



UNIVERSITY OF NAIROBI

ANNUAL
REPORT

**20
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Annual Report

2021

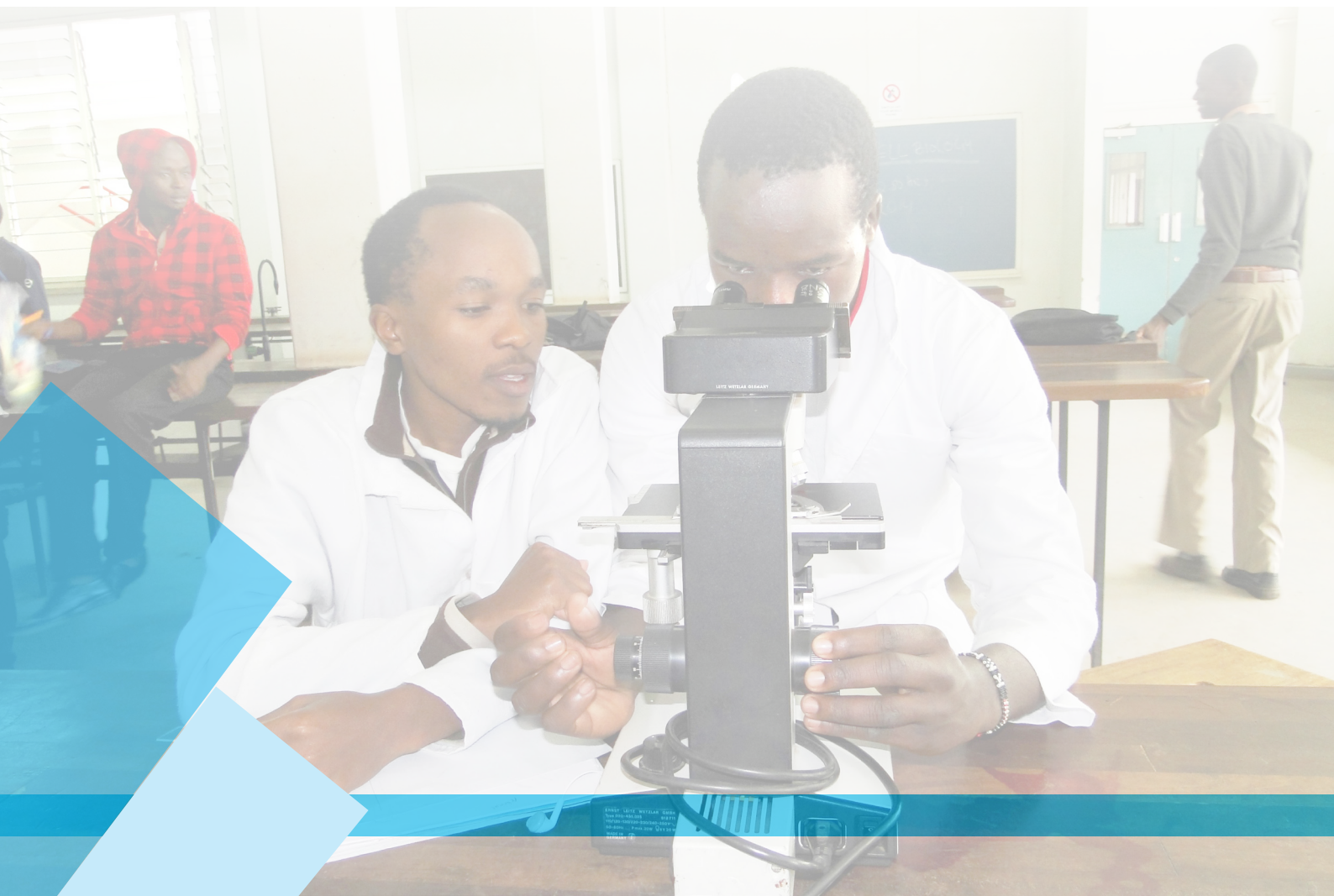


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ADMINISTRATION DEPARTMENT

Introduction

The Administration Department carries out the administrative function under the newly created office of the Chief Operations Officer. The Department is currently headed by the Ag. Registrar Administration Mr. Bernard D. Njuguna. It is the backbone of the University and acts as the link between the management and the employees.

The Office of the Registrar Administration embraces high levels of workplace productivity and efficiency and conformity to various laws and policies guiding management of the University.

The Department acts as the secretariat to various University Organs including The University Council and University Management Board. It advises Management in line with prevailing laws, regulations and policies and ensures the same are followed by other staff and develops policies, procedures and operations to ensure smooth running of the University.

Main functions of the department is to manage General Administration and Industrial Relations; develop policies and procedures in conformity with the Constitution of Kenya 2010, the Universities Act, the charter and any other written laws in Kenya; management of the University records for continuity of service delivery.

The Department comprises of the following sections:

1. General Administration
2. Industrial Relations
3. Records management
4. Committee Clerk

Services Offered

1. Secretary to the Council Committee responsible for the administrative function, the University Executive Board and such other committees, as assigned by management from time to time.
2. Custodian of the non-academic University records and such other records as deemed necessary by the Management.
3. Oversee the general administration and related services in the University.
4. Development and implementation of university policies and procedures regarding non-academic records and other general administrative activities.
5. Ensure adherence to University rules and regulations.
6. Enforce university policies.
7. Coordinate the management of all central functions.

Strategic Issues

1. Continued support to University Management in implementing ongoing reforms
2. Re engineering and automation of service delivery processes
3. Ensuring adherence to Service Delivery Charter commitments.
4. Promotion of team work and customer oriented service delivery.
5. Engagement with University stakeholders with a view to ensure continued harmonious industrial and labour relations.
6. Succession planning
7. Utilization of allocated resources
8. Performance assessment and accountability
9. Sensitization of staff on labour laws
10. Corporate Social Responsibility
11. Review on Records Management Policy

12. Installation of biometric system to access the university information and buildings
13. Digitization of the University
14. Leveraging Information and Communication Technologies (ICT) in service delivery
15. Provision of conducive work environment in an endeavour to enhance effective delivery of service
16. Creating linkages between Policy, Planning and Budgeting.

Major Achievements for the Year 2021

1. Timely Issuance of payroll numbers to new staff
2. Processing of reimbursement for funeral expenses for staff and students
3. Serviced University Management Board and Council meetings
4. Impactful engagement with critical stakeholders (Unions) through consultative meetings
5. Dissemination of Management Communication from to staff
6. Conducted timely, critical and impactful trainings and sensitization

Staff Establishment

Mr. Peter M. Muturi	Ms. Caroline Huria	Ms. Lydia W. Mbacha
Mr. Bernard D. Njuguna	Mrs. Chinga Catherine Wambui	Ms. Margaret Gichamba
Mr. Harrison S. Akala	Mr. Aggrey Ngoye Givai	Mr. Edward Nandebe
Ms. Mary M. Musyoki	Ms. Pamela Adamba	Ms. Doris K. Mboroga
Ms. Josephine Wangutusi	Mr. Peter Ngaruiya	Miss. Phillis M. Militsa
Mr. Stephen M. Gikami	Mr. Eric Were	Mr. Douglas M. Kibagendi
Ms. Joanne Bugo	Ms. Naomi W. Kamwana	Mr. Francis Nzomo Mweli
Ms. Salome Muiruri	Mrs. Patricia N. Kinyanjui	Ms. Mercy Adunga
Ms. Linet Nunda	Ms. Jacinta M. Nzalu	

Partnerships

- Public Service Commission
- Insurance Regulatory Authority
- Ethics and Anti-corruption Commission
- Commission on Administrative Justice | Office of the Ombudsman
- Unions (UASU, KUDHEIHA, KUSU)
- Ministry of Education
- Commission for University Education

Opportunities for Improvement

1. Participation in outreach services to enhance community service and Corporate Social Responsibility.
2. Digitization of vital University records and archives to enhance security of records, archives and documents.
3. Development of biometric system in the records storage buildings to control access of records and documents.

LIBRARY DEPARTMENT

Introduction

The University of Nairobi Library fully identifies with the philosophy of the University as spelt out in its Mission and Vision. The Library's role is to provide current, timely and quality information services to support the university's teaching learning, research, community service and consultancy.

The Library system comprises of fourteen Libraries located in faculties, Campuses and Institutes of the University of Nairobi as listed below:

Location	Seating Capacity
JKML Main Campus	3,700
IAGAS Institute	40
Mahatma Gandhi Library	505
Faculty of Business	596
Faculty of Law	449
Mombasa Campus	234
Kisumu Campus	230
Dental Library	40
Faculty of Vet and Agriculture	558
Faculty of Built Environment	100
Faculty of Science and Technology	966
Faculty of Education	730
Faculty of Health Sciences	475
Kenya Science Campus Library	124
TOTAL (Sitting Capacity)	8,747

The seating capacity figures are based on the number of chairs a Library can accommodate.

Library Activities

Date	Website Activity/Event	Description / Link
1st to 3rd Dec 2021	Library celebrates the UN day of persons with disabilities	The observance of the Day aims to promote an understanding of disability issues and mobilize support for the dignity, rights, and well-being of persons with disabilities.
8th December 2021.	Training on open journal publishing system (OJS) and research data management system (RDMS)	Open Journal Systems (OJS) is free open source software for managing and publishing scholarly/local journals. The training provided an overview of the fundamentals of using OJS to capture and manage local journals.
5th October 2021,	UoN Chancellor Donates Books to the Library	The Library received a delivery of 560 books from Educate Yourself Limited which were part of the Chancellor's book donation through Rattansi Education Trust. The total book donation cost was Ksh. 10 million.

24th August to 30th September 2021.	Clinical key - trial database tailored for medical practitioners	The Library in collaboration with Kenya Libraries and Information Services Consortium (KLISC) negotiated for a database trial for Medical students. The database caters for the information needs of physicians, nurses, pharmacists, faculty members, and students
8th August to 29th September 2021	Capacity Building for Students, Researchers & Academic Staff on Research tools	The Library organized a series of online training events to equip students and researchers on how to access and navigate the electronic resources offered by the Library. These included e-books, e-journals, available remote access options, open-access resources, use of Turnitin software, Zotero open source referencing tool, and academic publishing.
29th July 2021	Professor Emeritus Walter Ouma Oyugi honors the Library with Book Donations	The Library received a donation of books from Professor Emeritus Walter Ouma Oyugi who retired from the University of Nairobi. Prof. Mohamud Jama the Associate Dean Faculty of Social Sciences received the books on behalf of the university and graced the occasion.
6th July 2021	Nairobi Metropolitan Services Fire Department conducts Inspection at the School of Law Library	NMS fire department conducted a general and fire marshal inspection at the School of Law Campus including the library and gave recommendation on fire safety measures.
25th June 2021.	Library Staff visit Children's Home	The Library, led by the Deputy Director, in charge of Administration, visited Dream Children's Home as part of the Library's corporate social responsibility initiative.
14th of June, 2021	Library Staff receive training on RFID Library Inventory Management Tool	A section of the library staff were trained on RFID, a new innovative systems that had been installed at the refurbished Mahatma Gandhi Graduate library. The training covered: Biometric enrolment of library users via the Access Management System; RFID Library Inventory Management System; automated self-service station and circulation functions.
14th of June, 2021	Indian Minister officially Commissions the refurbished Mahatma Gandhi Graduate library (MGGL).	The External Affairs Minister, Republic of India, Dr. S. Jaishankar officially commissioned the MGGL for faculty staff and post graduate students The Library has seating capacity of 500 and equipped with state-of-the-art technologies
3rd June 2021	Library participates in Kenya library & information services consortium (KLISC) workshop.	The workshop was held at Kenya School of Revenue Administration (KESRA), Mombasa. The theme of the event was "Enhance, Entrench and Disseminate Research Output".
27-May-2021	Kisumu Library receives Book Donation	The Kisumu Library was privileged to receive Dr. Peter Onyango Onyoyo a lecturer from the School of Law, Kisumu Campus, who gifted the library 5 copies of his own publications on Administrative Law.

18 May, 2021	Library Department participates in tree planting exercise	The Library participated in trees planting event coordinated by the University of Nairobi partnered with the Equity Group Foundation, Kenya Forest Services, Ministry of Environment and Forestry, Ministry of Education, and the Ministry of Interior and Coordination of National Government. More than 5,000 trees were planted in various parts of the University.
14th - 16th April 2021.	The Library Department holds its 7th Library Open/Academic Integrity Week.	The Library Open/Academic Integrity Week theme of event was "Open Access & Academic Integrity for a Knowledgeable Society". The event was opened by the Deputy Vice Chancellor-RIE Professor Madara Ogot who emphasized on the need of embracing online information resources to satisfy remote library user.
15th April 2021	Books donation from the Deputy Vice Chancellor, research, Innovation & enterprise	The Library received books donation from the Deputy Vice-Chancellor in charge of Research, Innovation & Enterprise (DVC RIE) Professor Madara Ogot. The book titles were as follows: Days of my life, by Ogot G. Akinyi; My footprints on the sands of time, by Ogot Bethwell; A history of Kisumu City (1901 - 2001), by Ogot Bethwell; and History of Nairobi (1899 - 2012): From a Railway Camp and Supply depot to a world class African Metropolis, by Ogot Bethwell and Ogot Madara
5th February 2021	Knowledge Ambassadors initiative at the school of business library	The first year students in the Faculty of Business was introduced to Knowledge Ambassadors initiative and encouraged to promote library services and resources.

Strategic Issues

- Information Resources and Services
- Human Resources
- Collaborations and Partnerships
- Information Communication and Technology
- Library Infrastructure

Number of staff as at December 2020 is illustrated below:

Designation	Grade	Post
Director, Library & Information Services	Prof. & Equiv.	1
Deputy Director LIS (Technical)	Associate Professor & Equivalent	1
Deputy Director LIS (Planning)	Associate Professor & Equivalent	1
Deputy Director LIS (Administration)	Associate Professor & Equivalent	1
Senior Librarians	Senior Lecturer & Equivalent	7
Librarians	Lecturer & Equivalent	12
Senior Library Assistants	Grade DEF	24
Library Assistants	Grade ABC	53
Library Attendants	Grade II	3
Senior Administrative Assistant	Grade DEF	1
Accountants		
Assistant Accountant	Grade CD	1
Technologist		
Senior Technologist	Grade DEF	1

Bindery Unit		
Head Binder	Grade DEF	1
Binding Assistants	Grade ABC	2
Binding Assistants	Grade IV	2
Binding Assistants	Grade III/IV	6
Binding Assistants	Grade III	3
Secretaries		
Assistant Executive Secretary	Grade E	1
Senior Secretary	Grade C	1
Secretaries	Grade A & B	1
Copy Typist	Grade IV	1
Photographic Unit		
University Photographer	Grade D	1
Assistant Photographer	Grade ABC	2
Subordinate Staff		
Senior Messenger	Grade III	1
Cleaners	Grade II	7
Headman	Grade III	1
TOTAL		136

Staff and their Qualifications

Director

Angela Mumo, BA, (Nairobi), MLIS, (KU)

Deputy Director (Administration)

Harun Mugo, BSc, (Moi), MLIS, (KU)

Deputy Director (Technical)

Rosemary Otando, BSc, (Moi), MLIS, (KU)

Deputy Director (Planning)

George Nyalwal, MA Lib., (Moscow)

Senior Librarian

Dr. Catherine Chege, MLIS, (KU), BSc, PhD, (Moi)

Lilian Githere, MA Lib., (Moscow)

Evalyn Anambo, BA, (Nairobi), MLIS, (KU)

Dickens Wendo, BA, MSc. Inf. Sci.

James Akanga, MEd. LIS

Systems Librarian

Milchah Gikunju, BEd., MLIS (KU)

Senior Librarian

John Chepkwony, MSc. Info. Sci., PGD. Computer Science

Librarian

Grace Siteinei, MLIS, (Uzulu G.C.), Dip, (Kenya Poly), BLIS, (Makerere)

Sarah Gachunga, MA, Inf. Sci., BA Info. Sci, (UNISA)

Peter Kimita Waweru, MLIS, (Nairobi), B.Tech. Lis, (UNISA)

David Mulonzia, BLIS, (Moi), MLIS, (KU)

Stanley Macharia, BEd, (Nairobi), MLIS, (KU)

Mercy Waitakere, BA. Inf. Sci., MA. Inf. Sci.

Jane Atieno Opiyo, MSc LIS, BSc. Inf. Sci, (Moi), LIS, Dip Inf. Sci.

Mathews, Nyapela, MLIS, (Nairobi), Dip. LIS, (Sigalagala Poly), BA. Social Sci. (KIST),

Josephine, Kangethe, B.Tech, (UNISA), MLIS, (KU)

Alice, Okongo, BEd, MLIS, (Nairobi)

Zablon, Muyera, MLIS, (KU), BA, (Daystar)

Head Binder

Kimengu, Eunice, BSc. Inf. Sci., (Moi), Dip. Printing Tech, (Kenya Polytechnic), Dip. LIS, (Nairobi)

Areas of Improvement

Enhancement of the Selective Dissemination of Information to Researchers

The Library has strategized to develop profiles of researchers and PhD students of the University and provide them with lists of information resources in their areas of research. This will ensure faster access to information resources leading to timely outputs of research.

Mentoring of Staff on Library Customer Services

The major mandate of the Library is the provision of customer services. In view of this, the Library has put in place strategies to mentor staff on the Library customer services, to ensure that customers are given quality services in a friendly manner.

Improvement of the Visibility of Library Print Resources.

The Library has planned to weed out old books in the Library that are no longer in high demand and shelve them separately on the stacks in the Library basement area. This will enable new books on the shelves to be more visible to the patrons to enhance their access and usage.

Compiling of Subject Databases of the Electronic Resources

The Library intends to develop subject databases of the electronic resources that are available to the University and make them accessible to the various subject disciplines and academic programmes of the University. This will enable faster access to the electronic resources by the university academic community, leading to timely scholarly outputs and quality academic works.

UNIVERSITY HEALTH SERVICES

About Us

The University of Nairobi Management is committed to the assurance of the well-being of the larger university community and it is against this background that the University Health Services department (UHS) was established in 1972, initially, as an outpatient clinic to provide healthcare to students. Over the years, the UHS mandate has evolved to include outpatient and inpatient services to members of staff and their dependents, and large student population. The UHS mandate includes advisory role to University Management with regard to current and emerging healthcare issues, and development of strategic healthcare responses thereof.

To this end, and in order to offer quality and comprehensive healthcare services to the University Community, UHS has deployed elaborate structures that are represented as the Main students' and Staff clinics, as are situated in the main Campus, off State House Road, and that are open 24 hours daily, throughout the year. The Students' sick-bay serves as a short-stay in-patient facility and is conveniently located in the main Campus, close to other specialized services. UHS has ensured ease of access to services by establishing Satellite clinics in the various Campuses, thus Kikuyu, Upper Kabete, Lower Kabete, Medical School, Chiromo, Kisumu, Mombasa, Kibwezi Field Station, Parklands and Kenya Science. These satellite clinics remain open from 8.00am to 5.00pm with coverage for nights and weekends for emergencies.

Outpatient services that may not be available at UHS are outsourced from approved external providers. Staff/dependants hospitalization services are provided through five private hospitals that were competitively sourced. Students' in-patient needs are provided for through the Kenyatta National Hospital and County hospitals, as necessitated. The department has a workforce of 170 employees. The medical benefits that accrue to students, staff and their dependants are stated in relevant University documents and ascribe to various pertinent policies and guidelines, as determined by the University Management, regional and international conventions.

Mandate

On behalf of University Management, To provide accessible, quality, and affordable holistic medical care, while subscribing to approved national and international standards of practice and with due regard to national healthcare guidelines, and per the UoN and UHS service charters.

The UHS is licensed as a level IV Health facility, while the respective Campus based clinics duly licensed as either level 2 or level 3 facilities by the Kenya Medical Practitioners and Dentists Council and is also recognized by respective County Government authorities. The department subscribes to and abides with University Quality Management System, and other pertinent Regulatory and Statutory requirements. It is incumbent on UHS to maintain approved sector Standards and to uphold Professional integrity.

Vision

A health service provider committed to excellent healthcare for students, staff and their dependants

Mission

To provide quality healthcare services by offering holistic medical care of international standards to students, staff and dependants.

Strategic Objectives

- i) Provision of enhanced and improved quality healthcare to University Community
- ii) Effective Utilization and Management of allocated Healthcare Resources
- iii) To strengthen and sustain policy guidelines on ADAP, HIV/AIDS, including Counseling
- iv) Capacity building and continual growth and modernization of infrastructure, equipment
- v) Enhancement of the organizational culture: Participation, Ownership and Purposefulness

DIRECTORATE OF LEGAL AND CORPORATE BOARD SERVICES

Introduction

The University of Nairobi Directorate of Legal and Corporate Board Services is under the Vice Chancellor's office, and is an integral unit in the day to day running of the University especially in issues touching and/or requiring legal and corporate secretarial services input. The office aims to be a high impact corporate partner in synchronising and providing accurate, ethical and strategic legal and corporation Secretarial services to further the University's vision, mission and core values. The office hopes to achieve this in a setting characterized by competence, integrity, courtesy and set standards.

Establishment

Mandate and Functions

The office performs diverse functions, which include; -

Legal Services & Corporation Secretary	Synchronizes and provides efficient and effective legal, governance and Company Secretarial services, to the University Council, Management Board, faculty, and staff on legal matters that involve or affect the University and in support of the University vision, mission and core values in line with the Universities Act 2012 and the University of Nairobi Charter 2013.
Legal advice	This involves offering legal advice, analysis and opinions, to support senior management in achieving the University's strategic objectives
Litigation	This involves the management of cases in court in liaison with external lawyers, preparation of briefs and updates to management and preparation of the university's witnesses
Statutory Compliance	This involves review of policies to ensure compliance with the Constitution of Kenya, 2010, conducting trainings to members of staff especially in emerging areas of the law and offering legal advice to University committees
Facility Management	This involves the drafting and reviewing of leases and maintenance contracts as well as facilitating the termination of the same
Financial Matters	This involves issuance of Student Indemnity Covers to students undertaking industrial attachment/internship and managing insurance matters in liaison with the finance department and the insurance companies
Human Resource Management Matters	Which includes crafting and drafting of charges for staff disciplinary cases and offering legal advice in trade union related matters
Linkage and Collaboration	This includes crafting and review of new links and partnerships with peer institutions and industry as well as continuous facilitation and moderation of Collaborative Agreements
General procurement Contracts and Agreements that bind the University of Nairobi	This entails reviewing of general contracts, in order to safeguard the interests of the University

Students Disciplinary Matters	This includes the crafting of appropriate Student Charges as per the relevant regulations and legislation and giving legal advice and review throughout the disciplinary process
Vetting of Staff	This involves vetting of staff members to enhance integrity in the undertaking of their respective mandates and also to safeguard the integrity of the University of Nairobi
Funeral Assistance for Staff and Students	This involves provision for Coffin and Mortuary Waiver for deceased staff members and their dependants

Vision - To be Legal Advisors in keeping with a WORLD CLASS University

Mission - To provide quality services in line with the University of Nairobi vision.

Value Statement - In the office we are driven by a passion for service excellence to achieve and coordinate effective corporate and Legal Services, through teamwork and care in an atmosphere that ensures efficiency, integrity and Social responsibility.

Core Values

Service Excellence - The Office strives to exceed the expectations of all members of the University Community through excellent service delivery.

Objectively - We shall maintain personal, external and organizational independence so that our opinions, conclusions, and recommendations will be viewed as impartial by all knowledgeable third parties. We will exercise objective and unbiased Judgment on all issues associated with conducting and reporting on our work.

Team Work - In order to meet our goals, we practice teamwork to optimize the synergic of individual and collective human resource talents.

Efficiency - We ensure the optimum utilization of all resources available to deliver quality services.

Integrity - We uphold virtues of integrity through honesty, confidentiality and fairness on discharging our responsibilities.

Accountability - We strive to be responsible stewards of all resources entrusted to us in a professional and transparent manner.

Social Responsibility - We endeavour to be socially responsible to all members of the University Community and the society at large and pursue our goals and practices that add value to the society

Strategic Issues

- i) To maintain efficient, well governed and administered corporate office quality service delivery;
- ii) To increase access of legal and governance services to the University Council, Management, Staff, Students and Stakeholders;
- iii) To ensure timely and customer focus management Approach when rendering required legal governance services;
- iv) To minimize the University exposure to unnecessary and costly legal and governance risks; and
- v) To Apply the Advocates (Remuneration) (Amendment) Order 2014 on all matters being handled internally and externally by the University's pre-qualified legal service providers.

Staff

Director, Legal and Corporate Board Services - Cs. Collins F. Omondi	
Senior Legal Assistant	- Ms. Linda Mwanza
Legal Assistant	- Mr. Simon S. Kiboi
Executive Secretary	- Mrs. Janet Wairumu Ng'ang'a
Assistant Executive Secretary	- Mrs. Esther Nyatichi Merinyo
Legal Clerk	- Ms. Monica M. Okemo
Legal Clerk	- Mr. Nicholas O. Jumah
Office Assistant	- Mr. Naftali K. Mwangi

Partnership, Collaboration and Linkages Direction

Major Achievements

The directorate has ensured that matters filed against the university have been successfully dismissed against the university and favorable precedent set, such as:

1. Aberdares Engineering Contractors Versus University of Nairobi-Nairobi High Court No. 330 of 2011; Claim regarding University property.
2. Agnes W. Kinuthia & 607 Others Versus University of Nairobi-Milimani Employment and Labour Relations Court Case No. 1601 of 2013; Claim regarding Staff Retrenchment.
3. Andrew Kago Kanyiri Versus University of Nairobi-Nairobi High Court Constitutional Petition No. 431 of 2019; Claim by a student alleging failure to graduate on time from the University of Nairobi.
4. Benta Achieng Chief Magistrates Employment and Labour No. 1584 of 2019; Claim filed against the University on contention on gratuity paid.
5. Celestine Indeché Versus University of Nairobi-Nairobi Chief Magistrates Employment and Labour No. 1140 of 2019; Claim filed against the University on contention on gratuity paid.
6. Cherono Gladys V UoN HIGH COURT Petition No. 1 of 2018; Claim by student regarding issuance of University of Nairobi Degree Certificate to Petitioner.
7. Dr. Japheth Ododa Origa Versus University of Nairobi-Nairobi High Court Petition No. 491 of 2016; Claim regarding UoN Dean Elections in Faculty of Education.
8. Edwin Waweru Thini Versus University of Nairobi-Petition No. 381 of 2018; Claim filed against the University challenging the College Students Disciplinary Process.
9. Ille Investments Limited Versus University of Nairobi-High Court No. 258 of 2007; Claim filed against the University seeking specific performance of a lease.
10. Jackan Mwanika Mwasi Versus University of Nairobi-Nairobi High Court Judicial Review No. 65 of 2018; Claim filed against the University challenging expulsion from the University.
11. Jamal Abdi Aden Versus University of Nairobi Judicial Review Misc Civil Application No. 306 of 20; Unfair Suspension from University of Nairobi.
12. John Kiiru Versus University of Nairobi-Employment and Labour Relations Court No. 696 of 2019; Claim for unpaid leave days.
13. Joseph Orwa Vs- University of Nairobi-Chief Magistrates Employment and Labour Cause No. 1095 of 2019; Claim filed against the University on contention on gratuity paid.
14. Meyo Victor Mandela Versus University of Nairobi-Nairobi High Court Misc. Application No. 29 of 2019; Claim filed against the University on challenging expulsion from the University.
15. Mukenye Billy Graham Versus University of Nairobi-High Court Judicial Review. No. 44 of 2019; Claim for reinstatement to the university following disciplinary action.
16. Prof. Francis Njeru Versus University of Nairobi-Nairobi Employment and Labour Relations Cause No. 73 of 2015; Claim Regarding termination of employment and Terms and Conditions of Employment.
17. The Directorate successfully swore into office elected officials of the university of Nairobi student association and conducted leadership and integrity training and sensitization.
18. The Directorate successfully trained members of staff on the Revised University of Nairobi Student Code of Conduct (2021)
19. The Directorate successfully participated in the National Cohesion requirement and resolution of Public Complaints indicator.

DIRECTORATE OF UNIVERSITY ADVANCEMENT AND INSTITUTIONAL DEVELOPMENT

Introduction

The Directorate of University Advancement and Institutional Development is an extension of the office of the Vice Chancellor charged with the mandate of resource mobilization for the university, establishing an endowment fund and taking lead in initiating and implementing university capital projects as well as commercializing university assets.

The establishment of the Directorate for University Advancement and Institutional Development was approved by the Council of the University of Nairobi in 2015. It was established as part of the implementation of the University of Nairobi Strategic Plan 2013-2018.

The Directorate was envisioned as a support unit to the Vice Chancellor and the university governance in delivering these key functions, by and large the department is expected to strengthen research, increase endowment funds, promote experiential learning for students and promote their welfare with the objective of strengthening the UoN brand both locally and internationally.

Further it serves as the coordinating agency for all solicitations of funds from individuals, foundations, businesses, corporations, government and other organizations on behalf of the University besides fostering new partnerships and linkages between UoN, local and international partners.

Mandate of the Directorate

The Directorate of University Advancement and Institutional Development endeavours to harmonize all efforts geared towards the pursuit of mobilization of resources as well as institutional development.

The DUAID manages the contracting, deployment, management and documentation of all commercial ventures on behalf of the University of Nairobi. Due to the rigorous nature of the proposed processes, the University relies on the DUAID as the agent for purposes of engaging with third parties in pursuit of commercial ventures. The roles of the Directorate are articulated as follows:

1. To enhance resources mobilization,
2. To create value adding partnership and collaborations,
3. To grow university's endowment fund,
4. To initiate and develop University's Projects,
5. To boost commercialization of university assets, and
6. Any other function as may be assigned by the Vice Chancellor.

Major Achievements

1. Engineering and Science Complex

The Directorate initiated and coordinated the establishment of an Engineering and Science Complex at a cost of KES 5,387,601,764. The funding partner is the French Development Agency (AFD).

The Government of Kenya and French Development Agency (AFD) signed two financing agreements to the tune of KES 4.6B which took place at the National Treasury on October 29th 2021.

The signing was between Amb. Ukur Yatani, Cabinet Secretary, National Treasury and Mr. Bertrand Willocquet, AFD Kenya Director, in the presence of French Minister for Foreign Trade, Mr. Frank Reister and University of Nairobi's Vice-Chancellor, Prof. Stephen Kiama and University Advancement Director and Ag. Chief Operations Officer, Mr. Brian Ouma.

Approximately KES 4B will finance the detailed design, construction and seed equipment of an Engineering and Science Complex (ESC) in the University of Nairobi. An adequate and ambitious environmental certification will be sought for the building (LEED Silver, or equivalent international certification).

An additional of grant approximately KES 645 M will help with the creation and launch of the new ESC, by supporting the architects teams in monitoring the building activities, and the pedagogical teams in reviewing of curricula and pedagogy, as well as support to building stronger links with industry and increasing internationalization, in partnership with top French Science and Engineering universities.

2. Sericulture

Collaboration with Silk Origin Ltd that has established a sericulture farm at Upper Kabete campus. The silk farming is done under precision agriculture while employing latest technology from Mulberry Farming to processing, will yield vast research opportunities for the University. The production of silk will also help generate revenue for the university.

3. Agricultural Technology and Innovation Centre (ATIC)

The Directorate has coordinated a collaboration agreement with Elgon Kenya Ltd that will see the establishment an Agricultural Technology and Innovation Centre (ATIC) at Upper Kabete Campus. This collaborative venture was born out of the need to foster the culture of innovation, promote resource mobilization for development and commercialization of market-demanded products and services. Also, the need to train and mentor innovators/ entrepreneurs in order to increase chances of commercial success and to accelerate uptake of technology along the agricultural value chains.

The collaboration will also see UoN students get internship opportunities at Elgon Kenya. Elgon Kenya Ltd is an agricultural resource company with technologies in irrigation, plastic manufacturing, fertilizer distribution and large scale printing. The collaboration agreement was signed on Thursday, December 7, 2021.

4. Smart Classroom (International Institute of Online Education-Kenya National Centre)

The Directorate has coordinated and facilitated the signing of a collaborative agreement with the International Centre of Higher Education Innovation under the Auspice of UNESCO (UNESCO-ICHEI) that will see the establishment of International Institute of Online Education - Kenya National Centre (IIOE-Kenya National Centre) at the University.

The Centre will establish an IIOE Kenyan national hub to support national higher education innovation. This will help realize the digital transformation of higher education in Kenya at a national level.

5. University of Nairobi Cancer Teaching and Research Hospital (UoNCTRH)

The Directorate is working closely with the National Treasury and a private partner in establishing the UoNCTRH which will be one of the highest speciality hospital in the region.

The Hospital proposal is being handle through the Privately Initiated Proposal (PIP) and to this end the PPP committee approved the proposal giving it life to the feasibility stage and afterwards proceed to partners on boarding and contract engagement stages.

The hospital is approximated at KES 4B for design, construction and equipping. Its attendances facilities is estimated to cost KES 2B which will provide space for students and staff being trained at the hospital.

6. University of Nairobi Foundation

Kenya continues to position itself as a global leader in research and innovation. In 2021, the Global Innovation Index positioned Kenya as second to South Africa in Sub-Saharan. Further the Covid-19 pandemic has demonstrated the need to nurture new ideas in order to support society's growth as well as boost capacity to overcome pandemics. As such the UoN foundation has been established to support Kenyan researchers undertake more ground breaking research and innovation.

The University of Nairobi Foundation was signed by the Cabinet Secretary for Lands, Hon. Faridah Karoney on 31st August 2021, as a Registered Trust Deed with 9 trustees drawn from different sectors of the economy. The UoN Foundation is now awaiting the official launch.

Strategic Issues

The Directorate saw the need to reach out to the vast pool of Alumni, to offer support for their Alma Mater. Thus the establishment of the Alumni Affairs Office.

The Alumni Affairs Office was established in January 2021 within the Directorate of University Advancement and Institutional Development. The office is a liaison between the University and the Alumni Community who are important stakeholders in the University ecosystem.

The office has carried out some key activities that include; Alumni Mentorship & Coaching Program, Alumni Tracer Studies, Integrated Alumni Information Management System and Alumni Handbook.

Directorate Staff

NAME	DESIGNATION
Mr. Brian O. Ouma	Director
Mr. Kenneth K. Sawe	Deputy Director, Alumni Affairs
Ms. Anne N. Nkoidila	Programmes Manager
Arch. Jarret Odwallo	Projects Officer
Mr. Leonard K. Kirui	Assistant Accountant
Ms. Beatrice N. Kimuyu	Assistant Registrar (Alumni Affairs)
Mr. Allan Tagi	Assistant Registrar (Public Policy)
Ms. Lynet K. Kioko	Administrative Assistant
Mr. David K. Wachira	Web Communication Officer
Mr. Patrick M. Mwirigi	Senior Driver



Directorate of University Advancement and Institutional Development staff (L-R)

Director, Mr. Brian Ouma, Ms. Lynet Kioko, Mr. Leonard Kirui, Ms. Anne Nkoidila, Mr. David Wachira, Mr. Keneth Sawe, Mr. Dennis Thiiru, Ms. Beatrice Kimuyu, Mr. Allan Tagi and Mr. Patrick Mwirigi take a group photo with the Vice Chancellor, Prof Stephen Kiama during the Engineering and Science Complex signing celebrations.

OFFICE OF THE DEAN OF STUDENTS AND CAREER SERVICES

About Us

The Office of the Dean of Students was established in the early 70s. The Office is primarily concerned with student affairs to help address the holistic growth, development and wellbeing of students in support of the University's vision, mission and objectives. The office works in liaison with different University departments as well as student leaders, parents and maintains contact with industry partners and the community to help carry out the mandate of the office effectively and efficiently.

The Office of the Dean of Students deals with students' welfare right from admission to graduation. University life marks the beginning of one's career and requires students to make mental, physical and emotional adjustments.

Our Mandate

The overall mission of the Office of the Dean of Students is to foster a conducive environment for the holistic development of students through the provision of services that enhance the spiritual, psychological, social and moral growth of students and empower students to make responsible choices in their campus life and wise career choices later as they transit to the job market.

What We Do

The functions of the Office of the Dean of Students include:

- Counselling and Guidance Services
- Financial Aid Services
- Student Organizations Liaison Services
- Skills and Talents Development Services
- Career and Placement Services
- University Chaplaincy Services
- Disability Liaison Services
- Work-Study Program Services

Our Roles and Responsibilities

The Office of the Dean of Students is mandated to perform the following roles and responsibilities

- Co-ordinate all students' activities and welfare.
- Make proposals and review on policies of students' welfare.
- Coordinate implementation of policies on student welfare.
- Coordinate student counseling services.
- Co-ordinate activities of Students' Organization of UoN
- Manage students conduct and discipline.
- Coordinate education loans and bursaries and the Work Study Program
- Coordinate counseling and career services.
- Coordinate Spiritual nourishment activities for students
- Coordinate Student Skills and Talents Programs
- Coordinate implementation of policies on gender, disability and special needs for students.

CURRENT STAFF LIST

Assistant Dean of Students

Ms. Teresia Okumu
Sr. (Dr.) Caroline Rukunga
Ms. Lucy Gakuya
Ms. Catherine Gatwiri
Mr. Samson Mutinda
Dr. Nyawira Kuria

Student Counsellor

Mr. Paul Muia Mutune
Mr. Michael Muthuiya
Ms. Lucy Muthoni Kamau
Dr. Pamela Lunjalu
Ms. Mary Otieno
Mrs. Hellen Omwenga
Dr. Thayu Njiiru wa Ngigi

Chaplains

Catholic - Fr. Peter Kaigua Ngugi
Protestants - Rev. Hosea K. Mitei
Muslim - Mr. Mohamed Abdalla Swaleh

Assistant Registrar

Ms. Abigael M. Olimba

Section Heads

Mr. Chrispinus Wekulo - Skills and Talent
Mr. John Waweru - Work Study Program
Ms. Karen Munyao - Student Organizations Liaison

Disability Liaison Officer

Ms. Mildred Omino

Programme Officer, Disability Liaison Office

Mr. Eugene Ikutwa

Sign Language Interpreter

Ms. Amina N'Kadziri Idd
Ms. Shirleen Lunde Kyengo

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University of Nairobi, Main Campus
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P.O Box 30197 - 00100 Nairobi
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Email: dean-students@uonbi.ac.ke
Website: <https://studentlife.uonbi.ac.ke>
Facebook: University of Nairobi Dean of Students Office
Twitter: UoNDeanStudents

STUDENTS WELFARE SERVICES

CATERING DEPARTMENT

Mandate

- The Catering Department is one of the hospitality wing of the University mandated to provide quality and affordable catering services to the students.
- The department is headed by the Catering Manager and supported by qualified catering staff.
- Our Kitchens and Cafeterias are spread over the campuses and its environs and also the satellite Cafeterias in Mombasa and Kisumu Campuses.
- The provision of these services is achieved with the cooperation of the following departments; Dean of Students, Finance and Procurement

Strategic issues

- The catering department intends to achieve 10% cost reduction through the following measures:
- Food and Beverage Controls; by doing analysis after every meal and weekly/monthly reports to ensure that kitchens break even.
- Use of cashless transaction to control the risks that comes with use of cash.
- Phased out casuals, thus making huge saving on their payments.
- Improved food quality and also by diversifying on new menus
- Display of service points in all the units.
- In house detergent production
- Use of central store for bulk goods

Major achievements

- Implementation of revised food prices.
- Establishment of bulk store.
- Improved food quality.
- Implementation of pay-as-you-eat (PAYE) programme.
- Implementation of cashless transactions by use of M-pesa.

Staffing

As at 2021, the department had 129 in the following grades

Grade	No of Staff	Grade	No of Staff
DEF	- 6	A	- 1
CD	- 1	IV	- 34
ABC	- 4	III	- 41
AB	- 14	II	- 28
B	- 2		

Partnerships

The department works closely with the following Organizations/Institution/Departments;

- Dean of Students
- Kenya Meat Commission-
- Kenya Creameries Cooperative
- Unga Limited
- Toyota Kenya-
- Vivo Energy

Opportunity for improvements

The following are the targets of raising the revenues:

- i) Conferencing and Banqueting
- ii) Outside catering
- iii) Open the closed cafeterias/kitchens

Challenges

- i) The department was adversely affected by the Covid 19 pandemic during the year which brought the closure of the University in March 2021 leading to loss of revenue.
- ii) Continued price increase of goods.
- iii) Limited financial resources.
- iv) Unpaid bills and shortage of supplies due to supplier reluctance. Staff shortage due to attrition and retirement

HALLS DEPARTMENT

Introduction

The Halls Department is one of the hospitality wing of the University mandated to provide quality and affordable accommodation services to enhance student's welfare.

Revenue Collection

In 2021 Halls Department realized Kshs. million from its operations in accommodation services

Repairs and Renovations

During the year 2021 the Halls Department suffered a setback due to Covid 19 pandemic with several halls being closed up to about September 2021. However, the department undertook repairs/renovations of its facilities as follows:

With the help of University Management, the Department was able to replace the water tank at Parklands improving water provision at the Unit. Electrical and plumbing works in various halls has continued to be undertaken.

Achievements

In the year 2021 the Department continued using the outsourced cleaning services which has so far worked very well hence assisting in cost reduction, ease of supervision and improving service delivery to the customers.

Also in the same year the Department implemented the new accommodation rates which has increased revenue.

Challenges

In 2021, Halls department as any other department of the University of Nairobi was adversely affected by the COVID 19 pandemic during the year. The University was closed on March 26, 2021 with only medical students remaining on campus and only opened for some groups in September 2021 for physical occupation of rooms leading to loss of revenue. Other challenges faced by the department included; limited financial resources, over used facilities, inadequate bed spaces worsened by COVID 19 pandemic, unpaid bills and shortage of supplies due to supplier reluctance. The department continued to faces staff shortage of due to natural attrition, staff retirement and none renewal of contracts.

Outreach Activities

In 2021 the Halls Department joined the University in commemorating World Aids Day and IDADA day which was carried out virtually due to COVID 19 pandemic. These two occasions are commemorated in order to counsel, mentor and join those affected by HIV Aids, drugs and substance abuse. The Department has also continued to engage students on Work Study programme to mitigate staff shortage.

Staff

As at 2021, SWA had 86 in the following grades

Grade	Number of Staff
II	18
III	12
IV	18
A	1
AB	18
ABC	1
CD	8
DEF	1
EF	9
Total	86

Projections

The Halls department has potential of accommodating more students given the fact that the number of students looking for accommodation surpasses the accommodation capacity. With the help of University Management SWA believes that there is need to complete the stalled Lower Kabete New Hall to ease the perennial shortage of accommodation space. Also with the use of Private Public Partnership the university can consider construction modern hostels.



FACULTY OF AGRICULTURE

Principals Message

The Faculty of Agriculture and Veterinary Sciences, commonly referred to as FOA is one of the six Colleges that make up the University of Nairobi. FOA has continued to experience growth in various facets as it strives to fulfill its mandate of training human resource in the fields of agriculture, veterinary sciences and environmental studies. Apart from the professional aspect, we also offer all-round training that includes, but not limited to, mentorship and leadership as well as guidance and counseling, with the aim of producing graduates who will be responsible global citizens with the capacity to make positive contributions to society.

FOA has played its strategic role in helping to realize national and international policy aspirations such as Kenya's Vision 2030 and the Big 4 Agenda, and the Sustainable Development Goals (SDGs). In this respect, the Faculty has pioneered the breeding of new bean varieties, established the Seed Enterprise Management Institute (SEMI), established facilities for training on reducing post-harvest losses and offered higher training in veterinary sciences and environmental sustainability initiatives. All of these are crucial in, *inter alia*, alleviating food security challenges, reducing levels of excruciating poverty and promoting sustainable livelihoods. Our contribution to reducing impacts of the pangs of hunger allows people to engage in productive endeavours at the personal and national levels.

Our academic curricula are continuously and regularly reviewed in response to contemporary global trends, and because of this, the training that our graduates receive has enabled them to excel in diverse fields in different parts of the world. In this respect, several curricula were reviewed during the year.

FOA does not operate in a vacuum but is fully involved in outreach activities that include corporate social responsibility. Members of staff and students regularly go out to meet farmers to, among other things, train them in various fields and creating awareness on the latest trends in agriculture, veterinary and environmental issues, and vaccinating livestock. The students and staff in return also share experiential knowledge from the practitioners.

Following the Government of Kenya directive in early 2020 that all educational institutions should have at least 10% of their land under trees, FOA was given the task of undertaking this responsibility on behalf of the University of Nairobi. As a first step towards this objective, and in liaison with our stakeholders, we planted 3,065 tree seedlings at the Veterinary

Farm on November 20, 2020. Since then, a number of corporate organizations and the Indian High Commission in Kenya have expressed interest in partnering with us towards greening the University as part of national, if not global efforts, in environmental conservation and protection.

Despite our achievements, 2020 was a difficult year across the world mainly due to the outbreak of the COVID-19 pandemic and our Faculty was not spared the impacts. However, due to the tenacity of members of staff and students, and the unwavering support of University Management, we managed to graduate 820 students, after successfully completing many of the programmes on-line. We also held several webinars that attracted participants with different backgrounds from many parts of the world.

I therefore wish to thank all the staff and students, and all our partners and collaborators who stood with us during the difficult moments. Each one of us has a responsibility toward good health; I continue to urge all of you to adhere to the laid down protocols availed by the Ministry of Health, and tirelessly offer the Faculty your invaluable support.

We appreciate the Government of Kenya for the continued support, this being a public institution. Our quest for world-class excellence is solid as we embrace measures in place to ensure sustainable and maximum utilization of our resources.

Once again, I thank all our stakeholders, and urge you not to waver in your support as we forge forward into 2021.

Prof. Rose Nyikal
Dean, Faculty of Agriculture

Department of Agricultural Economics

Introduction

The mandate of the Department of Agricultural Economics is Teaching and Learning, Research and Innovation, Consultancy and Community Service. It also provides project and supervision work, Youth internship, and Mentorship services

Its Vision is to be an international centre of excellence in agricultural and applied economics training, research and extension, and outreach for the realization of sustainable livelihoods for all.

Whereas the Mission is to be an international centre of excellence in agricultural and applied economics training, research and extension, and outreach for the realization of sustainable livelihoods for all.

The Department participates in the Collaborative Agricultural and Applied Economics MSc programme that is partially funded by Africa Economic Research Consortium (AERC) and it has been performing exceptionally very well in the third semester at the Shared Facility for Specialization and Electives (SFSE), University of Pretoria. For instance, with the exemplary performance of our students, University of Nairobi was ranked Position 1 overall out of 8 major universities in Eastern and Southern Africa and scored an average of 75.5%. This is a repeat of our performance and ranking in 2017 when the University also produced the top three students at the SFSE. In 2019 the Department also produced the second top student. It is also important to note that 8 out of 11 students (73%) scored over 70%, which has not been achieved in the past years.

Programmes Offered

- i) Bachelor of Science in Agricultural Education and Extension
- ii) Bachelor of Science in Agribusiness Management
- iii) Bachelor of Science (Economics Major)
- iv) Master of Science in Agricultural and Applied Economics
- v) Master of Science in Agricultural Information and Communication Management
- vi) PhD in Agricultural Economics
- vii) PhD in Agricultural and Applied Economics
- viii) PhD in Agricultural Information and Communication Management

Strategic Issues

The Department is guided by the following Strategic Objectives:

- i) To manage the Departmental resources efficiently;
- ii) To grow the Department resource base and enhance productivity;
- iii) To produce quality and holistic graduates in agricultural and applied economics including agribusiness management, agricultural extension and rural development;
- iv) To contribute to the development of society through creation, storage, application and dissemination of knowledge on agricultural and applied economics;
- v) To enhance the competitiveness and image of the Department as a centre of excellence in agricultural and applied economics training and research
- vi) To enhance strategic partnership and collaborations.

Major Achievements in the Year 2020

Student Numbers

Programme	No. of Students
Bachelor of Science in Agricultural Education and Extension	356
Bachelor of Science in Agribusiness Management	313
Master of Science in Agricultural and Applied Economics	175
Master of Science in Agricultural Information and Communication Management	40
PhD. in Agricultural Economics	13
PhD in Agricultural and Applied Economics	20
PhD in Agricultural Information and Communication Management	8

International Students

There were 41 students under this category from across African continent e.g. Liberia Malawi, Ghana, Nigeria, Botswana, Rwanda, Burundi, Tanzania, Uganda and South Sudan. The number increased by 5.6% from that of last year

The department was actively involved in the following research activities:

- i) Analysis of the Socio-Economic Contribution of Donkeys Ownership and Use to Household Livelihoods in Kiambu County
- ii) Impact of Rural and Community Bank Credit Access on Technical Efficiency of Smallholder Cassava Farmers in Fanteakwa District of Ghana
- iii) Assessment of Livestock Farmers' Preferences for Integration of Community-Owned Resource Persons and Interrelationships in Animal Trypanosomiasis Management Methods in Kwale County, Kenya
- iv) Assessment of the Effectiveness of Communication Channels Used in the Dissemination of Reproductive Technologies in Dairy Cattle in Kangema, Murang'a County
- v) Participation in Contract Farming and its Effects on Technical Efficiency and Income of Vegetable Farmers in Western Kenya
- vi) Comparative gendered assessment of productivity, technical efficiency and technology gaps of sorghum plots in three Districts of Uganda
- vii) An economic evaluation of the role of land and livestock dynamics in livelihood diversification in Baringo County, Kenya
- viii) Effects of Integrated Nutrition Education Approaches of the Production and Consumption of Orange-Fleshed Sweet potatoes in Homa Bay County, Kenya
- ix) An assessment of smallholder livestock keepers' willingness-to-pay for cattle insurance attributes in Botswana: the case of Central District
- x) An Economic Assessment of the Factors That Influence Smallholder Farmer Participation in Export Markets as a Case of High Value Mango Markets in Southern Ghana

Corporate and Community Outreach Activities

The Department was involved in tree planting and community projects such schools in a number of countries. Some staff members are in the school boards (BOMs) and other are involved in mentorship activities of students and pupils.

Staff Portfolio

Cadre	No. Male	No. Female	Total No.	Number of PhD Holders
Full Professors	3	0	3	3
Associate Professors	2	1	2	2
Senior Lecturers	2	2	4	4
Lecturers	5	1	6	6
Assistant Lecturers/Tutorial Fellows	2	1	3	1

Projections

- i) Increased staff motivation and commitment
- ii) Improved quality and delivery of teaching and learning programmes
- iii) Improved employability of graduates in diversified fields
- iv) Increased internationalization of the Department
- v) Increased number of graduate students in diverse fields
- vi) Increased visibility and uptake of Department research output
- vii) Enhanced student satisfaction
- viii) Improved staff satisfaction
- ix) Increased staff productivity

Any Other Pertinent Information/Issue in the Year 2020

The Department participated in a workshop organized AERC at Egerton University whose main purpose is to disseminate research findings on the area of technology adoption, gender and trade for rural development. The Department had three students presenting workshop papers in this workshop.

Department of Food Science, Nutrition and Technology

Introduction

Department of Food Science, Nutrition and Technology (DFSNT) was established in 1973 as the Department of Food Science and Technology. This was later on changed to Department of Food Technology and Nutrition prior conversion to its current name in 2005. At the time of establishment, the department only offered Bachelor of Science Degree in Food Science and Technology. The first batch of students graduated in BSc. Food Science and Technology (FST) in 1976. The first Master of Science Degree programme, FST, was developed between 1982 and 1984 after which the first batch of students were admitted in 1984. In this same year, the MSc. Programme in Applied Human Nutrition curriculum was developed and the first lot of students was admitted in 1985. The mounting of the MSc Degree in ANH led to the renaming of the department to Food Technology and Nutrition.

The Department administrative structures include Sections units headed by an academic member of staff although the Pilot plant is headed by a manager (Technologist). The five sections include;

- a) Food Microbiology
- b) Food Chemistry
- c) Food safety and quality
- d) Applied Human Nutrition
- e) Pilot Plant

Programmes Offered

DFSNT currently offers nine degree programmes:

a) Undergraduates	Enrolled Students
i) Bachelor of Science in Food Science and Technology (BSC-FST)	52
ii) Bachelor of Science in Food Nutrition and Dietetics (BSC-FND)	41
b. Postgraduates	
i) Master of Science in Food Safety and Quality (MSC-FSQ)	4
ii) Master of Science in Applied Human Nutrition (MSC-AHN)	7
iii) Master of Science in Food Science and Technology (MSC-FST)	4
c) PhD offered in FSQ, FST and AHN	
The total number of enrolled PhD students is 2.	
i) Doctor of Philosophy in Food Safety and Quality (PHD-FSQ)	
ii) Doctor of Philosophy in Applied Human Nutrition (PHD-AHN)	
iii) Doctor of Philosophy in Food Science and Technology (PHD-FST)	

International Students Component

Name	Programme
Tito Vicky Achan Achuil	- BSc. Food Nutrition & Dietetics
Akpoko burene Ffranck	- MSc. Applied Human Nutrition
Ali Hussein Abdullahi	- MSc. Food Science and Technology
Hamdi Abdullahi Roble	- MSc. Food Science and Technology
Muna Abdullahi	- MSc. Applied Human Nutrition
Abdulrashid Mohammed	- MSc. Applied Human Nutrition

Research Activities

a) Title: Food and Local, Agricultural, and Nutritional Diversity (FoodLAND)

Scientific Area:	- Food security	Team:	- Prof Wambui Kogi-Makau
Discipline theme:	- Food Science and Technology		- Prof Michael Okoth
	- Human nutrition		- Dr Sophia Ngala
	- Economics		- Dr Jeff Wamiti
	- Agronomy		- Dr Lucy Njue
Collaborating institutions:	University of Bologna, Italy.		- Dr Dasel Kaindi

Publications for 2021

Author	Title	Journal
Sanya Emmaculate, Okoth Michael Wandayi, Abong George Ooko And Mugalavai Violet Kadenyeka.	Nutrient and Anti-Nutrient Composition of Extruded Cereal Flours Fortified with Grain Amaranth, Baobab and Orange-fleshed Sweet Potato Powder	Journal of Food Research; Vol. 9, No. 6: 21-35.
Joshua Ombaka Owade, George Ooko Abong' Michael Wandayi Okoth1 Agnes Wakesho Mwang'ombe Jared Omondi Jobor	Comparative profiling of lactic acid bacteria isolates in optimized and spontaneous fermentation of cowpea leaves	DOI: 10.1002/fsn3.2140

Jeff Wamiti, Wambui Kogi-Makau, Sophia Ngala, Francis Ephraim Onyango	Development and packaging of leucine-rich composite flour for treatment of moderate wasting in children	AJFAND
Beinah, A., Kunyanga, C., & Ngugi, K.	Utilization and Processing of Sorghum by Small Holder Farmers in Drought Prone Agro-Ecological Zones of Kenya	Advances in Social Sciences Research Journal
Gichure, J.N., Kunyanga, C.N., Imungi, J.K.	Processing Variations, Nutritional and Sensory Quality of Ethnic Deep-Fried Meats from Kenyan Pastoral Communities. African Journal of Food, Agriculture, Nutrition and Development	African Journal of Food, Agriculture, Nutrition and Development
Vila-Real, C., Pimenta-Martins, A., Magu, J., Kunyanga, C., Mbugua, S., Katina, K., Pinto, E.	A culture-sensitive semi-quantitative FFQ for use among the adult population in Nairobi, Kenya: Development, validity and reproducibility	Public Health Nutrition
Mbugua, M., Nzuma, J., Muange, E. & Kunyanga, C.N.	Social networks and household food consumption smoothing in the presence of idiosyncratic shocks: insights from rural Kenya	Development in Practice
Joyce W. Wanjiru Jasper K. Imungi and Lucy G. Njue	Moisture and Aflatoxin Contents of Kenyan Market Peanuts and Critical Reviews in Food Science Decontamination with Water, Lime and Ultraviolet Radiation Treatments.	
Ouma J.O , Abong' G.O and Ngala S	Contribution of cassava and cassava-based products to food and nutrition security in Migori county, Kenya	AJFAND
Nkechi P. Akah, Catherine N. Kunyanga Michael W. Okoth & Lucy K. Njue	Pulse Production, Consumption and Utilization in Nigeria within Regional and Global Context	Sustainable Agriculture Research;
Obiero L M., Abong' G O., Okoth M W., Muthama N J.	A review of Energy and Water Use for Processing by Horticultural Micro, Small and Medium Enterprises	East African Journal of Science, Technology and Innovation,
Ouma B N., Okoth. M W. Muthama J N.abong' G O. Villacampa M	Knowledge, attitudes and practices synthesis of waste management among horticultural processing MSMEs in Kenya	East African Journal of Science, Technology and Innovation,
Ouma B N. Okoth M W., Muthama J N., Abong G.o., Villacampa M	Capacity building influence on waste management among horticultural processing Micro, Small and Medium Enterprises in Kenya	East African Journal of Science, Technology and Innovation,
Masha C K. Okoth M W. Abong G O., Shibairo S I	The Effects of packaging materials on keeping quality of cassava root - leaf flakes	East African Journal of Science, Technology and Innovation,
Masha C K. Okoth M W., Abong G O., Shibairo S I	Formulation, of cassava root - leaf flakes, acceptability evaluation and determination of nutritional value	East African Journal of Science, Technology and Innovation,
Ogumo E O., Kunyanga Cn., Kimenju J., Okoth M W	Comparison of the efficiency of solar-powered prototype vapour compression cooler with evaporative charcoal cooler in maintaining quality of French beans	East African Journal of Science, Technology and Innovation,
Muchira J K., Michaelw. Okoth M W., 1Abong G O	Development of nutritious, safe and acceptable cassava-soybean flakes	East African Journal of Science, Technology and Innovation, Vol. 2

Ndanyi V C M., Abong' G O., Okoth M W., Kaaya A N., Mulindwa J., Wanjekeche E., Shibairo S I., Owade Jo	Physicochemical properties and flour pasting profiles of popular sweet potato varieties from Kenya and Uganda	East African Journal of Science, Technology and Innovation, Vol. 2
Abong' G O., 1Miriti J W., 1Okoth M W., 2Kabira J N	Acrylamide Intake in Nairobi Kenya: A case of French Fries Consumers	East African Journal of Science, Technology and Innovation, Vol. 2
Obiero L M., Abong'g O., Okoth M W., Muthama J.N., Gekonge D O., Odhiambo E G., Villacampa M	Current practices concerning the environmental management systems among horticultural processing MSMES in Kenya	East African Journal of Science, Technology and Innovation, Vol. 2
Ndanyi V C M., Abong' G O., Okoth M W., Odhiambo E G	Postharvest Handling Practices of Sweet potato in Kenya: A case of Bungoma and Homabay Counties	East African Journal of Science, Technology and Innovation, Vol. 2
Ndanyi V C M., Abong' G O., Okoth M W., Wanjekeche E	Effect of washing, packaging material and storage period on the quality of sweet potato roots	East African Journal of Science, Technology and Innovation, Vol. 2
A. E. Onyango ¹ ; M. W. Okoth ² ; C. N. Kunyanga ³	Water disinfection techniques: a review	Journal of Engineering in Agriculture and the Environment
Kambabazi MR ¹ , Okoth MW ¹ , Ngala S ¹ , Njue L ¹ And H Vasanthakalam ²	Evaluation of nutrient content in red kidney beans, Amaranth leaves, sweet potato roots and carrots Cultivated in Rwanda	Ajfang
Samwel Ochieng Onyango ^{1*} , George Ooko Abong ¹ , Michael Wandayi Okoth ¹ , Dora C. Kilalo ² And Agnes Wakesho Mwang'ombe ²	Effect of Pre-treatment and Processing on Nutritional Composition of Cassava Roots, Millet, and Cowpea Leaves Flours	Frontiers in Sustainable Food Systems
Omayio D G., 1 Abong' G O., Elmah G., 3marion S	Consumer awareness, practices and purchasing behavior towards green consumerism in Kenya	East African Journal of Science, Technology and Innovation, Vol. 2
1*Shivachi B S., 1abong' O G., 1karuri E G., 2likami I S	Consumption patterns and characteristics of free-range chicken consumers in Embakasi Sub-County, Nairobi County, Kenya	East African Journal of Science, Technology and Innovation, Vol. 2

Invited Staff	Theme	Place
Dr. C.N. Kunyanga	COLEACP E-meeting SPS with NPPO's from ACP countries 04 May 2021 on "How import controls of fresh fruit and vegetables are carried out in Europe example of Belgium - main implications and challenges	Virtually
Dr. C.N. Kunyanga	HEAL Community of Practice Webinar WASH and biosecurity interventions to reduce the burden of infections and AMR in animal agricultural settings', with Chris Pinto, Research Fellow at the London School of Hygiene and Tropical Medicine (LSHTM) at 1300 EAT, ILRI	Virtually
Dr. C.N. Kunyanga	Mycotoxins in food and feed' Wednesday, January 20 th 2021 at 4:00 PM (EAT) by AOAC Sub-Saharan Section and SAVETCON Event Management.	Virtually

6. Consultancies

Karurumo Value Addition Follow Up Training, February 19, 2021

The University of Nairobi through the Department of Food Science, Nutrition and Technology (DFSNT) and the Department of Plant Science and Crop Protection (PSCP) made a follow up visit and training to Karurumo farmers group in Embu to emphasize on a number of key requirements for value addition of mangoes and other fruits and vegetables. The training focused on the hygienic handling and practices required during processing, actual processing of fruits and vegetables into consumable products such as pulp, nectar, dried crisps and leather as well as storage of processed products. Other key issues that were re-emphasised included the need to assure food safety and quality of the product through appropriate use of additives and also the proper disposal of wastes to avoid attracting rodents and insects to the processing compound. The University team was led by Prof. Jane Ambuko who is a post-harvest management expert, Dr. George Abong who is the current chairman of DFSNT and food safety and quality expert, Mr. Duke Gekonge who is a PhD student and product development expert and Mr. Emmanuel Amwoka who is an MSc student in post-harvest physiology.

Masii Farmers Group Value Addition Follow Up Training, February 17, 2021

The University of Nairobi through the visited and trained Masii Horticultural farmers group in Masii on key requirements of product development and value addition of mangoes and other fruits and vegetables. The training focused on the hygienic handling and practices required during processing, actual processing of fruits and vegetables into consumable products such as pulp, nectar, dried crisps and leather as well as storage of processed products. Other key issues that were re-emphasised included the need to assure food safety and quality of the product through appropriate use of additives and also the proper disposal of wastes to avoid attracting rodents and insects to the processing compound. The University team was led by Prof. Jane Ambuko who is a post-harvest management expert, Dr. George Abong who is the current chairman of DFSNT and food safety and quality expert, Mr. Duke Gekonge who is a PhD student and product development expert and Mr. Emmanuel Amwoka who is an MSc student in post-harvest physiology.

Training of Horticultural Processing MSMEs and Business Intermediaries, 1-2 January 2021

In conjunction with Kenya Bureau of Standards (KEBS) and SUSTALDE Fundacion (Spain), the University of Nairobi through Hortigreen Project led by the Department of Food Science, Nutrition and Technology and Wangari Maathai Institute trained horticultural MSMEs and business intermediaries on sustainable and efficient use of key natural resources (water and electricity) as well as waste management. The Hortigreen project has been drumming up support for green processing whereby processors are encouraged to consider sustainable production and consumption as per the UN-SGD number 12. A total of 25 participants were trained both physically for those who made it to Qaribu Hotel and virtually. The project hopes that at the end of 2021 up to 50 processing MSMEs will be certified ISO14001 Environmental Management System. The staff members involved in this project include Dr. G Abong, Prof. MW Okoth, Prof. J. Muthama and Ms. L Obiero being supported by Mr. B. Nyankone, Mr. E Geoffrey, Mr. D Gekonge.

Training of Kitui Mango Farmers Group on Mango Product Development and Value Addition, 1-2 February, 2021

The University of Nairobi through the Department of Food Science, Nutrition and Technology (DFSNT) and the Department of Plant Science and Crop Protection (PSCP) in conjunction with Purdue University and support from Rockefeller Foundation conducted a training on key requirements for value addition of mangoes and other fruits and vegetables. The two days training that was conducted virtually and practically at the UON Hub focused on the hygienic handling and practices required during processing, actual processing of fruits and vegetables into consumable products such as pulp, jam, chutney, mango blended yoghurt, nectar, dried crisps and leather as well as storage of processed products. The need to assure food safety and quality of the product through judicious use of additives and the proper disposal of wastes to avoid attracting rodents and insects to the processing compound. The group was mainly composed of traders of horticultural fresh produce and had ventured into mango pulp production. The training was therefore administered to improve their knowledge and skills in product development. The University team was led by Prof. Jane Ambuko who is a post-harvest management expert, Dr. George Abong who is the current chairman of DFSNT and food safety and quality expert, Mr. Duke Gekonge who is a PhD student and product development expert and Mr. Emmanuel Amwoka who is an MSc student in post-harvest physiology.

7. Staff Establishment

a) Number of Staff by Designation/Category

Academic Year 2015/2016

Academic Staff		Technical Staff		Non Academic Staff	
Designation	Count	Designation	Count	Designation	Count
Professor	0	Chief Technologist	1	Secretary	1
Assoc. Prof	2	Snr. Technologist	4	Office Assistant	2
Snr. Lecturer	2	Technologists	6	Drivers	1
Lecturer	4	Technical Asst.	2	Support staff	5
Asst. Lecturer	1	Administrator	1	Registry Clerk	1
Tutorial Fellow	1	Total	14	Total	10
Part time staff	2				
Dietetic Preceptors	2				
Total	14				

b) Teaching staff

Associate Professor & Equivalent

Prof. Wambui Kogi-Makau
Prof. Michael Wundayi Okoth

Senior Lecturer

Dr George Abong'
Dr Catherine Nkirete Kunyanga

Lecturer and Equivalent

Dr Sophia Ngala
Dr Lucy Gicuku Njue
Dr. Angela Andago
Dr. Dasel Mulwa Kaindi

Assistant Lecturer

Ms. Jane Nyathegi Njenga

Tutorial Fellow

Dr. Jeff Wamiti
Sarah Cherere Obara
Dr. Caroline Wakuthie Muthike

c) Non-teaching Staff

Principal Technologist - Snr. Lect. Equivalent

Chief Technologist - Lecturer Equiv.
Mrs Jacinta W. Muchiri

Senior Technologist D/E/F

Mr Ross Paul Ongaro
Mr Isaac Muuo Maitha
Leonard Njue Giconi
Benard Ochieng Aliwa

Technologist A/B/C

Joseph Mugo Matheri
James Odhiambo Ouma
Mrs Cherotich Cheruiyot
Monica Wambui Njoroge
Catherine Wanjiku Ngunju

Technician

Benard Gichia Muroki
Stephen Adembo Okello

Secretary

Evelyne Ishuga

Office Assistant

Joan Tshikulo Waluvengo

Driver

Mr Mathew Kiprono Ruto

Support Staff

Leonard Kiprono Bett
John Kivuti Njoki
Simon Mwangi Mwaura
Mary Okello

8. Number of Graduates Year 2020/2021

Course	No. of Students Graduated
BSc. Food Science and Technology (Food Processing)	33
BSc. Food Nutrition and Dietetics	32
MSc. Food Science and Technology	1
MSc. Food Safety and Quality	10
Applied Human Nutrition	13
PhD Food Science and Technology	1
PhD Applied Human Nutrition	1
PhD Food Safety and Quality	1
TOTAL	92

1. Major Achievements

Kenya Nutritionists and Dieticians Institute (KNDI) Accredits BSc Food Nutrition and Dietetics Programme at The University of Nairobi

The University of Nairobi (UoN) has been fully accredited to train students in BSc. Food Nutrition and Dietetics at the Department of Food Science, Nutrition and Technology (DFSNT), College of Agriculture and Veterinary Sciences (CAVS). As a leading institution in Kenya and the region, UoN has been offering the programme based on interim licence. The Kenya Nutritionists and Dieticians Institute (KNDI) that is mandated by law as a professional organization to inspect and approve Nutrition and Dietetics Programmes in Kenya in collaboration with Commission for University Education (CUE), carried out site inspection based on 11 key standards and the UoN surpassed the minimum requirements. On a virtual meeting held on March 9, 2021 the Vice Chancellor, Prof. SG Kiama received with acknowledgement the accreditation licence as delivered by the KNDI accreditation committee chairman, Dr. G Nguka and KNDI CEO, Dr. D Okeyo. The University is committed to continuous improvement of quality and shall strive to uphold scholarly excellence. The great work done by DFSNT staff lead by the chairman, Dr. GO Abong', Dean of the Faculty, Prof. M Nyangito and college Principal, Prof. R. Nyikal is highly acknowledged.

Department of Land Resources Management and Agricultural Technology

Introduction

The Department of Land Resource Management and Agricultural Technology (LARMAT) is one of the Departments in the Faculty of Agriculture that is established to provide training, research and leadership in sustainable land resource management and the development of agricultural technologies for the diverse Kenyan agroecologies. The department executes this noble mandate through teaching and learning, research and innovations, community outreach and consultancy services. Since its establishment, the department has also demonstrated professional excellence in promotion and advocacy of Natural Resources Management and Sustainable Agricultural practices.

The training and research take cognizance of sustainability science as the basis for informing interventions and adaptations that; focuses on judicious management of resources for agricultural production, environmental conservation and management. The department also takes pride in providing capacity building, research and consultancy on dryland resource management, climate change mitigation and adaptation, resource governance, and socio-ecological systems dynamics.

LARMAT offers undergraduate and postgraduate degree programmes in Land Resource Management, Dryland Agriculture, Range Management, and Management of Agroecosystems and Environment. These Programmes draw students from within and outside Kenya. The Range Management and Dryland Agriculture programmes emphasize on building knowledge and understanding of rangeland production systems and fundamental ecological processes. The Management of Agroecosystems and Environment program, on the other hand offers a curriculum that emphasizes on prudent management of agricultural land and abatement of natural resource degradation and environmental pollution.

To achieve this noble goal, the department is guided by the following vision, mission, core values and strategic issues:

Vision: To be a department of excellence in sustainable land resource management and Agricultural Technology development.

Mission: Train highly skilled workforce capable of teaching, carrying out innovative research, consultancy and outreach to support natural resource conservation and agricultural productivity.

Core Values	Strategic Issues
<ul style="list-style-type: none"> - Professionalism and ethics - Transformative education - Innovative research - Teamwork and partnership - Environmental sustainability and care - Equity and inclusiveness 	<ul style="list-style-type: none"> - Resources and Governance - Teaching and Learning - Research, Innovation and Technology - Competitiveness of the Department of LARMAT in teaching and learning, research and outreach in land resources management, innovations and technology

Strategic Objectives

- i) Mobilize resources and manage the department efficiently
- ii) To produce quality and holistic graduates in land resource management and agricultural technology
- iii) Advance and consolidate scientific technological innovations in sustainable land resource management and agricultural technology
- iv) To enhance the competitiveness and image of the department in sustainable land-based resource management
- v) To improve the resources, facilities and infrastructure to enhance productivity
- vi) To enhance value-adding Collaborations and Partnerships culture

Programmes Offered

In collaboration with other departments in the Faculties of Agriculture and Veterinary Science, LARMAT offers the following degree programmes:

Doctor of Philosophy	Master of Science	Bachelor of Science
Doctor of Philosophy in Range Management	Masters of Science in Range Management	Bachelor of Science in Range Management
Doctor of Philosophy in Management of Agroecosystems & Environment	Masters of Science in Land & Water Management with specialization in i) Soil Science ii) Management of Agroecosystems and Environment iii) and Land and Water Management	Bachelor of Science in Management of Agro-Ecosystems and Environment
Doctor of Philosophy in Soil Science		Bachelor of Science in Agriculture (Land Resources Major)
Doctor of Philosophy in Land & Water Management		
Doctor of Philosophy in Dryland Resource Management		

Short Courses:

The department regularly and on need basis offers short courses targeting farmers, extension agents, students and other stakeholders in the following areas:

- i) Biological Nitrogen Fixation and Bio-fertilizer Production and Use.
- ii) Waste Management and Re-Use for Peri-Urban and Rural Agriculture.
- iii) Compost/Vermicomposting.
- iv) Ecological Organic Agriculture/Agroecology and Agrobiodiversity.
- v) Irrigation and Drainage/Water quality analysis.
- vi) Application of GIS and RS in Land Use Planning and management.

Services Offered by The Department

- i) Legume inoculants production - Bio-fix fertilizer
- ii) Soil testing, plant analysis and interpretation to researchers, extension agents and farmers
- iii) Plant species identification and herbarium management
- iv) Water quality analysis (physical and hydro-chemistry) and interpretation (including isotopic data)

5. Major Achievements in The Year 2021

a) International Virtual Exhibition

The Department of LARMAT virtually exhibited in the International Rangeland Congress 2021. The theme of the congress was “Sustainable Use of Grassland and Rangeland Resources for Improved Livelihoods”. The aim of the congress was to promote the interchange of scientific and technical information on all aspects of grasslands and rangelands: including grassland and rangeland ecology; forage production and utilization; livestock production systems; wildlife, tourism and multi-facets of grassland and rangeland; drought management and climate change in rangelands; pastoralism, social, gender and policy issues and capacity building, extension and governance.



The Virtual booth manned by Ms Carolyne Kyalo

b) Exchange Programme-

In the year 2021, four students were selected for 11 months internship at Arava International Centre for Agriculture Training (AICAT), Israel. The beneficiaries are; Brian Oginga and Ruth Basweti (BSc. Management of Agroecosystems) and Evance Okumbe Omollo and Felix Ouma Odegi (BSc Range Management).

FELIX ODEGI AMONG THE BENEFICIALLY OF AICAT INTERNSHIP IN ISRAEL



Felix Odegi harvesting Capsicum at AICAT centre, ISRAEL

c) Short Courses

In the year 2021, a three-week short course - Agroecology and Agrobiodiversity Training Course” (AATC) for undergraduates - was conducted at the department of LARMAT.

During the training the students were able to experience first-hand what it means to do agriculture sustainably. The agroecology and agrobiodiversity training course (AATC), co-financed by Biovision and provided insights into the practical implementation of a sustainable food system.



2021 AATC participants learn how to make compost practically (<https://www.biovision.ch/en/news/aatc/>)

d) Number of Graduates

In 2021, the Department graduated the following numbers in various programmes

Degree Programme	No. Graduated
Bachelor of Science in Range Management	14
Bachelor of Science in Management of Agro-Ecosystems and Environment	33
Bachelor of Science in agriculture (Land resource Major)	7
Masters of Science in Range Management	1
Masters of Science in Soil Science	3
Masters of Science in Land and Water Management	2
Doctor of Philosophy in Dryland Resource Management	4
Doctor of Philosophy in Sustainable Soil Resources Management	1
Doctor of Philosophy in Soil Science	2
Total	67

e) Research Activities

In 2021, six staff won various grants for project work as PIs

Research Project	PI
Effects of watering regimes on taro (<i>Colocasia esculenta</i>) yields in Kabete, Kenya. International Foundation of Science (2021 - 2023)	Dr. Anne Karuma
Woody Weeds Plus: Supporting the implementation of the National Prosopis Strategy in Kenya January 2021 - December 2023.	Dr. Staline Kibet
Achieving the SDGs in East African Drylands: Pathways and Challenges towards a Social- ecological Transformation of Landscapes, livestock and livelihoods (Dryland Transformation) 2021 - 2025	Dr. Stephen Mureithi
Management and restoration towards Healthy rangelands in East Africa (Dryland Restore) 2021 - 2023	Dr. Stephen Mureithi
Agroecology and agrobiodiversity training course for undergraduate, September 2021-Dec 2021	Prof. Richard Onwonga
Science-based and co-produced transformative Rangeland Management Practices - how to deal the with encroachment of unwanted woody species (TRAMAP Kenya). A project within AgriFoSe2030 Programme Phase II Challenge 2: Agricultural productivity and Ecosystem services 2021-2023.	Dr. Stephen M Mureithi Dr. Staline Kibet

f) International Links and Collaborations:

In the year 2021 the Department had the following Links:

LEAD PERSON AND NAME OF THE PROJECT	COLLABORATORS
Prof. Richard Onwonga Agroecology and agrobiodiversity training course for undergraduate	Biovision foundation for ecological development, Switzerland University of Nairobi
Dr. Oliver Wasonga Drought Resilience in East African dryland Regions (DRIER) CHL\R1\180485	- University of Bristol - Cardiff University - University of East Anglia - Addis Ababa University - The University of Nairobi
Prof. Nancy Karanja Rural youth employment opportunities: Support to integrated agribusiness hubs in Cameroon, Kenya and Mozambique.	International Institute of Tropical Agriculture (in partnership with the University of Nairobi and others).
Dr. Oscar Koech Technical cooperation fellowship on animal nutrition and quality assessment of animal feeds	Ministry of Environment, Agriculture, Livestock, and National Veterinary Laboratory, Burundi. University of Nairobi
Led by Prof. Moses Nyangito Sustainable Use of Grassland and Rangeland Resources for Improved Livelihoods	KALRO, CIRAD GASL, Welcome Kenya, APSK, IYRP, CELEP, USDA-NRCS, Kenya Seed, IGC 2023, Conservation South Africa, IGAD, and Ministry of livestock, agriculture, fisheries and cooperatives
Led by Dr. Oliver Wasonga Seventh African Higher Education Week and Ruforum Triennial Conference 2021	LARMAT, RUFORUM, Climate Smart Agriculture(CSA) from (Kenya, Democratic Republic of Congo, Ethiopia, Uganda, Benin, Ghana, Zambia, Burundi and Malawi
Dr. Oliver Wasonga Methodology Review Workshop & Pilot Survey for Down2earth Project	University of Bristol, Vrije Universiteit Amsterdam, University of Hohenheim, University of Nairobi, Addis Ababa University, IGAD Climate Prediction and Applications Center (ICPAC), Ghent University, University of East Anglia, Food and Agriculture Organization-Somalia
Dr. Judith Mbau Monitor UNDP-GEF/SGP Projects in Sacred Kaya Landscape	University of Nairobi, UNDP-GEF -Small Grants Programme, CECM Gender, Sports, Youth, Culture and Social Services-Kilifi County.
Dr. Judith Mbau AMU Lecture Series	Faculty of Geographical and Geological Sciences Adam Mickiewicz University in Poznan, Poland
Dr. Staline Kibet 6 th International Climate Change Adaptation Conference	International Centre for Research and Development Climate Development Knowledge Network (CDKN)
Dr. Stephen Mureithi Triple L Initiative - Land, Livestock and Livelihoods in dryland systems	Swedish University of Agricultural Sciences(SLU), Gothenburg University, Chalmers University, Makerere University, Jomo Kenyatta University of Agricultural Technology, ICRAF, IGAD, County Government of West Pokot, Baringo, Isiolo, and Laikipia
EU ERASMUS+ Mobility Programme for students and Staff	Jagiellonian University in Krakow (JU), Poland

SCIENTIFIC PUBLICATIONS

In 2021, the Department Scholars Published 35 Articles in various Journals and 1 Book

Mbithi, P.M., Mbau, J.S., Muthama, N.J., Inyega, H., & Kalai, J.M. (2021). Higher Education and Skills Development in Africa: An Analytical Paper on the Role of Higher Learning Institutions on Sustainable Development. *Journal of Sustainability, Environment and Peace*, 4(2), 58-73.

Rufino, M.C., Gachene, C.K., Diogo, R.V., Hawkins, J., Onyango, A.A., Sanogo, O. M., ... & Pelster, D.E. (2021). Sustainable development of crop-livestock farms in Africa. *Frontiers of Agricultural Science and Engineering*, 8(1), 175-181.

Kibet, S., Nyangito, M., MacOpiyo, L., & Kenfack, D. (2021). Savanna woody plants responses to mammalian herbivory and implications for management of livestock-wildlife landscape. *Ecological Solutions and Evidence*, 2(3), e12083.

Mugo, J.N., Karanja, N., Gachene, C., Dittert, K., & Schulte-Geldermann, E. (2021). Response of potato to fertilizers applied on different soil types in Kenyan Highlands. *Agronomy Journal*.

Gitau, A. N., Onwonga, R.N., Mbau, J.S., Chepkemoi, J., & Mureithi, S.M. (2021). Effect of Grazing Management and Land Cover Types on Mineral-Associated Organic Carbon and Particulate Organic Carbon in a Semi-arid Rangelands in Kenya.

Ndung'u, M., Ngatia, L.W., Onwonga, R.N., Mucheru-Muna, M.W., Fu, R., Moriasi, D.N., & Ngetich, K.F. (2021). The influence of organic and inorganic nutrient inputs on soil organic carbon functional groups content and maize yields. *Heliyon*, 7(8), e07881.

Knutsson, P., Mureithi, S., Wredle, E., & Nyberg, G. (2021). Perspectives on enclosures in pastoralist drylands: From contradictory evidence to the formulation of innovative land management strategies. *World Development Perspectives*, 23, 100351.

Nguru, W.M., Gachene, C.K., Onyango, C.M., & Girvetz, E.H. (2021). Factors constraining the adoption of soil organic carbon enhancing technologies among small-scale farmers in Ethiopia. *Heliyon*, 7(12), e08497.

Nyawade, S.O., Gitari, H.I., Karanja, N.N., Gachene, C.K., Schulte-Geldermann, E., & Parker, M.L. (2021). Yield and evapotranspiration characteristics of potato-legume intercropping simulated using a dual coefficient approach in a tropical highland. *Field Crops Research*, 274, 108327.

Otieno, M.A., Gitari, H.I., Danga, B., & Karuma, A.N. (2021). Soil properties and fertility management with respect to Capsicum (*Capsicum annum L.*) production in Nairobi Peri-urban Counties. *Journal of Soil Science and Plant Nutrition*, 1-19.

Jirde, M.I., Koech, O.K. and Karuma, A.N. (2021). An analysis of perceptions, knowledge and management of rainwater harvesting (RWH) technologies among agropastoralists in Odwayne District, Somaliland. *Tropical and Subtropical Agroecosystems*, 24(3): #107

Karuma, A.N., Njuguna, J.W. and Gicheru, P.T. (2021). Pedology, A disappearing skill in Eastern Africa? A Review. *Tropical and Subtropical Agroecosystems*, 24(2): #65

Mutuku, N.S., Nyangito, M. M., Kironchi, G., & Wasonga, O.V. (2021). Effects of Agroforestry Practices on Soil Properties in the Drylands of Eastern Kenya.

Wilson, M.M., Michieka, R.W., & Mwendwa, S.M. (2021). Assessing the influence of horticultural farming on selected water quality parameters in Maumau stream, a tributary of Nairobi River, Kenya. *Heliyon*, 7(12), e08593.

Nakitare Nambafu, G., & Ndemo Onwonga, R. (2021). Demographic and Socioeconomic Factors Influencing Uptake of Striga Weed Control Technologies in Kenya.

Mulema, J.M.K., Day, R., Nunda, W., Akutse, K.A., Bruce, A.Y., Gachamba, S., Haukeland, S., Kahuthia-Gathu, R., Kibet, S., Koech, A. and Kosiom, T., 2021. Prioritization of Invasive Alien Species with Potential to Threaten Agriculture and Biodiversity in Kenya through Horizon Scanning.

Chepkemoi, J., Onwonga, R.N., Nyankanga, R., & Gitau, A.N. (2021). Greenhouse Gas Emissions as Impacted by Topography and Vegetation Cover in Wooded Grasslands of Laikipia County, Kenya. *Journal of Rangeland Science*.

- Nyaga, M.N., Mureithi, S.M., Wasonga, V.O., & Koech, O.K. (2021). Woody Plant Species Composition and Diversity in Rusinga Island, Homa Bay County, Kenya.
- Mutuku, N.S., Nyangito, M.M., Kironchi, G., & Wasonga, O.V. (2021). Effects of Agroforestry Practices on Soil Properties in the Drylands of Eastern Kenya.
- Mgalula, M.E., Wasonga, O.V., Hülsebusch, C., Richter, U., & Hensel, O. (2021). Greenhouse gas emissions and carbon sink potential in Eastern Africa rangeland ecosystems: A review. *Pastoralism*, 11(1), 1-17.
- Coulibaly, J.Y., Gachene, C.K., & Kironchi, G. (2021). An oasis in the dryland of Kenya! The case of irrigation as an adaptation strategy among the transitioning pastoralists and agro-pastoralists of Laikipia County, Kenya. *Journal of Cleaner Production*, 303, 126764.
- Dabasso, B.H., Wasonga, O.V., Irungu, P., & Kaufmann, B. (2021). Emerging pastoralist practices for fulfilling market requirements under stratified cattle production systems in Kenya's drylands. *Animal Production Science*, 61(12), 1224-1234.
- Mugo, J.N., Karanja, N.N., Gachene, C.K., Dittert, K., Gitari, H.I., & Schulte-Geldermann, E. (2021). Response of potato crop to selected nutrients in Central and Eastern highlands of Kenya. *Cogent Food & Agriculture*, 7(1), 1898762.
- Morlue, B., Kamau, S., Ayuke, F.O., & Kironchi, G. (2021). Land use change, but not soil macrofauna, affects soil aggregates and aggregate-associated C content in central highlands of Kenya. *Journal of Soils and Sediments*, 21(3), 1360-1370.
- Nyalitya, B., Mureithi, S., & Boeckx, P. (2021). Spatiotemporal hydro-chemical and isotopic dataset of the tropical Nyando river basin in Kenya. *Data in Brief*, 35, 106787.
- Harmsen, H., Wang'ondou, V.W., Mbau, J.S., & Muthama, N.J. (2021). Randomized hotspot strategy is effective in countering bushmeat poaching by snaring. *Biological Conservation*, 253, 108909.
- Harmsen, H., Mbau, J.S., Muthama, J.N., & Wang'ondou, V.W. (2021). Comparing law enforcement monitoring data and research data suggests an underestimation of bushmeat poaching through snaring in a Kenyan World Heritage Site. *African Journal of Ecology*, 59(4), 912-923.
- Kenfack, D., Arellano, G., Kibet, S., Kimuyu, D., & Musili, P. (2021). Understanding the monodominance of *Acacia drepanolobium* in East African savannas: insights from demographic data. *Trees*, 35(5), 1439-1450.
- Caleb W. Mbayaki and George N. Karuku. 2021. Growth and Yield of Sweet Potato (*Ipomoea Batatas* L.) Monocrops versus Intercrops in the Semi-Arid Katumani, Kenya. *Tropical and Subtropical Agroecosystems* 24(3). Submitted March 1, 2021 - Accepted May 22, 2021. Published in September 1, 2021. This work is licensed under a CC-BY 4.0 International License. ISSN: 1870-0462.
- Kiplangat Rop, George N. Karuku and Mbui Damaris. 2021. Synthesis and characterization of biodegradable cellulose-based nano-composite polymer hydrogel for potential agricultural application. Elsevier Book titled "NANOTECHNOLOGY IN THE PAPER AND PULP INDUSTRY". PUBLICATION DATE
- David Kimani Muigai, Richard N. Onwonga, George N. Karuku, Abdullahi Mohammed. 2021. Evaluating maize performance under varying water depletion levels in Bura Irrigation Scheme, Kenya. *International Journal of Agronomy and Agricultural Research (IJAAR)* ISSN: 2223-7054 (Print) 2225-3610 (Online) <http://www.innspub.net> Vol. 18, No. 1, p. 19-29, 2021
- Caleb W. Mbayaki and George N. Karuku. 2021. Predicting impact of climate change on water requirements for directly sown rain-fed sweet potato in the semi-arid Katumani region, Kenya. *Tropical and Subtropical Agroecosystems* 24(2). This work is licensed under a CC-BY 4.0 International License. ISSN: 1870-0462.
- Josephine Njogu, John Busienei, John Gathiaka, George N. Karuku and Lia Wensenbeeek 2021. Income mobility in diversified CSA households of Nyando Basin, South Western Kenya. *African Journal of Agricultural Research*, Vol. 17(5), pp. 780-793, May, 2021 DOI: 10.5897/AJAR2020.15310 Article Number: 5471CBA66891 ISSN: 1991-637X.
- Haddish Melakeberhan, ZinThuZar Maung, Isaac Lartey, Senol Yildiz, Jenni Gronseth, George N. Karuku, John W. Kimenju, Charles Kwoseh, Thomas Adjei-Gyapong and Jiaguo Qi. 2021. Nematode community analysis reveals distinct soil food web structures in selected Ferralsol, Lithosol and Nitosol soil groups in Ghana, Kenya and Malawi. Received: 11 December 2020. Accepted for publication: 19 February 2021. *Diversity Journal*. Vol 13(3) pp10.

Kizito M. Kwena, George N. Karuku, Fredrick O. Ayuke, and Anthony O. Esilaba. 2021. **Impact of Climate Change on Maize and Pigeon Pea Yields in Semi-arid Kenya**. Book Title: Environmental Change and Sustainability. ISBN 978-1-83880-917-1. Edited by: Dr. Suriyanarayanan Sarvajayakesavalu E-mail: [Book Citation Index in Web of Science™ Core Collection \(BKCI\).info@intechopen.com](mailto:Book Citation Index in Web of Science™ Core Collection (BKCI).info@intechopen.com).

G.L. Lelenguyah, M.M. Nyangito, O.V. Wasonga, R.C. Bett, 2021. Perception of Key Informants on Climate Variability, Livestock Diseases, Herd Mobility and the Adaptation Strategies of Local Pastoralists in Samburu County, Kenya. International Journal of Trend in Scientific Research and Development (IJTSRD Vol. 6(1) 2456 - 6470

PAPERS PRESENTED

In 2021, the Department Presented 17 Papers

Elisabeth Simelton, Henrik Haller, Madelene Ostwald, Stephen M. Mureithi (2021), Track5f Food security and agriculture, The 27th international sustainable development research society conference

Margeret Nyaga (2021) Community Perceptions on the Changes in Vegetation Composition and Abundance in Rusinga Island, Homa Bay County, Kenya, Rangeland/Grassland Ecology-2021 Virtual Congress

Margeret Nyaga (2021), Woody Plant Species Composition and Diversity in Rusinga Island, Homa Bay County, Kenya, Rangeland/Grassland Ecology-2021 Virtual Congress.

Moses Nyangito David J. Augustine, Ben Wigley, Jayashree Ratnam, Staline Kibet, and Mahesh Sankaran 2021, Large Herbivores Maintain a Two-Phase Herbaceous Vegetation Mosaic in a Semi-Arid Savanna., Forage Production and Utilization, Virtual Congress.

Haileselassie G. Mariam Araya (2021), Effects of Banana Peels on Chicken Weight Gain and Egg Production in the Urban and Peri-Urban Areas of Aksum City, Ethiopia, Forage Production and Utilization, Virtual Congress.

TeyieSharon, (2021), Charcoal value chain as a complimentary livelihood activity for pastoralists in the rangelands Wildlife, Tourism and Multi-Facets of Rangelands/Grasslands,2021, Virtual Congress.

Rodgers Rogito (2021) Soil nitrous oxide (N₂O) emission from integrated soil fertility management in maize (Zea Mays L.) cropping systems, Drought Management and Climate Change in Rangelands, Virtual Congress.

Bulle Dabasso, (2021), Interventions for mitigating drought-related livestock mortality in Africa's drylands: a review of their relevance and effectiveness with special reference to Kenya, Drought Management and Climate Change in Rangelands, Virtual Congress.

Walter Magero Wafula (2021) Analysis of Actors and Activities at Dagoretti Livestock Market in Nairobi City County, Virtual Congress.

Stephen Mureithi et al 2021, Restoring rangelands for nutrition and health for humans and livestock, Range Management, Virtual Congress.

Staline Kibet (2021) Perceptions on governance and knowledge flow on effective adaptation to climate changes within community-based conservancies in Kenya The Joint XXIV IGC and XI IRC Congress 2021, Virtual Congress.

Richard Onwonga, (2021), Agro-ecology and Agrobiodiversity Training Course

Staline Kibet(2021) , Launch of Woody Weeds + Supporting the Implementation of the National Prosopis Strategy in Kenya, Wood Science.

Staline Kibet(2021) Climate Development Knowledge Network (CDKN) and International Development Research Centre, climate change.

Oliver Wasonga (2021) Seasonal forecast; Rain forecast season for East Africa, GHACOF57.

Charles Gachene (2021) Restoring African Degraded Landscapes (REDEAL) Soil Carbon Monitoring, SASNR/PI-UoK.

Stephen Mureithi (2021) Technical Working Group for Africa risk capacity, Kenya drought insurance in Kenya.

Policy Briefs: In 2021 The Department Produced 5 Policy Papers

- i) Stephen Mureithi, Ingrid Öborn, Aida Bargues Tobella (2021), Drylands Transform soon at Agri4D.
- ii) Aida Bargues Tobella, Leigh Ann Winowiecki, Stephen Mureithi, Vagen, Tor-Gunnar, (2021), Field work is on after Covid -19 lockdown
- iii) Faith Gikunda, Stephen Mureithi, Martin Oulu (2021), Inter-Sectoral Forum on Agro-Ecology and Agro-Biodiversity (Isfaa)
- iv) Pascal Boeckx, Stephen Mureithi, Benjamin Nyilitya (2021), Eutrophication of Lake Victoria - Restoring the former glory by control of excess nitrogen discharge in the basin
- v) Pascal Boeckx, Stephen Mureithi, Benjamin Nyilitya (2021), Groundwater Resources Management in the Lake Victoria basin, Kenya.

Corporate and Community Outreach Activities

- a) Livestock Café Site Fencing and Reseeding In Chepkopegh Location, Chepukat Village, Chepareria Ward, Pokot South Subcounty, West Pokot County, (September, 2021)



Fig. 1. Signing of the annex land agreement by the owner witnessed by the Chepkopegh Administration Assistant Chief. Photo by M. Nyaga



Fig. 2. Water harvesting and soil conservation structures installed at the Livestock Café site at Chepareria. Photo by S Mureithi

b) Training of Trainers on Participatory Rangeland Management in Samburu County, (June 2021)



Participatory Rangeland Resource Mapping and Presentation of Group Work by Participants (Photo Credit: Oliver Wasonga)



**Outputs (Range Units) of Participatory Rangeland Resource Mapping Exercise
Photo Credit: Oliver Wasonga**



Dr. Oliver Wasonga and Dr. Oscar Koech training TOTS in Maralal



Dr. Oscar Koech and John Jamiaca leading pastoralists on charcoal briquettes production from *Prosopis juliflora* and *Acacia reficiens* in Lerata, Samburu County

c) Baringo Community Trained on Participatory Gis Mapping (26th November, 2021)



Dr. Staline Kibet and Baringo Trainees

d) National Training Course on Livestock Forage Production and Conservation Techniques, Asmara, Eritrea, 18-29 October 2021



Training facilitated by Dr. Oscar Koech

e) Field Day Excursion to Ololo Farm 3rd December, 2021



Field Day Excursion To Ololo Farm

Prepared by MSc Range
Management Class 2021/2022

Prof. Kinuthia with Post graduate students

f) Bridging Dry Spells for High Value Vegetable Cropping through Supplemental Drip Irrigation Chumvi Village in Laikipia County, Kenya

by CKK Gachene, PI, NRF Project	
	<p>Brief background and Description of the activity</p>
<p>a)</p>	<p>Kenya is one of the countries most vulnerable to climate change and with least capacity to respond. The nature of Kenya's agriculture, primarily rain-fed, means that production is sensitive to fluctuations in rainfall. In particular, agro pastoralist communities residing in Kenya's arid and semi-arid lands and whose livelihoods highly depend on natural resources are among the most vulnerable to climate change. Potential adaptation strategies such as use of fertilizers, altering planting dates and supplemental irrigation have been suggested to offset negative climate change impacts on food security. This study is been conducted in the agro pastoral production systems in Laikipia County. The project team has hypothesized that due to current rainfall variability, crop production in agro pastoral production systems is limited by drought stress, notably by long dry spells during the critical crop growth stages and that using supplemental drip irrigation is a viable option for bridging dry spells in the Laikipia County.</p>
<p>b)</p>	<p>c)</p> <p>The farmers are experiencing a number of challenges, among them, <i>lack of good water for irrigation (a)</i> and <i>Green algae and silt ladden dam(b)</i> and <i>human – wildlife conflict (c)</i> where for instance, this farmer's crop of miraa, sugarcane and bananas were destroyed by elephants. The research team, led by Prof CKK Gachene (in a white T- shirt) plans to install 1/8 acre plot drip irrigation system. Soil and water samples were collected for assessing their suitability for irrigation.</p>

Staff Portofolio

Professor

Prof. N. Karanja, PhD
Prof. C.K. Gachene, PhD

Asso. Professo

Prof. R.K. Ngugi, PhD
Prof. M.M. Nyangito, PhD
Prof. G. Kironchi, PhD
Prof. R.N. Onwonga, PhD
Prof. G.N. Karuku, PhD

Senior Lecture

Dr. V.O. Wasonga, PhD
Dr. F.O. Ayuke, PhD
Dr. S.M. Mureithi, PhD

Lecturer

Dr. O.K. Koech, PhD
Dr. J.S. Mbau, PhD
Dr. A.N. Karuma, PhD
Dr. S. Kibet, PhD
Mr. A.K. Mwala, MSc
Mr. J.M. Ndutu, MSc

Chief Technologist

Mr. S.K. Tirop, MSc

Asst. Chief Technologist

Ms. C. Kyalo, MSc
Ms. M. Kimani, MSc

Administrative Assistant

Mr. E. Guintai, MSc

Asst Executive Secretary

Ms. F. Keru, MSc

Technician DEF

Mr. J. Ndiritu, BSc
Mr. J. Kimotho

Range Manager

Mr. M Kioko, BSc

Technician ABC

Mr. S. Kisamuli Diploma

Field Assistant

Mr. F. Anyika
Mr. J. Onganyo

Stores Clerk

Mr. J. Wambua

Storeman

Mr. W.K. Wanjohi

Subordinate

Ms. M. Waweru

Records Clerk

Mr. D. Juma

Accounts Clerk

Ms. E. Kamau

Subordinate

Ms. E. Noah

Electrician

Mr. K. Nawango

STRATEGIC PROJECTIONS/OPPORTUNITIES FOR IMPROVEMENT

- i) Seeking more research funds through responding to research calls/project proposal to assist both our graduate students and for the farmers through
- ii) More publications both articles/books with internationally recognized and reputable publishers
- iii) Complete all teaching modules with emphasis on e-Blended learning platforms
- iv) Revise curriculum of various programmes
- v) Departmental committee intensification of specific duties

Paradigm Shifts in Agricultural Systems towards Sustainable Land-Use in Africa



Prof. Margaret Jesang Hutchinson (AVC, RIE, UoN), Prof. Richard Onwonga (Chairman, LARMAT), Dr. Oliver Wasonga (LARMAT), Daniel Guenther (German Embassy), Dr. Marcus Giese (University of Hohenheim), Dr. Katrin (University of Hohenheim), Dr. Juliet Kariuki (University of Hohenheim), and Maria Oguche (University of Hohenheim) after Opening of the Workshop on March 28, 03, 2022

Department of Plant Science and Crop Protection

Introduction

The Department of Plant Science and Crop Protection started as two departments, Department of Crop Production and Department of Applied Science in the Faculty of Agriculture in 1970/71 within the College of Agriculture and Veterinary Sciences (CAVS) in the Upper Kabete Campus. The two departments were later re-organized and merged and renamed the Department of Crop Science. In 1997, the Department of Crop Science was split into two departments namely, Department of Crop Science and Department of Crop Protection. In 2005, the two departments were merged to form the Department of Plant Science and Crop Protection. After the merger, the department was re-organized into two sections; namely Crop Science and Crop Protection. The Crop Science Section is made up of the following units: Agronomy, Horticulture, Plant Breeding and Biometry, whereas the Crop Protection Section is made up of Plant Pathology and Entomology Units. The Department teaches most of the courses for the BSc Agriculture and offers 51 service courses to BSc Agricultural Education and Extension, BSc Agribusiness Management, BSc Management of Agroecosystems & Environment, BSc Range Management, Food Science, Nutrition & Dietetics, Food Science & Technology in the Faculty of Agriculture. It offers a BSc course in Horticulture, and postgraduate programmes for and masters and PhD in the following areas: Agronomy, Plant Breeding and Biotechnology, Plant Pathology, Crop Protection, Horticulture and Agricultural Resource Management.

The Department undertakes rigorous training for both Undergraduate and Postgraduate levels and conducts research geared towards solving both local and global challenges of national and international importance. The Department also undertakes consultancies, advisory services and encourages both national and international collaboration. The Department has strong linkages with national, regional and international research institutions and universities.

The department has qualified staff and thus able to deliver quality training and research in all areas of its mandate.

Programmes and Services Offered

- | | |
|---|---|
| i) BSc. Horticulture | viii) MSc. Plant Pathology |
| ii) BSc. Agriculture (Crop Science Major) | ix) PhD. Agricultural Resource Management |
| iii) BSc. Agriculture (Crop Protection Major) | x) PhD. MSc. Agronomy |
| iv) MSc. Agronomy | xi) PhD. Horticulture |
| v) MSc. Horticulture | xii) PhD. Genetics and Plant Breeding |
| vi) MSc. Plant Breeding and Biotechnology | xiii) PhD. Crop Protection |
| vii) MSc. Crop Protection | xiv) PhD. Plant Pathology |

Services Rendered

- | | |
|-------------------------------------|--------------------------------------|
| i) Online and Face-to-Face Teaching | iii) Agricultural Extension Services |
| ii) Consultancy and Research | iv) Community Outreach |

Strategic Issues

- i) Management of the Departmental resources efficiently by utilizing the allocated funds on the programmed activities.
- ii) To produce quality and holistic graduates in plant sciences through curriculum design, quality teaching, supervision and mentorship.
- iii) To contribute to the development of society through participation in outreach activities
- iv) To enhance the competitiveness and image of the Department as a centre of excellence in plant sciences by increasing openness and presence on the Departmental website,
- v) To increase and enhance strategic partnerships and collaboration by establishing multi-stakeholder projects.
- vi) Improve student and employee satisfactions
- vii) Increase the students enrolment and completion rate in all degree programmes
- viii) Increase number of publications and Google Scholar citations

MAJOR ACHIEVEMENTS IN THE YEAR 2021

Academic Curricula Reviewed

The following programmes were approved by the Senate on November 17, 2021.

1. Revised Master of Science in Agronomy
2. Revised Master of Science in Horticulture
3. Revised Master of Science in Plant Pathology
4. Revised Master of Science in Plant Breeding and Biotechnology
5. Revised Master of Science in Crop Protection

Journal Publications

Author	Title	Journal	Month & Year	Link
Waweru B.; Rukundo P.; Kilalo D.; Miano D.; Kimenju J.	Effect of border crops and intercropping on aphid infestation and the associated viral diseases in hot pepper (<i>Capsicum</i> sp.)	Crop Protection Vol. 145 (105623)	July 2021	https://doi.org/10.1016/j.cropro.2021.105623
Muchira N.; Ngugi K.; Wamalwa N.; Avosa M.; Chepkorir W.; Manyasa E.; Nyamongo D.; Odeny D.A.	Genotypic variation in cultivated and wild sorghum genotypes in response to <i>Striga hermonthica</i> infestation	Frontiers in Plant Science	July 2021	https://doi.org/10.3389/fpls.2021.671984
Pretorius B.; Ambuko J.; Papargyropoulou E.; Schonfeldt H.C.	Guiding Nutritious Food Choices and Diets along Food Systems	Sustainability 13 (9501)	Aug. 2021	https://doi.org/10.3390/su13179501
Kathimba F.K; Kimani P.M; Narla R.D.; Kiirika M.L.	Characterization of tomato germplasm accessions for breeding research	Journal of Agricultural Biotechnology and Sustainable Development Vol. 13(2): 20-27	Aug. 2021	https://doi.org.10.5897/JABSD2021.0386
Sokame B.M.; Malusi P.; Subramanian S.; Kilalo D.C.; Juma G.; Calatayud P.A.	Do the invasive Fall Armyworm, <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae), and the maize lepidopteran stemborers compete when sharing the same food?	Phytoparasitica 50: 21-34	Aug. 2021	https://doi.org/10.1007/s12600-021-00952-6
Maina C.M.; Nyang'anga H.T.; Mburu J.I.; Kasina J.M.; Guantai M.M.; Nderitu J.H.; Gathaara V.N.	Determinants influencing farmers' use of macadamia nut information sources in central Kenya	Journal of Agriculture and Food Research Vol. 5 (100184)	Sep. 2021	https://doi.org/10.1016/j.jafr.2021.100184
Mujuka E.; Mburu J.; Ogutu A.; Ambuko J.; Magambo G.	Consumer awareness and willingness to pay for naturally preserved solar-dried mangoes: Evidence from Nairobi, Kenya	Journal of Agriculture and Food Research, Vol. 5 (100188)	Sep. 2021	https://doi.org/10.1016/j.jafr.2021.100188

Mbayaki C.W.; Kinama J.M.	More crop per drop: The magic sweetpotato (<i>Ipomoea batatas</i>)	Tropical and Subtropical Agro- ecosystems 25 (2022): 018	Sep. 2021	https://www.revista.ccbba.uady.mx/ojs/index.php/TSA/article/view/3834
Munguti F.M.; Kilalo D.C.; Nyaboga E.N.; Wosula E.N.; Macharia I.; Mwango'mbe A.W.	Distribution and molecular diversity of whitefly species colonizing cassava in Kenya	Insects 2021, 12 (875)	Sep. 2021	https://doi.org/10.3390/insects12100875
Jaoko V; Taning C.N. T; Back S; Motti P.; Mulatya J.; Vandenabeele J.; Magomere T.; Olubayo F.; Manginck S.; Werbrouck S.P.O; Smaghe G.	Laboratory and Greenhouse Evaluation of <i>Melia volkensii</i> Extracts for Potency against African Sweet Potato Weevil, <i>Cylas puncticollis</i> , and Fall Armyworm, <i>Spodoptera frugiperda</i>	Agronomy 11 (10): 1994	Oct. 2021	https://doi.org/10.3390/agronomy11101994
Mulema J.M.K.; Day R.; Nunda W.; Akutse K.A.; ...; Kibet S.; Koech A.; Miano D.W.; Muthomi J.W. et al	Prioritization of invasive alien species with potential to threaten agriculture and biodiversity in Kenya through horizon scanning	Research Square	Oct. 2021	https://doi.org/10.21203/rs.3.rs-886417/v1
Ojwang, J.D.; Nyankanga, R.; Rao, J. Imungi	Evaluation of vegetable pigeonpea (<i>Cajanus cajan</i> (L.) Millsp) genotypes for yield stability.	CABI Agriculture and Bioscience 2 (41)	Oct. 2021	https://doi.org/10.1186/s43170-021-00061-8
Owino W.O.; Ambuko J.L.	Mango fruit processing: Options for small-scale processors in developing countries	Agriculture 11 (1105)	Nov. 2021	https://doi.org/10.3390/agriculture
Moi P.E.; Kitonyo O.M.; Chemining'wa G.N.; Kinama J.M.	Intercropping and nitrogen fertilization altered the patterns of leaf senescence in sorghum	International Journal of Agronomy Vol. 2021(5348859)	Nov. 2021	https://doi.org/10.1155/2021/5348859
Juma, R.U.; Bartholomé, J.; Prakash T.; Nzuve F.; Miano D. et al.	Identification of an elite core panel as a key breeding resource to accelerate the rate of genetic improvement for irrigated rice	Rice 14 (92)	Nov. 2021	https://doi.org/10.1186/s12284-02100533-5
Murithi M. Wilson, R.W. Michieka, S.M. Mwendwa	Assessing the influence of horticultural farming on selected water quality parameters in Maumau stream, a tributary of Nairobi River, Kenya	Heliyon, Vol. 7 (12): e08593	Dec. 2021	https://doi.org/10.1016/j.heliyon.2021.e08593
Wangila, J.; Gachuri, C.; Muthomi, J. W; Ojiem, J. O.	Quality of lablab (<i>Lablab purpureus</i>) forage preserved as hay or silage	Indian Journal of Animal Nutrition Vol. 38 (2): 127-133	Dec. 2021	https://doi.org/10.5958/2231-6744.2021.00019.0

Nguru W.M.; Gachene C.K.; Onyango C.M.; Ng'ang'a S.K.; Girvetz E.H.	Factors constraining the adoption of soil organic carbon enhancing technologies among small-scale farmers in Ethiopia	Heliyon Vol 7 (12): e08497,	Dec. 2021	https://doi.org/10.1016/j.heliyon.2021.e08497
Chepkemoi J.; Onwonga R.N.; Nyankanga R.; Gitau A.N.	Greenhouse gas emissions as impacted by topography and vegetation cover in wooded grasslands of Laikipia county, Kenya	Journal of Rangeland Science	Dec. 2021	http://www.rangeland.ir/article_686655.html
Pierre N.;, Wamalwa L.N.; Muiru W.M.; Simon B.; Kanju E.; Ferguson M.E. et al.	Genetic diversity of local and introduced cassava germplasm in Burundi using DArTseq molecular analyses	PLoS ONE 17(1): e0256002.	Jan. 2022	https://doi.org/10.1371/journal.pone.0256002
Cheserek J.J.; Kahi Ngugi K.; Muthomi J.W.; Omondi C.O.; Kathurima C.W.	Genetic variability and correlation of biochemical and sensory characteristics of coffee	Journal of Agricultural Science Vol. 14 (2): 95-103	Jan. 2022	https://doi.org/10.5539/jas.v14n2p95
Kimenju J.W.; Wendot P.K.; Thuo A.K.	Cumulative damage impact of plant parasitic nematodes in smallholder maize cropping systems in East Africa. In eds Sikora R.A.; Desaegeer J.; Molendijk L.P.G. Intergrated Nematode Management	CAB International	Jan. 2022	Nosworthy Way, UK
Dushimimana C.; Magomere T.; Mulatya J.; Vandenabeele J.; Olubayo F.; Smaghe G.; Werbrouck S.P.O.	Variation of morphological traits and quality indices of micropropagated <i>Melia volkensii</i> Gürke clones before field planting	Forests 13: 337	Feb. 2022	https://doi.org/10.3390/f13020337
Scholz H.A., Freitag J., Lyal C.H.C., Sara R., Cepeda M.L., Cancio I., Sett S., ..., Miano D.W., et al.	Multilateral benefit-sharing from digital sequence information will support both science and biodiversity conservation	Nature Communications Vol 13(1086)	Feb. 2022	https://doi.org/10.1038/s41467-022-28594-0
Mulenga R.M.; Miano D.W.; Rwahniha M.A.; Kaimoyo E.; Akello J.; Mbutu F.; Simulundu E.; Alabi T.; Chikoti P.C.; and Alabi O.J.	Survey for virus diversity in common bean (<i>Phaseolus vulgaris</i> L.) fields and the detection of a novel strain of cowpea polerovirus 1 in Zambia	Plant Disease	Feb. 2022	https://doi.org/10.1094/PDIS-11-21-2533-RE

Mucheni A.; Gicheru P.; Kitonyo O.	Conservation agriculture for climate smart agriculture in smallholder farming systems in Kenya. In eds Mkomwa S.; Kassam A.H. Conservation Agriculture in Africa: Climate Smart Agricultural Development	CAB International	Feb. 2022	https://books.google.co.ke/books?hl=en&lr=&id=4dFYEAAAQBAJ&oi=fnd&pg=PA431&dq=onesmus+kitonyo&ots=Gothd2spoG&sig=qWYNJQowyo8e86t60r9NWDV7lBk&redir_esc=y#v=onepage&q=onesmus%20kitonyo&f=false
Omaiyo D.G.; Abong G.O.; Okoth M.W.; Gachui C.K.; Mwang'ombe A.W.	Effect of pulping methods on the physiochemical properties of the Kenyan red and white-fleshed guava pulp	JSFA Reports 2 (3): 131-142	Feb. 2022	https://doi.org/10.1002/jsf2.35
Wamalwa N.L.; Tovar J.C.; Indieka A.S.; Torto B.; Ghislain M.	Exogenous and endogenous plant growth regulators' effect on regeneration of selected African sweetpotato (<i>Ipomoea batatas</i> L. Lam) cultivars	European Journal of Horticultural Science Vol. 87(2): 1-10	April 2022	https://doi.org/10.17660/eJHS.2022/022
Hutchinson M.J.; Ouko J.R.; Yumbya P.M.; Ambuko J.L.; Owino W.O.; Subramanian J	Efficacy of hexanal field spray on the postharvest life and quality of papaya fruit (<i>Carica papaya</i> L.) in Kenya	Hindawi Advances in Agriculture Vol. 2022 (4262734)	April 2022	https://doi.org/10.1155/2022/4262734
Kwach, J.K., Nyakomitta, P.S., Muthomi, J.W., Ndayitegeye, O., & Okoko, E.N. (2021).	Single Stem Rouging of Banana Xanthomonas Wilt Infected Plants for Orchard Rehabilitation.	Asian Journal of Agricultural and Horticultural Research 8(4)	2021	http://dx.doi.org/10.9734/ajahr/2021/v8i430122
Lengai, G.M. W., Mbega, E.R. & Muthomi, J.W.	Activity of ethanolic extracts of spices grown in Tanzania against important fungal pathogens and early blight of tomato.	Bulg. J. Agric. Sci., 27 (6), 1108-1117	2021	https://agrojournal.org/27/06-09.pdf
Uzayisenga, B., Mutimura, M., Muthomi, J.W., Mwang'ombe, A.W., & Ghimire, S.R.	Disease surveillance and farmers' knowledge of Brachiaria (Syn. Urochloa) grass diseases in Rwanda.	African Journal of Range & Forage Science, 38(sup1), S1-S13.	2021	https://doi.org/10.2989/10220119.2020.1810774
Dushimimana, C., Magomere, T., Mulatya, J., Vandenabeele, J., Olubayo, F., Smaghe, G., & Werbrouck, S. P.	Variation of Morphological Traits and Quality Indices of Micropropagated <i>Melia volkensii</i> Gürke Clones before Field Planting.	Forests, 13(2), 337.	2022	https://www.mdpi.com/1999-4907/13/2/337
Wanjala, B.W., Ateka, E.M., Miano, D.W., Fuentes, S., Perez, A., Low, J. W., & Kreuzer, J.F.	Loop-Mediated Isothermal Amplification assays for on-site detection of the main sweetpotato infecting viruses.	Journal of virological methods, 298, 114301.	2021	https://doi.org/10.1016/j.jviromet.2021.114301

Msenya, H.N., Runo, S., Miano, D.W., Gikungu, M.W., Gichuru, E.K., Kathurima, C.W., & Alworah, G.O.	Msenya, H.N., Runo, S., Miano, D. W., Gikungu, M. W., Gichuru, E.K., Kathurima, C. W., & Alworah, G.O. (2021). The Potential of Fungi as Bio-Control Agents in Managing Colletotrichum Kahawae In Kenya.	Current Agriculture Research Journal, 9(3).	2021	http://dx.doi.org/10.12944/CARJ.9.3.04
Charles Nkonge, William M. Muiru, Douglas W. Miano and George N. Chemining'wa4	Effect of no-till and residue retention on fungal composition and population in maize-bean intercrop	African Journal of Biological sciences, 4 (2), 31-45	2022	https://doi.org/10.33472/AFJBS.4.2.2022.31-45
Mugambi, I., Karanja, L., Macharia, I., Kaguongo, W., Ngundo, G., Amata, R., & Mulema, J.	What influences uptake of alternative pest management practices by potato farmers? Evidence from six counties in Kenya.	Journal of Development and Agricultural Economics, 13(3), 205-214.	July 2021	https://academicjournals.org/journal/JDAE/article-inpress-abstract/what_influences_uptake_of_alternative_pest_management_practices_by_potato_farmers_evidence_from_six_counties_in_kenya
Murigi, W.W., Nyankanga, R.O., & Shibairo, S.I.	Effect of storage temperature and postharvest tuber treatment with chemical and biorational inhibitors on suppression of sprouts during potato storage.	Journal of Horticultural Research, 29(1), 83-94.	Sep 2021	https://doi.org/10.2478/johr-2021-0001
Biermann, O., Mwoka, M., Ettman, C.K., Abdalla, S.M., Shawky, S., Ambuko, J., & Valladares, L.M.	Data, Social Determinants, and Better Decision-making for Health: the 3-D Commission.	Journal of Urban Health, 98(1), 4-14.	Aug 2021	https://doi.org/10.1007/s11524-021-00556-9
Mwoka, M., Biermann, O., Ettman, C.K., Abdalla, S.M., Ambuko, J., Pearson, M., & Mberu, B.	Housing as a Social Determinant of Health: Evidence from Singapore, the UK, and Kenya: the 3-D Commission.	Journal of Urban Health, 98(1), 15-30.	Sep 2021	https://doi.org/10.1007/s11524-021-00557-8
Chimbevo, L.M., Atego, N.A., Oshule, P.S., Mapesa, J., Essuman, S., Nderitu, J.H., & Ngeny, C.	The Role and Sustainability of Community-based County Government Funded Agricultural Infrastructure Projects: A Case of Community Cattle Dips and Acaricides Use in Kilifi, Kajiado and Nakuru Counties.	Journal of Agriculture and Ecology Research International, 22(4), 26-36.	August 2021	

Active International Students

Name	Programme	Country
Yohannes Tadesse	PhD. Plant Breeding.....	Eritrea
Aryemo Sunday Ocaya.....	MSc. Agronomy	South Sudan
Moi Peter Elia.....	MSc. Agronomy	South Sudan
Karama Oteaniel Akum.....	MSc. Agronomy	Uganda
James Robert O. Hakim	MSc. Agronomy	Sudan
Pachi Emmanuel.....	MSc. Crop Protection	Tanzania
Kulimushi Matumwahirhi S.....	MSc. Plant Pathology	Congo
Gut Daniel Mabior.....	MSc. Plant Pathology	South Sudan
Taban James Francis.....	MSc. Plant Breeding & Biotechnology.....	South Sudan
Nshimiyama Octave.....	PhD. Crop Protection	Rwanda
Waweru Bancy Waithira	PhD. Crop Protection	Rwanda
Saur Miriam	BSc. Agriculture	
Pirre Nyozimma	MSc. Plant Breeding and Biotechnology	Sudan
Sangalia Izinga Philippe	BSc. Agriculture	DRC Congo
Labu David	MSc. Crop Protection	Uganda
Sande Dismas	MSc. Agronomy	Uganda
Olaniyi Ebenezer Olawale	BSc. Agriculture	Others
Matusso Jossias Mateus Materusse.....	MSc. Crop Protection	Mozambique
Weldetsion Yakem Tesfazghi.....	PhD. Agricultural Resource Management	Eritrea

New Partnerships

Theme	Partner	Details	Duration	Documentation
Empowering Kenyan women in Agriculture and Nutrition	University of Cambridge	The Cambridge-Africa ALBORADA Research Fund	01/04/2019 to 31/12/2019	ACTIVE Signed MoU
Inter-University collaboration	Stellenbosch University	MoU	28 th January 2020	Signed document

Project Title	Project Objectives	Funding Institution	Project Partners	Principal Investigator Or Uon Co-Pi
<p>Identification, development and formulation of biological control agents and metabolites in integrated plant disease management</p>	<p>Overall Objective To increase crop productivity by developing alternative, environmentally friendly, effective strategies that can be applied in an integrated approach in the management of important plant diseases.</p> <p>Specific Objectives</p> <ul style="list-style-type: none"> - To identify and develop antagonistic biological control agents and their metabolites that are effective against important plant diseases on horticultural/ grain and soil-borne diseases. - To develop different formulations of agents and the metabolites to usable disease management products. - To test the formulated products for management of selected important foliar, vascular/soil-borne and bacterial diseases. - To incorporate the successful biological products in an integrated crop protection systems with stakeholders - Capacity building by training postgraduate students and farmers for up-scaling technologies 	<p>NRF</p>	<p>Pest Control Products Board</p>	<p>Prof. E. Mutitu</p>
<p>Climate-smart adaptive technologies for sustainable production and postharvest management and utilization of ware potato in Kenya</p>	<p>To validate IPM technologies for management of aphids and potato tuber moth in Nyandarua County</p>	<p>KCSAP</p>	<p>KALRO; University of Nairobi; Moi University; Eldoret University</p>	<p>Dr Kinyua/ Prof. John Nderitu</p>

<p>Synergistic Climate-smart Technologies, Innovations and Management Practices for Sustainable Greenhouse Tomato Production in Kenya</p>	<p>Goal: To enhance food and nutritional security, and income for smallholder farmers through validation and scaling up of sustainable greenhouse tomato production technologies in Kenya.</p> <p>Objectives</p> <ul style="list-style-type: none"> - To validate the performance of selected improved tomato varieties under diverse agronomic practices and greenhouse conditions. - To validate and promote integrated pest and disease management practices for greenhouse tomato production. - To validate and promote a diverse range of post-harvest handling technologies for fresh tomatoes. 	<p>KCSAP</p>	<p>KALRO and University of Nairobi</p>	<p>Prof. John Kimenju</p>
<p>Towards Gender Mainstreaming and Social Inclusion In Climate Smart Agriculture Selected TIMPS Value Chains In Selected Counties In Kenya</p>	<ul style="list-style-type: none"> - To examine women, youth and VMGs concerns, demands and needs in the validation, dissemination and adoption of CSA selected TIMPs value chains in selected counties in Kenya - To analyze opportunities and benefits for women, youth, men and VMGs in CSA selected TIMPs in selected counties in Kenya - To empower women, youth, and VMGs in order to improve their agricultural productivity and enhancement of their resilience 	<p>KALRO- Kenya Climate Smart Agriculture Project (KCSAP)-world bank</p>	<p>KALRO and University of Nairobi</p>	<p>Dr. Jessica Ndubi (KALRO)/ Dr. Juliana Cheboi (UoN Co-PI)</p>
<p>Validation of climate smart Pigeon pea Agronomic practices in Baringo, Elgeyo marakwet, Machakos, Tharaka and Kabete</p>	<ul style="list-style-type: none"> - To validate the potential use of selected hormones in seed priming in economically important pigeon pea - To determine the effect of seed priming hormones on the physiological responses of the selected varieties and the effect growth and yield under drought stress conditions. - To validate nitrogen and phosphorus fertilizer micro-dosing and rainwater harvesting practices under varied pigeon pea and cereal inter-cropping systems - To validate an effective IPM strategy combining host plant resistance, bio-control and selective insecticide spraying regime(s) against the pigeon pea insect pest complex. 	<p>KALRO- Kenya Climate Smart Agriculture Project (KCSAP)-world bank</p>	<p>University of Nairobi and Egerton University</p>	<p>Prof. Paul Kimani (UoN PI)</p>

Strengthening Kenyan Small-Scale Processors to Access Market and Reduce Losses (SAP) Project	<ul style="list-style-type: none"> - To establish “hub and spoke” fruit processing incubators for dissemination and adoption of food processing technologies and innovations - To train fruit processors on good food processing practices, product development and food processing entrepreneurship 	Rockefeller Foundation/ Purdue University	University of Nairobi Purdue University, USA Technoserve Kenya Smallholder farmers/ processors	Prof. Jane Ambuko
Adaptation and upscaling of tested and applicable postharvest technologies for smallholder horticultural farmers to reduce postharvest losses	To conduct adaptive research for cold storage technologies and promote their adoption among smallholder farmers and other practitioners in horticultural value chains	National Research Fund (NRF-Kenya)	University of Nairobi KALRO JKUAT Ministry of Agriculture Community Based Organizations	Prof. Jane Ambuko
Innovations in Post-Harvest Loss and Food Waste Reduction in the Global Food System	<ul style="list-style-type: none"> - Establish the Consortium for Innovation in Postharvest Loss and Food Waste Reduction to advance a common research agenda for gaining efficiencies in global food systems - Develop academic and entrepreneurial capacity in the next generation talent 	Foundation for Food and Agriculture Research (FFAR)	University of Nairobi Iowa State University, USA Stellenbosch University, South Africa Volcani Institute, Israel	Prof. Jane Ambuko
Capacity building in food security, CaBFoodS-Africa	<ul style="list-style-type: none"> - Create awareness about the problem of high food losses and waste in the food supply chain - To train (build capacity) of practitioners in the food supply chain including farmers, traders, transporters on best practices in postharvest management to reduce food losses and waste 	UK Research Innovation (UKRI)	University of Nairobi University of Pretoria University of Ghana	Prof. Jane Ambuko
Food Systems Research Network for Africa (FSNet-Africa)	<ul style="list-style-type: none"> - Create structured opportunities for Early Career Research Fellows (ECRF) in the focus countries to conduct impact-focused interdisciplinary research, build lasting research networks and develop their skills to design and implement gender sensitive research with non-academic stakeholders. - Set up carefully matched, formal mentorship relationships between ECRF and established scientists in the UK and Africa to form interdisciplinary research-triads to create long-term collaborations and networks 	UK Research and Innovation (UKRI) Global Challenges Fund (GCRF) Partnership Programme	University of Nairobi University of Pretoria ARUA Partner Universities	Prof. Jane Ambuko - UoN Institutional Champion

<p>Solar Powered Cold Food Chains for Food Waste Reduction and Value Addition (SolCool)</p>	<ul style="list-style-type: none"> - Create structured opportunities for Early Career Research Fellows (ECRF) in the focus countries to conduct impact-focused interdisciplinary research, build lasting research networks and develop their skills to design and implement gender sensitive research with non-academic stakeholders. - Set up carefully matched, formal mentorship relationships between ECRF and established scientists in the UK and Africa to form interdisciplinary research-triads to create long-term collaborations and networks 	<p>Innovate UK</p>	<p>University of Nairobi Phase Change Material Products Ltd Tanzania Horticultural Association Ltd Brunel University London</p>	<p>Prof. Jane Ambuko</p>
<p>Evaporative Cooling Technologies for Vegetable Preservation in the Kenya</p>	<ul style="list-style-type: none"> - Evaluation of various materials and designs in evaporative cooling technologies to optimize performance in preservation of postharvest quality of vegetables 	<p>Massachusetts Institute of Technology, USA</p>	<p>D-Lab Massachusetts Institute of Technology</p>	<p>Prof. Jane Ambuko/ Dr. Duncan Mbuge</p>
<p>Harnessing the genetic resources of Sorghum (Sorghum bicolor L) in Kenya to improve drought tolerance and Striga resistance of farmer preferred cultivars for climate change adaptation by utilizing innovative genomic, value chain and participatory approaches</p>	<ul style="list-style-type: none"> - To conserve and exploit the biodiversity of wild relative genetic resources of sorghum - To identify striga resistance and drought tolerance genes by use of genomic technologies and transfer Striga resistance and drought tolerance genes from wild relatives into cultivated farmer - To strengthen the existing sorghum value chains, improve processing methods and promote innovative and diversified sorghum product - To enhance stakeholder capacity to produce, process and market sorghum through innovative participatory approaches and avail information 	<p>NRF</p>	<p>KU, ICRISAT, KALRO</p>	<p>K Ngugi</p>
<p>Validation Of Climate-Smart Sorghum Technologies For Increased Productivity And Improved Livelihoods</p>	<ul style="list-style-type: none"> - To validate and promote Climate Smart sorghum technologies - To validate and promote diversified sorghum based products. - To validate and promote pre- and post-harvest loss reducing technologies. 	<p>KALRO- World Bank</p>	<p>Egerton University</p>	<p>K Ngugi</p>

<p>Cassava Sustainable Advancement & Nurturing by discovery of Disease Resistance Alleles</p>	<ul style="list-style-type: none"> - Identification and characterization of natural virus resistance in the cassava germplasm - Characterization of genes conferring natural resistance against cassava geminiviruses - Development of methods for on field sanitation of cassava seeds - Implementation of results in the cassava seed system and dissemination to farmers 	<p>EU</p>	<p>University de Liege- Belgium University of Witwatersrand, SA INRA- France</p>	<p>Prof Herve Vander Schuren</p>
<p>Validation and promotion of integrated climate-smart green gram technologies for improved livelihoods in Kenya</p>	<ul style="list-style-type: none"> - To validate and disseminate adoption of farmer and market-preferred green gram varieties - To validate and promote integrated soil water harvesting and conservation practices - To validate and promote integrated soil fertility management practices - To validate and promote proven and sustainable IPM technologies for key pests and diseases - To validate and disseminate appropriate post-harvest handling and value addition technologies 	<p>World Bank</p>	<p>UoN KALRO</p>	<p>Dr. Onesmus Kitonyo</p>
<p>Improving Farm Profitability and Household Incomes of Mango Farmers in Kenya with Silicon</p>	<ul style="list-style-type: none"> - Optimize the silicon treatment effect by investigating whether combined soil and foliar application can improve on pathogen resistance, fruit yield and quality. - Understand the fate of the applied silicon in the mango plant. - Evaluate consumer acceptability and market competitiveness of the harvested fruits. 	<p>GCRF</p>	<p>UoN University of Cambridge</p>	<p>Co-PI's Dr Kitonyo Dr Nzube Dr Kilalo Prof Miano</p>
<p>Synergy for mass propagation of elite Melia volkensii clones and exploiting its derived bio pesticides.</p>	<p>Develop a good rooting system and reducing losses during acclimatization of elite clones and indigenous hardwood tree</p>	<p>Government of Belgium</p>	<p>University of Gent, University of Nairobi, Kenya Forestry Research institute, Better Globe Forestry (BGF)</p>	<p>Prof. Florence Olubayo</p>

Staff Portfolio

Professor

Prof. Kimani Waitthaka, PhD
Prof. Ratemo W. Michieka, PhD
Prof. Agnes W. Mwang'ombe, PhD
Prof. Eunice W. Mutitu, PhD
Prof. Paul M. Kimani, PhD
Prof. Florence M. Olubayo, PhD
Prof. John W. Kimenju, PhD
Prof. John H. Nderitu, PhD
Prof. Solomon I. Shibairo, PhD
Prof. George N. Chemining'wa, PhD
Prof. Margaret J. Hutchinson, PhD
Prof. James W. Muthomi, PhD

Associate Professor

Prof. Emmanuel S. Ariga, PhD
Prof. Eliud K. Ngugi, PhD
Prof. Richard O. Nyankanga, PhD
Prof. Cecilia M. Onyango, PhD
Prof. Jane A. Lukhachi, PhD
Prof. Douglas W. Miano, PhD

Senior Lecturer

Dr. Josiah M. Kinama, PhD
Dr. William M. Muiru, PhD
Dr. Dora C. Kilalo PhD

Lecturer

Dr. Felister N. Mbute, PhD
Dr. Lydia N. Wamalwa, PhD
Dr. Onesmus M. Kitonyo, PhD
Dr. Juliana J. Cheboi, PhD
Mr. Peter Mongare, MSc
Mr. Elias O. Obudho, MSc

Chief Technologist

Mr. Chebii W. Kibet, MSc

Senior Technologist

Ms. Sicily W. Muchira, BPHILL
Mr. Douglas W. Khamila, BSc
Mr. Joseph W. Kariuki, HND
Mr. Angwenyi Maobe Michael, BSc
Ms. Jackline L.A. Weullow, HND
Ms. Beverlyne Khayecha Mmera, BSc
Ms. Peter M. Catherine, BSc
Ms. Sicily W. Nyaga, Diploma

Technologist

Mr. Titus N. Mwangangi, Diploma
Ms. Nancy M. Mvungu, BSc
Mr. Dickson N. Mathenge, Diploma
Ms. Risper Njoki Gathoni, Diploma
Ms. Rosbena C. Techtuk, Diploma
Mr. Alexander Shivachi, Diploma
Ms. Rose Makena Njue, BSc

Secretary

Ms. Esther W. Thiongo, Diploma
Ms. Jackline Kinuthia, Diploma

Assistant Technologist

Mr. Simon K. Muthiora

Subordinate

Ms. Margaret N. Mucheni
Ms. Mary W. Gichia
Ms. Mary A. Okello
Ms. Monica A. Okoum

Semis Staff

Stores Clerk

Mr. Benson Kimbio

Seed Technologist

Mr. Silas Wechuli

Office Assistant

Ms. Linah Mwakio

Projections

- i) To utilize 100% of the allocated funds
- ii) To grow the Departmental resource base by increasing academic revenue by 10% annually.
- iii) To hold at least six student mentorship sessions for students.
- iv) To participate in at least 10 outreach activities.
- v) To increase departmental openness and presence on the website by 10%.
- vi) To establish at least two multi-stakeholder projects annually.
- vii) To increase postgraduate students completion rate by at least 10 %
- viii) To implement and promote Open and Distance Learning (ODEL) for all postgraduate training programmes.
- ix) To review at least 6 curricula during the year

Any Other Pertinent Information/Issue in The Year 2021

- i) The Department implemented online teaching and learning at all levels during the year.
- ii) For the first time, all the examinations were processed and administered online.
- iii) The Department lost one academic staff through death during the year.

Corporate and Community Outreach Activities

Strengthening Kenyan Small-scale Mango Processors to Access Market and Reduce Losses (SAP) Project	Training for Kawala Horticultural Farmers from Makueni County	Collaboration between University of Nairobi (UON) and Purdue University (USA)	Food Processing Hub, CAVS 2 nd and 3 rd February 2021
Strengthening Kenyan Small-scale Mango Processors to Access Market and Reduce Losses (SAP) Project	Training traders under the Association of Kenya Mango Traders (AKMT)	Collaboration between University of Nairobi (UON) and Purdue University (USA)	Food Processing Hub, CAVS 28 th and 29 th January 2021

Major Achievements, Challenges and Strategic Projections

Achievements	Challenges	Projections
Increase in research activities	COVID-19	Great strides in research activities
Increase in outreach activities and CSR	Delay in delivery of lab materials by suppliers	More CSR and outreach activities
Increase in members with active projects	Renovation of major infrastructure	Faster procurement process
Increase in international students on postgraduate programmes	Replacement of retired staff	Hastened replacement of retired staff/successional plan
Commensurate increase in scientific publications in refereed journals	Inadequate funding	More funding
Increase in the number of scientific publication in refereed scientific journals	Some students publishing their research in very low impact factor journals	Encourage and target high impact journals
Increase in number of postgraduate students opting to register for ODeL mode in postgraduate programmes	Low completion rate for students registered under ODeL	Revise the ODeL schedules and approach to supervision of ODeL students
Increase in the number of postgraduate students' thesis research is supported by funded projects	Delay in postgraduate students in completion of thesis research	Schedule of postgraduate seminars for tracking student progress in research

2. FACULTY OF ARTS AND SOCIAL SCIENCES

Introduction

All Faculty of Arts and Social Sciences programmes are offered in three modes of learning: Module I (full-time on campus), Module II (part-time - day and evening)

The Faculty also offers Bachelor of Arts Degree programme in Political Science and Public Administration; Psychology; and Sociology and Social Work at Kisumu and Mombasa campuses

Strategic Issues

Major Achievements in the Year 2020

Research Projects

Research Project/Activities Done by Members of the Department	Key Participant(s)
Gambella wetland and spring conservation and protection initiative management in Isiolo/Meru Counties. Project sponsored by WYSS Academy for Nature, Switzerland - ongoing project	Dr. Boniface Wambua Dr. Thuita Thenya Dr. Stellah Mukhovi Dr. Boniface Kiteme
Participated in Research for the Women Economic Empowerment Hub (African Women Studies Centre, UON)	Dr. Parita Shah
A joint research collaborative Venture with Dimitrie Cantemir University in Romania on the Ogiek Community in Nakuru County	Dr. Shadrack Kithia and Prof. Mihai (Romania)
IDRC-funded research on Urban Food Systems Governance for NCD Prevention in Africa (Nourishing Spaces) Project, covering Cape Town, Kimberly (South Africa), Windhoek, Oshakati (Namibia), Kisumu and Nairobi (Kenya).	Dr. Samuel Owuor
Social Sciences and Humanities Research Council (SSHRC)/IDRC-funded Hungry Cities Partnership (HCP) Project, covering Cape Town (South Africa), Bangalore (India), Kingston (Jamaica), Maputo (Mozambique), Mexico City (Mexico), Nairobi (Kenya) and Nanjing (China).	Dr. Samuel Owuor
Swiss National Science Foundation/Swiss Agency for Development and Cooperation-funded Sustainable Governance of Food Systems Project in Kenya and Bolivia, in collaboration with Agroecología Universidad Cochabamba (Bolivia), University of Bern (Switzerland) and Centre for Training and Integrated Research for ASAL Development (CETRAD, Kenya).	Dr. Samuel Owuor
Rights & Resilience Project on pastoral and agro-pastoral climate change adaptation in Kenya. The project is a jointed activity between University of Nairobi (Department of Geography, IDS and ICCA)and University of Copenhagen sponsored by DANINDA Fellowship Center with 3 PhD student on scholarship- Ongoing	Dr. Martin Marani and Prof Karuti Kanyinga of IDS
Arua-Mellon Funded Research Grant for training of PhD students from five universities in Africa namely: University of Ghana, University of Cape Town, Witwatersrand University, University of Nairobi and University of Zimbabwe	Prof. Elias Ayiemba
Post doc Researcher, 2019-2020 on food systems, under CDE Switzerland and CETRAD	Dr. Stella Mukhovi and Dr Kiteme

Research Project/Activities Done by Members of the Department	Key Participant(s)
Earth observation and environmental sensing for climate-smart sustainable agropastoral ecosystem transformation in East Africa - ESSA. Research project sponsored by EU in Amboseli ecosystem, Chulu hills and Ethiopia with scholarship s for 1 PhD and 2 master students	Dr. Francis Mwaura
Re-evaluation of the M.SC programme in Dryland Natural Resources Management for Gariss University	Dr. Francis Mwaura
EIA for the construction of a transport Termini of Asian Quarter (Bus station, Modern Stalls, Business Park & Social Amenities by Nyeri County Government	Dr. Francis Mwaura
Thika Dam hydrological studies funded by Nipon Koei Company	Dr. John Nyangaga
Research Grant on Development of New Low Cost Sensors for use in tropical environments Sponsored by United Kingdom Research and Innovation	Dr. John Nyangaga
Wahu Kaara: A Biography writing in progress.	Dr. George Gona
Kenya's underground in Exile: the Dar-es-Salaam Group.	Dr. George Gona
The 1971 Revolution.	Dr. George Gona
Sourcing financial support for M.A. students USD 15,000	Ephraim Wahome
Ongoing Research - Resilience Cultural heritage tourism and COVID-19 pandemic -Joint	Ephraim Wahome
Ongoing Research - 'Labour and Leisure': Joint University of Nairobi and Humboldt University Joint Research - Joint	Ephraim Wahome
The Aftermath of Big Game hunting in Kenyas History-Joint	Ephraim Wahome
Shared futures Project -Joint	Ephraim Wahome

Publications

- Henry Indangasi (2020). "The Pitfalls of Descriptivism and Relativism in the Study of Language and Literature" Published in The Nairobi Journal of Literature.
- Henry Indangasi (2020). "Covid- 19 and Our Humanity" in *Soaring above the Pandemic: Poetic Echoes from East Africa*. Edited by Peter Amuka et al. Bungoma, Kenya: InterCEN Books.
- Masumi Odari, Jennifer Muchiri, Mumia G. Osaaji (2020).The Agile Thinking and Subversion in Chinua Achebe's The Education of a British-Protected Child.
- Alina N Rinkanya, Masumi H Odari, Wambua Kawive (2020). Theatre in Kenya and the Construct of Leadership in Francis Imbuga's Aminata
- Alina N. Rinkanya, Masumi H Odari, Shadrach Mwanthi (2020). A Critical Thinking Approach to Shakespeare's Tragedies: King Lear and Romeo and Juliet
- Henry Indangasi (2020). Critical Thinking, Moral Integrity, and Citizenship: Lessons from W.E.B. Du Bois' Academic Career and his Relationship with Africa
- Ciarunji Chesaina (2020). Critical Thinking, Moral Integrity, and Citizenship: Lessons from W.E.B. Du Bois' Academic Career and his Relationship with Africa
- Joram K. Mbui (2020). Critical Thinking, Moral Integrity, and Citizenship: Lessons from W.E.B. Du Bois' Academic Career and his Relationship with Africa
- D.H. Kiiru, (2020).Formal Features in Alex la Guma's "Come Back to Tashkent," *Asian Journal of African Studies*, Vol. 47 February 2020. 99-119
- D.H. Kiiru (2020).Teaching Canadian Literature in the University of Nairobi, *Eastern African Literary and Cultural Studies*, DOI: 10.1080/23277408.2020.1767985, 12 June 2020. 1-17

11. Mwangi, V., S. Owuor, B. Kiteme & M. Giger (2020). Beef production in the rangelands: A comparative assessment between pastoralism and large-scale ranching in Laikipia County, Kenya. *Agriculture* 2020, 10, 399.
12. Buyana, K., S. Lwasa, D. Tugume, P. Mukwaya, J. Walubwa, S. Owuor, P. Kasaija, H. Sseviiri, G. Nsangi & D. Byarugaba (2020). Pathways for resilience to climate change in African cities. *Environ. Res. Lett.* 2020, 15, 073002.
13. Mwangi, V., S. Owuor, B. Kiteme, M. Giger, J. Jacobi & O. Kirui (2020). Linking household food security and food value chains in North West Mt. Kenya. *Sustainability* 2020, 12, 4999.
14. David Muriithi, Boniface Wambua and Kennedy Omoke: An assessment of constraints and opportunities for adopting the greenhouse farming technology by the smallholder farmers of Nyandarua county of Kenya, September 2020
15. David I. Muriithi¹, Boniface N. Wambua² and Kennedy J. Omoke: Characterization of small-scale farmers' low levels of adoption to crop insurance as an adaptation strategy to climate variability in nyandarua county of kenya. *Asian Journal of Agriculture and Food Sciences* (ISSN: 2321 - 1571) Volume 8 -Issue 4, August 2020
16. Oluoko-Odingo, A.A. & Ayiamba, E.H.O. 2020. Food Security in the Afro-China Cooperation: The Hanging, Untapped 'Win-Win' Partnership. *The African Review* 47(2020): 1-27.
17. Akukwe, T.I, Oluoko-Odingo, A.A., Krhoda, G.O. 2020. Do floods affect food security? A before-and-after comparative study of flood-affected households' food security status in South-Eastern Nigeria. *Bulletin of Geography, Socio-economic Series*, No. 47 (2020): 115-131.
18. Irandu, E.M. and Owilla, H.H. (2020d). "The Economic Implications of Belt and Road Initiative in the Development of Railway Transport Infrastructure in Africa: The Case of the Standard Gauge Railway in Kenya". *The African Review*, 47(2). 457-480.
19. Togoch, H. Kemboi, Evaristus M. Irandu and Thuita Thenya. (2020c). "Patterns of Livelihood Diversification among Kamnarok National Reserve adjacent Communities in Baringo County, Kenya". *Journal of Sustainability, Environment and Peace*. Vol. 3(2) 55-62.
20. Togoch H. Kemboi, Irandu M. Evaristus, Thuita Thenya. (2020b). "Conflicts over resource use in Kamnarok National Reserve and the adjacent community". *Journal of Environmental Science* 2(2), 236-246.
21. Kithuka, J.M., Irandu EM, Moronge JM/ (2020a). "The role of periodic markets in provision of manufactured goods and creation of income in rural areas: a case study of selected markets in Mukaa Sub County; Kenya." *International Journal of Scientific Research and Innovative Technology*
22. Shah. P., Changing gender partiality amongst indigenous communities: The case of the Maasai around the Maasai Mara Conservancies in Kenya. *Pathways to African Feminism and Development* Vol 5(1): 102-117
23. Atieno, E. and Moronge, J. (2020a). Hazardous Biomedical Waste Management in a Level Four Private Hospital in Nairobi County, Kenya. *Journal of Sustainability, Environment and Peace*, 3(2), 34-40. July. <http://jsep.uonbi.ac.ke/ojs/index.php/jsep/article/view/272>
24. Martin Marani, Sylvia Rotich and Mikkel Funder (2020). Maasai lessons to the world on managing multiple crises. Published on 05-July-2020 in the Daily Monitor online at www.monitor.co.ug/uganda/news/national/maasai-lessons-to-the-world-on-managing-multiple-crises-1898346
25. Mikkel Funder, Martin Marani, Sylvia Rotich (2020). *Hele verden kan lære af Kenyas masaier* (The whole world can learn from Kenya's Maasai). Published on 22-June-2020 in the Jeyllands-Posten, <https://jyllands-posten.dk/debat/international/ECE12230704/hele-verden-kan-laere-af-kenyas-masaier/>
26. Atieno, E. and Moronge, J. (2020a). Hazardous Biomedical Waste Management in a Level Four Private Hospital in Nairobi County, Kenya. *Journal of Sustainability, Environment and Peace*, 3(2), 34-40. July. <http://jsep.uonbi.ac.ke/ojs/index.php/jsep/article/view/272>
27. Akukwe, T.I. Oluoko-Odingo, A.A. and Krhoda G.O. (2020). Do floods affect food security? A before-and-after comparative study of flood-affected households' food security status in South-Eastern Nigeria. *Bulletin of Geography. Socio-economic Series*, 47(47): 115-131. DOI: <http://doi.org/10.2478/bog-2020-0007>
28. Manoa D.O, Mwaura F, Thuita T, Mukhovi S (2020): A Review of the Visible and Hidden Opportunity Costs of Human-Wildlife Conflict in Kenya. *Journal of Biodiversity Management & Forestry*
29. Wabwire, E., Mukhovi, S. Nyandega, I.N (2020) The Spatial and Temporal Characteristics of Rainfall over the Lake Victoria Basin of Kenya in 1987-2016. *Atmospheric and Climate Sciences* 2020 (10),: 240-257
30. Mukhovi, S., Jacobi, J., Llanque, A., Rist, S., Delgado, J.M.F., Kiteme, B. Ifejika S.C. (2020) Social self organisation and social-ecological resilience in food systems; Lessons learned from Smallholders in kenya and Gurani indigeneous communities in Bolivia. *Food studies An interdisciplinary journal*, 10(1):19-42
31. Jacobi, J., Mukhovi, S., Llanque, A., Giger, M., Bessa, A., Golay, C., Ifejika Speranza, C., Mwangi, V., Augstburger, H., Buergi-Bonanomi, E., Haller, T., Kiteme, B. P., Delgado Burgoa, J. M. F., Tribaldos, T., and

- Rist, S. (2020). A new understanding and evaluation of food sustainability in six different food systems in Kenya and Bolivia. *Scientific Reports*, 10(1), 19145. <https://doi.org/10.1038/s41598-020-76284-y>
32. Elisha Ondieki Makori (2020). Blockchain Applications and Trends That Promote Information Management. In *Emerging Trends and Impact of Internet of Things in Libraries*. IGI Global.
 33. Nyabul, P. (2020) Theuri, John Mwai, Njuguna Waitherero, Patrick Nyabul: “Dewey’s Progressive Education in Relation to virtue ethics” in *International Journal of Applied Science and Research IJASR 2020 Volume 3 issue 3 May - June ISSN: 2581-7876*.
 34. Nyabul, P. (2020) Theuri, Mwai, Njuguna Waitherero and Patrick Nyabul: “John Dewey’s Theory of Progressive Education” in *African Research Journal of Education and Social Sciences*, 7(2), 2020 ISSN (online): 2312-0134 | Website: www.arjess.org
 35. Nyabul, P. (2020) Kindo, Noel, Patrick Nyabul and Simon Njuguna: “Ethical Issues on IVF and Surrogacy” in *International Journal of Sciences and Applied Research, IJSAR*, 7(7), 2020; 01-13.
 36. Maweu, J. M. 2020. “Fake Elections”? Cyber Propaganda, Disinformation and the 2017 General Elections in Kenya, *African Journalism Studies*, DOI: 10.1080/23743670.2020.1719858 *African Journalism Studies* 40:4, 62-76, ISSN: 2374-3670 (Print) 2374-3689 Journal homepage: <https://www.tandfonline.com/loi/recq21>.
 37. Musili T.K (2020) Rethinking Value Pluralism in the Ethics of Sharing Benefits and Burdens in Collaborative Research. *Journal of Culture, Society and Development* 61, 45-51.
 38. Muriuki, W. 2020. “Shinran” in *The Encyclopedia of Philosophy of Religion*, edited by Stewart Goetz and Charles Taliaferro, forthcoming, John Wiley and Sons.
 39. Oduor, R.M.J. 2020. “Kenya beyond Liberal Democracy: The Rationale for an Ethnically-Based Federation”. *The Elephant*, 14th August. <https://www.theelephant.info/ideas/2020/08/14/kenya-beyond-liberal-democracy-the-rationale-for-an-ethnically-based-federation/>
 40. Iribe Mwangi (2020) “Kiswahili as a Privileged Mother Tongue in Kenya: the Pros and Cons” in *Reyono Journal of Interdisciplinary Studies*. St. Thomas College, Kozhencherry, India. ISSN 2277-7652. Vol. 9, No. 1
 41. Iribe Mwangi (2020) “A River from Rivulets? A Study of Sheng vis-à-vis Indigenous Kenyan Languages and Modern Technology.” *Asian Journal of African Studies (AJAS)*, Hankuk University of Foreign Studies. ISSN 2466 - 1821. Vol. 49, pp 25-46, August 2020.
 42. Amiri Swaleh (2020) ‘Ujenzi wa Ujitambuzinafsi Hasi katika Bunilizi za Omar Babu’ in *Mwanga wa Lugha*, Vol 5, Iss. 1, April 2020. pp 57-70.
 43. Amiri Swaleh (2020) ‘The Impact of Feudalism and Racialism on The Construction of Self- and Gender Identities in M.S. Mohamed’s Kiu and Nyota ya Rehema’ katika *Asian Journal of African Studies*, Vol. 47, Feb. 2020.
 44. Amiri Swaleh (2020) ‘Mother Tongue as Repository of Culture and Identity: Sampling Classic Kiswahili Poetry’, in *Languages Matter for Development, Peace Building and Reconciliation*, Kakamega, MMUST, Feb., 2020. Uk. 70-85.
 45. Rayya Timammy (2020) “*Usawiri wa Familia ya Kisasa katika Fasihi ya Watoto Nchini Kenya*” *Mwanga wa Lugha Journal of Moi University*, Vol 5 No. 1 April 2020 Pp.185-194.
 46. Rayya Timammy (2020) “*Uchanganuzi wa Toni katika Ushairi wa Kithaka wa Mberia*” *Mwanga wa Lugha - Journal of Moi University*, Vol 5 No. 1 April 2020 Pp 195-211.
 47. Rayya Timammy (2020) “Africa Images in Kithaka wa Mberia’s Poetry” *Asian Journal of African Studies* Vol. 49 August 2020 Pp 3-28.
 48. Rayya Timammy (2020) “*Tamathali za Usemi na Taswira katika Utenzi wa Ukimwi ni Zimwi*” in *Mwanga wa Lugha Journal of Moi University*, Vol 5 No. 2, Sept 2020, Pp15-32.
 49. Ayub Mukhwana (2020) “*Athari Za Ulumbilugha Miongoni mwa Chokoraa*” in *Mwanga wa Lugha Journal of Moi University*, Vol 5 No. 2, Sept 2020, Pp. 151 - 164.
 50. Ayub Mukhwana (2020) “An Optimality Theory Account of the Phonological Processes Involved In Hiatus Resolution in the Olutura Dialect of Luyia” in *The University of Nairobi Journal of Language and Linguistics*. vol.8 (2020), Pp 27-60.
 51. Ayub Mukhwana (2020) “*Historia Mapokeo laminiwe?*” Book chapter in *Mosol Kandagor (Mhariri) Kiswahili Na Maendeleo Ya Afrika Mashariki*,
 52. Ayub Mukhwana (2020) “*Michakato Mipya ya Kueneza Dini Kiutandawazi na Athari zake katika Mustakabali wa Maenezi ya Kiswahili*”, Book chapter in *Mwenda Mukuthuria na Mosol Kandagor (Wahariri) Lugha ya Kiswahili: Utafiti na Maendeleo yake*.
 53. Kineene wa Mutiso (2020) “Africa Images in Kithaka wa Mberia’s Poetry.” *Asian Journal of African Studies*. Vol. 49, 113-138. (With Ongarora, S, Timmamy, R. & Michira, J.)

54. Kineene wa Mutiso (2020) *“Uchanganuzi wa Toni Katika Ushairi wa Kithaka wa Mberia.”* Mwanga wa Lugha. Journal of Moi University, Vol. 5, No. 1., 195-211. (With Michira, J, Timmamy, R. & Ongarora, S.)
55. Zaja Omboga (2020) “Configuring Thematic Tropes in Kiswahili Literature: Translating Mariama Ba’s So Long a Letter as Barua Ndefu Kama Hii” in Mwanga wa Lugha, Journal of Moi University, Vol 5 No. 2, Sept 2020, Pages 129-150
56. Zaja Omboga (2020) “Proverbs and Enculturation: The Gender Convergence of Kiswahili and Ekegusii Proverbs” in Mwanga wa Lugha Journal of Moi University, Vol 5 No. 1, Apri 2020, Pages 19-36
57. Zaja Omboga (2020) *“Usawiri wa Familia ya Kisasa katika Fasihi ya Watoto Nchini Kenya”*, in Mwanga wa Lugha Journal of Moi University, Vol 5 No. 1, April 2020,, Pages 185-194
58. Mary Ndung’u (2020) *Mwenge wa Kiswahili: Kitabu cha Mazoezi kwa Shule za Msingi.* One Planet. Nairobi. (With Matei)
59. James Michira (2020) *“Tafsiri ya Chata za Huduma: Nafasi ya Kukuza Msamiati na Istilahi za Kiswahili.”* Mwanga wa Lugha. Journal of Moi University, Vol. 5, No. 2; 109 - 128. (With Indindi, H.)
60. James Michira (2020) “African Images in Kithaka wa Mberia’s Poetry.” Asian Journal of African Studies. Vol. 49, 113-138. (With Ongarora, Timmamy, R. & Mutiso, K.)
61. James Michira (2020) “Uchanganuzi wa Toni Katika Ushairi wa Kithaka wa Mberia.” Mwanga wa Lugha. Journal of Moi University, Vol. 5, No. 1., 195-211. (With Ongarora, Timmamy, R. & Mutiso, K.)
62. James Michira (2020) *“Kiswahili kama Lugha Rasmi ya Kenya: Majukumu, Changamoto na Mapendekezo”* in Arege, T., Wafula, R., Matundura, E., Kadurenge, B., Matei, A. & Kandagor, M. (2020). Lugha: Utamaduni na Katiba, Nairobi: Access Publishers Ltd. pp. 185 - 196.
63. Jefwa Mweri (2020) Sustainable Development Goals: Reaching People through Their Mother Tongue. Linguistics and Literature Studies 8(1): 14-25, www.hrpub.org > download > LLS3-19314435. DOI: 10.13189/lis.2020.080103
64. Jefwa G. Mweri (JULY, 2020). Coronavirus Disease (COVID-19) From an Emerging and Rapidly Evolving to a Trending Issue. Research, Innovation and Enterprise Blog. UON. [https://uonresearch.org > blog > coronavirus-disease-covid-19-from-an-em...](https://uonresearch.org/blog/coronavirus-disease-covid-19-from-an-em...)
65. Jefwa G. Mweri (JULY, 2020). The Corona Virus Disease (COVID-19) Pandemic and its Role as an Agent of Social Change. Research, Innovation and Enterprise Blog. UON. [https://uonresearch.org > blog > the-corona-virus-disease-covid-19-pande...](https://uonresearch.org/blog/the-corona-virus-disease-covid-19-pande...)
66. Jefwa G. Mweri (AUGUST, 2020) Corona Virus Disease (COVID-19) Pandemic: Why Some Health Protocols are Meeting Resistance. Research, Innovation and Enterprise Blog. UON. <https://uonresearch.org/blog/coronavirus-disease-covid-19-pandemic-why-some-health-protocols-are-meeting-resistance/>
67. Samson Ongarora (2020) “African Images in Kithaka wa Mberia’s Poetry.” Asian Journal of African Studies. Vol. 49, 113-138. (With Michira, J, Timmamy, R. & Mutiso, K.)
68. Samson Ongarora (2020) *“Uchanganuzi wa Toni Katika Ushairi wa Kithaka wa Mberia.”* Mwanga wa Lugha. Journal of Moi University, Vol. 5, No. 1., 195-211. (With Michira, J, Timmamy, R. & Mutiso, K.)
69. Ephraim Wahome and Joan Gathungu (2020)- Redefining Sustainability in the Conservation and Promotion of the Cultural Heritage Tourism Product in Kenya. In Tourism Destination Management. Emeral Publishing. Pp. 257-271
70. Mugwima B. Njuguna, Ephraim W. Wahome and Anne Marie Deisser (2020): The Role of the National Construction Authority in the Conservation of Vernacular Architectural Heritage. East African Journal of Engineering Vol 2 No 1 (2020): 23-32

Book and Book Chapters Written by Members of Staff

1. Oluoko-Odingo, A.A. 2020. Smallholder Innovations towards Food Security in Peri-urban Areas of Africa. In: *Rural-Urban Linkages and Sustainable Development Case Studies from Africa* [Farai Kapfudzaruwa, Shogo Kudo, Kanako Matsuyama, Doreen Ingosan Allasiw (eds)], Spears Media Press LLC, ISBN: 9781942876588 (Paperback).
2. Moronge J. (2020) ‘Spatial (Industrial) Organisation of the Kenyan Coast’ in Onditi F. and Yates D. (2020) *Illusions of Location Theory: Consequences for Blue Economy in Africa*, Vernon Press, USA.
3. Shadrack Kithiia (2020). Bridging the Coastal-Hinterland Divide in Eastern Africa Book chapter in *Illusions of Location Theory Consequences for Blue Economy in Africa* (2020).
4. Oduor, R.M.J. 2020. *Introduction to Ethics*, Second Edition. Nairobi: Sophia Publications.
5. Omari H.K. et al 2020. *Arabic for All*. Nairobi: Chance Publishers.

6. Wachege, P. 2020. *Jesus Christ as "Muthamaki"* (Ideal Elder), 2nd Edition. Nairobi: Phoenix Publishers.
7. Mwenda Mbatiah (2020) Book Chapter: "Swahili Literature as a Minority Discourse in African Literatures" in Ojaide & J. Ashuntantang Routledge *Handbook of Minority Discourses in African Literature*. London: Routledge.

Staff Presentations at Conferences/Seminars 2020

1. Jennifer Muchiri (2020). Re-imagining and Restaging Cultural Identity in Ngugi wa Thiong'o's *Kenda Muiyuru*.
2. Alina Rinkanya (2020). The problems of Kenyan female youth in the works of Moraa Gitaa.
3. Julius Kanyari Mwangi (2020). The Eastern Africa and the Caribbean space and identities: rethinking the African presence in the Caribbean
4. Sam Dennis Otieno Narrating East African Oceanic Encounters in Yvonne Owuor's *The Dragonfly Sea* (2020)
5. Makau Kitata (2020). Family Matters: Intersections of Gender, Ethnicity and Nationhood in Binyavanga Wainaina's, *One Day I will write about this Place*.
6. Joseph Muleka (2020). Inseparability of Freud's Psychoanalysis in African Literature: Interpreting East African Drama through Tripartite Psyche
7. Simon Peter Otieno (2020). Down-Top Approach to Dealing with Pandemics: Forgotten Lessons of Theatre and Film for Development in Kenya
8. Miriam Musonye (2020). Power Performance in the Digital Space: An Analysis of Kenyan Online Parody
9. Judith Jefwa (2020). The Blogger and the Reader as Co-creators of Works of Fiction
10. Kimingichi Wabende (2020). Performing Narratives in Digital Space during Covid-19 Pandemic
11. Prof. DH Kiiru (2020). "Faith and Healing in the Bible." Conference Paper, College of Humanities and Social Sciences (CHSS) Third Annual International Multi-Disciplinary Conference, University of Nairobi, 14th -16th October.
12. Prof. Ciarunji Chesaina (2020). "Kenyan Oral Literature Revisited"
13. Prof. Henry Indangasi (2020). "The Department of Literature at 50: The Facts and the Fabrications", paper submitted at the UoN@50 Department of Literature webinar (November)
14. Owuor, S (2020): "Urban growth and food security in Nairobi, Kenya". Makadara Sub-County Food and Farm Market Community Urban Studio, Nairobi, Kenya, February 28, 2020
15. Owuor, S (2020): "Housing in Nairobi". IGLUS Training Workshop, Aga Khan University, Nairobi, Kenya, February 18, 2020.
16. Oluoko-Odingo, A.A. 2020. Gender mainstreaming in Climate risk reduction for Sustainable food and nutrition security in Africa. 14th KMS International Conference on Meteorological Research, Applications and Services, Lake Naivasha Resort, Nakuru County, Wednesday 21 - Friday 23 October 2020.
17. Oluoko-Odingo, A.A. 2020. Gender concerns of Climate risks and their implications for Livelihood sustainability. African Women Studies Centre Conference, University Research Week, 14-16 October 2020.
18. Oluoko-Odingo, A.A. 2020. Harnessing Technology for improved Gender Equality and Human security in Kenya. Global and Local Response to Emerging Issues in the Third Decade of the Millennium: Opportunities and Threats, University of Nairobi Research Week, Date: 14th - 16th October, 2020
19. 2020a Shah. P., Coronavirus pandemic and the girl child: The case of the Maasai Women in Kenya. Paper presented at the 3rd Annual Status of African Women Conference, UoN, 14th - 16th October.
20. 2020b Shah. P., Implementing Kenya's 2012 Wildlife Policy through The Constitution: Engagement and resilience. Paper presented at the 3rd Annual Nairobi International Multidisciplinary Conference (College of Humanities and Social Sciences), UoN, 14th - 16th October.
21. Francis Mwaura 6th June 2020; Evaluation of biodiversity articles in Vol 1 of the EAJSTI. Second Editorial Board Meeting of the East African Journal of Science, Technology and Innovation (EAJSTI)
22. Sam Owour and Teresa Mbatia 4th to 5th July 2020: Contemporary Issues in Food and Food Security Maputo, Mozambique
23. Ochola, E.A (2020). Global Communication Summit, Houston, Texas. Social media Communication, 27-28th Feb.
24. Hashim, H. 2020. Virtual meeting on the Launch of Alternative Theological Narratives to Prevent/Counter Religious Extremism and Radicalisation", African Council of Religious Leaders- Religions for Peace, Nairobi, 24th September 2020.

25. Mbugua, K. 2020: Dreams and Dreaming: Evolved Defense Mechanisms or Spandrels of Sleep? Paper presented at the Dreams and Dreaming Conference, Makerere University, Uganda, 27th-28th February 2020.
26. Mbugua, K. 2020. "Sex -Selection for Family Balancing Reconsidered", Fourth Bioethics Society of Kenya Annual Conference - Contemporary Issues in Bioethics, Swiss Lenana Mount Hotel, Nairobi, Kenya, 12-13 March 2020.
27. Maweu, J.M. 2020. 'The Propaganda Model and Journalistic agency in Kenya Today: Ethnicity as a key sixth Filter? Paper presented at the International Communication Association (ICA) annual conference (Online), organized by Gold Coast, Australia, 21-25 May 2020.
28. Maweu, J.M. 2020. 'Mainstreaming Elite Ideology through a Handshake: Media, Politics and Propaganda in the Building Bridges Initiative in Kenya'. Paper presented at the annual IAMCR conference (Online) organized by Tampere University, Tampere, Finland 12-17 July 2020.
29. Musili T. 2020. Fourth Bioethics Society of Kenya Annual Conference - Contemporary Issues in Bioethics, Swiss Lenana Mount Hotel, Nairobi, Kenya, 12-13 March 2020
30. Musili, T. 2020. 10th ASET Annual Conference - Who do you say I am? Christology in Africa, Africa International University, Nairobi, Kenya, 6-7 March 2020.
31. Nyabul, P. "The Significance of Dreams and Dreaming Among the Luo People of Kenya". Paper presented at the Dreams and Dreaming Conference: African Perspectives, Makerere University, Uganda, 27th - 28th February, 2020
32. Oduor, R.M.J. 2020. "The Fourth Industrial Revolution: Universal Design, Affordability, Cultural Identity, and Ethical Orientation". Paper presented at the Roundtable on "African Studies and 4IR: in Search of an Appropriate Analytical Approach" organised online by the University of Johannesburg's Institute for Intelligent Systems (IIS), in collaboration with the Johannesburg Institute of Advanced Study (JIAS) on 7th December, 2020.
33. Owakah, F. 2020. General Assembly & Annual Conference of the Association of Human Rights Institutes on the Future of Human Rights: Socio-Economic Rights, Equality and Development: <https://ahri2020.eventbrite.co.ke> 4-5 September 2020
34. Owakah, F. 2020. Information for Development (I4D), Governance, Leadership and Ethics in Institutions of Higher Learning (IHL), University of Nairobi, Nairobi, 12th - 14th October 2020:
35. Owakah, F. and Musili, T. 2020. 'Ideology, Politics and Human Rights in Africa: Conversations and Reflections on the Future of Human Rights in Africa Post COVID-19. In the Third Annual International Multi-Disciplinary Conference: Global and Local Response to Emerging Issues in the Third Decade of the Millennium: Opportunities and Threats, 14th - 16th October, 2020.
36. Presented a paper titled "Andrew Kailembo: an East African at the ICFTU" at the "East Africa Global Lives" online Workshop, 11 December 2020.
37. Iribe Mwangi (2020) December, Conference: International Webinar "Kiswahili Ulimwenguni" Nairobi.
38. Prisca Jerono (2020) February 1st African Pragmatic Conference at the University of Ghana, Legon; "Aggression and Impoliteness on Kenyan Roads"
39. Mwenda Mbatiah (2020) December, Conference: International Webinar "Kiswahili Ulimwenguni" Nairobi.
40. Rayya Timammy (2020) "Waswahili ni Nani?" Swahili Literary Festival - Identity Politics on the Swahili Coast (6 - 7 March 2020) - Presented a paper on 6 Machi 2020 Swahili Hub.
41. Judy Onyancha (2020) "Uwezesaji Lugha kama chombo cha Kuimarisha Maendeleo ya Kitaifa: Mfano wa Lugha ya Kiswahili" Presented a paper in a 3rd Annual Nairobi International Multidisciplinary Conference 14th - 16th October, 2020
42. Kineene wa Mutiso (2020) December, Conference: International Webinar "Kiswahili Ulimwenguni" Nairobi.

Webinars Hosted and Webinar Presentations and Conferences Hosted by the Faculty

1. Department of literature hosted a webinar themed "UoN@50: Conversations on Kenyan Literature and our Being" in November 2020
2. Department of Geography & Environmental Studies hosted local webinar on UON@50years on 9th March 2021
3. Department of Geography & Environmental Studies hosted an International webinar on UON@50years on 27th April 2021

4. Prof. Irandu. Panelist on Re-imagining tourism and food experience in Kenya post COVID19 at the Interregional Economic Network (IREN) Growth pad Virtual Food Festival 2020, September, 24th-25th, Nairobi.
5. Prof. Irandu, Dr. Martin Marani, Dr. James Moronge. Impact Assessment for Belt & Road Initiative Projects. Organized by International Association of Impact Assessment (IAIA)
6. Dr. John Musingi. Key presenter; Assessing the Fiscal & Social Protection Policies in times of Covid 19, University of Nairobi webinar 23rd April 2020
7. Dr. Martin Marani. Global Manufacturing and Industrialization Conference and Summit. Organized by GMS Representatives and Deutsche Messe AG
8. Dr. Martin Marani. Effective Project Level Grievance Mechanisms in a Changing Landscape: An Interactive Tool. Hosted by International Association of Impact Assessment (IAIA)
9. Dr. Boniface Wambua. Sustainable urban agriculture in Nairobi and Dar es Salaam. Presentation done to students and staff in Humboldt University Berlin, Germany July 2020
10. Dr. Parita Shah. UON WEE Hub - 20th November 2020. The origin of the grounded theory and its implication on research on women in Africa.
11. Dr. Parita Shah. UON WEE Hub - 16th December 2020- strengthening the generation and use of evidence to advance women's economic empowerment (WEE) and gender equality in Kenya
12. Dr. Parita Shah. UN webinar - 17th December 2020 - GEO-6 Technical Summary Webinar: How to incorporate the GEO into university curricula
13. Dr. Parita. UN webinar - 3rd December 2020 GEO-6 Technical Summary Webinar: How to incorporate the GEO into university modules
14. Dr. Parita Shah. UN webinar - 6th October 2020 - Future of GEO Consultation webinar #7
15. Dr. Paraita Shah. Times Higher Education in partnership with Desire to Learn -12th August 2020 - Enabling digital transformation in South Africa: staying locally and globally competitive in a new era of digital learning
16. The Department of Library & Information Science Department held a webinar conference on Information for Development, Governance, Leadership and Ethics in Institutions of Higher Education from 12th - 14th October 2020. This was the First Annual Conference on Information Science (FACIS) where academics, professionals, practitioners, scholars, students, organizations and industries deliberated and shared knowledge and experiences
17. The Department of History & Archaeology hosted an International Webinar on "Rethinking African Historical. Social and Cultural Scholarship During and After Covid 19: Challenges and Opportunities, 23rd September 2020
18. International Webinar organized by the Department of History and Archaeology, "UON@50: History of Scholarship Trajectories a Half a Century Later," 4th November 2020.
19. The Department of Literature hosted the third international annual conference on the Role of Literature in a Global World in October 2020
20. The department of Kiswahili organized and hosted an International Webinar: "Kiswahili Ulimwenguni." 2nd December 2020
21. Ephraim W. Wahome attended ICOMOS 20th General Assembly, 1st session/20e Assemblée générale de l'ICOMOS, 1ère session - Webinar. 20th ICOMOS General Assembly - ZOOM link for 3 December session and final draft Resolutions/20e AG de l'ICOMOS - Lien ZOOM pour session du 3 décembre et ébauche finale des résolutions
22. Ephraim W. Wahome attended International UON@50 webinar whose theme is Kiswahili Ulimwenguni (Kiswahili in the Globe) on December 2, 2020 from 2.00 pm.
23. Ephraim W. Wahome attended Literature Webinar- 25th November 2020: UoN @50: Conversations on Kenyan Literature and our Being.
24. Ephraim W. Wahome attended History Webinar: UoN@50: History of Scholarship Trajectories a Half Century on.
25. Ephraim W. Wahome attended ICOMOS Scientific council Webinar: Scientific Council/Conseil scientifique 2020-1: Triennial Scientific Plan Review, Projects, and Collaborations/Révision du plan scientifique triennal, projets et collaborations. Monday 19 October 2020
26. Ephraim W. Wahome attended ICOMOS National Committees Meeting 1 WEBINAR (Outcomes of Regional Discussions) on Thursday 15 October 2020. Topic: Advisory Committee/Conseil consultatif 2020-1: Preparatory Webinar/Webinaire préparatoire

27. Ephraim W. Wahome attended Rethinking African Historical & Cultural Scholarship During and After Covid-19: Challenges and Opportunities. Webinar - September 23, 2020
28. Ephraim W. Wahome attended BSF Project webinar December 15th, 2020

New Partnerships, MoUs, Linkages and Collaborations

1. The Department of Literature signed an MOU with Soka University, Japan.
2. Mwendu, J.M. 2020 University of Nairobi-University of Leeds-University of Ghana Research partnership on Interrogating (Gendered) Information Ecosystems in Climate Change Adaptation in rural Ghana and Kenya: a pilot field study
3. Omari, H.K. 2020. "Islamic teachings on Child protection." Conference Channels of Hope for Child Protection for Uganda Staff and faith leaders World Vision Uganda, 20th February 2020.
4. Omari, H.K. 2020. "Curbing child abuse: interfaith perspective, workshop Channels of Hope to Religious leaders (Muslims/Christians) Isiolo c/o World Vision Kenya, 25th Sept 2020
5. Omari, H.K. 2020. Mediation Parents, Students and School administration, workshop Garissa Muslim Centre, 8th February 2020
6. Omari, H.K. 2020. Islam and development paper presented at All Africa Conference of Churches (AACC) Agenda 2063 at AACC Desmond Tutu Conference Centre (DTCC), 19th November 2020,
7. Omari, H.K. 2020. "Preventing Violent Extremism: Islamic perspective, presented at Counter-Narrative Training at international Leadership University Nairobi October 2, 2020
8. Omari, H.K. 2020. "Role of interfaith leaders in countering violent extremism: transformative narratives from a faith perspective: presented at YWCA CVE Forum, 22nd November 2020
9. Mwendu, J.M. 2020 University of Nairobi-University of Leeds-University of Ghana Research partnership on Interrogating (Gendered) Information Ecosystems in Climate Change Adaptation in rural Ghana and Kenya: a pilot field study.
10. Muriuki, W., 2020. Nanzan University, Center for International Affairs, and the Faculty of Global Liberal Studies on the tentative theme: "Strengthening Grass-roots Resilience with Multi-cultural, Systems, and Market Thinking in the Post-COVID19 Period."
11. Mwendu, JM. 2020. January 2020-December 2020: Lead researcher in Kenya in the University of Leeds, University of Nairobi and University of Ghana GCRF collaborative research award with Chris Paterson (PI) University of Leeds on Information in Climate Change Adaptation in rural Kenya and Ghana
12. The Department of Kiswahili Collaborated with University of Western Cape (South Africa) in MA Supervision of Simon Mwaniki, "Mashairi: A Surviving Art of the Swahili Muslim Peoples of Lamu Town, Kenya." (Prof. Tom Olali).
13. The Department of Kiswahili Collaborated Humbolt University, (Germany), Tianjin Normal University (China) in the Publication of Chinese-English-Swahili Grammar Book. (Prof. Tom Olali).
14. The Department of Kiswahili Collaborated with Universitat Rovira i Virgili (Spain) in PhD Supervision of Alicia Waceera Wangeci Ndegwa, "Impact of Technology on Reading Comprehension and Attitude of Kiswahili on Young Learners in Kenya." (Prof Iribe Mwangi)
15. The Department of Kiswahili Collaborated with The State University of Zanzibar (Zanzibar) in PhD Supervision of Ziada Tajo Ameir, "Ukiushi wa Kimaadili katika Filamu Zilizofasiriwa kwa Lugha ya Kiswahili." (Prof Iribe Mwangi)

Achievements

Scholarship Awards

During 2020, 14 students from the Department of Geography and Environmental Studies were awarded Mitsubishi corporation international scholarships; present were General Manager Mitsubishi corporation international, regional office, DVC AA representing VC, Principal CHSS, Dean Faculty of Arts, Director School of biological Sciences, Dean student's affairs and Chairman Department of Geography & Environmental Studies



Graduation

As at 2021, the department had 872 in the following grades

Programme	No. of Graduands	Programme	No. of Graduands
PhD.	3	Bachelors	688
Masters	129	Diplomas	53
Postgraduate Diploma	2		

Others

1. Publication of the Nairobi Journal of Literature Number 9 (Special Issue) December 2020
2. Nomination and award of honorary degree to Prof. Micere M. Githae Mugo -Department of Literature
3. Nomination and appointment of Prof. Wanjiku Kabira as Professor Emeritus
4. The department of Geography and Environmental studies Launched departmental Magazine on the achievements of the department since inception as part of UON@50 years celebrations 27th April 2021
5. The Department of Library and Information Science implemented education, training and research programmes in line with the United Nation's (UN) Sustainable Development Goals (SDGs), Government of Kenya's Vision 2030 policy and classified under Social Sciences, Journalism and Information in the UNESCO International Standards Classification of Education in the detailed field of Library, Information and Archival Studies (ISCED, 2011: 18).

Consultancies



The Department of Kiswahili lead in the translation of the Standing Orders of the National Assembly (see photos)
The department also lead in translation of documents for the Communication Authority of Kenya (CA).

Corporate and Community Outreach Activities

1. Faculty of Arts Performing arts students entertained guests during the UoN@50 celebrations
2. Members of staff from the Department of Literature consistently write for the Saturday Nation on pertinent issues related to Literature and the arts
3. Prof. George was appointed an international observer in the negotiation between Ethiopia and Egypt on the Grand Ethiopian Renaissance Dam. The appointment was done by African Union to maintain peace between Ethiopia, Egypt and Sudan
4. Makadara Sub-County Food and Farm Market Community Urban Studio, Nairobi, Kenya. Organized by Prof. Sam Owuor
5. Dr. Alice Odingo, Chairperson, Gender Mainstreaming Committee and has been training staff in the six colleges of UON to ensure a gender responsive working environment from management to units level
6. The Department represented University of Nairobi in international wetlands day in sabaki estuary where 10,000 mangrove tree seedlings were planting as part of community service. Dr. Wambua, chairman of the department, took part in this important international day
7. The Department in partnership with Mitsubishi International corporation advertised and selected 14 needy and bright students who qualified for scholarship support
8. Prof. George Krhoda has been involved in Mentorship Programme under international support Network for African Development (ISNAD-Africa): Hydrological Society of Kenya African Ministries of Water Council, Abuja, Nigeria ADS Nyanza Company Ltd
9. Dr. Stellah Muhovi was involved in Transformative Pilot action on Funds mobilization an community engagement-Umande cooperative Laikipia County
10. Dr. John Musingi was involved in Covid-19 Donations of Sanitizers and wash Tanks in Machakos under Masinga Professionals Association and he was also involved in Development of Kuku Group Ranch Land Use Plan which benefits the community bordering the ranch
11. Dr. S. Kithiia, Chairman of 3 School Board Management (BOM)-Nguumo Girls High School, Kibwezi, Makindu Girls Secondary School and Synumile Secondary school-Makindu.
12. Dr. F. Mwaura Appointment by the East African Science & Technology Commission (EASTCO) to the Editorial Board of East African Journal of Science Technology and Innovation.
13. Prof E. Irandu sponsored two needy Secondary school pupils in Tharaka Constituency, Tharaka Nithi County from Form 1-Form IV with effect from January 2015 to November 2018.
14. Dr. B. Wambua, BOM chairman, Kasikeu Boy High School and a BOM member at Nduluni Secondary School. He further;
 - a) Sponsored several students in secondary schools
 - b) Chairman NGUMA welfare society
 - c) Chairman, Bahati welfare Group
15. Dr. J. Nyangaga, BOM member, Itierio High school
16. Prof. Elias Ayiemba, Chairman, Education Council, Nairobi Central SDA Church and an active Church Elder, Nairobi Central SDA Church
17. Dr. Martin Marani, Continued to support Ndiema, Nanjala Harriet (an orphan), a Form Three student at Friend Muji Secondary School, Admission No. 4322
18. Prof. George Krhoda, Chairman of Resources Mobilisation for Homa Bay County Covid 19 Committee. He is also the:
 - a) Chairman of Homa Bay Water and Sewerage Services Ltd
 - b) Chairman of Kajiado County Water and Sewerage Company Ltd
 - c) Chairman of Homa Bay County Climate Change Steering Committee
 - d) Patron of Hydrological Society of Kenya
19. Prof. Francis Mwaura, Technical advisor for Uhodari community self-help group in Naivasha
20. Dr. Stellah Mukhovi Member, department of geography welfare committee
21. Dr. Kennedy Omoke Member of Mwekeima Self-help Group, Mwamugosii Self Help Group and Kenyan secondary BOM
22. Prof. Samuel Owuor Member of East Africa Representative, Commonwealth Geographical Bureau; a member of Maasai Mara Science and Development Initiative; and the Chairman, Department of Geography welfare committee

23. Prof. Tom Olali (2020) International Christian Centre Nativity Play (Directed and wrote it)...”Attention Covid-19: The King is Born” available on YouTube. (Prof. Tom Olali)
24. Ephraim Wahome a Board Member, National Museums of Kenya and an External Examiner, Kenyatta University

Staff Portfolio

Academic Rank	No. of Staff
Department of Communication Skills	
Assistant Lecturer	1
Lecturer	4
Tutorial Fellow	2
Department of Geography & Environmental Studies	
Professor	2
Associate Professor	3
Senior Lecturer	8
Lecturer	8
Tutorial Fellow	1
Department of History & Archaeology	
Associate Professor	2
Senior Lecturer	5
Lecturer	7
Part-Time Lecturer	3
Tutorial Fellow	2
Professor	1
Associate Professor	7
Senior Lecturer	5
Lecturer	3
Tutorial Fellow	5
Department of Literature	
Professor	4
Associate Professor	3
Senior Lecturer	7
Lecturer	2
Assistant Lecturer	2
Tutorial Fellow	1
Department of Philosophy & Religious Studies	
Professor	1
Associate Professor	4
Senior Lecturer	8
Lecturer	11
Total	112

Projections

1. To have 2 international colloquia (Department of Literature) and issue the Nairobi Journal of Literature Number 10.
2. Increase international linkages with new partners and boost university visibility
3. Upscale research activities and look for more research grants to support research and student’s scholarships
4. Increase the number of grandaunts to one thousand (1000)
5. Increase staff publications in reputable Journals
6. Attract more foreign students
7. To start a communication programme in professional communication.
8. Review of all Faculty programmes

Challenges

1. Limited budget allocation
2. Low staff establishment, less than 54%
3. Inadequate teaching and research facilities
4. Restrictions by Covid-19 on staff and students exchange programs
5. There is need for aggressive marketing and advertisement of programmes to recruit more students in all programmes and campuses
6. There is need for more investment in staff development so as to support the implementation and expansion of academic programmes.

New Appointment

Appointment of new head of department in the Department of Literature

International Linkages

The Faculty made significant efforts in striving to be a centre of international repute committed to scholarly excellence developing and strengthening international Partnerships in areas of research, students and staff exchange visits.

In the year 2020, the Faculty continued to nurture formal Memoranda of Understandings with the following institutions and organizations:

Institution	Country
Aarhus University	Denmark
African Studies Centre-Leiden	Netherlands
Centre for Development and Environment, University of Berne	Switzerland
Centre for Training and Integrated Research in Arid and Semi-Arid Lands Development	Kenya/Switzerland
International Space University	France
Justus-Liebig-University-Giessen	Germany
Linköping University	Sweden
Mitsubishi Corporation	Kenya/Japan
The United Nations University	Japan
University of Bordeaux Montaigne	France
University of Cologne	Germany
Makerere University	Uganda
The University of Cape Town	South Africa
University of Fraser Valley	Canada
Humboldt University	German
United Nations University of Tokyo	Japan
University of Salzburg	Austria
Queens university	Canada
Air Bus Defense and Space Limited	Britain
Geoprogress Onlus	Italy
University of Copenhagen	Denmark (New)
University of Helsinki	Finland (New)

Department of Anthropology, Gender and African Studies

Introduction

The Institute of Anthropology, Gender and African Studies (IAGAS) *formerly* Institute of African Studies at the University of Nairobi has been in existence since 1970. At its inception, the Institute was mandated to carry out research into socio-cultural issues including research in the field of African prehistory and history; musicology and dance; traditional and modern arts crafts; religion and other belief systems. This became its main focus of research for close to 15 years. In 1986, the Institute's mandate was expanded to include training in Anthropology and in 1999 a Gender and Development Studies programme was introduced.

The Institute staff teach and conduct research in the various fields of humanities and social sciences including archaeology; heritage management; museology; language, culture and society; cultural studies; gender and development studies; medical anthropology; development anthropology; anthropology of children and childhood, demographic anthropology and anthropology of conservation. The Institute continues to partner with similar institutions for purposes of research collaboration and academic exchange. As a result the Institute receives senior research scholars and students from all over the world, who seek affiliation. These affiliations provide avenues for exchange of ideas with staff and students of the Institute.

Courses Offered

Academic programs at IAGAS together with entry requirements are summarized below. Applicants must fulfill the general University of Nairobi entry requirements.

1. BA in Anthropology
2. BA in Gender and Development Studies
3. MA in Anthropology
4. MA in Gender and Development Studies
5. Doctor of Philosophy in Anthropology
6. Doctor of Philosophy in Gender & Development Studies

Student Enrolment

Programme	No. of Students
B.A. Anthropology	377
B.A. Gender & Development	38
M.A. in Anthropology	27
M.A. in Gender & Development Studies	52
PhD. in Anthropology	15
Total	509

International Students

The Institute continues to attract international students in its programmes. In the 2020 calendar year, we hosted four foreign students who enrolled in the undergraduate courses of the Institute. At the postgraduate level we hosted four students from Germany, Denmark, Ethiopia, Somalia, Uganda, Nigeria, Liberia, Tanzania and Sudan. The Institute has 14 international students.

Graduates in 2020

Programme	No. of Graduates
BA. Anthropology	74
BA. Gender & Development Studies	8
MA. in Anthropology	2
MA. in Gender & Development Studies	5
Total	89

International Links and Collaborations

1. The Institute seeks to forge linkages with other institutions in the South as well as in the North. We have active MoUs with UNFPA, Kyoto University, Japan, Bryn Mawr College, USA, University of Bergen, Norway, University of Southern Denmark, Yokohama National University, Japan, University College Dublin, National University of Ireland, Dublin and Steno Diabetes Health Promotion, Denmark.
2. In addition, the Institute also receives research scholars and students. These affiliations provide avenues for exchange of ideas with staff and students of the Institute.
3. Africa Oxford Initiative Research Development Awards Project - Collaboration Agreement between the Chancellor, Masters and Scholars of the University of Oxford and University of Nairobi.
4. Collaborative Agreement between School of Oriental and African Studies (SOAS), University of London and IAGAS, University of Nairobi to host the Global Conference on Linguistic Anthropology in 2021.

Publications/Consultancies

1. The Institute publishes *Mila* as its flagship journal which is published once every year since its inception in 1999.
2. Martin M Gazimbi, Monica A Magadi, **Washington Onyango-Ouma**, Elizabeth Walker, Rosemary B Cresswell, Margaret Kaseje and Charles O Wafula, 2020. Is polygyny a risk factor in the transmission of HIV in sub-Saharan Africa? A systematic review *African Journal of Reproductive Health*, 24(4):198-212.
3. W. Onyango-Ouma and J. Aagaard-Hansen. 2020. Dholuo Kincepts in Western Kenya. *Studies in African Linguistics*, 49 (2):304-320.
4. **Bukachi, S.A.**; Mburu, C.M. and Bett, B.K. (2020) Understanding Sociocultural Dynamics to Enhance Control of Rift Valley Fever (RVF) Epidemics in Kenya, SSHAP Case Study Issue 11, UNICEF, IDS and Anthrologica.
5. *Salome A. Bukachi, Dalmas O. Omia, Mercy M. Musyoka, Faith M. Wambua, Mariah P. Ngutu (University of Nairobi), Marina Korzenevica (University of Oxford).*2020. **Can Social capital quench thirst? Evidence from rural Kenya.** Available at <https://reachwater.org.uk/can-social-capital-quench-thirst-evidence-from-rural-kenya/>

Newspaper, Radio and TV features

1. Bukachi SA: Impact of COVID-19 on the community: Radio talk on Jambo Kenya - Radio Citizen 3rd Dec 2020
2. Bukachi SA: Discussant about Healthcare and Health Governance during COVID-19 on Day Break Citizen TV 16th December 2020
3. Bukachi SA: Anthropology and Health. Presentation made on 9th September 2020 to the Pan African Women in Health, online seminar Series
4. Bukachi SA: Interviewed for a Newspaper feature on Eve magazine of the Saturday Standard newspaper:7 (COVID) habits of highly successful women. 30th May, 2020
5. Bukachi SA: Talking Africa- 23rd April 2020 (Africa's response to COVID-19 Pandemic). Radio on interview conservation with Talking Africa Radio Station in London 23rd April 2020
6. Omu Anzala, **Salome Bukachi**, Marybetth Maritim, Moses Maskia, Joy Kiiru, Pamela Godia.2020. Public Forum on COVID-19, University of Nairobi.

Consultancies

1. Dalmas Omia-2020: Principal Investigator: Gender Vulnerability and climate variability, a case of small-holder agro-pastoralists in Baringo County Kenya. A joint project of Makerere University and University of Nairobi under the Norwegian Waso Project.
2. Dalmas Omia-2020-Lead consultant; Gender analysis to inform Capacity strengthening for World Food Programmes in the four targeted Counties: Baringo, Marsabit, Samburu and Wajir in Kenya.
3. Dalmas Omia-2020. Gender Expert: Gender Equality in Leadership and Decision-making. UN-Women, Kenya Office and KIPPRA-Wide Survey, 2019-2020.
4. Salome Bukachi (Dec 2019 - June 2020) Development of a Strategy for enhancing women's participation in PhD programs and research in Applied Sciences, Engineering and Technology (ASET fields at African Universities. A consultancy under ICIPE's Regional Coordination Unit of the Regional Scholarship and Innovation Fund (RSF).
5. Geoffrey Muga 2020. Lead Consultant for Christian Blind Mission: Assessment of the Quality of Services of the Association of the Physically Disabled Kenya (APDK) in Western and Coast Hubs. October-November 2020.
6. Geoffrey Muga 2020. Lead Consultant United Disabled Persons of Kenya (UDPK): Audit of the Impact of the Constitution of Kenya 2010 on Persons with Disabilities. November-December.
7. Geoffrey Muga 2020. Team leader Baseline Study for Norwegian Church Aid S. Sudan Programme. November - December 2020.

Staff Portfolio

Designation	No. of Staff
Professors	2
Associate Research Professors	5
Senior Research Fellows	2
Research Fellows	6
Junior Research Fellow	1
Senior Assistant Registrar	1
Administrative Assistant	1
Senior Secretary D	1
Draughtsman C/D	1
Technologist A/B/C	1
Clerk III/IV	2
Driver - A	1
Cleaner II	1
Total	25

Appointments

1. **Prof. W. Onyango-Ouma** was appointed the Director, Institute of Anthropology, Gender and African Studies.
2. **Prof. Salome Bukachi**: Appointed to the REACH (consortium led by the University of Oxford is implementing a seven-year research programme on “Improving Water Security for the Poor”) Global Advisory panel 2018-2020
3. **Dr Dalmas Ochieng Omia**: Appointed member - Global Technical Advisory Group, George Washington University, US: Global Women Institute on Building Gender Based Violence in Conflict and Refugee Settings.
4. **Dr Dalmas Ochieng Omia**: Appointed Board Member : Emerging Leaders Foundation, Kenya
5. **Dr Geoffrey Muga**: Appointed on the Board of childFund Kenya
6. **Bukachi SA, (2020)**. Listed as one of the Top 500 authors, by Scholarly Output in Kenya over the period 2014 to >2019 and released in 2020. Featured in the Scival list of top 500 authors. Was number **218 out of 500** top Kenyan Researchers.
7. **Bukachi SA, (2020)**. Chair of Plenary session 2: Intersectionality in African research: Findings from a systematic literature review, under the 18th Gender Summit (GS18) held in Nov 2020.
8. **Bukachi SA, (2020)**. Chair of the Food Safety thematic abstract-driven session at the Research Conference of the Agriculture, Nutrition & Health Academy (ANH) Academy Week Online 2020 Conference 30 June 2020
9. **Bukachi SA, (2020)**. Appointed Member of the Ad-hoc Committee for the TDR and WaSH/WHO to support activities to control water-related infectious diseases with a special focus on vector-borne diseases (2020)

Research Affiliates

Dr. Elizabeth Cooper will be conducting a research for a period of 2 years 6 months. Dr. Cooper will be conducting research on “Students’ Ideas and Practices of Collective action in Kenyan Secondary Schools”.

Research Activities and Funding

1. CEDIL PROJECT - Structural Estimation of Spatial Spillover Effects of Cash Transfers. Amount: GBP 76,973.09
2. Sustainable Governance of Food Systems in South America and Africa: A Case Study of Bolivia and Kenya. - Funded by Swiss Agency for international Development and Cooperation and Swiss National Science Foundation.

3. Gender inclusive vaccine ecosystem: enhancing distribution and delivery systems for Newcastle disease (NCD) and contagious Caprine Pleuropneumonia (CCPP) among smallholder farmers [The GIVE Project]. Funded by: International Development Research Centre (IDRC) & Bill & Melinda Gates under the Livestock Vaccine Innovative Funds (LVIF) Projects. Amount: CAD 1,500,000.
4. Drivers of demand for animal-source foods in low-income informal settlements in Nairobi, Kenya Funded by: Drivers of Food Choice (DFC) Competitive Grants Program. Amount: USD, 269,989.
5. Gender Analysis of Vulnerability and resilience to household water insecurity in Kitui County, Kenya: Implications for Institutional and Policy response in the face of Climate variability: Funded by: REACH programme: the UK Department for International Development (DFID) (Aries Code 201880). Amount: GBP, 50,000.

Conferences Attended and Presentations

1. **Dr Khamati Shilabukha** presented a paper entitled “Identifying Documentary sites, monuments and indigenous knowledge at the Kenya National Commission for UNESCO”
2. **Dr Humphrey Ojwang** gave a public lecture at mama grace Onyango social Centre in Kisumu County, Kenya Title: Pedagogy of African women’s indigenous knowledge in Food Security.
3. **Bukachi SA**, Nyamongo I., Chemuliti J., Waweru K., Omia D., Ogolla K., Kiganane L., Ngutu M., Okinda O., Anyona D., Kimani W., Mbithe M., Nzioki A., Wanjiru S., Simiyu A., Nyaboke (2020). Gender inclusive vaccine ecosystem: enhancing distribution and delivery system for Newcastle disease & CCPP among smallholder farmers [GIVE project]: Preliminary results LVIF Virtual Annual Learning Meeting IDRC LVIF Virtual meeting, 3rd - 5th June, 2020
4. Paula Domínguez-Salas, Aurélie Lépine, **Salome Bukachi**, Suneetha Kadiyala, Mariah Ngutu, Juan Segura Buisán, Ann Wambui. (2020). Drivers of demand for animal-source foods in low-income households in Nairobi: A qualitative perspective. Presentation made at the Research Conference of the Agriculture, Nutrition & Health Academy (ANH) Academy Week Online 2020 Conference 30 June 2020
5. Bukachi SA, Nyamongo I., Chemuliti J., Waweru K., Omia D., Ogolla K., Kiganane L., Ngutu M., Okinda O., Anyona D., Kimani W., Mbithe M., Nzioki A., Wanjiru S., Simiyu A., Nyaboke L. 2020 Gender inclusive vaccine ecosystem: enhancing distribution and delivery system for Newcastle disease & CCPP among smallholder farmers [GIVE project]: progress on project implementation joint projects meeting IDRC Joint Project meeting IDRC offices, Nairobi, 20th January, 2020.
6. **Bukachi SA, (2020)**. Gender inclusive Vaccine Ecosystem Among smallholder farmers in Makueni County, Kenya. Presentation made in the Plenary session 7: Improving gender equity in economic and technological inclusion of women and underserved groups in agriculture-oriented services. Online 18th Gender Summit (GS18) November, 2020
7. **Dalmas Omia**. 2020. Community of Practice Workshop: IDRC-LVIF: Virtua: Identifying gender responsive entry models: Linking SheVax+ data analysis and results to interventions” 24th Nov. 2020.
8. **Dalmas Omia**. 2020. Community of Practice Workshop: IDRC-LVIF: Gender Transformative Materials for training and research”. 27th October, 2020.
9. **Dalmas Omia**. 2020. Community of Practice Workshop: IDRC-LVIF: Project Level Women’s Empowerment”. 28th July, 2020.
10. **Dalmas Omia**. 2020. Outcome Mapping Training on Gender Inclusive Vaccine Ecosystem project., Jan. 2020
11. **Dalmas Omia**. 2020. IDRC-LVIF Nutritional Assessment Training on Gender Inclusive Vaccine Ecosystem, 21st September, 2020.
12. **Dalmas Omia**. 2020. Women Empowerment in Livestock Index (WELI) training. February 8th, 10th and 12th, 2021.
13. **Dalmas Omia**. 2020. GAAP2 Webinar on Ghana small-scale irrigation project. September, 18th 2020.
14. **Dalmas Omia**. 2020. GAAP2 Webinar on Pro-WEAL lessons from their Burkina Faso project. September, 30th 2020.

15. **Dalmas Omia.** 2020. Gender inclusive vaccine ecosystem: enhancing distribution and delivery systems for Newcastle Disease (ND) and contagious caprine pleuropneumonia (CCPP) among smallholder farmers. Training workshop on WELL survey at the fort hotel, Makueni County (20th - 23rd July, 2020)
16. **Dalmas Omia.** 2020. Webinar on Leveraging on Social Capital for Household Water Security in Rural Kenya. REACH-OXFORD. September, 1 2020.

Training Attended

1. Mr. David Kengere Sereti attended training on Governance Auditors Accreditation course in November, 2020.
2. Dr Khamati Shilabukha attended training hosted by Kenya National Commission for UNESCO on the Sensitization on the development of national register and documentary heritage.

Department of Diplomacy and International Studies

Introduction

The Institute of Diplomacy and International Studies is part of the College of Humanities and Social Sciences which specializes in the teaching of International Studies and Diplomacy and conducting research. It offers training both at undergraduate and postgraduate level to professionals in the realm of International Studies and Diplomacy. The Institute is housed in the first floor of 844 Building at the Main Campus just behind the Jomo Kenyatta Memorial Library.

The mandate of the Institute is to conduct research in Diplomacy and International Studies and also train professionals in those areas and related proficiency.

Like other public entities, IDIS is faced with challenges which the administration continues to systematically address within the context of the Institute's vision and mission. A major tenet that we espouse is our firm commitment to quality service delivery that is hinged on observance of the rule of law, skilled human resource, hard work, transparency, accountability, fairness and timely service delivery in all our activities.

The Institute adheres to the tradition of excellence in teaching, research, and scholarship, consultancy and community service, good governance and management.

Programmes Offered

IDIS programmes are in high demand due to their high quality and relevance. The Institute provides a user friendly environment that is sensitive to the needs of the students and attracts high caliber students from all over the African continent and outside Africa thus providing its students with a rich multi-cultural experience. The Institute also counts among its alumni many ambassadors, diplomats and international and regional civil servants. This reaffirms our basic philosophy and belief at the IDIS: **"The Sky is the limit"** in our constant pursuit of academic excellence.

1. PhD in International Studies (Thesis and course work)
2. MA in International Studies
3. MA in Diplomacy
4. MA in International Conflict Management
5. MA in Strategic Studies
6. Postgraduate Diploma in International Relations
7. Postgraduate Diploma in Strategic Studies
8. BA in International Studies
9. Diploma in International Studies
10. Diploma in Strategic Studies

Enrolled Students

Programme	No. of Students
PhD in International Studies	85
MA in International Studies	230
MA in Diplomacy	45
MA in International Conflict Management	50
Postgraduate Diploma in Strategic Studies	53
BA in International Studies	1,080
Diploma in International Studies	165
Diploma in Strategic Studies	34
Total	1,742

International Student Component

The Institute has thirty-one international students enrolled in different programmes.

Number of Graduates in 2020

Programme	Graduates
MAs (International Studies, International Conflict Management and Diplomacy)	59
PGD in Strategic Studies	35
BA in International Studies	121
Diploma in International Studies	45
Diploma in Strategic Studies	3
Total	263

International Links and Collaborations

The institute maintains close links with resident diplomatic community. The latter participate in the Institute's programmes either as guest lecturers, seminar resource persons/participants or advisers in practical aspects of diplomacy such as diplomatic negotiations/simulations. The location of the Institute allows it to benefit from large diplomatic presence and International Organizations and Media Personnel in Nairobi.

The Institute has well developed teaching and research links with institutions that have related programmes. IDIS has established links with the following institutions:

- National Defence College (K)
- Ministry of Foreign Affairs (K)
- Centre for Parliamentary Studies and Training (CPST)
- Ministry of East African cooperation of Kenya
- International Non-Governmental Institutions
- International Development and Research Centre (IDRC)
- Horn of Africa Institute
- School of International Relations and Diplomacy in Philippines
- Defence Staff College (K)
- Kenya School of Government
- United Nations University of Peace
- Heinrich Boll Foundation
- East African Legislature
- Africa Policy Institute
- Fahamu
- RUSI

Publications for the Year 2020

i) Refereed Journals

- Wilkins Ndege, Johnson Mavole and Mumo Nzau. 2020. Stakeholders' Awareness Creation and Online Child Abuse among Primary School Children in Langata Sub-County, Kenya. *Journal of Research Innovation and Implications on Education*. 4(3): 209-219. ISSN: 2520-7504. [www.jiire.com].
- Wilkins Ndege, Johnson Mavole and Mumo Nzau. 2020. Stakeholders' Monitoring Interventions and Online Child Abuse among Primary School Children in Langata Sub-County, Kenya. *Journal of Research Innovation and Implications on Education*. 4(3): 156-167. ISSN: 2520-7504. [www.jiire.com].
- Mumo Nzau. 2020. **Book Review:** Brig. Jonah M. Mwangi, et al. 2018. Eds. The Soldier's Legacy. Nairobi: Kenya Army, KDF. *Horn Bulletin*. Vol. 3 (3): 40-43. ISSN: 2663-4996.
- Millicent A. Ochieng and Mumo Nzau. 2020. Securitization of Migration and Implications for Security in Africa: Towards Balancing State Interests and Migrants' Rights and Protection. *Horn Bulletin*. Vol. 2(1): 19-29. ISSN: 2663-4996.

ii) Publications in Book Chapters

- Kizito Sabala (2020): Inside the 100- Day Deadline in South Sudan-Perils and Prospects in the Horn Institute, Vol. III. Bulletin Issues 1 January- February Nairobi.
- Kizito Sabala (2020): Kenya's Diplomacy and International Relations with IGAD on Peace and Security: Growth, Development and Prospects in Adetula, Victor et al. (Eds), Regional Economic Communities and Peace Building in Africa: Lessons from ECOWAS and IGAD, Routledge, New York, pp 149-160.
- Mumo Nzau. 2020. 'The Political Economy of Terrorism and Counter-Terrorism in Twenty-First-Century Africa: A Critical Evaluation.' In, Samuel Ojo Olurontoba and Toyin Falola. Eds. *The Palgrave Handbook of African Political Economy*. Switzerland AG: Palgrave Macmillan. ISBN: 798-3-030-38922-2. DOI 10.007/978-3-030-38922-2. Amazon Link: <https://www.amazon.com/Palgrave-Handbook-African-Political-Handbooks/dp/3030389219>
- Mumo Nzau. 2020. "Eastern: The Dynamics of 'bridesmaid politics'," in Cheeseman, Nic, Karuti Kanyinga and Gabrielle Lynch. Eds. *The Oxford Handbook of Kenyan Politics*. New York: Oxford University Press: 702-715. ISBN: 978-0-19-811569-3. UOP Link: <https://global.oup.com/academic/product/the-oxford-handbook-of-kenyan-politics-9780198815693?cc=us&lang=en&>

Consultancies

Kizito Sabala (2019-2020); Consulted for the Building Bridges Initiative (BBI) in Kenya in the capacity of a Senior Programme Officer in charge of the Safety and Security theme and corruption.

Staff Portfolio

Position	No of Staff
Professor	1
Senior Lecturer	2
Lecturer	5
Assistant Lecturer	1
Tutorial Fellow	1
Assistant Registrar	1
Senior Administrator Assistant	1
Administrative Assistant	1
Secretary	1
Records Clerk	1
Office Assistant	1
Driver	1
Grounds Man	1
Cleaner	1
Total	19

Corporate Social Responsibility and Outreach Activities

1. Member of Board, Centre for Parliamentary Studies (Prof. Nzomo)
2. Co-Chair of Management Board, National Defence College (Prof. Nzomo)
3. Patron, IDIS- IFIA (Prof. Nzomo)
4. Patron, UN Model Association (Prof. Nzomo)
5. Member, Board of Management Manyoeni Mixed Secondary School (Dr. Maluki)
6. Sponsor and Trustee of Lenakakya Ivuuni Primary School (Dr. Maluki)
7. Director, Poverty Eradication and Community Empowerment (PEACE) NGO (Dr. Maluki)
8. Board Member Rusinga Environmental Trust (Dr. Martin Ouma)
9. Board Member, Kalawa secondary School (Dr. Martin Ouma)
10. Board Member, and Member of the Pastorate - Protestant Community Church (Dr. Martin Ouma)
11. Board Member, Rusinga Children welfare Fund (Dr. Martin Ouma)

Department of Economics and Development Studies

Introduction

The School of Economics offers education and research training in economics to local and international students. It has highly qualified teaching staff supported by a dedicated and highly experienced administrative staff. The School is a member of the African Economic Research Consortium collaborative graduate training programs network.

Programmes Offered

The School offers instruction in Economics at the Bachelors, Masters and Doctoral levels. The programmes cover three thematic areas: Economic Theory; Applied Economics; Mathematical and Quantitative Economics.

1. Undergraduate Programmes

The School offers instruction in 2 undergraduate programs:

1. Bachelor of Economics
2. Bachelor of Economics and Statistics (in collaboration with School of Mathematics).

The School also offers a common undergraduate course in Economics to all first year students in the University. In addition, the School provides service teaching of Economics in Faculties/Schools in the University, especially School of Built Environment, Faculty of Arts, School of Business and School of Education.

2. Masters Programmes

Postgraduate training at Masters level in the School is organized in 3 programmes:

- i) Master of Arts in Economics
- ii) Master of Arts in Economic Policy Management
- iii) Master of Science in Health Economics and Policy

3. Doctoral Programme

The School of Economics has trained many doctoral students. Initially, the doctoral programme was by thesis only. Since 2008, the doctoral program added coursework and examination. Students join the program as scholarship holders under The African Economic Research Consortium or as Self Sponsored students.

Strategic Issues

1. The School has focus on the following issues which impact achievement of its mission.
2. How to ensure that the academic calendar has adequate time for research and rejuvenation of staff.
3. How to enhance collaboration with domestic and international organizations in research, teaching and capacity building.
4. How to ensure continuous improvement in quality and relevance of teaching, research and community service.
5. How to increase number of postgraduate students toward becoming a School of postgraduate training in Economics.
6. How to ensure that people who labour within the School do so under conducive working environment

Major Achievements 2020

Student Enrollment

The total enrolment in the School is as follows:

Postgraduate Programmes	Total
Doctor of Philosophy in Economics	10
Master of Arts in Economics	40
Master of Arts in Economic Policy Management	16
Master of Science in Health Economics & Policy	21
Total	77
Undergraduate Programmes	
Bachelor of Economics	175
Bachelor of Economics & Statistics	193
Total	368
Grand Total	445

Number of Graduates

In the year 2020, the number of graduates was distributed as follows:

Postgraduate Programmes	No. of Graduates
Doctor of Philosophy in Economics	2
Master of Arts in Economics	40
Master of Arts in Economic Policy Management	7
Master of Science in Health Economics and Policy	29
Sub-total	78
Undergraduate Programmes	
Bachelor of Economics	176
Bachelor of Economics and Statistics	295
Sub-total	471
Total	549

Research Activities

1. The School staff participated in various webinars in 2020, a period whose scholarly activities were shaped by COVID-19 pandemic
2. The School is implementing the following funded research projects:
 - i) Water Pricing and the Poor: Designing and delivering improved subsidies for water and sanitation services in Nairobi, Kenya. Funded by SIDA (Swedish International Development Agency).
 - ii) Inequality Trends and Diagnostics in Kenya. Funded by Agence-Francaise de Development (Afd).
 - iii) Transforming Social Inequalities Through Inclusive Climate Action (Tsitica). Funded by UKRI, GCRF and ARUA.
 - iv) Activity Based Costing and Management to HIV Care and Treatment in Kenya and Mozambique. In Partnership with Palladium International LLC. Funded by USAID

International Links and Collaborations

The School maintained active external links with various institutions in research and capacity building. These institutions are:

1. University of Gothenburg in support of the Environment for Development-Kenya (EfD)
2. African Economic Research Consortium
3. World Trade Organization (WTO)
4. UNCTAD Virtual Institute on Trade and Development
5. Agence-Francaise de Development (Afd)
6. University of Quebec in Montreal
7. University of Cape Town and University of Ghana as partners in the ARUA Center of Excellence in Inequality Research (ACEIR)
8. Palladium International LLC
9. UN Women
10. Partnership for Economic Policy (PEP)

Publications

1. Nicky RM Pouw, Barbara Rohregger, Esther Schüring, Kennedy, A Alatinga, **Bethuel Kinuthia**, Katja Bender, 2020 "Social protection in Ghana and Kenya through an inclusive development Lens. Complex effects and risks". *World Development Perspectives* 17: 1-10
2. Gideon Mukui, Joseph Onjala, & **Japheth Awiti.**, 2020. Effect of Tax and Debt Financed Government Expenditure on Economic Growth in Kenya. *Journal of Economics, Management and Trade*, 26(1), 1-13.
3. Rachael W. Gachogo, **Daniel N. Mwai**, Frank G. Onyambu, 2020. Cost analysis of implementing HIV drug resistance testing in Kenya: a case study of a service delivery site at a tertiary level hospital in Kenya. *F1000Research* 2020, 9:793 <https://doi.org/10.12688/f1000research.23379.1>
4. Amutabi, C. & Wambugu, A., 2020. Determinants of labor productivity among SMEs and large-sized private service firms in Kenya. *African Development Review*, Vol. 32, Issue 4. <https://doi.org/10.1111/1467-8268.12463>
5. Manda, D.K., Mugo, M.G., & Murunga, J., 2020. Health Expenditures and Health Outcomes in Kenya. *European Scientific Journal*. Vol. 16(22).
6. Mbithi, M.L., 2020. Does COMESA Have Export Potential to Emerging Economies? *Journal of Economics and Sustainable Development*, Vol.11, No.10, 2020.
7. Gatauwa, J.M., Kaijage, E.S., & **Kiriti-Nganga, T.**, 2020. Intervening Effect of Selected Macroeconomic Factors on Fiscal Policy Stance and Public Expenditure in Kenya. *The Pan-African Journal of Business Management*, Volume 4(1).
8. **Socrates, M.K.**, Moyi, E., & **Gathiaka, K.**, 2020. Explaining Export Duration in Kenya. *South African Journal of Economics*. Vol. 88(2).
9. Barasa, L, 2020. Teacher Quality and Mathematics Performance in Primary Schools in Kenya. *African Journal of Research in Mathematics, Science and Technology Education*, Vol. 24(1).
10. **Barasa, L.**, **Kinyanjui, B.**, Knobens, J., Vermeulen & Kimuyu, P., 2020. Innovation and exporting: the case of mediation effects in Sub-Saharan Africa. *Industry and Innovation*, 28:2, 113-135, DOI: 10.1080/13662716.2020.1768514.

11. Haana, A., Dowieb, G., & Mariara, J. 2020. To RCT or not, is not the question: Methods for policy-relevant research on gender equality. *World Development*, Volume 127.
12. Muriu, P., 2020. The Impact of Microfinance Programs: A Review of Data and Methodological Dilemma. *Journal of Economics and Sustainable Development*, Vol. 11(22).
13. Wanja, D., & Muriu, P., 2020. Does Pecking Order Theory Hold Among Kenyan Firms? *Journal of Economics and Business*, Vol.3 No.1.
14. Ochenge, R., Muriu, P., & Ngugi, R., 2020. Macroeconomic Conditions and Stock Market Liquidity in Kenya. *International Journal of Economics and Finance*; Vol. 12, No. 12.
15. Opondo, E.M., & Oleche, M.O., 2020. "Out-Of-Pocket Health Expenditure among the Elderly in Kenya," *Global Journal of Health Science, Canadian Center of Science and Education*, vol. 12(11), pages 53-64.
16. Kipkorir, M. K. & Oleche, M.O., 2020. Short and Long-Run Impact of Trade Liberalization on Agricultural Growth in Kenya. *International Journal of Finance, Insurance and Risk Management*, Vol X, (3).
17. Ochieng, J., Abala D., & Mbithi, L.M., 2020. Infrastructure development, institutions, and intra-regional trade: The case of East Africa. *The European Journal of Applied Economics*, Vol. 17, (2), pp. 104-118.
18. Kimunio, I.K., Muniu, J.M., & Kinuthia, B.K., 2020. Foreign-owned banks and their impact on Kenya's financial stability. *SN Business and Economics* 1(18), <https://doi.org/10.1007/s43546-020-00019-4>.
19. Musyoka, P.K., Joseph Onjala, J. and Mureithi, L.P., 2020, Infrastructure Growth, Household Vulnerability and Response to Shocks in Kenya. *African Journal of Economic Review*, vol. 8(1)
20. Gathiaka, J.K. & Muriithi, M.K, 2020, Empirical Analysis of Livelihood Strategies and Food Insecurity in Turkana County, Kenya. *Tanzanian Economic Review*, Vol. 10 (1)
21. Ogo, I.O., & Kioko, U. M. (2020). Progressivity of the Output Based Aid Voucher Programme and its Effects on Family Planning and Maternal Health in Nairobi and Kiambu Counties, Kenya. *European Scientific Journal, ESJ*, 16(25), 175. <https://doi.org/10.19044/esj.2020.v16n25p>
22. Socrates, M.K and & Mwanja D.K., 2020, Pragmatic History of Economic Thought: Explaining Trade Practices and Policies in Kenya, *Tanzanian Economic Review*, Vol. 10 (1)
23. A.M, H, & Ongeri B.O. 2020. Effect of Islamic banking development on economic growth -A case of the Kenyan Economy. *International Journal of Scientific Research and Innovative Technology*. 7(2)
24. Ongeri, B.O. & Mutasa F. 2020. Commercial banks' performance and economic growth nexus: -An Empirical Analysis of Kenya's Commercial Banks. *International journal of scientific research and innovative technology*. 7(3).
25. Ochenge, R.O., Ngugi, R. & Muriu, P., 2020, Foreign equity flows and stock market liquidity in Kenya, *Cogent Economics & Finance*, 8:1, DOI: [10.1080/23322039.2020.1781503](https://doi.org/10.1080/23322039.2020.1781503)

Book Chapters

1. Kiiru J.M., Barasa L.N. (2020) Securing Inclusive Growth: Mentorship and Youth Employment in Kenya. In: Ramutsindela M., Mickler D. (eds) Africa and the Sustainable Development Goals. Sustainable Development Goals Series. Springer, Cham. January 2020 <https://doi.org/10.1>
2. Mwai, D. & Maina, T., 2020. Tracking Health Resources Using Health Accounts. In the Palgrave Handbook of Global Health Data Methods for Policy and Practice. *Springer International Publishing*.

Working Papers

1. Damiano Kulundu MANDA & Reuben MUTEGI & Samuel KIPRUTO & Moses MURIITHI & Martine OLECHE & Germano MWABU & Stephen D. YOUNGER, 2020. "Fiscal incidence, inequality and poverty in Kenya: A CEQ assessment," Working Paper cb01f7d3-407b-418c-a79e-9, Agence française de développement.
2. Barasa, L., 2020. Closing the gap: Gender and innovation. United Nations University World Institute for Development Economics Research, WIDER Working Paper 2020/105.
3. Muriithi, B. & Mariara, J., 2020. The Dynamics and Role of Gender in High-value Avocado Farming in Kenya. Working paper, Partnership for Economic Policy.
4. Machio, P.M., Chege, P.K., Ng'ang'a, A.M., & Njoroge, M.M., 2020. A Profile of Sustainable Development Goals in Gikindu Location, Murang'a County, Kenya. Working paper, Partnership for Economic Policy. CBMS-2020-01.
5. Machio, P.M., Chege, P.K., Ng'ang'a, A.M., & Njoroge, M.M., 2020. Social Capital and Women's Empowerment in Kenya: Case Study of Murang'a County. Working paper, Partnership for Economic Policy. CBMS-2020-02.
6. Kinuthia, B.K., 2020. *Agricultural input subsidy and outcomes for farmers in Tanzania*. United Nations University World Institute for Development Economics Research, WIDER Working Paper 2020/149.

Corporate and Community Outreach Activities

Teaching and non-teaching staff of the School serve the community in a variety of ways.

- a) **Board Membership in international/Regional Groups**
 - i) Partnership for Economic Policy
 - ii) African Economic Research Consortium CMAP/ CPP Boards
- b) **Membership in Parastatal Boards**
 - i) Kenya Institute for Public Policy Research and Analysis
 - ii) Central Bank of Kenya
 - iii) Post Bank of Kenya

Staff Portfolio

The School had 36 teaching staff and 11 non-teaching staff distributed as follows:

a) Teaching Staff Portfolio

Designation	No. of Staff
Professor	2
Associate Professor	4
Senior Lecturer	17
Lecturer	12
Tutorial Fellow	3
Total	38

b) Non-Teaching Staff

Designation	No. of Staff
Administrative Assistant Grade C/D	2
Senior Secretary Grade D	1
Computer Lab Assistant Grade A/B	2
Assistant Secretary Grade A	1
Documentalist Grade A	1
Documentalist Grade IV	1
Record Clerk Grade IV	1
Copy Typist - Grade IV	1
Messenger	1
Total	11

Projections

The School projects that in 2021 both quantity and quality of output in teaching, research and community service will continue to be enhanced.

Any Other Pertinent Information/Issue in the Year 2020

The School successfully coped with risks to service delivery posed by COVID-19 pandemic. All services continued to be offered using online platforms. The School staff were resilient and did all they could to adapt to the changed operating environment. In this regard they took part in all capacity building opportunities offered by the University to cope with the situation.

Department of Geography Population and Environmental Studies

Introduction

The Department of Geography Population and Environmental Studies, offers a wide range of academic programmes leading to Bachelor of Arts (BA), Post Graduate Diploma (PGDs), Master of Arts (MA) in and Doctor of Philosophy (PhD) degrees. In addition the Department also offers a number of Ordinary Diploma and Certificate programmes.

Being one of the largest and oldest academic Faculties in the country, the Faculty has produced a significant pool of highly trained and skilled professionals who have continued to play a significant role in Kenya's development and beyond. Furthermore, the alumni of the Faculty are employed in all sectors of the economy. The Faculty aspires to be a Faculty of international academic repute that is at the cutting edge of research and transmission of knowledge in the humanities and social sciences. Our mission is to promote excellence in teaching, research and publications in humanities and social sciences, generation and dissemination of knowledge on cultural, socio-economic, political and geographical environment, while preserving and encouraging the best in our national heritage.

Programmes and Services Offered

As part of its mandate in teaching and training, the Department offers the following undergraduate and postgraduate programmes listed below:

1. Certificate in Natural Resource Management
2. Diploma in Natural Resource Management
3. BA in Geography and Environmental Studies;
4. BSc in Geography and Environmental Studies;
5. BEd in Geography
6. MA in Agricultural Geography;
7. MA in Biodiversity and Natural Resources Management;
8. MA in Climatology;
10. MA in Environmental Planning and Management;
11. MA in Geomorphology;
12. MA in Population Geography;
13. MA in Transport Geography;
14. MA in Urban Geography;
15. MA in Water Resources Management
16. MA in Industrial Geography
17. Master of Science Programmes:
 - a) MSc in Hydrology; and
 - b) MSc in Sustainable Urban Development
18. PhD Programmes:
 - PhD in all fields of Geography and Environmental Studies

Department of Journalism and Mass Communication

Introduction

The history of professional training for journalists in East Africa dates back to the early 1960s. The intention then was to Africanize the mass media. Between 1963 and 1968, the International Press Institute ran a series of six-month training programmes in Nairobi for journalists from English-speaking African countries. To continue of these programmes the Ministry of Education approached UNESCO in 1968 to assist in setting up a more intensive training programme integrated into the University of Nairobi. Thus, the School was opened in the University as a UNESCO regional project financed largely by funds from Denmark, Norway, and Austria to cater for students from Eastern and Central Africa. Until 1979, the School offered a two-year undergraduate programme leading to a Diploma in Journalism.

This earlier effort was mostly aimed at advanced-level secondary school leavers and journalists with little or no prior professional training. The courses gave practical training as well as relevant theoretical background in subjects such as mass communication, international studies, economics and government.

The School offers five programmes namely; Doctor of Philosophy in Communication and Information Studies, Master's Degree in Communication Studies, Bachelor of Arts in Journalism and Media Studies, Bachelor of Arts in Broadcast Production in collaboration with the Kenya Institute of Mass Communication and Diploma in Mass Communication in collaboration with Media School Africa

Programmes Offered

1. Diploma

With specializations in the following fields:-

- i) Mass Communication
- ii) Television and Radio Production

2. Bachelor of Arts in Broadcast Production (B.A. Broadcast Production)

With specializations in the following fields:-

- | | |
|---------------------------|--|
| i) Radio Production | iii) Film Production |
| ii) Television Production | iv) Bachelor of Arts in Journalism and Media Studies |

With specializations in the following fields:-

- | | |
|------------------------------|---|
| i) Development Communication | iv) Broadcast Journalism |
| ii) Public Relations | v) Master of Arts Degree in Communication Studies |
| iii) Print Journalism | |

With specializations in the following fields:-

- | | |
|------------------------------|--|
| i) Development Communication | iii) Print Journalism |
| ii) Public Relations | iv) PhD in Communication and Information Studies |

With specializations in the following fields:-

- i) Development Communication
- ii) Public Relations

Enrolled Students per Programme

Programme	No. of Students
Bachelor of Arts in Journalism and Media Studies	71
Bachelor of Arts in Broadcast Production	53
Diploma in Mass Communication	15
Master of Arts in Communication Studies	50
PhD in Communication Studies	17
Total	206

International Students Component

The School enrolled one international student.

Number of Graduates per Programme

Programme	No. of Students
Master of Arts in Communication Studies	25
Bachelor of Arts in Journalism and Media Studies	51
Bachelor of Arts in Broadcast Production	4
Diploma in Mass Communication	6
Total	86

International Links and Collaborations

The Director attended a seminar on poverty alleviation and sustainable development that was organized by the Chinese Academy of Social Sciences (UCASS) in partnership with the Kenya School of Government.

Publications and Presentations for the Year 2020

Author*	Title	Journal	Date
Dr. Samuel Ngigi	Informality and development in Africa	Edward Elgar Publishing	2020
Dr. Michael Mwangi	Determining the context of Television serial drama viewership in Nairobi, Kenya	Editon Consortium Journal of Media and Communication Studies	Dec 2020
Dr. George Gathigi	Consumer awareness of the right to truthful advertising information in Kenyan FM Radio Stations	The International Journal of Humanities & Social Studies	Aug 2020
Dr. George Gathigi	Consumer rights observance in Kenyan FM Radio Stations	The Journal of Marketing and Consumer Research	Oct 2020
Prof. George Nyabuga	Political Showmanship: A Critical Analysis of Electoral Debates in Kenya' in Juárez-Gámiz, Julio, Christina Holtz-Bacha and Alan Schroeder (eds.)	International Handbook on Electoral Debates. Abingdon: Routledge	2020

Consultancies Undertaken by Staff Members or the Unit

1. Dr. Samuel Ngigi partnered with the External Labour Contract as an External Collaborator to undertake impact assessment of the Covid-19 pandemic on informal sector, develop a mechanism of identifying the most vulnerable, and develop proposal on required interventions to cushion the sector from the shocks of the pandemic.
2. Prof. George Nyabuga developed a Covid-19 reporting guidelines for Article 19.
3. Prof. Hezron Mogambi and Prof. George Nyabuga are members of the Kenya Editors' Guild, in 2020, they facilitated training of journalists all over the country in counties like Kilifi, Lamu, Kisumu, Siaya, Kisii, Nyamira, Homa Bay, Kakamega, Vihiga and others.

Staff Portfolio

Designation	No. in Position
Associate Professor	4
Senior Lecturer	6
Lecturer	6
Tutorial Fellow	5
Senior Administrative Assistant	1
Technologist	1
Records Clerk	1
Secretary	1
Computer Lab Assistant	1
Selectric Composer	1
Total	27

Corporate Social Responsibility

1. The School partnered with the European Commission in organizing the Lorenzo Natali Media Prize. The prize rewards excellence in journalism on sustainable development issues.
2. Prof. George Nyabuga helped organize the Annual Editors' Convention held in Ciala Resort, Kisumu County, on 3th to 5th December 2020.

Major Achievements and Strategic Projections

1. Successfully mounted online learning and examinations were seamlessly administered.
2. The School conducted online defenses for graduate students 25 of whom graduated.
3. Equipment and licensing of the TV/Radio station on course.
4. Excellent collaboration with international organizations and academic institutions
5. Strong links with the media industry
6. Attractive and competitive communication programmes

Department of Kiswahili

Programmes Offered

With specializations in the following fields:-

1. BA (Kiswahili)
2. BEd (Service Course)
3. MA. in Kiswahili Studies
4. PhD in Kiswahili Literature & Kiswahili Linguistics

Department of Library and Information Science

Programmes Offered

With specializations in the following fields:-

1. Bachelor of Information Science
2. Master of Library and Information Science
3. Master of Information Science
4. Doctor of Philosophy in Information Science

Department of Linguistics and Languages

Introduction

The Department of Linguistics and Languages offers both Bachelor of Arts and Master of Arts programmes. It services the Bachelor of Education programme at the College of Education and External Studies, Kikuyu Campus. It also has students registered for PhD degree.

Programmes and Services Offered

The BA. programmes are in Linguistics and English, Intercultural German Studies, Korean Studies, Arabic Studies, Chinese and Language and Communication. The Department has three M.A. programmes. These are MA. in Arabic Studies, MA. in Linguistics and M.A. in German Studies. All these show how dynamic the department is MA. in Linguistics has full-time and part-time programmes. The Department also offers PhD. studies in these three areas. The MA. and PhD. in Linguistics programmes give students the opportunity to conduct research on various aspects of languages spoken in Kenya and in other parts of the world. Currently, the Department also offers a Certificate Course in Portuguese Language and Culture.

Strategic Issues

The Department is looking for ways to increase research on and teach mother languages in Kenya. The Department is also looking for ways of increasing the number of foreign languages on offer.

Major Achievements in the Year 2020

The Department of Linguistics and Languages Celebrated the International Mother Language Day on Friday February 21, 2020. The theme of the Day was 'Preserving Linguistic Diversity and Promoting Multilingualism to Support Sustainable Development Goals: The Beauty of Mother-Language'

One member of the Department participated in training Class 7, Class 8, Form 1 and Form 2 school teachers on how to use Inquiry Based Learning in teaching English. The Project was called School Based Teacher Support System. It was done under Teachers Service Commission and was funded by the World Bank.

The Department published Volume 8 of The University of Nairobi Journal of Linguistics and Languages in October, 2020.

Corporate and Community Outreach Activities

1. One member of the Department participated in training Class 7, Class 8, Form 1 and Form 2 school teachers on how to use Inquiry Based Learning in teaching English. The Project was called School Based Teacher Support System. It was done under Teachers Service Commission and was funded by the World Bank.



Prof. Jane Oduor training secondary and primary school teachers of English to used Inquiry Based Learning (IBL) in teaching English at Eregi Teachers' College in Kakamega County.



2. Prof. Kithaka wa Mberia receives a gift from the President of the Hankuk University of Foreign Studies (South Korea), in Chul Kim, after teaching in that University for two years.



3. Prof Kithaka wa Mberia's Publication entitled Mvumo wa Helikopta

4. Members of the Department of Linguistics and Languages (P), Department of Kiswahili and the Sub-Department of French the 1st African Pragmatics Conference at the University of Ghana, Legon in Ghana in February, 2020. From left, they are Prof. Jane Oduor, Ms. Caroline Mutai, Prof. Kithaka wa Mberia, Dr Zipporah Otiso, Prof. Helga Schroeder and Dr Prisca Jerono.



Projections

The Department will look for partners to work with in an effort to increase research on and teach mother languages in Kenya. The Department is also looking for ways of increasing the number of foreign languages on offer through partnerships.

Staff Portfolio

The table below captures the numbers of the academic and non-academic staff of the Department.

Designation	No. of Staff	Designation	No. of Staff
Full Professor	1	Assistant Lecturers	1
Associate Professor	2	Tutorial Fellows	3
Senior Lecturers	3	Secretary	1
Lecturers	16		

International Students

The department admitted international students to take MA in German Studies and MA in Linguistics.

International Links and Collaborations

1. The department (through the University) has a MoU with DAAD where students from various African countries are sponsored biannually to take MA. in Intercultural German Studies.
2. The department also has a MoU with Bible Translation and Literacy (BTL), Kenya. In the last three consecutive years the Department has organized International Mother Language Day celebrations jointly with BTL, East Africa.
3. The department also has a MoU with Korea Foundation (KF). The latter sent a visiting lecturer, Ms. Yuhjin Park, to teach Korean language to Korean Studies students.
4. The department also has a MoU with Camoes Institute. The latter sent a visiting lecturer, Ms. Ana Alfaiate, to teach Portuguese language to students at the University of Nairobi.

Publications and Workshops

Journals

Author*	Title	Journal	Date
Prof. Helga Schroeder	The Syntax and Semantics of Clause-chaining in Toposa	Studies in African Linguistics, Vol. 49, pp.60-83	May, 2020
Samwel Komenda, Jane A.N. Oduor and Prisca Jerono	Speaker Age-Related Effects on the Intonation of Simple Declarative Paratones in Ekegusii	University of Nairobi Journal of Linguistics and Languages, Vol. 8(2020), pp. 117-135	October, 2020
Sussy Khaadi Nandama, Komenda, Jane A.N. Oduor and P. Iribe Mwangi	The Tonal Patterns of Nouns in Isolation in the Lwisukha Dialect of Luyia	University of Nairobi Journal of Linguistics and Languages, Vol. 8(2020), pp. -83	October, 2020

Conferences Attended

Author(s)	Article Title	Date	Name	Location
Helga Schroeder	A pragmatic view on clause linkages in Toposa, an Eastern Nilotic language of South Sudan	February, 2020	AfrPrag	University of Ghana
Zipporah Otiso	The “welcome” and “unwelcome” meanings of Madam as an address term in Kenyan English usage.	February, 2020	AfrPrag	University of Ghana
Zipporah Otiso	Translating from English into Ekegusii in Radio News and Advertisements	February, 2020	IMLD	MMUST, Kenya
Jane Oduor	The Interface Between Pragmatics and Prosody in Dholuo	February, 2020	AfrPrag	University of Ghana
Jane Oduor	Language documentation: What it is and how to apply for an Endangered Language Documentation Programme (ELDP) grant	February, 2020	IMLD	MMUST, Kenya
Kithaka wa Mberia	Exaggeration as Source of Humour	February, 2020	AfrPrag	University of Ghana
Alfred Buregeya	Corpus Linguistics for Researching the Indigenous mother tongues of Africa	February, 2020	IMLD	MMUST, Kenya
Ana Alfaiate	The Global Interpreter - The Interpreter as a facilitator in Refugees’ Integration in New Societies	February, 2020	IMLD	University of Nairobi, Kenya
Yuhjin Park	Asian Cultural Community in Africa	June 2020		UoN (Online)

Conferences Held

Conference	Theme	Date
Celebrating International Mother Language Day	Preserving Linguistic Diversity and Promoting Multilingualism to Support Sustainable Development Goals: The Beauty of Mother-Language	February 21, 2020

Department of Literature

Introduction

The teaching of French at the University of Nairobi commenced at the department of Literature in the 1960s when the University was still a constituent college of the University of East Africa. The objective then was to give students of literature direct access to the rich literature of the French-Speaking Africa. The need was later felt to create an academically independent unit, the Sub-Department of French, which expanded its offerings to cover not just the French language and literature in French but also Culture and Civilisation of the French-Speaking World, Translation involving the French Language and Linguistics of the French Language at both the bachelor's and master's levels. These advanced courses were made possible by the introduction of the teaching of French in many pre-university educational institutions in Kenya. The French Beginners' full degree courses were, therefore, progressively scrapped.

Programs and Services Offered

1. BA French
2. BEd. French (Negotiations continued with the school of Education for its revival)
3. Certificate Course in French: Tremendous interest shown from the university community and the public at large. The offer, however, remained in abeyance as clarity continued to be sought on a number of certificate course related matters.
4. Translation Services: The Sub-Department continued with the provision, to the University and the general public, of translation services involving the French language
5. IT Services: The technologist of the Sub-Department played a pivotal role in providing, to the Faculty of Arts, the College of Humanities and Social Sciences the IT services and training made necessary by the COVID 19 situation.

Strategic Issues

1. To continue to seek to be listed on the KUCCPS list for more visibility and publicity
2. To work on reviving the French Bed program
3. To continue to pursue membership of the AUF (Association of French-Speaking Universities) for the University as a whole to take advantage of the many and huge benefits that it has to offer
4. To look for ways and means of offering French classes within the framework of ParisTech-UON agreement.
5. To work on hosting a language assistant from France
6. To organise online interaction between students of the Sub-Department and students from French-speaking countries.

Major Achievements

1. A student of the Sub-Department represented Kenya in an AUF organised international interuniversity debate in French, having been declared the winner at the country level.
2. Two students who took Sub-Department of French courses as part of their bachelor's degree programs, graduated with First Class Honours degrees.
3. Smooth shift from face to face to online operations.
4. Contribution to the management of and participation in the 2020 annual conference of the Department of Literature
5. Two members of the academic staff settled on PhD research topics and made tremendous progress in developing their proposals

Corporate and Community Outreach Activities

1. Contribution to and participation in the donation of clothes and foodstuffs to Karai Children's Home in Kikuyu town - M. Nginye.
2. Attended to various duties as an official of a Staff Welfare Association - M. Nginye.
3. Community financial empowerment through network marketing - B. Mwenesi.

4. Part of management of a school alumni association for mutual support and support to the school - B. Mwenesi.
5. Attended to various duties as an official of an extended family welfare association - B. Mwenesi
6. Contributed to the promotion of organic farming as a member and administrator of an East African farmers' group - B. Mwenesi

Staff Portfolio

Designation	No. of Staff
Lecturer	3
Tutorial Fellow	2
Librarian/Translator Grade DEF	1
Technologist Grade ABC	1

Projections

1. To revive Bed French for the 2021/2022 intake
2. To appear on the KCCPS list before the end of the academic year 2020/2021
3. To have the AUF membership application signed and submitted before the end of the year 2021
4. To work for the operationalisation within the year 2021 of the ParisTech/UON agreement

Other Activities

Contribution to/participation in academic activities

1) Conferences

- a) 1st African Pragmatics Conference - C. Mutai presented paper and joined association
- b) 2nd African Pragmatics Conference - C. Mutai Secretary to organising committee
- c) Kenya 2020 Mother Language Day Celebration and Conference- B. Mwenesi presented paper

2) Webinars

i) Participation:

- a) French Embassy sponsored workshops on Online Teaching of French as a Foreign Language - B. Mwenesi, C. Oyugi
- b) Eastern African Literatures in the 21st Century: Achievements, Challenges, Perspectives - C. Oyugi contributed to its organization and co-chaired a session while B. Mwenesi presented a paper and chaired a session
- c) PhD Findings of Dr. Ojwang of IAGAS - B. Mwenesi
- d) The Trends in Higher Education Pedagogy - B. Mwenesi

ii) Attendance

- a) Retreat to Nationalism in the 21st Century Globalisation - Lessons for Africa from COVID 19 - B. Mwenesi
- b) Rethinking African Historical & Cultural Scholarship During and After Covid-19: Challenges and Opportunities - B. Mwenesi
- c) Artificial Intelligence and Interpretation - B. Mwenesi
- d) Moi African Cluster Centre webinar entitled: Presentation by Dr Miriam Maranga-Musonye on Nganya Rides: Travel Imaginarise in Matatu Transport in Ongata Rongai - M. Nginye; B. Mwenesi
- e) Conversations on Kenyan Literature and Our Being; Department of Literature, UON - M. Nginye

iii) Review

Abstracts in French for the Language Association of Eastern Africa - B. Mwenesi

iv) **Language Assistantships**

- a) Following a rigorous selection process, two students of the Sub-Department of French proceeded to France to serve as English language assistants.
- b) The Sub-Department facilitated the participation, in the program, of students from other sections of the University of Nairobi, whose contribution was the biggest in the country and positive reports have been received.

Bid for a Project

In the year 2020, the Sub-Department of French had the honour of being associated, as a potential language service provider, with a bid of the College of Health Sciences for a Digital Health Training project. It can quite safely be assumed that the winning university had within it, health professionals with the relevant operational proficiency in both English and French. Therein, a strong message to be taken note of and acted on by the University of Nairobi.

Department of Philosophy and Religious Studies

Programmes Offered

With specializations in the following fields:-

1. Certificate in Philosophy
2. Diploma in Philosophy
3. Bachelor of Arts (Philosophy and/or Religious studies or any other discipline.
4. Master of Arts in Philosophy
5. Master of Arts in Religious Studies
6. Master of Arts in Human Rights
7. PhD in Philosophy
8. PhD in Religious studies
9. PhD in Human Rights

Department of Political Science and Public Administration

Introduction

The Department of Political Science and Public Administration is one of the oldest Departments in the Faculty of Arts. It is also one of the biggest departments. The Department of Political Science and Public Administration offers diverse programs both at the undergraduate and graduate level. At the undergraduate level the department offers the following programs. First, the Department offers an undergraduate degree programme namely, Bachelor of Arts in Political Science and Public Administration that was first offered in the 1965/66 academic year and the syllabus has undergone several revisions including 1976/77 and the most recent being in the year 2014. Second, beginning July, 2005 and following University programme restructuring and harmonizing exercise, the Department of Political Science and Public Administration took over the teaching and examination of all Political Science courses offered to Bachelor of Education (Arts) students in the College of Education and External Studies (CEES). These courses had previously been offered by the Department of Government and History in the Faculty of Social Sciences in CEES which was scrapped with the "Government" component being absorbed by the Department of Political Science and Public Administration in the Faculty of Arts.

At the postgraduate level the department of Political Science and Public Administration runs five Master degree programmes, i.e. the Master of Arts in Political Science and Public Administration (MAPSPA), Master of Arts in International Relations (MAIR); Master of Arts in Strategic and Security Studies (MASS), Masters of Public Administration (MPA) and Master of Research and Public Policy (MRPP). The Department also offers Doctor of Philosophy (PhD.) programme in Political Science and Public Administration and in 2019 launched Doctor of Philosophy Degree in Public Policy. It is the vision of the Department that the publications, research outputs, outreach activities, consultancies, partnership and linkages will catapult it into an internationally recognized institution that is at the cutting edge of research and transmission of knowledge in the Humanities and Social Sciences.

Programmes Offered

In 2020, the Department offered the following degree programmes:

1. Bachelor of Arts
2. Bachelor of Arts in Political Science)
3. Master of Arts in Political Science and Public Administration
4. Master of Arts in International Relations
5. Master of Arts in Strategic and Security Studies
6. Master of Public Administration
7. Master of Research and Public Policy
8. Doctor of Philosophy in Political Science and Public Administration
9. Doctor of Philosophy in Public Policy.
10. Enrolled Students

Programme	No. of Students
Master of Arts in Political Science and Public Administration	8
Master of Arts in International Relations	25
Master of Arts in Strategic and Security Studies	30
Master of Public Administration	5
Master of Research and Public Policy	10
Doctor of Philosophy in Political Science and Public Administration	10
Doctor of Philosophy in Public Policy.	5

International Students Component

In 2020, the Department had thirty (30) international students; 3 PhDs and 27 Masters.

Staff Establishment

Professor	- 1	Assistant Lecturer	- 1
Associate Professor	- 4	Tutorial Fellow	- 1
Senior Lecturer	- 1	Administrative Assistant	- 1
Lecturers	- 10	Secretary	- 1

Number of Graduates per Programme

Programme	No. of Graduands
Master of Arts in Political Science and Public Administration	7
Master of Arts in International Relations	11
Master of Arts in Strategic and Security Studies	4
Master of Public Administration	7
Master of Research and Public Policy	2
Doctor of Philosophy in Political Science and Public Administration	1
Total	32

Publications and Conference Presentations

1. In 2019, the Department hosted the First Annual Conference on China-Africa Relations during the University of Nairobi Research Week in October. The best papers were published as Special Issue in **The African Review** titled: From Sino-Africa to Africa-China Engagements in the 21st Century: Emerging Interdisciplinary Issues and Research Gaps in October 2020, volume 47 (2020). The Journal included the following articles:
 - a) China-Africa Relations: Interdisciplinary Question and Theoretical Perspectives by Oscar M. Otele.
 - b) A Transition from Win-win to “win-lose” outcome in Africa’s Trade with China: A Case of in-depth assessments of Kenya’s exports by Joseph Onjala.
 - c) Nature and Impact of Chinese and South African Engagement on the Development of the City of Lusaka by Hangwei Li and Gilbert Siame.
 - d) China’s Footprint in Africa’s Peace and Security: The Contending Views by Oita Etyang and Simon Oswan Panyako.
 - e) The Dragon’s March into the Indian Ocean: Implications for International Trade by Fred Jonyo and Samuel Mbutu.
 - f) Food Security in the Afro-China Cooperation: The Hanging Untapped ‘Win-Win’ Partnership by Alice Oluoko-Odingo and Elias Ayiemba.
 - g) Addressing Impact Evaluation Gaps in Belt and Road Initiative Projects in Africa: The Standard Gauge Railway Projects in Africa by Keren Zhu, Rafiq Dosani and Jenniffer Bouey.
 - h) The Economic Implications of the Belt and Road Initiative in the Development of Railway Transport Infrastructure in Africa: The Case of the Standard Gauge Railway in Kenya by Evaristus Irandu and Hesbon Owilla.
 - i) Strategic Application of the Tao of Soft Power: The key to understanding China’s expanding influence in Africa by Paul Nantulya.
2. Elizabeth Kirkham and Singo Stephen Mwachofi, Tackling the proliferation and misuse of small arms and light weapons in Africa: the role of China-Africa co-operation, Briefing paper, Saferworld (UK), London, Link: <https://www.a-c-eproject.eu/project-publications>.
3. Jonyo Fred and Mbutu Samuel 2020, The Dragon’s March into the Indian Ocean: Implications for International Trade, *The African Review*, Vol. 47
4. Jonyo Fred and Okul John 2020, Challenges to Peace and Security in the East African Community (EAC): Actualizing the 2013 Peace and Security Protocol, *The Horn*, Vol. 3 Issue 5
5. Jonyo Fred et al. 2020, The Influence of Demographic Factors in Access to Public Health care in Kenya: A case of Nairobi County, Kenya, *Journal of Social Sciences*, Vol. 3 No. 2, pgs. 439 - 454
6. Jonyo Fred et al. 2020, The Influence of Socio-Cultural Factors in Access to Public Health care in Kenya: A case of Nairobi County, Kenya, *Journal of Social Sciences*, Vol. 3 No. 3, pgs. 745 - 760
7. Kanyamurwa, John Mary and Obosi Okeyo Joseph. 2020. The Influence of Citizen Competence on District Level Political Accountability in Uganda. *Journal of Public Administration and Governance*, ISSN 2161-7104/2020, Vol. 10, No. 3, URL: <https://doi.org/10.5296/jpag.v10i3.17428>.
8. Katete, George Book Review/Recension De Livres. In *African Journal of Democracy and Governance/Revue africaine de la démocratie et de la gouvernance*, Vol 6, Nos 2 & 3, 2020.
9. Musambayi Katumanga Kenya: Under-developed Maritime Domains and the Mutating Geographies of Terrorism. *Contemporary Security in Africa. Journal of the National Defense College, Kenya*. Vol 5 , No2 November 2020
10. Musambayi Katumanga: The Dilemmas In Somalia: Reframing the National Security Options For Kenya. Occasional paper On National Security. No3, October 2020.
11. Obosi, Okeyo Joseph. 2020. Community Management and Water Service Delivery in Africa, doi: <http://dx.doi.org/10.5772/intechopen.90746>.
12. Oloo Adams 2020 The Weaknesses of Political Parties in N. Cheeseman, K. Kanyinga and G. Lynch (eds) *Oxford Handbook of Kenyan Politics*. London; Oxford University Press.
13. Onyango, Gedion. 2020a. Legislative Oversight and Policy-Reforms in “Unsettled” Political Contexts of Public Administration. *International Journal of Public Administration*, 43(3), 213-228. <https://doi.org/10.1080/01900692.2019.1627556>. (Taylor & Francis).
14. Onyango, Gedion. 2020b Anti-corruption efforts and inter-institutional trust in governmental organizations in Kenya. *African Studies Quarterly* (University of Florida)

15. Onyango, Gedion. 2020c. Whistleblowing behaviours and anti-corruption approaches in public administration in Kenya. *Economic and Political Studies* <https://www.tandfonline.com/doi/abs/10.1080/20954816.2020.1800263>
16. Otele, M. Oscar “China, Region-Centric Infrastructure Drives and Regionalism in Africa”, *South African Journal of International Affairs*, 27(4):1-22. <https://doi.org/10.1080/10220461.2020.1856179> (Taylor & Francis).
17. Otele, M. Oscar “China’s Belt and Road Initiative and Intra-Regional Dynamics in Africa, *African Studies Quarterly*, 19, 3(4), <http://www.africa.ufl.edu/asq/v19/v19i3-4a4.pdf> (University of Florida).
18. Otele, M. Oscar “China-Africa Relations: Interdisciplinary Question and Theoretical Perspectives”, *The African Review*, 47(2) <https://doi.org/10.1163/1821889x-12340019> (Brill Publishers).
19. Zedekia Sidha., Patrick Asingo and Justine Magutu, 2020. Street-Level Bureaucrats as Policy Entrepreneurs: The Nexus between Timing of Traffic Enforcement Activities and Road Safety Policy, *Politics & Policy*, <https://doi.org/10.1111/polp.12386> (Wiley Online Library).

Research Activities

In 2020, the Department prioritized research activities especially through supervision of student research projects both at the undergraduate and postgraduate levels.

i) Ongoing Research Activities

Prof. Fred Jonyo

- Research on Basic Concepts of Political Economy
- Whole Government Approach (WGA)
- Disrupting Criminal Trafficking and Smuggling Networks through Increased Anti-Money Laundering and Financial Investigation Capacity in the Greater Horn of Africa

Prof Musambayi Katumanga

- Under Developed Maritime Spaces and State Viability/Unviability Options: Under auspices of faculty of the Royal Danish Defense College and the Faculty of Military Science, Stellenbosch University Research Program: African Security Triad-From Leadership to Landward and Maritime Sea Governance.
- Morphing of marginalized Ocean Front spaces into Terror-Insurgency spaces
- Nexus between low levels maximization of Maritime Spaces and State Security and Insecurity Crisis
- Discourses and Realities of the Convergences of MAHAN’S SLOCs and Mackinder’s evolving closed spaces in The Great-lakes and Horn of Africa Geographies
- Geo-economic Implications Of the Indian Ocean and Options For State Consolidation in Africa
- Maritime Corridors, Borderlands and Alternatives to Community, State, Regional Security Provisioning Capacity Development
- Differentiated Insecurity Enhancing Infrastructures as platforms for Interdependence and Collective Security
- Kenya: The Viability Question and Options In Mutating Duels With Asymmetrical Challenges in Juba Corridor
- Alternative Regional Security Policy Options for Enhanced Maritime Security Management and Cooperation Under Three Leg Consortium Nairobi

Mr. Singo Stephen Mwachofi

- Domestic Radicalization and Terrorism in Kenya: The Youth, the State and Al Shabaab Authors: Singo Mwachofi and Edmond Pambaby Dr. Emeka Okereke and Prof. Rohan Gunaratna (Editors).
- Kenya’s Security Sector: Reform amid Changing Security and Strategic Environments, Routledge by Prof. Shadrack Nasong’o (Editor).

ii) Consultancies

Prof. Fred Jonyo

- Associate Consultant, Understanding the Perspectives of Displacement affected Communities and Identification, Norwegian Refugee Council (NRC)
- Consultant: National Defence College (NDC), Whole Government Approach
- Consultant: Kenya Revenue Authority, Kenya School of Revenue Administration
- Consultant: National Assembly's Liaison Committee
- Consultant: European Union (EU), Disrupting Criminal Trafficking and Smuggling Networks through Increased Anti-Money Laundering and Financial Investigation Capacity in the Greater Horn of Africa

Dr. Oscar M. Otele

- Associate Researcher, China-Working Group Consortium on Belt and Road Initiative, COVID-19 and African Agency, Centre for African Studies, University of Florida.
- Consultant, International Crisis Group, The Role of China in Re-energizing Peace Process in South Sudan
- Consultant, The Christian Democratic Party of Norway To review policies, by laws and procedures among political parties in Kenya as they pertain to the inclusion of persons with disabilities

Dr. Joseph Okeyo Obosi

- Consultant, the Accountability for Water Programme, Partnership for African Social Governance and Research
- Consultant, Understanding the Perspectives of Displacement affected Communities on Identification, Norwegian Refugee Council (NRC)
- Consultant, As Assessment of Performance Improvement Programme, Ushirika High School, Nairobi
- Consultant, Development and Implementation of a School Based Teacher Support System (SBTSS) for English Subject Project No. P160083. Teachers Service Commission/World Bank.

Dr. George Katete

- Associate Researcher, International Research on Digital Trust @ Workplace. Conducted surveys to collect and generate data on the level of trust in utility of digital tools in workplace in the Kenyan context.

Mr. Singo Stephen Mwachofi

- Lead Researcher, "Analysis of Counter-Terrorism and Juvenile Justice Sector in Kenya" Research undertaken for JICA Kenya Office, December 2019-March 2020.
- Lead Facilitator, "Dialogue, Negotiation and Mediation" Course at the International Peace Support Training Centre (IPSTC): December 2020.

International Links and Collaborations

The Department maintained international links and collaborations in various activities in the year 2020. Our collaborator included:

1. Hradec Kralov University, Czech Republic
2. Partnership for African Social and Governance Research (PASGR) and Partner Universities (University of Pretoria, Ibadan University)
3. Kenya School of Government (KSG)
4. Konrad Adenauer Stiftung
5. National Intelligence Academy
6. National Defense College (K)
7. Defense Staff College (K)
8. Horn of African Institute

Major Achievements, Challenges and Strategic Projections

Achievements	Challenges	Strategic Projections
Increase in research activities	Decrease in the number of international students due to COVID-19	Encourage and target high impact journals
Increase in scientific publications in referred journals	Inadequate office staff	Meeting with postgraduate students for tracking student progress in research
Increase in the number of postgraduate students theses/projects	Some lecturers reluctant to publish or publish in very low impact factor journals	To fast track PhD studies
Publication of 2019 conference outputs in a special issue	Delay in postgraduate students in completion of thesis/project research Overwhelmed and demotivated faculty Delayed payment of DSP	To increase the faculty capacity

Other Relevant Activity

i) Departmental Seminar and UoN@50 Seminars

- Departmental Seminar on Political Theory of Xenophobia
- Sixty Years of Post-Independence Governance in Africa: Trends and Lessons Learnt
- Global Political Economy and Africa's Development over the last 60 years.
- The Impact and Implications of Covid on the University Fraternity: What way forward for Students and Staff

ii) External Examiners

Academic Staff Acting as External Examiners 2020

Staff	Institution
Prof. Phillip Nying'uro	Department of History, Political Science and Public Administration, Moi University
Prof. Fred Jonyo	School of Development and Strategic Studies (SDSS), Maseno University
Prof. Fred Jonyo	School of Social Sciences, University of Botswana,

iii) State Appointments, Honors and Decorations

Prof. Adams Oloo

- Board member, Kenya School of Government
- Elder of the Burning Spear (EBS)
- Vice Chair- Building Bridges to Unity Advisory Steering Committee

Mr. Singo Stephen Mwachofi

Member, Committee of Experts to the Building Bridges Initiative (BBI) Task Force, 2019-2020

iv) Fellowships and Awards

Mr. Singo Stephen Mwachofi

Winner of Carnegie Foundation PhD Fellowship in Public Policy, January 2020

Department of Psychology

Introduction

The Department of Psychology was started at Kikuyu Campus of the University of Nairobi in 1988. Initially, it was started mainly to service Education and Nursing Departments. In 1999, the Department developed a Bachelor of Psychology (Counselling) degree Programme. The primary objective was to train counsellors. However, when the Department of Psychology was transferred from College of Education and External Studies to the Faculty of Arts in 2005, there was the need to review the syllabus to meet the Faculty of Arts regulations. The syllabus was, therefore, reviewed to enable students, in the Faculty of Arts, who were interested in psychology to gain access.

Currently, the Department is teaching the Psychology component in the Bachelor of Arts and the Bachelor of Economics and Statistics in the College of Humanities and Social Sciences; Bachelor of Education programs (College of Education and External Studies and Kenya Science, College of Agriculture and Veterinary Sciences); Bachelor of Science (College of Engineering and Architecture); Bachelor of Science Nursing (College of Health Sciences). The Department has also programmes in Mombasa and Kisumu Campuses.

Programmes and Services Offered

The following programmes are offered:

- | | |
|--|-------------------------------------|
| i) Diploma in Counselling Psychology | iv) Master of Psychology |
| ii) Bachelor of Arts (Psychology) | v) Master of Counselling Psychology |
| iii) Bachelor of Arts (Counselling Psychology) | vi) PhD in Psychology |

Strategic Issues

The department in the year 2020 period developed a Postgraduate Diploma in Psychology. The Diploma will give access to graduates who are interested in pursuing psychology at Masters Level but are not admissible because they did not have a background in psychology. The Postgraduate Diploma will also be accessible to graduates of other specialties who may need psychology to enhance their work.

Major Achievements in the Year 2020

The Department was able to graduate 15 Masters Students in various specialties, despite the COVID-19 challenges. The specialties included: Counseling psychology, Organizational Psychology, Community Psychology and Forensic Psychology. This is in addition to many other undergraduate and Diploma students who graduated in the same year.

Corporate and Community Outreach Activities

The department has a vibrant psychology club that reaches out to the public especially in support of Children's homes. However, the club was not active in 2020 due to the COVID-19 pandemic.

The department, however, organized an online seminar on coping with the COVID-19 stressor. The key presenters were a member of staff Mrs Jean Wachira and a guest speaker Dr. Elizabeth Ngozi.

Staff Portfolio

The department had 23 in the following grades

Designation	No. of Staff	Designation	No. of Staff
Professors	3	Tutorial Fellow	3
Associate Professors	2	Graduate Assistant	1
Lecturer	1	Sign Language Translator	1
Lecturers	12		

Projections

The Department hope to evolve into an Institute of Psychology in future.

Department of Sociology Social Work and African Women Studies

Development of Curriculum

i) PhD in African Women Studies

As part of the core activity of AWSC which is to offer academic courses, the Centre developed Regulations and Syllabus for the Degree of Doctor of Philosophy in African Women Studies. The PhD programme aims to provide inquiry into the experiences, roles, knowledge and achievement of African women, and expose the students to basic theories and concepts related to African Women. The goal of the programme is to enhance the students' skills and knowledge to interrogate traditional theories, philosophies and research methods so as to strengthen their capacity to generate and harness knowledge and experiences of African women and provide alternatives for bridging any gaps identified.

ii) Master of Arts in Women Leadership and Governance in Africa

The goal of the programme is to enhance the students' skills and knowledge to interrogate traditional theories, philosophies and research methods so as to strengthen their capacity to generate and harness knowledge and experiences of African women and provide alternatives for bridging any gaps identified and therefore produce highly qualified graduands.

iii) Master of Arts in African Women Entrepreneurship

The Centre also developed Regulations and Syllabus for Master of Arts in African Women Entrepreneurship (AWE). The goal of the programme is to create an opportunity for the learners to access knowledge; develop analytical skills; strengthen their creative and problem-solving skills; and promotes a responsible attitude towards women's entrepreneurship in order to contribute positively to the transformation of African economies and improve the lives of women, families and communities.

iv) Development of ODeL Courses in WLGA

The AWSC continued to develop the teaching modules for Open, Distance and Electronic Learning for the courses in M.A in Women Leadership and Governance in Africa (WLGA). During the year 2019/2019, AWSC has engaged its own lecturers together with those from the School of Law IAGAS, and Political Science in both teaching and development and uploading additional teaching modules.

The AWSC in collaboration with the ODeL Campus organized trainings to enhance staff and students skills in e-Learning. The staff training was held at the UON Mains Campus on January 16th, 2020. The staff were trained on the application of the various e-learning tools. The ODeL students were trained on January 21st, 2020. Their training focused on the access of the use of the various in access e-learning materials and on-line engagement both with the lecturers and with other students.

With the closure of the University as a measure to control possible spread of the corona virus all the academic staff participated in the various trainings organized by the University of Nairobi, ICT Centre, Through the trainings they acquired skills that enabled them to continue with classes on-line as well as administer the on line examinations.

Students Enrollment

Programme	No. of Students
PhD in African Women Studies	37
Master of Arts in Women Leadership and Governance in Africa	33
Masters of Arts in African Women Entrepreneurship	1
Diploma in Women Leadership and Governance in Africa	4
Total	75

Programme/Project Activities Implemented by AWSC

i) Evaluation of Gender Impacts in Agriculture and Food Security

The African Women Studies Centre (AWSC) of University of Nairobi together with CARE Kenya and Kenya Agricultural and Livestock Organization (KALRO) has been carrying out a research on Evaluating Impacts of Gender in Agriculture and Food Security Outcomes in Agriculture. The Project which is in its final year started in 2018 in Kinangop Sub County, Nyandarua County and is funded by IDRC. AWSC received a budget of KES 8Million for its activities. The study aimed to test two comparable, agricultural extension approaches and measure their potential for improved gender equality, food and nutrition security. The study applied a compares the standard Farmer Field School (FFS) approach, gender-transformative Farmer Field and Business School (GT-FFBS). The overall goal to promote gender equality and women's empowerment, food and nutrition security, and economic well-being in Kinangop Sub-County, Nyandarua County. Prof. Wanjiku Kabira, the AWSC Director is The Project Advisor, while Reuben Waswa is Technical Leader.

ii) Innovations and Exhibitions

During the Nairobi Week, the AWSC exhibited a project dubbed: *Bringing Back the Forgotten Fruits of the Kenyan Highlands*. The Project focuses on innovation, transfer and adoption of technologies for increased production and value addition of pear, plums, apricots. The Project is multi-disciplinary and brings together AWSC and Faculty of Agriculture (UON), Kenya Agricultural and Livestock Research Organization (KALRO) Horticultural Institute and the Kiambu County Government.

Temperate fruits such as pears, plums and apricots have been successfully produced in the Kenyan highlands for many decades, following their introduction into the country by colonial settlers. However, a sharp decline in the production of these temperate fruits has occurred in recent times, largely driven by a changing climate.

The Project aims to pilot new technologies and train farmers and extension workers on the new technologies that and is expected to bridge the gap between the best practices and the current farmers' practice, which is now in jeopardy; thus bringing back the forgotten fruits of the Kenyan highlands.

iii) Current Fundraising Activities

At the beginning of this year, we got into a conversation with the Bill and Melinda Gates Foundation and other partners in relation to a program on Women's Economic Empowerment. Through AWSC, the Director convened a multidisciplinary team of scholars most of who are from the College of Humanities and Social Sciences and we presented our draft proposal to the Foundation. A smaller team made of Prof Kameri Mbote, Prof Kiriti Nganga, Dr Mary Mbithi, Dr Agnes Meroka, Mary Wambui Kanyi and myself have since then been working on the establishment of the UoN Hub to be housed by the AWSC with a funding base of USD 3 million from the Foundation. The secretariat work is being coordinated by one of our AWSC PhD students Ruth Wamuyu Gacii. Signing of the grant documents and disbursement of the initial funds have already happened

We have submitted a proposal for funding to the Norwegian Partnership for Higher Education (NORHED) to support a regional Masters and PhD program in areas of women, environment, natural resources and climate change to be coordinated by Prof. Kameri Mbote and to be housed in AWSC. Others partners for this project include Malawi, Zimbabwe and Kenya and the expected funding for UoN is KES 78 Million.

We have also submitted another proposal in response to 'A Call for Proposals by IDRC', on Growth and Economic Opportunities for Women (GrOW) East Africa. The initiative seeks to spur transformative change to advance gender equality in the world of work. AWSC will focus on Skills building and work readiness programs for women to increase entry, retention, and advancement in under-represented sectors. Specifically, the Centre's attention will be on 'road construction with an aim of evaluating the level of women's participation, any challenges they encounter and identifying strategies that work to upscale their participation in this male dominated sector'. In this project, we shall collaborate with the Department of Civil Engineering UON. We shall also work with number of organizations including the Ministry of Public Service and Gender Affairs, the National Gender and Equality Commission, as well as the National Construction Authority. The team working on this through AWSC is also a multi-disciplinary team, and the grant should be around KES 65Million.

Collaboration with Partners

1. In Relation to Academic Program

We have also collaborated with other partners like CARE-Kenya who have sponsored two of our students to do their Masters projects namely Gacii Ruth Wamuyu (Reg. No. M10/10054/2018) and Janet Kimutai from School of Economics. AWSC also brought together 4 units namely, PSRI, IAGAS, School of Economics and AWSC to work together in a project funded by UN-Women. The project supported 16 MA students to do their research projects in the area of gender statistics and 15 of them successfully completed their projects and graduated in December 2019. Both the students and their supervisors were trained on gender statistics by the Kenya National Bureau of Statistics. It was very satisfying to bring together a group of students from different disciplines to work together in an area that is at the heart of AWSC. I believe that this is an area we need to explore a bit more in the future.

2. In Relation to Women's Issues

The Director of AWSC, chaired and took lead of the Women's Leadership Group under the MPSGAs Gender Sector Working Group. As a member of the GSWG, AWSC was represented at the following forums/meeting:

- i) Gender Sector Working Groups meeting organized by the Ministry for Public Service Youth and Gender Affairs at the Panafric Hotel, Nairobi on March 1st, 2020.
- ii) Launch of African Women's Leadership Network - Kenya Chapter organized by the Ministry for Public Service Youth and Gender Affairs at the Sarova Stanley Hotel on March 4th. 2020.
- iii) National Gender Sector Working Groups meeting organized by the Ministry for Public Service Youth and Gender Affairs at the Panafric Hotel, Nairobi on October 28th, 2019.
- iv) AWSC was also represented at other key women's forums/meeting including the following:
 - a) National Government Affirmative Action Fund (NGAAF) Public Participation on Revision of Regulations held at the Kenya School Of Monetary Studies On 23rd January 2020
 - b) Kenya Gender Budget Network (KGBN) at a meeting organized by the Collaborative Centre for Gender and Development that was held on 16th July 2019 at the Laico Regency Hotel, Nairobi.
 - c) UMMA University celebrations during the celebrations of the international day for the girl child held at the University's Main Campus in Kajiado on 11th October 2019.

Publications

1. *Changing the Main Stream: Celebrating Women's Resilience* authored by a team of scholars from different disciplines.
2. The Director co-authored a book: *Making research work for African women* with Dr. Lanoi Maloiy. Both of these books were published in 2018/2019 academic year.
3. Center's online publication journal: *Pathways to African feminism and Development*, continues to encourage the staff and other members of the community to publish.

Conferences

During this Covid time we have also discovered the power we have as AWSC in bringing together people for academic discussions over issues that are of concern to African women scholars. We have started webinars focusing on African feminist theories and their application within the African context. We have had one conference with 16 papers being presented. After we have covered six webinars, we will publish a special issue in this area of focus. We shall then begin another series for six months resulting in an online publication. This academic dialogue is becoming a regular event for African scholars in the continent and in the Diaspora. AWSC being the only such institution in the continent has a responsibility to shape scholarships, research and policy dialogue in the continent.

In the first webinar, we had over 150 participants. Over 50 of these were Nigerians scholar from different universities while others comprised of scholars from different parts of Europe and USA. We had an African American lecture from Harvard University who has been participating in these webinars. In July, 2020, AWSC had 192 participants attending the webinar. We have also participated in the University's Research Week as a center. Our seminars have been very well attended both at the local and international level.

During the University of Nairobi Research Week, AWSC held the second Internal Conference on the Status of Women in Africa. A total of 16 presenters from different countries presented papers on diverse issues affecting African Women.

Research and Policy Program

The director has promoted the continuous research and policy dialogue within AWSC. We continue to offer research and analysis of policies in support of areas related to women. In 2018/2019 we have presented through public participation our recommendations to the Senate and Parliamentary relevant committees including a presentation done on 9/7/2020 to the Senate Standing Committee on Justice, Legal and Human Rights, on the constitution of Kenya (Amendment) Bill (Sen. Bills No. 16 of 2019); and The Representation of Special Interests Groups Laws (Amendment) Bill (National Assembly Bills No. 52 of 2019). During this presentation, one of our graduate assistants Ms Mary Wambui Kanyi was hailed by many of the participants for her good presentation. Most recently the Cabinet Secretary Ministry of Gender Affairs has requested the center to assist in providing information that would be useful for negotiations for the best institutional framework for the implementation of the Affirmative Action Funds. Currently a team of researchers is working on this. The center is becoming an information hub for women related issues.

Through the *Women's Policy Watch Programme* coordinator, Ms. Mary Wambui Kanyi, AWSC influenced the following national policies/bills through gender audit and submission of written memoranda recommendations/proposals to the relevant bodies:

- i) Public Finance Management (Amendment) (No. 2) B 2020
- ii) Public Finance Management (Biashara Kenya Fund) Regulations, 2020
- iii) Reproductive Healthcare Bill, 2019 and submitted recommendations to the Senate
- iv) The Representation of Special Interest Groups Laws (Amendment) Bill 2019 submitted to the Senate by AWSC in collaboration with the Women's Leadership Gender Sector working group (GSWG) committee in June 2020
- v) Kenya National Commission on Human Rights Bill (National Assembly Bills No. 1 of 2020) which sought the merger of KNHC and the National Gender and Equality Commission, to The Parliamentary Constitutional Implementation Oversight Committee of the National Assembly in June 2020
- vi) Negotiated Democracy and women's participation in leadership draft policy developed by Coffey International (July 2019).
- vii) Economic policy recommendations for the Financial year 2020/2021
- viii) AWSC plans to influence, at last four policies/bills annually, to ensure they mainstream gender and women's concerns.

FACULTY OF BUILT ENVIRONMENT AND DESIGN

Department of Architecture and Building Science

Introduction

The Department of Architecture & Building Science is the Leading Centre of Professional Training in Architecture in East and Central Africa. Our mission is to train high caliber professionals in the discipline of Architecture through teaching, research and consultancy.

Founded in 1956, the Department of Architecture was at first the only Department of the Faculty of Architecture, which later became the Faculty of Art and Architecture of the Royal Technical College of East Africa.

Programs Offered:

- | | |
|--|--------------------------------|
| i) Bachelor of Architectural Studies (BAS) | iv) Master of Urban Management |
| ii) Bachelor of Architecture (BArch) | v) PhD |
| iii) Master of Architecture (MArch) | |

Enrollment

- | | |
|---|--------------------------------------|
| i) Bachelor of Architectural Studies (BAS)? | iv) Master of Architecture (M.Arch)? |
| ii) Bachelor of Architecture (B.Arch)? | v) PhD? |
| iii) Master of Urban Management (MUM)? | |

Strategic Issues

a) Degree Programmes/Curriculum

i) Bachelor of Architectural Studies (BAS)/Bachelor of Architecture (B.Arch)

Currently the Department of Architecture offers a two-tier degree programme. The 6 year Bachelor of Architecture course was replaced with a 4yr + 2yr structure with the first four years leading to a Bachelor of Architectural Studies degree (B.A.S.) and a further two years leading to Bachelor of Architecture (B.Arch.). The curriculum adopted the concept of electives. Out of these are crafted areas of in-depth study in non - core areas of knowledge. These in-depth study areas are within the first tier of the course.

Strengths	Weaknesses	Opportunities
<ul style="list-style-type: none"> Flexibility of graduating after 4 years with a BAS degree, allowing students to practise in a wide-range of non-design areas of the profession and, within a limited scope, to also engage in design. BArch (Year 5 & 6) offering, is equivalent to an MArch Degree, but with the benefit of funding for Government sponsored students which is only tenable for Undergraduate studies 	<ul style="list-style-type: none"> BAS level currently does not receive any recognition from accreditation institutions such as BORAQS. BArch graduates see little or no value in pursuing a MArch Degree from the Department, and as such the enrolment for postgraduate studies is generally low. 	<ul style="list-style-type: none"> Recognize each stage of the curriculum in the national accreditation system by BORAQS Beef up the 2-tier system, by including an internship program in the interim of BAS & BArch Degrees. BArch (Year 6) Curriculum should focus on resolving fundamental design problems akin to Practice/Industry demands.

ii) Master of Architecture (M.Arch)

The Department of Architecture offers a two year Postgraduate Master of Architecture Programme. The programme comprises coursework, studio projects, examination and thesis with specialization in the following areas:

- 1) Architectural Design
- 2) Environmental Design
- 3) Building Technology and
- 4) Landscape Design
- 5) Urban Design.

Opportunities: MArch Degree curriculum should be expanded to resolve research and innovation in specialized fields such as Conservation Practice, History & Theory of Architecture, Industrial Design, etc.

iii) Master of Urban Management (MUM)

The Department of Architecture offers a two year Postgraduate Master of Urban Management Programme. The programme is intended to provide the requisite solid and balanced academic teaching (theory + research) and professional and practical training relevant to urban management in Kenya and the East African region. The course enrolls candidates from various educational and occupational backgrounds relating to urban development.

Teaching and Learning

Lectures

Lectures are administered for thematic theory courses for core areas of the architectural field.

Architecture Design Studios

This is the core subject in the architectural course and is administered in 'Studio' spaces. All other supporting theory coursework is normally organised to provide contributions towards effective Design Studio learning. The key components of the Design studio include:

- **Practical Student-centred Learning** - Design studio is meant to provide students with expertise and knowledge necessary in order to produce innovative, creative and competent design solutions. The main objective of the Design studio is to develop students' imagination in design and allow them to produce architectural designs that balance between creative, critical and pragmatic thinking.
- **Exhibition-style Presentations** - Students express their architectural ideas through a myriad of communication techniques and methods including free-hand drawings, physical models, computer models, photography, video clips and oral presentations during interim studio presentations
- **Co-teaching/Teaching Panels** - Design Studio sessions are administered through a 1:10 teacher-student ratio. The benefit of co-teaching is that educators work together to plan, organize, evaluate and instruct the students providing a range of ideas/solutions. Students benefit from diverse expertise and panel consensus.
- **Desk-crits** - are one-on-one (teacher-student) instruction activities that increase the opportunity to differentiate student needs.

Examinations

- Examinations are held in line with the Common Examination Regulations of the School of the Built Environment as approved by the University Senate.
- Examinations shall consist of written papers, projects, studio and portfolios.
- All course units, except projects, studio and portfolios, shall be examined during the semester in which they are taken. Such examinations shall consist of continuous assessment, course tests and end of semester examinations. The end of semester examinations shall account for 70% of the total marks, while continuous assessment and course tests, shall account for 30%.
- All first semester examinations shall be School examinations and shall be approved by the School Academic Board.

Portfolios and Research Projects

All studio and portfolio examinations in the 2nd, 3rd and 5th years of the BAS/BArch degree course shall be conducted at the end of the academic year in which they are taken and shall in each case be equivalent to six course units.

All studio/portfolio examinations in the 1st, 4th and 6th years of the BAS/BArch degree course shall be conducted at the end of the academic year in which they are taken and shall in each case be equivalent to eight course units.

Research projects for the 6th year of study for BArch are submitted by the last day of written examinations and constitute four course units. Research projects shall be examined at the end of the academic year.

Panel Examinations & Peer-Group Reviewers- All studios and portfolio examinations are examined through a panel consensus and peer-group reviewers for 6th Year graduating class

Mentorship - There is an active culture of mentorship for students by a teaching staff that is actively involved in architectural practice. This is achieved by way of class visits to construction sites, and individual apprenticeship during school breaks. Additionally the BArch (Year 6) project involves one-on-one supervisions between student and teacher.

Internship - Though optional, a large number of students undertake internship programs in architectural firms during school holidays. This greatly contributes to the unique learning process and should be reviewed. The Department should be more proactive in facilitating student placement.

Major Achievements

Date	Item	Remarks
December 11, 2020	Graduation of 4th and 6th year students who had supplementary/ special examinations	Supplementary/special examinations were conducted and students were able to graduate.
November 30 to December 8, 2020	Supplementary/Special examinations	Supplementary/special examinations conducted successfully face to face.
November 9, 2020	Blended learning commenced for all years.	Learning for all years both face to face and online commenced and is progressing on well.
September 21, 2020	Online teaching and learning commences for First Year students	Teaching commenced as scheduled and progressed well.
September 25, 2020	Graduation of 4th, 6th and Masters students	Master of Architecture, Master of Urban Management graduated as well as 4th and 6th year students who graduated with Bachelor of Architectural Studies and Bachelor of Architecture respectively.
September 14-25, 2020	Online theory examinations	Theory examinations for all years and Masters were conducted successfully online.
September 7 - 5 October, 2020	Face to Face Portfolio examinations for 1st, 2nd, 3rd, and 5th year students	The examinations were conducted successfully face to face.
July 21 to August 10, 2020	Portfolio examinations for graduating years	The examinations were conducted successfully face to face.

Date	Item	Remarks
February 2020	Publication of a book and an International Exhibition at the Guggenheim Museum in New York showcasing work by our department amongst 5 other international universities from February 2020.	Several members of staff and students in the department participated.
February 9-16, 2020	4th year annual study trip to the Kenya Coastal Strip (Mombasa)	Annual academic trip to Mombasa for 4th year portfolio project.
February 3-8, 2020	3rd year field trip to Voi, Taita Taveta County	Annual academic trip to Voi for 3rd year portfolio project.
February 8, 2020	Mangu High School Career Fair	The department set up an exhibition tent which included brochures for courses offered in the School, student model showcasing a final year project, projector and screen displaying final year works from Architecture students.
January 29, 2020	2nd year academic trip to Machakos University	2nd year tour of Machakos University to design a Students' Centre.
January 6, 2020	Commencement of 2nd semester 2019/2020 learning.	Learning commenced for year 1-6, Master of Architecture and Master of Urban Design.

Corporate and Community Outreach Activities

- February 2020** - Publication of a book and an International Exhibition at the Guggenheim Museum in New York showcasing work by our department amongst 5 other international universities from February 2020.
- February 9-16, 2020** - 4th year annual study trip to the Kenya Coastal Strip (Mombasa)
- February 3-8, 2020** - 3rd year field trip to Voi, Taita Taveta County
- February 8, 2020** - Mangu High School Career Fair

Staff Portfolio

As at 2021, the department had 42 in the following grades

Designation	No. of Staff	Designation	No. of Staff
Professor	4	Assistant Lecturer:	1
Associate Professor:	1	Tutorial Fellow:	9
Senior Lecturer:	6	Chief Technologist:	1
Lecturer	20		

Projections

- August, 2021 - Annual E.A. Architecture Workshop and Exhibition,
- August, 2021 - Basco Awards of Excellence,
- March - April, 2021 - Annual 4th year academic trip to Mombasa,
- March, 2021 - Annual 3rd year academic trip to Voi, Taita Taveta County

Department of Arts and Design

Introduction

The School of The Arts and Design (StAD) is a constituent School of the College of Architecture and Engineering (CAE) and is situated in the ADD Building, off State House Road, Nairobi. The School offers two degree programmes namely Bachelor of Arts in Design and Bachelor of Interior Design. The two degree programmes are offered over a four year period. BA in Design students specialize in one of the four areas of Graphic, Interior, Product, Fashion and Textiles and Illustration design. The training is offered as a mix of lectures, individual discovery, studio practice and theory. These are complimented by industry exposure and visiting professional persons. StAD has a strong faculty with diverse specializations supported by technical and support staff serving a student population of over 400 that includes postgraduate and PhD students.

Design has experienced increased demand from consumers, the building sector and manufacturing, because it is an enabler for better products, services and systems. People need aesthetic products, universal design in the environments, sustainable design practices and healthy products and services. Design services are crosscutting in every sector of the economy for example, medicine, agriculture, tourism and small, medium and large firms. When combined with other factors of production and distribution, design innovation and entrepreneurship can contribute significantly to the country's industrialization.

The students and staff actively participate in local and international forums. Some of the international collaborators are Loughborough Design School, University Leicester, Zurich School of the Arts, the Oslo School of Architecture and Design and Cape Peninsula University of Technology (CPUT). Within the eastern Africa region, the School has partnered with Makerere University, Kyambogo University and Kwame Nkrumah University of Science and Technology (KNUST). The School has held conferences, workshops and seminars in collaboration with government, alumni, NGOs, and co-hosted the Africa Design Day (February 22, 2021) conference and exhibition.

The StAD strategy is to continue to provide quality services in design training, research, extension and consultancy. It shall continue to expand its scope and networks through opening up of communication channels and increasing use of open and distant learning platform.

Programmes Offered

The School of the Arts and Design offers the following Programmes:

Programmes

- i) Bachelor of Arts (Design)
- ii) Bachelor of Interior Design (BID)
- iii) Masters of Arts (Design)
- iv) PhD (Design)

Student Enrollment in 2020

In September 2020, the School admitted 90 students in various programmes as shown below:

Course	Admissible	Admitted	Variance
B.A. (Design) Module I	47	29	18
B.A. (Design) Module II	10	6	4
BID Module I	50	34	16
BID Module II	18	13	5
M.A. Design	12	8	4
Total	137	90	47

Student Population

The student population at the school in the academic year 2019/2020 was 369 spread as shown in the table.

Year	Course	Module 1	Module II	Total Undergraduates	Masters	PhDs	Int. Students
Year I	BA Design	29	6	35	8	5	Nil
Year II	BA Design	51	15	66	9		1
Year III	BA Design	39	13	51	N/A		Nil
Year IV	BA Design	39	13	52	N/A	N/A	Nil
Year I	BID	34	14	48	N/A	N/A	Nil
Year II	BID	45	15	60	N/A	N/A	4
Year III	BID	N/A	17	17			
Year IV	BID	N/A	18	18			
Total Number of Students in 2020				347	17	5	5

International Student

- The total number of undergraduate students was 347 and the total number of international undergraduate students was 5.
- There were no international postgraduate students
- The percentage component of international student at the school is $5/347 \times 100 = 1.4\%$.

Number of Graduates Per Programme

In the year 2020, the School graduated 91 students as indicated in the table below:

Programme	Graduands
Bachelor of Arts (BA - Design)	87
Bachelor of Interior Design (BID)	0
Masters of Arts (MA - Design)	3
Doctor of Philosophy	1
Total	91

Major Achievements

Research Activities

1. The School won a research grant worth €20,000/- to conduct a research entitled “Informing energy futures through lessons from science-policy-society interactions case studies in Kenya, Uganda and South Africa”. The lead principal researcher is Dr. Lorraine Amollo.
2. The School won a research grant worth Kshs. 13m to conduct a research and provide consultancy services to undertake investigation into local production/manufacture of affordable ceramic fittings to support affordable housing in Kenya. The lead researcher is Dr. Lilac Osanjo.

Policy Brief

In January 2020, the School produced a policy brief.

“A case for providing electricity subsidies in urban informal settlements” January 2020

Performance Contract

The School emerged number one (1) in performance contract category of Schools without departments.

Consultancy

The School undertook a consultancy in 2020 with the Export Promotion and Branding Agency (KEPROBA) in product development for Small and medium enterprises focusing on exports. The enterprises included apparel, tea, chilli, avocado producers among others.

Institution(s)	Detail
Export Promotion and Branding Agency	Training Micro enterprises on product development by Dr. Lilac Osanjo, Ms. Julia Kamuiru and Ms Nkatha Kiruki.

International Links and Collaborations

The School established three links with other institutions.

Link	Type
University of West Indies, Barbados	Established academic relations in order to promote direct co-operation and communication in the field of Art and Design and related disciplines. The School shared with them the Graphic design syllabus.
Science Council	Informing energy futures through lessons from science-policy-society interactions
Ministry of Transport, Infrastructure, Housing and Public works. State Department of Public Works.	Consultancy Services in affordable ceramic fittings for affordable housing

Publications for the Year

In 2020, the School had 11 journal publications produced.

Author	Title	Journal	Month & Year
Ms. Betty Mwiti	Bottom-up approach: A community intervention in fighting non communicable diseases in urban informal settlement in Kenya	East Africa medical journal	April, 2020
Dr. Lorraine Amollo	Exploring the dynamic of social networks in urban informal settlement: The case of Mathare valley, Kenya	Springer	June, 2020
Dr. Lilac Osanjo	Thinking Through the Growth of The Fashion Design Industry in Kenya	Africa Habitat review	August, 2020
Mr. Mike Kemboi Chesaro	Waste Minimization Strategy for Sustainable Interior Design	Africa Habitat review	August, 2020

Author	Title	Journal	Month & Year
Mr. Daniel Munyaga Macharia	Enhancing Visual Aids in Training of Child Caregivers in Daycares Within Nairobi's Urban Informal Settlements	Africa Habitat review	August, 2020
Mr. Ignatius Wambugu Rukwaro	Graffiti Artists in East Africa	Africa Habitat review	August, 2020
Dr. Samuel Maina	Graffiti Artists in East Africa	Africa Habitat review	August, 2020
Mr. Collins Makunda	Waste Minimization Strategy for Sustainable Interior Design	Africa Habitat review	August, 2020
Dr. Samuel Maina	Waste Minimization Strategy for Sustainable Interior Design	Africa Habitat review	August, 2020
Dr. Lilac Osanjo	Enhancing Visual Aids in Training of Child Caregivers in Daycares Within Nairobi's Urban Informal Settlements	Africa Habitat review	August, 2020
Dr. Betty Mwit	Enhancing Visual Aids in Training of Child Caregivers in Daycares Within Nairobi's Urban Informal Settlements	Africa Habitat review	August, 2020

Corporate and Community Outreach Activities

The School designed the logo for "University of Nairobi@50", logos and branded packaging materials for various tea factories around the country.

The School is undertaking a research on renewable energy in Mathare slums led by Dr. Lorraine Amollo.

Staff Portfolio

The following is the staff portfolio for the department. It had a total of 25 staffs in the following grades

Designation	No. of Staff	Designation	No. of Staff
Senior Lecturer	2	Technologists	8
Lecturer	3	Senior Administrative Assistant	1
Tutorial Fellow	5	Secretary	2
Asst. Lecturer	1	Registry Clerk	1
Graduate Assistant	2		

Strategic Projections

The strategic projection of the School includes:

1. Attracting grants projects to support the growth of the School.
2. Continue to grow the School journal as an avenue for disseminating research findings and innovations.
3. Attract professionals and industry to participate in the implementation of the syllabuses.
4. Grow the numbers of students especially in the postgraduate programmes.
5. Empower the School community in adoption of online teaching and management.

FACULTY OF BUSINESS AND MANAGEMENT SCIENCE

Brief Introduction

The Faculty of Business and Management Sciences, formerly School of Business, was established in 1956/57 academic year in the then Royal Technical College to offer special academic and professional examinations in accountancy and secretarial practice.

At the time of establishment in 1964, the Faculty had 4 departments, namely, Accounting, Business, Administration, Law and Home Economics. In 1970, the department of Law became a fully-fledged Faculty of Law while the Department of Home Economics was absorbed into the Faculty of Science. The Faculty moved to its current location at Lower Kabete Campus in the premises formerly occupied by the Kenya Institute of Administration in 1988. Today, the Faculty has 3 departments: Finance and Accounting, Business Administration, and Management Science.

The Faculty provides leadership in the teaching and research in business management programmes, providing knowledge and applications through customer-driven teaching, training, research, consultancy and community services.

The Faculty of Business and Management Sciences is currently operating in four distinct locations namely: the Lower Kabete Campus which serves as the headquarters of the Faculty's operations; the Main Campus location comprising of Main Campus and Chiromo Campus that mainly serves the Module II evening programmes; the Mombasa Campus established in 2004 and the Kisumu Campus established in 2008.

The Faculty currently has a population of over seventeen thousand students spread in the programmes and across the various teaching locations. The Faculty has a rich pool of qualified teaching staff with adequate training, teaching and research experience. This ensures the production of all-round graduates who have over the years competed very well in the job market.

The programmes are offered in several modes i.e. fulltime, part-time and distance learning modes. The part-time and distance learning programmes are designed to accommodate the special needs of those in full time employment and other related engagements.

Courses Offered

Currently the Faculty offers 22 programmes namely:

1. Diploma in Project Planning and Management
2. Diploma in Purchasing and Supplies Management
3. Diploma in Business Management
4. Diploma in Human Resource Management
5. Diploma in Public Relations
6. Postgraduate Diploma in Human Resource Management
7. Postgraduate Diploma in Project Planning and Management
8. Bachelor of Commerce (B.Com) with specialization in the following: Finance, Accounting, Marketing, Human Resource Management, Insurance, Procurement & Supply Chain Management, Operations Management and Business Information Systems,
9. Bachelor of Science in Accounting,
10. Bachelor of Science in Finance,
11. Bachelor of Science in Operations and Supply Chain Management,
12. Bachelor of Arts in Project Planning and Management,

13. Master of Business Administration with specialization in the following: Finance, Human Resource Management, Strategic Management, International Business Management, Marketing, Insurance, Management Information Systems, Operations Management, Procurement and Supply Chain Management and Project Management,
14. Master of Science in Finance,
15. Master of Arts in Project Planning and Management,
16. Master of Science programmes in Human Resource Management,
17. Marketing, Entrepreneurship & Innovations Management,
18. Master of Science in Supply Chain Management,
19. Master of Science in Marketing
20. Master Science in Operations and Technology Management,
21. Doctor of Philosophy (PhD) in Business Administration and
22. Doctor of Philosophy (PhD) in Project Planning and Management.

The Faculty continues to review its curriculum in line with the emerging market and individual needs.

Student Enrolment

Summary of Students Enrolled

International Student Component

In the year 2021, the international student component in the Faculty was as follows:

Summary by Programme

Programme	No.
Diploma in Project Planning and Management	3
Diploma in Business Management	5
Diploma in Human Resource Management	2
Diploma in Public Relation	1
Postgraduate Diploma in Project Planning and Management	1
Bachelor of Commerce	36
Bachelor of Science in Finance	8
Bachelor of Project Planning and Management	5
Master of Business Administration	60
Master of Arts in Project Planning & Management	40
Master of Science in Finance	32
Master of Science in Human Resource Management	7
Master of Science in Entrepreneurship Innovations and Management	1
Master of Science in Supply Chain Management	9
Master of Science in Operations and Technology Management	1
Doctor of Philosophy in Business Administration	19
Doctor of Philosophy in Project Planning and Management	10
TOTAL	340

Number of Graduates per Programme

Programme	Number
Diplomas	563
Bachelors	667
Masters	562
Doctor of Philosophy	19
TOTAL	1,841

Research Activities

The Faculty has continued to prioritize research activities especially through analysis and supervision of student research projects both at the undergraduate and postgraduate levels.

International Links and Collaborations

1. The Faculty is currently having the following links and collaborations:
2. Collaboration with GfK-Germany aimed at establishing a Master of Science programme in Marketing Research;
3. Collaboration with SMC University for on line MSc. and PhD programmes;
4. Collaboration with Barclays Bank where the bank has sponsored an Endowed Chair through the Department of Finance and Accounting;
5. The Faculty remains an active member of the Association of African Business Faculty's (AABS) which acts as a benchmarking body for business Faculty's across the continent.
6. Collaboration with EFMD (European Foundation for Management and Development) in collaboration with Strathmore University in its efforts to foster interaction and exchange of ideas among scholars.
7. Collaboration with Shanghai Finance University aimed at developing joint undergraduate program.
8. Collaboration with Kuhne Logistics University aimed at developing master's in business research.

Consultancies

The Faculty did not undertake any consultancies during the year 2021.

Research And Conferences for the Year

In the year 2021, the Faculty hosted three successful international conferences:

- i) The 12th African International Business and Management Conference (AIBUMA)
- ii) The 3rd Annual Development Finance Conference (ADFC)
- iii) The 6th DBA-Africa Management Review International Conference (DBA-AMR)

Faculty Based Journals

- i) The Faculty published in the DBA Africa Management Review Journal Vol 11 No 1 (2021),
- ii) African Journal of Business and Management (AJBUMA) Volume 7 Issue 1 (2022)

Academic Staff

The Faculty has the Following numbers of Academic Staff:

Professor	- 7	Lecturer	- 38
Associate Professor	-15	Assistant Lecturer/TF	- 14
Senior Lecturer	-19		

Academic Staff

Dean

Prof. James M. Njihia, BSc, MBA, (Nairobi), PhD, (Warwick)

Associate Dean

Dr. Joshua Wanjare, BSc (Hons), MBA, PhD, CPA (K)

Chairman, Department of Business Administration

Dr. Muindi Florence Kagendo, PhD, (Nairobi), MSc, (JKUAT), BEd. (Nairobi)

Chairman, Department of Finance and Accounting

Prof. Mwangi Cyrus Iraya, PhD, MBA, BCom, (Nairobi) CPA (K)

Chairman, Department of Management Science and Project Planning

Dr. Thomas Ongoro Ombati, BEd. Arts, MBA, (Nairobi), PhD, (Western Cape SA)

Department of Business Administration

Introduction

The School of Business, formerly Faculty of Commerce, was established in 1956/57 academic year in the then Royal Technical College to offer special academic and professional examinations in the accountancy and secretarial practice. Following its inception in 1964, the first bachelor of commerce class was admitted with 35 students in Main Campus. The School moved to its current location at Lower Kabete Campus in the premises formerly occupied by the Kenya Institute of Administration in 1988.

The School provides leadership in the pursuit of business management programmes, providing knowledge and applications through customer-driven teaching, training, research, consultancy and community services.

Currently, the School offers 13 programmes namely: Bachelor of Commerce (B.Com), Bachelor of Science in Accounting, Bachelor of Science in Finance, Bachelor of Science in Operations and Supply Chain Management, Master of Business Administration (MBA), Master of Science in Finance (MSc. Finance), Master of Science programmes in Human Resource Management, Marketing, Entrepreneurship & Innovations Management, Master of Science in Supply Chain Management, Master Science in Operations and Technology Management and the Doctor of Philosophy (PhD) in Business Administration. The School continues to review its curriculum in line with the emerging market and individual needs.

In line with the current demands in the market, the School is in the process of launching new programmes at the undergraduate level.

The School of Business is currently operating in four distinct locations namely: the Lower Kabete Campus which serves as the headquarters of the School's operations; the Main Campus location comprising of Main Campus, University of Nairobi Tower and Chiromo Campus that mainly serves the Module II evening programmes; the Mombasa Campus established in 2004, the Kisumu Campus established in 2008.

The School currently has a population of over 10,000 students spread in the 13 programmes and across the various teaching locations. The School has a rich pool of qualified teaching staff with adequate training, teaching and research experience. This ensures the production of all-round graduates who have over the years competed very well in the job market.

The programmes are offered in several modes i.e. fulltime, part-time and distance learning modes. The part-time and distance learning programmes are designed to accommodate the special needs of those in full time employment and other related engagements. For detailed and specific information on each programme, kindly see the accompanying write-ups by heads of departmental units.

Courses Offered

1. Bachelor of Commerce with specialization in the following: Finance, Accounting, Marketing, Human Resource Management, Insurance, Procurement & Supply Chain Management, Operations Management and Business Information Systems
2. Bachelor of Science in Accounting
3. Bachelor of Science in Finance
4. Bachelor of Science in Operations and Supply Chain Management
5. Master of Business Administration with specialization in the following: Finance, Human Resource Management, Strategic Management, International Business Management, Marketing, Insurance, Management Information Systems, Operations Management, Procurement and Supply Chain Management and Project Management.
6. Master of Science in Finance
7. Master of Science in Entrepreneurship & Innovations Management
8. Master of Science in Human Resource Management
9. Master of Science in Marketing
10. Master of Science in Supply Chain Management
11. Master of Science in Operations and Technology Management
12. Doctor of Philosophy in Business Administration

Student Enrolment 2020

Programme	No. of Students
Bachelor of Commerce	4,418
Bachelor of Commerce in Distance Learning	149
Bachelor of Science in Accounting	48
Bachelor of Science in Finance	117
Bachelor of Science in Operations and Supply Chain Management	32
Master of Business Administration	3,331
Master of Science in Finance	709
Master of Science in Human Resource Management	81
Master of Science in Marketing	82
Master of Science in Entrepreneurship and Innovations Management	123
Master of Science in Supply Chain Management	76
Master of Science in Operations and Technology Management	57
Doctor of Philosophy Degree in Business Administration	935
Total	10,158

Summary of Students Enrolled

Undergraduate - 4,764 students
 Postgraduate - 5,394 students

International Student Component

In the year 2020, the international student component in the Department was as follows:

Summary by Programme

Programme	No. of Students
Bachelor of Commerce	45
Bachelor of Science in Accounting	1
Bachelor of Science in Finance	4
Master of Business Administration	79
Master of Science in Finance	46
Master of Science in Human Resource Management	6
Master of Science in Entrepreneurship Innovations and Management	1
Master of Science in Supply Chain Management	13
Master of Science in Operations and Technology Management	1
Doctor of Philosophy in Business Administration	15
Total	211

Number of Graduates per Programme

Programme	Number
Bachelors	568
Masters	315
Doctor of Philosophy	14
Total	897

Research Activities

The School has continued to prioritize research activities especially through analysis and supervision of student research projects both at the undergraduate and postgraduate levels.

International Links and Collaborations

The School currently have the following links and collaborations:

1. Collaboration with GfK-Germany aimed at establishing a Master of Science programme in Marketing Research;
2. Collaboration with SMC University for on line MSc. and PhD programmes;
3. Collaboration with Barclays Bank where the bank has sponsored an Endowed Chair through the Department of Finance and Accounting;
4. The School remains an active member of the Association of African Business Schools (AABS) which acts as a benchmarking body for business schools across the continent.
5. Collaboration with EFMD (European Foundation for Management and Development) in collaboration with Strathmore University in its efforts to foster interaction and exchange of ideas among scholars.
6. Collaboration with Shanghai Finance University aimed at developing joint undergraduate program.

Publications

1. Ondiek, T.O., Odock, S.O., Njihia, J.M. & K'Obonyo, P.O. (2020). Examining the Effect of Organizational Culture on the Relationship between Supply Chain Quality Management Practices Adoption and Performance of Private Hospitals in Kenya. *European Scientific Journal*, 16(31), 147-161
2. Ondiek, T.O., Odock, S.O., Njihia, J.M. & K'Obonyo, P.O. (2020). Supply Chain Quality Management Practices and Performance of Private Hospitals in Kenya. *DBA Africa Management Review* 10(5), 57-78
3. Mkwizu K.H., Matama R. & Marika N. (2020). Milk Society and Industrialization in East Africa. *The Operations Research Society of East Africa Journal*, Vol. 9 (1), January
4. Mutua, D.M., Odock S.O. & Litondo, K. (2020). Green Logistics Practices and Firm Performance: The Mediating Effect of Economic Performance among Logistics Firms in Kenya. *European Scientific Journal*, 16(25), 142-159
5. Mutua, D.M., Odock S.O. & Litondo, K. (2020). Effect of Green Logistics Practices on Performance of Logistics Firms in Kenya. *DBA Africa Management Review* 10(4), 20-35
6. Swalehe, R.W., Odock, S.O. & Gituro, W. (2020). Moderating Effect of Firm Age and Size on the Relationship between Sustainable Operations Management Practices and Competitive Advantage of Manufacturing Firms in Kenya. *DBA Africa Management Review* 10(4), 106-125
7. Swalehe, R.W., Odock, S.O. & Gituro, W. (2020). Sustainable Operations Management Practices and Competitive Advantage of Manufacturing Firms in Kenya. *European Scientific Journal, ESJ*, 16(28), 241-262
8. Mkalama B.W., Ndemo B.E. & Maalu J.K (2020). The Antecedents of Innovativeness in Small and Medium Manufacturing Enterprises in Kenya: A Qualitative Approach. *The African International Journal of Business and Management*, June, Vol. 6(1)
9. Mkalama B.W., Ndemo B.E., Maalu J.K. & Pokhariyal G.P. (2020). Entrepreneurial Orientation and Firm Innovativeness in Manufacturing Small and Medium Enterprises: The Moderating Effect of Environmental Dynamism. *European Scientific Journal, ESJ*, May, Vol. 16, No. 13
10. Mwanoyota J., Njihia M., Maalu J. & Iraki X.N. (2020). Reverse Logistics and Competitive Advantage: The Mediating Effect of Operational Performance among Manufacturing Firms in Kenya. *European Scientific Journal*, July Edition Vol. 16, No. 19
11. Ongeru R.N., Magutu P.O. & Litondo K. (2020). Business Process Re-Engineering Strategy and Service Delivery: Does the Moderating Role of Information Technology Infrastructure Matter? *Manufacturing. DBA Africa Management Review*. 10 (4), 71-91
12. Ongeru R.N., Magutu P.O. & Litondo K. (2020). The Moderating Effect of Information Technology Infrastructure on the Relationship between Business Process Re-Engineering Strategy and Performance of Food Manufacturing. *DBA Africa Management Review*. 10 (4), 71-91
13. Ongeru R.N., Magutu P.O. & Litondo K. (2020). The Business Process Re-Engineering Strategy: Its Impact on the Performance of Companies Manufacturing Food in Kenya. *European Journal of Business and Management Research*. 5 (5)
14. Makini S.O., Awino Z.B. & Magutu P.O. (2020). The Moderating Effect of Operating Environment on Corporate Governance and Firm Performance: A Case of Corporate Entities Listed at the Nairobi Securities Exchange. *DBA Africa Management Review*. 10 (5), 97-106
15. Nyamweya J.M., Ochieng D.E., Ondigo J. & Magutu P.O. (2020). Economic Growth, Financial Deepening, Income Distribution, Financial Efficiency and Poverty Level Nexus: A Co-integration and Causality Analysis in Kenya. *DBA Africa Management Review*. 10 (3), 58-72
16. Nyamweya J.M., Ochieng D.E., Ondigo J. & Magutu P.O. (2020). Moderating Effect of Financial Efficiency on the Relationship between Economic Growth and Poverty Levels in the EAC Countries. *DBA Africa Management Review*. 10 (2), 125-146
17. Nyamweya J.M., Ochieng D.E., Ondigo J. & Magutu P.O. (2020). Relationship between Economic Growth, Financial Deepening, Income Distribution, Financial Efficiency and Poverty Levels within East Africa Community Member Countries. *Africa Development Finance Journal*. 4 (2), 50-61

18. Ongoto H.K., Munyoki J. Kibera F. & Magutu P.O. (2020). Moderating Role of Organization Demographics on the Relationship between Grand Personality and Customer Service Delivery of Public Universities in Kenya. *DBA Africa Management Review*. 10 (2), 53-72
19. Nyamweya J.M., Ochieng D.E., Ondigo J. & Magutu P.O. (2020). Economic Growth, Financial Deepening, Income Distribution, Financial Efficiency and Poverty Level Nexus: A Co-integration and Causality Analysis in Kenya. *DBA Africa Management Review*. 10 (3), 58-72
20. Muiruri J.W. & Magutu P.O. (2020). Quality Management Practices and Competitiveness of Manufacturing Firms in Nairobi. *International Journal of Supply Chain and Logistics*. 4 (1), 27-45
21. Nyamweya J.M., Ochieng D.E., Ondigo J. & Magutu P.O. (2020). Is there any Mediating Effect of Financial Deepening on the Relationship between Economic Growth and Poverty Levels in the EAC Countries? *International Journal of Finance and Banking Research*. 6 (4)
22. Ogada J.A., Nyamwenge S.O., Magutu P.O. & Ongeri R.N. (2020). Quality Management System Implementation and Operation Performance of National Council for Law Reporting, Kenya. *Noble International Journal of Business and Management Research*. 4 (5), 38-48
23. Nangulu E. & Magutu P.O. (2020). Capacity Management Strategies and Operational Performance of Sugar Manufacturing Firms in Kenya. *Noble International Journal of Business and Management Research*. 4 (2), 09-19
24. Kivuti C.K. & Mutunga O. (2020). Effect of Behavioural Biases on Investment Decisions for Individual Investors at Nairobi Securities Exchange. *International Journal of Social Science and Economic Research*, May, Vol. 5 (5)
25. Odipo E.A. & Mutunga O. (2020). Effect of Mobile Banking Services on Financial Performance of Deposit-Taking SACCOs in Kenya. *International Journal of Social Science and Economic Research*, May, Vol. 5 (5)
26. Ongenge G.M. & Marika N.K.M. (2020). Hospital Referral System and Patient Satisfaction. Paper presented at the DBA AMR Conference. October
27. Onditi E.O., Kibera F.N., Aranga J.J. and Iraki X.N. (2020). The Influence of Firm Size on the Relationship between Market Orientation and Non-financial Performance of Private Security Firms in Kenya. Paper presented at the DBA AMR Conference. October
28. Voreza K.L., Marika N.M. & Mogikoyo L.K. (2020). Consumer Sales Promotions and Brand Equity of Selected Toothpaste Brands in Kenya. Paper presented at the DBA AMR Conference. October
29. Oduori K.E. & Ndambuki M. (2020). Digitalization and Supply Chain Risk among Commercial Banks in Kenya. Paper presented at the DBA AMR Conference. October
30. Munyoki J.M. (2020). Marketing and Entrepreneurship as Tools of Economic Growth: A Study of Weavers of African Baskets in Kitui County Kenya. Paper presented at the DBA AMR Conference. October
31. Wachira J. & Njeru W. (2020). Sustainability Marketing Practices and Performance at General Electric Kenya. Paper presented at the DBA AMR Conference. October
32. Benadatte L.M. & Munyoki J. (2020). Perceived Effect of Customer Relationship Management Practics on Customer Satisfaction among Telecommunication Companies in Kenya. Paper presented at the DBA AMR Conference. October
33. Kiruthu S.G., Munyoki J.M. & Kinoti M. (2020). A Critical Literature Review on the Effect of Customer Orientation on Organizational Performance. Paper presented at the DBA AMR Conference. October
34. Walubengo W. & Njeru W. (2020). Corporate Brand Identity and Customer Satisfaction at Java House, Nairobi. Paper presented at the DBA AMR Conference. October
35. Mwangi D. & Kariuki M.M. (2020). The Perceived Effect of Workplace Environment on Employee Job Performance at Prudential Life Assurance in Kenya. Paper presented at the DBA AMR Conference. October
36. Munjuri M.G. & George L.M. (2020). Leadership Approaches and Employee Performance in the Energy Sector Parastatals in Kenya. Paper presented at the DBA AMR Conference. October
37. Okiro C. & Kariuki M.M. (2020). Effects of Human Resource Development Practices on Employee Job Performance in State Corporations in Nairobi. Paper presented at the DBA AMR Conference. October
38. Ogollah K. & Mwangi P. (2020). Right or Left? Which Hand do I play as the Tide Turns? Paper presented at the DBA AMR Conference. October

39. Mwakio S.M, Ndemo B., Awino Z.B. & Ndambuki M. (2020). The Effect of Entrepreneurial Training, Orientation and Organizational Size on Performance: A Conceptual Overview. Paper presented at the DBA AMR Conference. October
40. Thuita W.J. & Njeru W. (2020). Marketing Information Systems and Competitive Advantage at Consolidated Bank of Kenya Limited. Paper presented at the DBA AMR Conference. October
41. Angima C. & Mueni F. (2020). Effect of Digital Adoption and Performance of Insurance Companies in Kenya. Paper presented at the DBA AMR Conference. October
42. Twalib M. (2020). Wondering Wanderers: A Study of In-group, Out-group and Caught in the Middle. Paper presented at the DBA AMR Conference. October
43. Gworo C.O. & Onsomu Z. (2020). Financial Planning and Performance of Listed Firms: A Critical Literature Review. Paper presented at the African Development Finance Journal (ADF) Conference. October
44. Okiro K. & Ombati D.O. (2020). Detection of Fraud in Financial Statements using Beneish Ratios for Companies Listed at the Nairobi Securities Exchange. Paper presented at the African Development Finance Journal (ADF) Conference. October
45. Oruke M. & Omoro N. (2020). Corporate Governance: What can we learn from State Owned Enterprises in Kenya? Paper presented at the African Development Finance Journal (ADF) Conference. October
46. Mutunga O. (2020). Effect of Mobile Banking Services on Financial Performance of Deposit Taking SACCOs in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
47. Sanda T.O. & Omoro N. (2020). Enterprise Risk Management and Firm Performance amongst Financial Firms Listed at the Nairobi Securities Exchange. Paper presented at the African Development Finance Journal (ADF) Conference. October
48. Onsomu Z. (2020). Microfinance and Financial Inclusion. Paper presented at the African Development Finance Journal (ADF) Conference. October
49. Engefu G., Omoro N. & Kinyua H. (2020). The Politics of revenue Allocation and Resource Control in Kenya: Implications for County Governments Stability. Paper presented at the African Development Finance Journal (ADF) Conference. October
50. Kirimi S. & Elly D. (2020). Effect of National Budget Allocation on County Economic Growth in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
51. Waruingi V. & Elly D. (2020). Effect of Healthcare Budget Allocation on County Economic Growth in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
52. Simiyu R. & Elly D. (2020). Effect of Public Debt on Achieving Sustainable Development Goals in East Africa Community. Paper presented at the African Development Finance Journal (ADF) Conference. October
53. Kanji J. & Elly D. (2020). Need for Deposits, Supplies and Working Capital Regulations in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
54. Mulei M. & Barasa J.L. (2020). Effect of Board Characteristics on Financial Performance of Commercial Banks Listed at the NSE. Paper presented at the African Development Finance Journal (ADF) Conference. October
55. Wanyiri W. & Barasa J.L. (2020). Effect of Internal Controls on Financial Performance of Commercial Banks in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
56. Ojuok M. & Omoro N. (2020). Determinants of Financing Patterns and Performance among Small and Medium Enterprises in Kisumu County. Paper presented at the African Development Finance Journal (ADF) Conference. October
57. Kemunto G.K. & Omoro N. (2020). Determinants of Youth Enterprises Development Fund Loan Repayment in Kisumu County, Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
58. Khobes S.S. & Barasa J.L. (2020). Effect of Individual Policy on Financial Performance of Listed Manufacturing and Allied Firms in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
59. Gitonga T.K. & Barasa J.L. (2020). The Effect of Risk Management on Profitability of Commercial Banks in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October

60. Elly D., Kinyua H. & Adika C. (2020). Presidential Coronavirus Containment Protocol Announcements and Stock Returns at the Nairobi Securities Exchange. Paper presented at the African Development Finance Journal (ADF) Conference. October
61. Oriwo E. & Elly D. (2020). Macroeconomic Factors and Stock Returns at the Nairobi Securities Exchange. Paper presented at the African Development Finance Journal (ADF) Conference. October
62. Muriungi A., Mirie M. & Okiro K. (2020). Dividend Signaling and Shareholder Monitoring: Empirical Evidence from Nairobi Securities Exchange. Paper presented at the African Development Finance Journal (ADF) Conference. October
63. Onsomu Z. (2020). Effect of Automation of Accounting Services on the Performance of Commercial Banks in Kenya. Paper presented at the African Development Finance Journal (ADF) Conference. October
64. Kinoti M. & Iraki X.N. (2020). Reactions to Covid-19 Pandemic by Individuals and Micro and Small Business in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
65. Busaka V. & Munyoki J. (2020). Innovation Capability, Creativity, Technology and Performance of Insurance Companies in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
66. Daybah N.T. & Marika N.K.M. (2020). Logistics and Transportation Practices on Organizational Performance in the Milk Processing Firms in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
67. Mudogo K.E. Njeru W. (2020). Technological Innovation and Performance of Telecommunication Companies in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
68. Kinoti M. & Wangai R. (2020). The Influence of Public Sector Marketing Practices on Service Delivery in Government Ministries in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
69. Marieta M. & Munyoki J. (2020). Influence of Digital Marketing Strategies on Performance of Real Estate Firms in Nairobi City County, Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
70. Macharia D.K. & Njeru W. (2020). Service Innovation and Performance of Star Rated Hotels in Nairobi County. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
71. Halako M. (2020). Ingratiators Quandary: Ranking the Dimensions of Ingratiation. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
72. Ogollah K. (2020). Public versus Private Sector Individuals: Is there a Behavioural Link? Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
73. Kegoro O.H. & Munyoki J. (2020). The Relationship between Brand Personality and Customer Service Delivery: Perspectives from Public Universities in Kenya. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October
74. Halako M. (2020). Deliver us from the Endemic of Mediation and Moderation Research. Paper presented at the 11th African International Business Management (AIBUMA) Conference. October

Staff Portfolio

The department had 131 in the following grades

Professor	- 8	Secretary	- 7
Associate Professor	- 10	Clerk	- 14
Senior Lecturer	- 15	Lab Assistant/Technologist	- 5
Lecturer	- 41	Drivers	- 2
Assistant Lecturer	- 3	Accounts Staff	- 1
Tutorial Fellows	- 15	Machine Operator	- 2
Visiting Lecturer	- 1	Messenger	- 3
Administrative Staff	- 4		

Research and Conferences for the Year

In the year 2020, the School hosted 3 successful international conferences:

1. The 11th African International Business Management (AIBUMA) Conference
2. The African Development Finance Journal (ADF) Conference
3. DBA Africa Management Review Journal Conference

4. FACULTY OF EDUCATION

Department of Educational Foundations Arts and Social Studies

Achievements in 2020

Date	Item	Comment
16 th January 2020	International conference on “Decolonizing Education”	The departmental successfully held an international conference with participants from UK
March 2020	Training on online teaching and examinations	The staff were trained on the conducting of lectures and examination following the closure of the university for face to face teaching due to the COVID-19 Pandemic
April- June 2020	Online teaching	The department adopted on line teaching to ensure continuity of teaching
June - July 2020	Online examination	The departmental successfully conducted online examinations. This was in line with the senate guidelines on conducting online examinations
May - December 2020	Increase in PhD Student enrolment	The departmental registered an increase in the number of PhD applicants with a total of 8 new students were admitted

Department of Physical Education and Sports

The Department of Physical Education and Sport had a vibrant year despite the COVID-19 pandemic raving the world. The students and staff managed to successfully migrate onto the online platforms for the teaching and learning process. The number of student who graduated in the year 2021 were 50, creating a healthy progression pattern. The staff were happy to learn new methods of teaching. Indeed all the staff went for pedagogy training where they were taught how to teach asynchronously a method that has created a revolution in the teaching learning process.

Programmes Offered

Currently the Department offers three programme, the Bachelor of Education (Physical Education and Sports Option), Master of Education (Physical Education and Sport) and Doctor of Philosophy (Physical Education and Sport). The Bachelor of Education programme is offered in combination with another art subject under the title Bachelor of Education (Arts); in combination with a science subject, under the title Bachelor of Education (Science) or as a double subject under the title Bachelor of Education (Physical Education Option). However the Department is in the process of pushing the following four programmes through the School of Education Board, then CAB, Deans Committee and Senate. These market driven programmes are:

1. Bachelor of Science (Sports Management and Coaching) at Senate
2. Bachelor of Science (Sports Science) Deans Committee
3. Bachelor of Science (Leisure and Recreation) Deans Committee
4. Diploma in Leisure and Recreation- Deans Committee
5. Diploma in Coaching- Faculty Academic Board
6. Certificate in Sports- Deans Committee

Research Activities Undertaken (2019)

The following Studies were undertaken in 2019:

Summary of Journal Publications

Authors	Title	Journal
Gathoni, B, Munayi, S.P., and Chumba, J.	Recreation Activities that have the Greatest Negative Environmental impact on Environmental Resources Attributes in National Parks of central Kenya.	American Journal of Environment Studies. Vol. 5, Issue 1, pp-1-8, 2022. ISSN: 4520-4738 (Online).
Gathoni, B., Munayi, S.P. and Wanjira, J.	Impact of Recreation Activities in National Parks in the Central Kenya Region on Vegetation, Soil Water and Wild Game.	Journal of Environment, Vol. 2 Issue number 1, pp1-18, 2022. ISSN 2789-3863(Online).
Gathoni, B., Rintaugu, E.G. and Munayi, S.P.	Effectiveness of the Management Measures Undertaken to Mitigate the Impact of Recreational Activities on Vegetation, Soil, Water and Wild Game.	International Journal of Sociology. Vol. 6, Issue 1, No.2 pp. 11-19, 2022. ISSN 2710-3773 (Online)
Gathoni, B.N., Munayi, S.P., Wanjira, J. and Inyega, J.	Examining the Effect of Online Sports Betting on the Perceived Economic Wellbeing of Students, Athletes.	International Journal of Research in Business and Social Science. Vol 10 No.7 (2021) Pp. 242-248.
Gathoni, B.N., Munayi, S., Wanjira, J. and Inyega, J.	Investigating the Effect of Online Sports Betting on the Perceived Social Wellbeing of Students Athletes.	International Journal of Business Ecosystem Vol3. No. 2 Pp. 62-27 ISSN: 2687-2293.
Michael D. Otieno, Nicholas K. Bailasha, Elijah G. Rintaugu	Anthropometric Characteristics of Elite Male Rugby Players at the Rio and Tokyo Summer Olympic Games: A Systematic Review	International Journal of Research and Innovation in Social Science (IJRISS). Volume VI, Issue IV:293-299

Conference Presentations

Dr. Simon Munayi	1st FEAUS Forum Dodoma	History of the Eastern Africa University Sports	DATE: 28th & 29th October 2021
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Enrolled Students

The department managed to enrol 91 fresher's students in September 2021 bring the total number of students undertaking Bachelor of education (Physical Education and Sports option to 250 students. This plus the twenty postgraduate student at different stages of their thesis brings the total number of students in the department to 270

International Students

The department managed to enrol one PhD student from Uganda.

Research Activities Undertaken by Members of Staff

Staff in the department continue to be involved in research activity at their own levels. One of the member of staff Dr. Janet Wanjira continued to work on a Ksh. 6 million project sponsored by World Anti-Doping Association as a Principal Investigator.

International Links and Collaborations

The department managed to attract a Carnegie African Diaspora Fellow Prof. Jerono Rotich from North Carolina Central University for a period of two months. Her visit provided a refreshing period for the department as she interacted with students and staff.

Publications

The department managed 6 publications in the period under discussion

Staff

The department had 9 staffs in the following grades

Senior Lecturers	-	3	Dept. Administrator	-	1
Lecturers	-	3	Clerk	-	2

6. FACULTY OF ENGINEERING

Introduction

The University of Nairobi, Faculty of Engineering is the premier Engineering Institution in Kenya and the region and it is known for excellence in engineering education. Established in 1956. The Faculty of Engineering has grown to a student enrolment of over 4500 undergraduates who pursue programs accredited by the professional bodies in five departments leading to the award of Bachelor of Science degrees in Civil Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Biosystems Engineering, and Geospatial Engineering.

Department of Civil and Construction Engineering

Introduction

The Department of Civil & Construction Engineering is located along Harry Thuku Way, off University Way in Nairobi Central Business District in Nairobi City County, Kenya. The location of the Department of Civil and Construction Engineering is shown in the map in *Figure 2.1*.



Figure 2.1: Location of the Department of Civil & Construction Engineering.

The building that houses the administrative section of the Department of Civil & Construction Engineering is known as Civil Block. Civil Block is shown photographed in *Figure 2.2*



Figure 2.2: A picture of Civil Block.

Most of the classes are also in Civil Block. The department is decentralized and has laboratories, staff offices in other buildings. Classes with a large number of students are held at the University of Nairobi Tower. The UoN Tower is photographed in *Figure 2.3*.



Figure 2.3: University of Nairobi Tower of the Fountain of Knowledge, Main Campus.

Contact Address:

Department of Civil & Construction Engineering,
P. O. Box 30197 - 00100, Nairobi, Kenya
Located at Main Campus
Civil Engineering Block (Next to Central Police Station)
Harry Thuku Way, Nairobi
Nairobi City County Kenya
Tel: +254 - 20 - 491- 3512
Email: civileng@uonbi.ac.ke
Website: <https://civil.uonbi.ac.ke/>

Mandate

The mandate of the Department of Civil & Construction Engineering students is to administer courses in:

1. Bachelor of Science in Civil Engineering
2. Master of Science in Civil Engineering (Environmental Health Engineering)
3. Master of Science in Civil Engineering (Geotechnical Engineering)
4. Master of Science in Civil Engineering (Structural Engineering)
5. Master of Science in Civil Engineering (Transportation Engineering)
6. Master of Science in Civil Engineering (Water Resources Engineering)
7. Doctor of Philosophy in Civil Engineering

Strategic Issues

Number of Students per Year

The number of students in the department per academic programme are shown in Table 3.1.

Programme	Number of Students
Year I	113
Year II	182
Year III	170
Year IV	169
Year V	124
Master of Science in Environmental	10
Master of Science in Water Resources	15
Master of Science in Transportation	8
Master of Science in Structures	3
Master of Science in Geotechnical	0
Doctor of Philosophy	8

The Department of Civil & Construction Engineering has planned strategic issues to be handled. The first item is to improve the staffing of the department. The department has had 22 academic staff whose top qualifications distribution is shown in *Figure 3.1*

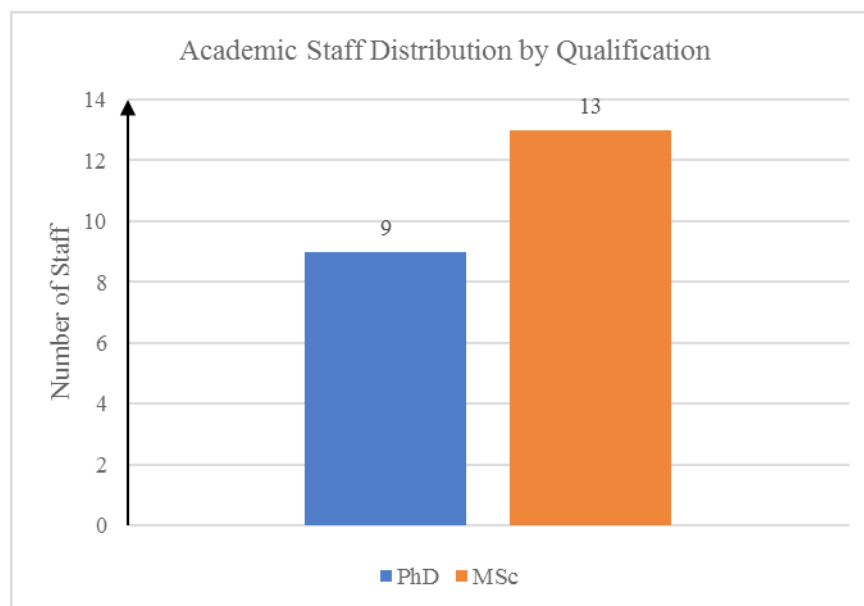


Figure 3.1: Academic staff distribution by qualification.

The department needs to increase the number of staff with PhDs. With regards to specialisation, staff specialising in Geotechnical and Transportation Engineering need to be increased as shown in *Figure 3.2*.

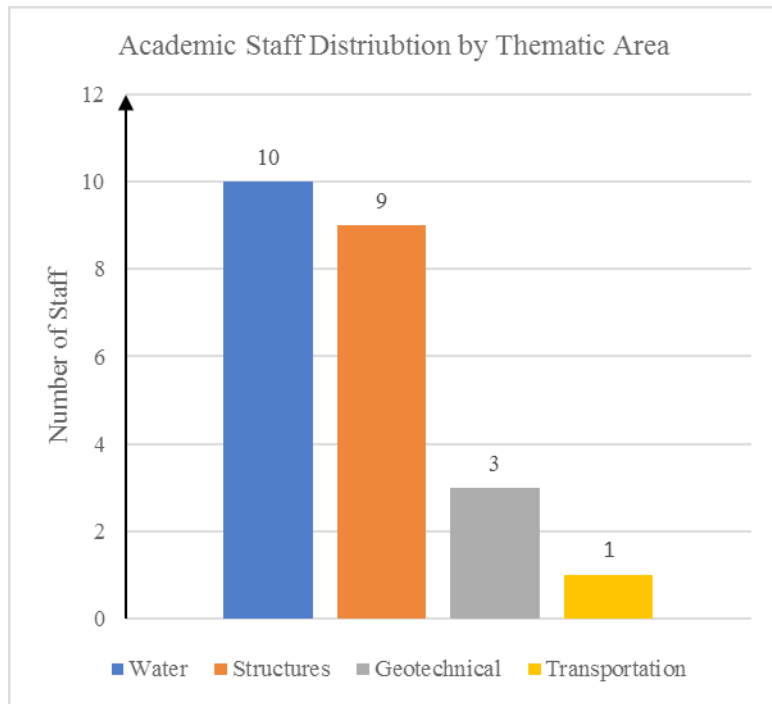


Figure 3.2: Academic staff distribution by thematic area.

The department needs to increase younger people in the department so as to assist with institutional memory. The age distribution is shown in Figure 3.3.

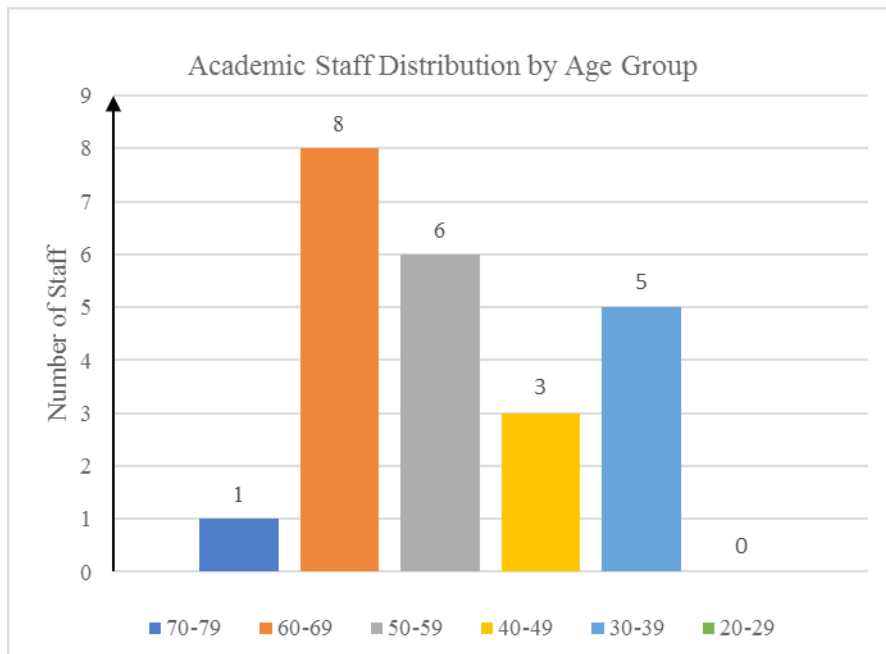


Figure 3.3: Age distribution of academic staff.

The department plans to improve on the qualifications of its technical staff. The qualifications of the technical staff are presented in Figure 3.4.

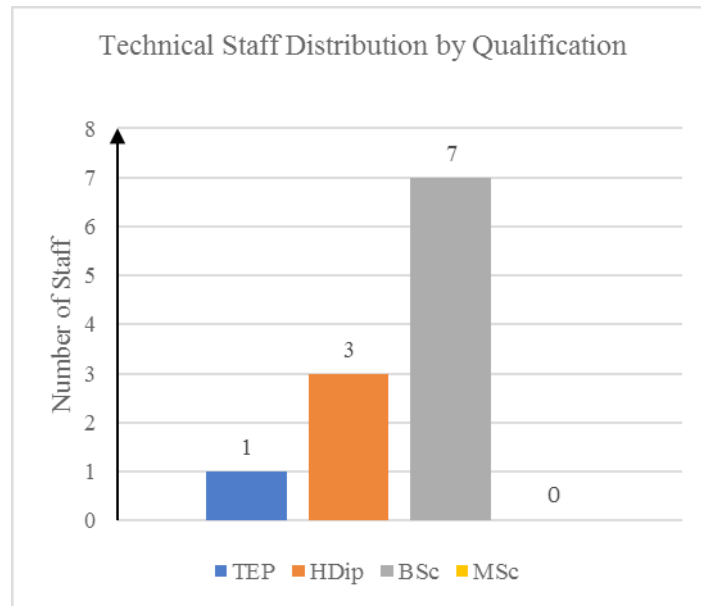


Figure 3.4: Qualifications of technical staff.

The age distribution of technical staff is presented in Figure 3.5.

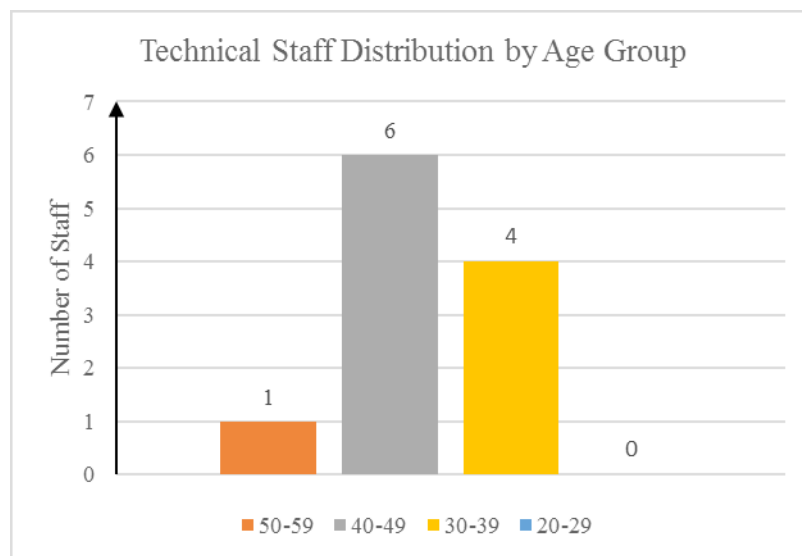


Figure 3.5: Technical staff age distribution.

The department needs to increase a specialist in the Metal Workshop which was unused in the last academic year. The technical staff distribution by specialisation is shown Figure 3.6.

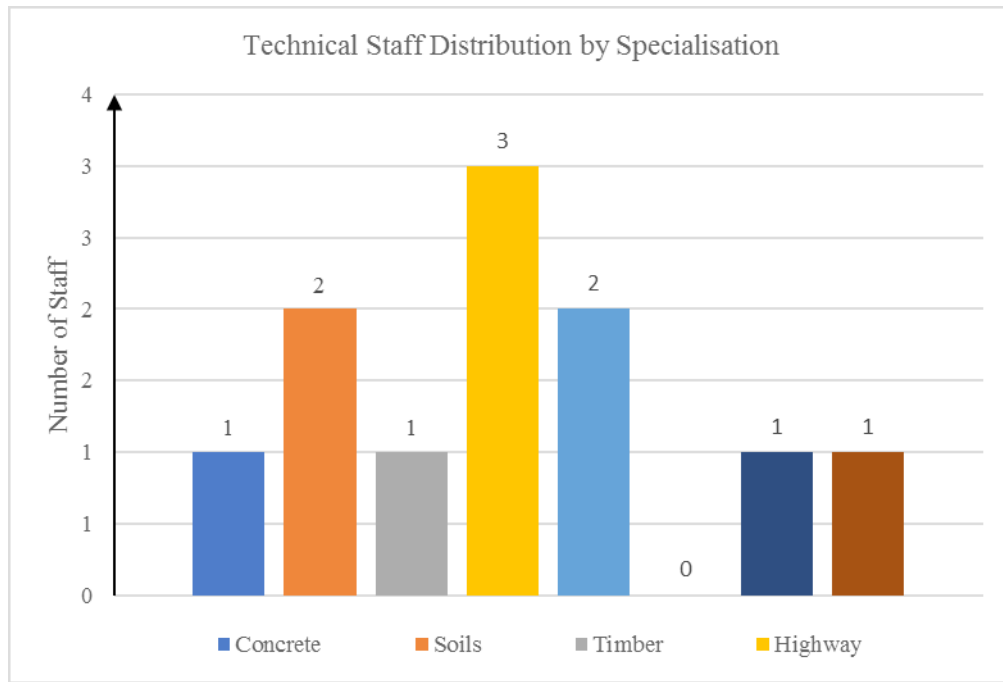


Figure 3.6: Technical staff distribution.

The ideal distribution of technical staff is shown in Figure 3.7 which the department is striving to achieve.

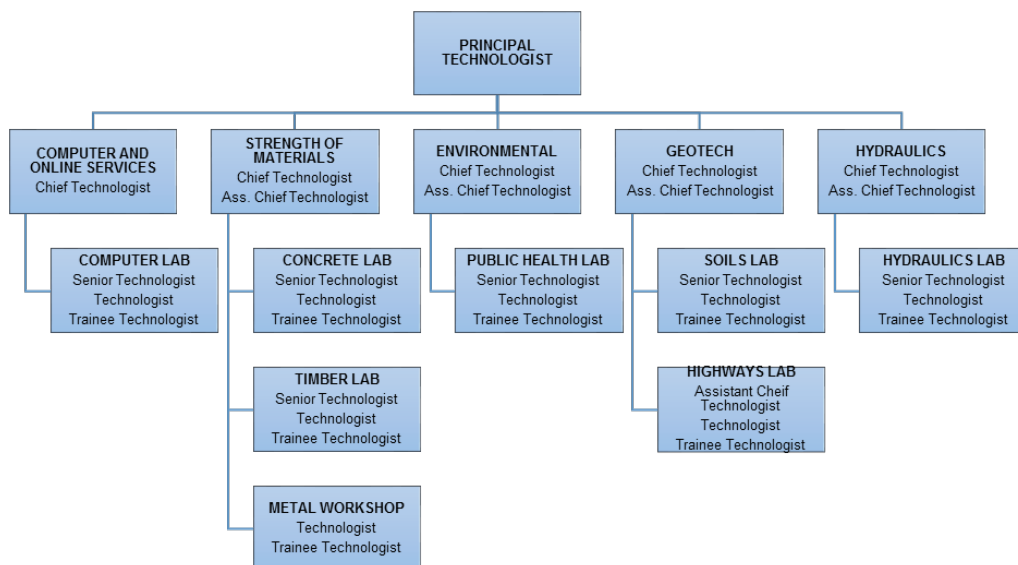


Figure 3.7: Technical Staff Organisation.

The same is presented in tabular form in Table 3.2.

Table 3.2: Laboratories and staff in request.

Laboratory	Positions	Staff In Position	Staff Request
1. Hydraulics	Senior Technologist	1	0
	Technologist	0	1
	Trainee technologist	0	1
2. Public Health	Senior Technologist	2	0
	Technologist	0	1
	Trainee technologist	1	1
3. Concrete and Large Structures	Senior Technologist	1	0
	Technologist	1	0
	Trainee technologist	0	1
4. Geotechnical	Senior Technologist	1	0
	Technologist	1	0
	Trainee technologist	0	1
5. Highways and Transportation	Assistant Chief Technologist	0	1
	Technologist	1	0
	Trainee technologist	0	1
6. Timber and Model Structures	Senior Technologist	0	1
	Technologist	1	0
	Trainee technologist	0	1
7. Computer and Online Services	Senior Technologist	1	0
	Technologist	0	1
	Trainee technologist	0	1
8. Metal Workshop	Senior Technologist	0	0
	Technologist	0	1
	Trainee technologist	0	0

Academic Staff

Lecture (4 positions) - to have full establishment and fill the positions in Transportation/Geotechnical Thematic Area to help in administering the undergraduate and postgraduate level;

Lecture (2 positions) - to fill the positions in Wet Area to help in administering the undergraduate and postgraduate level.

Technical Staff

- | | | | |
|-----------------------------------|-----------------|---------------------------|-----------------|
| i) Chief Technologists | - (4 positions) | iv) Senior Technologist | - (1 positions) |
| ii) Assistant Chief Technologists | - (5 positions) | v) Technologists | - (4 positions) |
| iii) Principal Technologist | - (1 position) | vi) Trainee Technologists | - (8 positions) |

Major Achievements

Chairman's First Year Address

Chairman CCE Dr. Osano gave his welcoming address on Friday, 23rd September 2021 during the first year 2021 orientation exercise that took place at civil engineering lecture theatre (CELT). In his remarks Dr. Osano gave a small history of evolution of this field of civil engineering. *Figure 4.1* shows the chairman making a presentation. Further details can be found on: <https://civil.uonbi.ac.ke/latest-news/chairman-address-first-year-2021-students>.



Figure 4.1: The Chairman giving the Freshman address in CELT.

Road Safety Conference

The department had its first annual road safety conference on 14th and 15th October 2021. Figure 4.2 shows an invitational feature advert of one of the key speakers from Europe.



Matthew Baldwin

Further details are found in:
<https://civil.uonbi.ac.ke/node/384>.

Prof. Gichaga becomes a Professor Emeritus



Prof. Francis John Gichaga became a Professor Emeritus of the University of Nairobi. This promotion was the first in the history of the Department of Civil & Construction Engineering.

Civil Engineering Student Receives Commendation

Darren Hart, a civil engineering student from the Department of Civil & Construction Engineering received commendation from the Dean of Students of the University of Nairobi for organising the first mental health day at the University of Nairobi. The event had 510 attendees. A short excerpt for his commendation is shown in *Figure 4.4*.



Figure 4.4: Civil Engineering student received commendation for his achievement.

Further details can be found at: - <https://civil.uonbi.ac.ke/latest-news/civil-engineering-student-receives-commendation-organising-mental-health-day-university>

Geoid Technologies made a Presentation on Drones

Students were taken through a presentation on drones and a beginner course on how to operate drones. *Figure 4.5* shows a drone on landing pad. This exercise was undertaken at the Great Court.



Figure 4.5: A drone on the landing pad.

Further details can be found at:
<https://civil.uonbi.ac.ke/latest-news/aces-partnership-geoid-technologies-mentorship-talk>
A gallery of the images can be found at: <https://civil.uonbi.ac.ke/node/394>

ITDP Conducted a Sensitisation Training on Civil Engineering Students on the New Street Design Manual

The Institute for Transportation and Development Policy (ITDP) in collaboration with the Association of Civil Engineering Students held a lecture for fifth-year civil engineering students on 30th November 2021 at LT 401, UoN Tower. Figure 4.6 shows the students in attendance.



Figure 4.6: Students attending a sensitisation lecture by ITDP.

Further details can be found at:

<https://civil.uonbi.ac.ke/latest-news/itdp-conducts-lecture-association-civil-engineering-students-aces>

Engineering Students visited Treehouse Children's Home

On 11th December 2021, Engineering students visited Treehouse Children's Home. Figure 4.7 shows some of the activities that were performed.



Figure 4.7: A pictorial of the report shared by students after the event.

Further details can be found at:

<https://civil.uonbi.ac.ke/latest-news/civil-engineering-students-visit-treehouse-childrens-home>

Civil Engineering Welfare Luncheon

The welfare group of the department met on 4th January 2022 at Bonds Restaurant to celebrate and mark events of various staff members. Figure 4.8 shows staff members in attendance.



Figure 4.8: Dr. Mumenya making an opening sermon at the venue.

Staff members receive gifts for completing degrees, birth of children, promotions, appointments, accomplished service among other things.

Figure 4.9: Current and past Chairmen of the Department.



From Left, Dr. Simpson Osano, (the current Chairman), Dr. Siphila Mumenya, Prof. S.K. Mwea, Prof. Patts Odira and Dr. Simeon Dulo. A gallery of the images can be found on: <https://civil.uonbi.ac.ke/node/407>

Department Received Cement for Research

The department received Cement for research from Bamburi Cement Company.



Figure 4.10: 32.5 Cement 50kg bags at the Concrete & Large Structures laboratory.



Figure 4.11: 42.5 cement 50kg bags at the Concrete & Large Structures laboratory.

Further details can be found at:

<https://civil.uonbi.ac.ke/latest-news/department-receives-cement-research-bamburi-cement-company>.

Mang'u High School Students Visit

Mang'u High School Students visited the department to learn more about civil engineering. Figure 4.12 shows the students posing for a photo at the UoN tower.



Figure 4.12: Mang'u High School students at the UoN tower.

A gallery of the images can be found at: <https://civil.uonbi.ac.ke/node/406>

Master's Students Field Trip

Master's students in the field of Transportation Engineering made a field trip along Lang'atta Road. Figure 4.13 shows the students on the field trip.



Figure 4.13: Transportation engineering students on a field trip.

Further information can be found at: <https://civil.uonbi.ac.ke/latest-news/msc-transport-class-visit-mbagathi-road> A gallery of the images are at: <https://civil.uonbi.ac.ke/node/408>

Simeon Dulo named as Second-Best Lecturer at UoN Awards

Dr. Simeon Dulo from the Department was named as number two lecture at the Faculty of Engineering during the Awards of Excellence ceremony held at UoN's Taifa Hall on Wednesday morning, March 23, 2022. Dr Dulo was the former Chairman at the Department. Faculty of Engineering was named the best. Further information can be found at: <https://civil.uonbi.ac.ke/latest-news/dr-dulo-becomes-number-two-lecturer-faculty-engineering-uon>

Department, UoN Alumni and Geothermal Development Corporation

UoN Alumni Affairs in collaboration with the Department visited Geothermal Development Company (GDC) at their headquarters in Kawi House on Friday, 8th April 2022. The UoN Alumni Affairs was represented by Kenneth Sawe and Beatrice Ndaisi. Jeff Anduvate, a UoN alumnus and a former ESA chairperson represented the alumni. Muthomi Munyua represented the Department of Civil & Construction Engineering and the Faculty of Engineering.



Figure 4.14: A photo of UoN and GDC representatives.

From left: Jedidah Ojwang (GDC), Jeff Anduvate (UoN Alumnus), Kenneth Sawe, Beatrice Ndaisi (UoN Alumni Affairs), Wanjiru King'ara (GDC), Muthomi Munyua (CCE) and Anne Wanyoike (GDC).

Further information can be found at: <https://civil.uonbi.ac.ke/latest-news/uon-alumni-affairs-collaboration-department-visited-geothermal-development-company-gdc>

Mentorship Session with Civil Engineering Students

Eng. Jane Mutulili held a mentorship session with engineering students. Eng. Jane is a passionate civil engineer, with over 20 years of experience. In her career, she has collaborated with UN bodies, national and international non-governmental organizations and government agencies (INGOs), as well as community-based organizations.

Kenneth Sawe and Beatrice Ndaisi from the Alumni Affairs Office organised the mentorship talk with the students from the Faculty of Engineering. Jeff Anduvate, an alumnus of the university and a former chairperson of the Engineering Students Association (ESA) moderated the session.



Figure 4.15: Invitational poster to students for the mentorship talk.

Further information can be found at:

<https://civil.uonbi.ac.ke/latest-news/eng-jane-mutulili-holds-mentorship-session-engineering-students>

Zion Children's Home

University of Nairobi students who visited the Zion Children's Home - Kasarani on Sunday 1st May 2022. The Children's home has about 70 Children, and they live inside a church after being evacuated from where they were living. The students donated toiletries and foodstuff and had a lot of exciting activities with the staff and children at the Home.



Figure 4.16: Students at Zions Children's Home.

Further information can be found at:

<https://civil.uonbi.ac.ke/latest-news/childrens-home-visit-zion-childrens-home-kasarani-nairobi-city-county>

The photo gallery is available at: <https://civil.uonbi.ac.ke/node/421>

Open-Day

The department held its open-day during the Faculty Open Day that was held virtually. The department had a booth where the presentation of the department was presented. The virtual booth was managed by Muthomi Munyua and Stephen Ochieng.

The presentation is available for download from: <https://app.box.com/s/en94azi1bex4tyqcvi1282th0nkm92x9>

Further information on the occasion is available at: <https://civil.uonbi.ac.ke/latest-news/open-day-presentation>

World Environment Day

There was a Community Clean-up, Tree Planting and Mental Health Talk for World Environment Day held on 4th June 2022 along Kitengela Road and Ngei Primary School in Langata to Mark the World Environment Day. University students participated in the event. Figure 4.17 shows students posing for a photograph during the tree-planting exercise.

Further information can be found at:

<https://civil.uonbi.ac.ke/latest-news/community-clean-tree-planting-and-mental-health-talk-world-environment-day>

The photo gallery is available at: <https://civil.uonbi.ac.ke/node/425>



Figure 4.17: Students posing for a photo during a tree-planting exercise.

Class of 2022 Finalist Dinner

To mark the ultimate culmination of five years of hard work, patience and grit, the Civil Engineering finalist class of 2022 organised a dinner to celebrate these milestones.

The dinner was sponsored by:

1. Kenya Roads Board (Platinum)
2. Kenya National Highways Authority (Bronze)
3. Thika Water Limited (Bronze)
4. Absa Bank PLC (Bronze)
5. Association of Consulting Engineers of Kenya (ACEK)

In attendance were sponsors, Eng Omai, Chief Guest, Dr. Eng S. Osano, Eng. Okari and Eng. Kandie. The event was pompous, colourful and jubilant.



Figure 4.18: Fifth-year students together with representatives from the sponsoring institutions.

Further information is available at: <https://civil.uonbi.ac.ke/latest-news/class-2022-finalist-dinner>

Dr. Simeon Dulo Passes On



Dr. Simeon Dulo a Senior lecture at the department passed on while attending a climate change conference in Abidjan, Ivory Coast. He felt unwell and was diagnosed with Malaria a day before his passing on. A lot of condolence messages have been sent to the family and also to the Department. Among those who have sent the message includes. Vice Chancellor UON Prof. S.G. Kiama, Christian Borgemeister, Director, Centre for Development Research University of Bonn Germany and Prof. Ayub Gitau, Dean school of Engineering UON. shows a condolence book set up outside the Department of Civil & Construction Engineering in Dr. Simeon Dulo's honour.

Figure 4.19: A stand set up where mourners can record their condolences.

Further information is available at: <https://civil.uonbi.ac.ke/latest-news/dr-simeon-dulo-passes>

Guidelines for Postgraduate Thesis Submission

A comprehensive one-stop webpage has been set up where all guidelines regarding postgraduate issues has been set up. The link for the webpage is <https://civil.uonbi.ac.ke/thesis-submission>.

The screenshot shows a web browser window displaying the 'Thesis Submission Guidelines' page. The URL is civil.uonbi.ac.ke/thesis-submission. The page features a navigation menu with 'Home', 'Students', 'Staff', 'Alumni', 'Resources', and 'UoN@90'. The 'Resources' menu is open, showing options like 'Civil Engineering Facilities', 'Facility Equipment', 'Infrastructure', 'Library', 'Teaching venues', and 'Thesis Submission'. A red box highlights the 'Thesis Submission' option. Below the navigation, the page header includes the Department of Civil & Construction Engineering, University of Nairobi logo, and a search bar. The main content area has a heading 'THESIS SUBMISSION GUIDELINES' and a list of requirements. Red text annotations provide instructions: 'Step 1: Go to civil.uonbi.ac.ke', 'Step 2: Hover over the 'Resources' Tab', and 'Step 3: Click the 'Thesis Submission' Button to access the guidelines'. A 'STUDENTS' section with an 'Apply Online' button is also visible.

Figure 4.20: An instructional image on how to get to the webpage for thesis guidelines.

Staffing

Overview

The staff at the Department of Civil & Construction Engineering are categorised into academic, technical and administrative.

i) Academic staff

Qualifications, Designations and Thematic areas of Academic Staff.

Name	Qualification	Designation	Thematic Area
Sixtus Kinyua Mwea	BSc, MSc, PhD	Professor	Geotechnical
Osano Simpson Nyambane	BSc, MSc, PhD	Senior Lecturer	Geotechnical
Hesbon Moriasi	BSc, MSc, PhD ⁺	Tutorial Fellow	Geotechnical
Silvester O. Abuodha	BSc, MSc, PhD	Associate Professor	Structures
Siphila Wanjiku Mumenya	BSc, MSc, PhD	Senior Lecturer	Structures
Patrick P. Maimba	BSc, MSc	Senior Lecturer	Structures
Evans Collie Goro	BSc, MSc	Lecturer	Structures
Monica G. Wokabi	BSc, MSc	Lecturer	Structures
Solomon K. Mutua	BSc, MSc	Lecturer	Structures
Barrack Omondi Okoya	BSc, MSc, PhD ⁺	Tutorial Fellow	Structures
Hesbon Hayowa	BSc, MSc, PhD ⁺	Tutorial Fellow	Structures
Muthomi Munyua	BSc, MSc, PhD ⁺	Graduate Assistant	Structures
George Paul K. Matheri	BSc, MSc, PhD ⁺	Lecturer	Transportation
Ezekiel E. Nyangeri	BSc, MSc, PhD	Professor	Water
Bernard N.K. Njoroge	BSc, MSc, PhD	Professor	Water
Zablon N. Oonge	BSc, MSc, PhD	Senior Lecturer	Water
Peter Kuria Ndiba	BSc, MSc, PhD	Senior Lecturer	Water
Samuel K. Ngari	BSc, MSc	Senior Lecturer	Water
Mathew Kipkoros Kandie	BSc, MSc	Lecturer	Water
Charles Odira Maxwel	BSc, MSc, PhD ⁺	Tutorial Fellow	Water
Damaris Kerubo	BSc, MSc, PhD ⁺	Tutorial Fellow	Water
Nancy Waweru	BSc, MSc, PhD ⁺	Tutorial Fellow	Water

⁺ongoing

ii) Technical Staff

Table 5.2: Qualifications, Designations and Laboratories of Technical Staff.

Name	Qualification	Designation	Laboratory
Stephen Ochieng Odhiambo	BSc, MSc ⁺	Senior Technologist	Computer
John K. Muchina	TEP	Technologist	Concrete
Samuel Nganga Gatimu	HDip	Senior Technologist	Highway
Kaunda Kenneth Jimbo	BSc, MSc ⁺	Chief Technologist	Highway
Martin Chege Mburu	BSc.	Technologist	Highway
Francis Mburu Muturi	BSc	Senior Technologist	Hydraulics
Margaret Wambui Muriithi	BSc	Senior Technologist	Public Health

Name	Qualification	Designation	Laboratory
Joyce Nyawira Kiboi	BSc	Senior Technologist	Public Health
Charles Kibet Kirui	BSc	Senior Technologist	Soils
Alphonse Elly Oyier	HDip	Technologist	Soils
RoselyneWakasa Masoni	HDip, BSc ⁺	Technologist	Timber

*ongoing

iii) Administrative Staff

Table 5.3: Designations of Administrative Staff.

Name	Designation
Stephen Anyona	Senior Administrative Assistant
Diana Njoki	Secretary
Grace	Secretary
Erastus Ngutu	Records Clerk
Josphat Ogiri	Messenger

Publications

A summary of the publications is presented in Table 6.1: Publications at the department.

Author	Title	Journal	Month & Year
Mumenya S.	Flexural properties of surface modified fiber reinforced polyester resin composites	Journal of natural fibres	November 2021.
Mwea S.	Assessing strength of plastic paving blocks for construction of non-motorised transport facilities	Journal of East Africa Engineering	November 2021.
Osano S.	Assessing strength of plastic paving blocks for construction of non-motorised transport facilities	Journal of East Africa Engineering	November 2021.
Abigail Muigai	Assessing strength of plastic paving blocks for construction of non-motorised transport facilities	Journal of East Africa Engineering	November 2021.
Dulo S.O	Characteristics of Kenyan Rice Husk Ash Produced Under Controlled Burning.	International Journal of Engineering Research and technology	November 2021
Okoya Barrack	Characteristics of Kenyan Rice Husk Ash Produced Under Controlled Burning.	International Journal of Engineering Research and technology	November 2021
Abuodha, S.O	Characteristics of Kenyan Rice Husk Ash Produced Under Controlled Burning.	International Journal of Engineering Research and technology	November 2021
Mumenya S.	Characteristics of Kenyan Rice Husk Ash Produced Under Controlled Burning.	International Journal of Engineering Research and technology	November 2021
Dulo S.O	Impact of climate change and hydropower development on the community livelihood in Sondu Miriu river basin, Kenya	Journal of sustainable development	February 2022

Research Output

NRF Funded Research

There were two NRF researches as shown in Table 7.1.

Title	Principal Investigator
Development of Novel construction materials & electricity generation systems for selected agricultural waste	Dr. Silphila W. Mumenya
Use of Cow dung as a construction material	Prof S.K. Mwea

Student Research

The department reached a milestone of ongoing 50 researches at the department on 24th February 2022. By the end of May, the number of ongoing researches reached 61 as shown in Table 7.2.

Table 7.2: Ongoing research at the Department.

Title	Principal Investigator
Performance and cost comparisons of Integral Bridge Structures and Non-integral Bridge Structures	Yimam
Assessing Suitability of Plastic Paving Blocks for Construction of Non-Motorised Transport Facilities	Wanjiru
Design flood estimation in ungauged rivers, a case study of Kakia and Esamburmbur watershed in Esankare Narok River Basin.	Okello
Determinants of Pedestrian Safety and Risk Factors at Roundabouts along Uhuru Highway in Nairobi	Oyoo
Evaluation of Defluoridation of Water by Adsorption with Sugarcane Bagasse derived Activated Carbon	Mugambi
Pozzolanic Potentials of Fresh Cow Dung (FCD) and Cow Dung Ash (CDA) for Gravel Roads Construction	Nyagah
Defluoridation of Groundwater by Activated Carbon derived from Water Hyacinth (E. Crassipes) by Phosphoric Acid Activation	Muchunku
Experimental Study on The Influence of Manufactured Sand on The Engineering Properties of Concrete In Mogadishu, Somalia	Abdinafa
The Study of Composite Bridges Under Seismic Forces by Physical Model Methods	Akuku
Pavement Performance Testing of the Newly Constructed Portreitz and Moi International Airport, Mombasa Access Road	Olang'o
Reduction of thermally induced cracks in asphalt using Thermo chromatic pigments in the asphalt	Kangethe
The Effect of Gum Arabic on Concrete Properties Using Crushed Limestone Coarse Aggregate	Haji
Properties of Geopolymer Concrete with the Addition of Bamboo Leaf Ash as a Natural Pozzolanic Material	Hassan
Evaluation of Crack Development and Creep of Lightweight Concrete Containing Tuff Aggregates	Mariita
Effect of Bacillus subtilis Bacteria on Mechanical Properties and Crack Remediation of Limestone Calcined Clay Cement Concrete	Odhiambo

Title	Principal Investigator
Study of On-Road Traffic Emissions in varying Traffic Flow Dynamics, A case of Karura Section of Kiambu Road	Odiwuor
Evaluation of Urban Traffic Emissions Along Dagoretti Road	Musili
Performance and capacity evaluation of roundabouts in Kisumu city using the Highway Capacity Manual 6th edition Model	Olang
Effects of Construction Delays in Road Projects on Quality of Work. Case Study: Bhachu Service Road Km 0+025 - 0+560 (Athi River - Machakos Turnoff Road, A109. Second Carriage Way)	Lamaon
Performance of Plastic Waste and Waste Engine Oil as Partial Replacement of Bituminous Asphalt Concrete in Flexible Pavement	Ogada
Impact Of Heterogeneous Traffic Conditions on Vehicular Emissions Along Jogoo Road	Okebe
Visual Evaluation of The Performance Of Thika Magumu Road Pavement Surface Condition Survey And Analysis	Yvone
Study of Vehicular Emissions Profile Along Argwings Kodhek Road, Hurlingham	Kerubo
Effects of Incorporating Waste Plastic Bottles (Pet) As an Additive on Bituminous Mixture	Kiptoo
A Correlation Analysis of Vehicular Traffic Conditions and On-Road Emission Trends Along the Nairobi Southern Bypass	Mohammad
Assessing Deployment of Emerging Innovations and Technologies in Catalysing Sustainable Water Services Provision in Nairobi City County, Kenya: Case of Soweto Kayole Jisomee Mita	Obunga
Effects of Aloe Vera Mucilage as a Superplasticizer on the Performance of Self-consolidating Concrete	Nyabuto
Evaluation of Urban Traffic Emissions on Lunga-Lunga Road in Nairobi Industrial Area	Chore
Pavement Evaluation of Kampi Ya Moto-Eldama Ravine-Kamwosor B77 Road	Murambi
Efficacy of County Governments Routine Maintenance Works A Study of Bomet County Unclassified Road Networks	Korir
Urban Traffic Emission Trends Along Naivasha Road (Dagoretti Corner – Uthiru)	Oyugi
Modelling of the Transfer Function of Random Vibrations from Vehicular Movements on Uneven Surfaces	Orwa
A Comparative Study of Earthquake Performance and Material Cost of Braced Tube, Diagrid, Tube-in-tube, and Shear Wall-frame Structures	Grant
Effect of Band Width & Spacing of Fibre Reinforced Polymer Strengthening on Axial Capacity of Non – Slender Square Concrete Columns	Juma
Hydrologic Modelling of Watershed Response to Landcover Change in The Upper Tana Basin	Theuri
Investigation of the Engineering Characteristics of Cinder Gravel as Road Pavement Construction Material in Meru County	Kosgey
Emissions of Vehicular Traffic along Uhuru Highway Corridor in Nairobi	Kaunda
Simulation of Water Demand and Supply using WEAP Model Case study: Naro Moru River Basin	Ogao

Title	Principal Investigator
Impact of Urban Traffic Congestion on Emissions Along a Section of James Gichuru Road in Nairobi County, Kenya	Kisimbo
Pedestrian and Public Transport Facilities in Housing Developments in Nairobi, Kenya; A Case Study of Nyayo Highrise Estate	Terigin
Evaluating The Potential of Adopting Waste-to-Energy Strategy in Solid Waste Management in Nairobi County, Kenya	Nyakenyanya
Investigation into the Coherence of Brown Sugar to Impart Desirable Characteristics on Ordinary Portland Cement Subclasses 42.5N and 42.5R Physiochemical and Mechanical Properties	Sitienei
Evaluation of the Performance of Flexible Pavement founded on the Reinforced Earth Sections Along Outer Ring Road, Nairobi	Kirima
Evaluation of Robustness of Water Distribution Networks by varying Peak Factors in Hydraulic Models: Case Study of Mombasa North Mainland Distribution Network	Mugaa
Phytoremediation of Chromium Contaminated Soils using Ricinus Communis Plant	Kemunto
Response Surface Methodology Optimization of Bone Char Defluoridation Using Seed Extract of Moringa Oleifera As Pretreatment	Ngaruro
Recycled Plastic Waste In Production Of Paving Blocks For Construction Of Non-Motorized Transport Facilities	Mapelu
Mechanical Properties of Engineered Timber towards Influencing Building Sector Policies in Kenya	Songok
Assessment of Groundwater Variability in the Mbagathi River Catchment	Ambundo
Pavement Evaluation of Nairobi Southern Bypass Road (Langata Road Interchange to Ngong Road Interchange)	Livingstone
Sediment Transport in River Basin –A case study of Thwake Dam	Maiyo
Assessment of The Application of Water Conservation and Demand Management Strategies - Kakuma Refugee Camp Case Study	Mawira
Assessment of Adequacy of Non-Motorised Transport Facilities in Nairobi’s Urban Roads; Case Study of Dunga Road and Workshop Road	Korir
Effects of Volcanic Tuff Use on The Rheological and Mechanical Properties of Self-Compacting Concrete	Khaoya
Evaluating Superplasticiser Compatibility in the Production of High-Performance Concrete using Portland Pozzolana Cement CEM II B-P	Ofwa
Comparative analysis of structural steel and reinforced concrete construction for sustainable development	Kaaria
A Comparative Study of Reinforcing Bar Splicing: Overlapping and Welding	Kagwiria
Comparative Study of Correlation of Consumptive Water Use and Emissions in Greenhouse and Open Field Irrigation from Vegetable Farms in Kenya	Waweru
Evaluation of Non-Motorized Transport Facilities and Their Usage in Nairobi City	Kituku
Structural Health Monitoring of Bridges: Embedded Sensor-Based Deformation Detection Using FEM and Artificial Intelligence	Okoth
Batch Anaerobic Digestion of Banana Plant Residues For Methane Production	Oyaro

Partnerships

The Department of Civil & Construction Engineering made partnerships with:

1. Framework for Collaboration between Kenya Roads Board and University of Nairobi on Road Transport Research
2. Collaboration Agreement between Kenya National Highways Authority and University of Nairobi.

Opportunities for Improvement

The department can make further improvements in the use of ICT. The department will benefit further from continuous improvement of:

1. The lecturer's module
2. The postgraduate Tracking System.

Department of Electrical and Information Engineering

Introduction

The department runs BSc, MSc, and PhD. programs in Electrical and Electronic Engineering, and MSc program in Nuclear Science and Technology. The undergraduate BSc. program consists of five years of study, and contributes to knowledge in both fundamental and applied areas of Electrical Engineering. It provides a diverse curriculum that instills in our students the skills, talents and creativity necessary for the varied and rapidly changing requirements. This enables them to serve a wide variety of other fields that require leadership, teamwork, decision making and problem solving abilities.

Courses

Bachelor of Science Course

General

The undergraduate students complete a total of 76 course units distributed as follows (including laboratories):

First Year	- 14	Fourth Year	- 16
Second Year	- 16	Fifth Year	- 14
Third Year	- 16		

Each semester course unit has a total of 45 contact hours including lecturers and tutorials, while a laboratories course unit has 60 hours per semester. The program incorporates a practical "fourth term" internal attachment of eight weeks at the end of the second and third years of study. For the fourth year of study, there is an industrial attachment during the long vacations.

In the course codes, the first integer after FEE denotes the year study. The second integer denotes as far as is possible, the subject area while the last integer denotes the semester in which the course is taught; 1 for the first and 2 for the second semester. Where the last integer is 0 it means that this is a course which is done throughout the two semesters such as the Engineering Project in the fifth year of study.

In order to cover this syllabus, service courses shall be provided by the following Departments.

Master of Science in Electrical and Electronic Engineering

General

The MSc students complete a total of 9 course units in Part I of the program, distributed as follows:

	Common	Option	Total
First Semester	2	3	5
Second Semester	1	3	4
TOTAL	3	6	9

Each semester course unit has a total of 60 contact hours including lectures and tutorials. The students proceed to Part II (Thesis phase) after successfully completing Part I by passing all the course units for their option.

Course codes have the first integer after FEE as 6 denoting Masters. The other digits are applied as shown in the next section.

Master of Science in Nuclear Science and Technology

General

The MSc students complete a total of 12 course units in Part I of the program, six for each semester. Each semester course unit has a total of 60 contact hours including lectures and tutorials. The students proceed to Part II (Thesis phase) after successfully completing Part I by passing all the course units for their option.

Student Enrolment

i) Undergraduate

	Male	Female	Total
First Year	74	17	81
Second Year	80	20	100
Third Year	65	20	85
Fourth Year	64	16	80
Fifth Year	66	27	93
Total	349	100	449

ii) Masters

	Male	Female	Total
First Year	5	3	8
Second Year	13	7	20
Total	18	10	28

iii) Doctor of Philosophy

	Male	Female	Total
Enrolled	16	3	19
Total	16	3	19

iv) International Students

	Male	Female	Total
Undergraduate	6	0	6
Masters	2	0	2
Doctor of Philosophy	1	0	1
Total	9	0	9

Numbers of Graduands

i) Undergraduate

	Male	Female	Total
Graduated	97	24	121

ii) Masters

	Male	Female	Total
Graduated	5	3	8

iii) Doctor of Philosophy

	Male	Female	Total
Graduated	1	0	1

Research

Publications

Some of the reported journal publications in 2021 are listed below.

Name of Author(s)	Article Title	Journal	Vol. No and Pages
Stephen Kiambi, Elijah Mwangi and George Kamucha	PAPR Reduction in MIMO-OFDM Systems Using Low-Complexity Additive Signal Mixing	Journal of Communications	Vol. 16(11), pp. 468-478
Ronoh Kennedy and Kamucha George	TV White Space Network Power Allocation Using Hybrid Grey Wolf Optimizer with Firefly Algorithm and Particle Swarm Optimization	WSEAS Transactions on Communications	Vol. 20, pp. 66-75
K.V. Rop, P.K. Langat, H.A. Ouma	Spectrum Sensing on High Density Cognitive Radio Vehicular Ad Hoc Network	Journal of Communications (JCM)	Vol. 16 No. 7, pp 259-266
Amolo, W., Musau, P. and Nyete, A	Optimal Placement of Reclosers to Minimize Power Losses during Non-Load Bearing Disturbances in a Power Distribution Using Firefly Algorithm	Journal of Power and Energy Engineering	Vol.9 No.5, pp. 63-75
Abraham M. Nyete	Effective and median effective earth radius factor distribution characterization for microwave link design applications	International Journal of Engineering Research & Technology	Volume 10, Issue 3, pp. 110-118
Abraham M. Nyete	Power Line Noise Measurements and Analysis in an Indoor Environment	International Journal of Scientific and Engineering Research (IJSER)	Volume 12, Issue 3, pp. 155-163
Brenda Jerop, Davies Segera	An Efficient Pca-Ga-Hksvm-Based Disease Diagnostic Assistant	Biomedical Research International	N/A
Enock Momanyi, Davies Segera	A Master-Slave Binary Grey Wolf Optimizer for Optimal Feature Selection in Biomedical Data Classification	Biomedical Research International	N/A
Peter Mule, Davies Segera	Hybrid Gradient Descent Grey Wolf Optimizer for Optimal Feature Selection	Biomedical Research International	N/A

6.2 Research Projects and Grants

Principal Investigator (PI)	Co-PIs (UoN)	Funder	Funder's Country	PI Institution	Start Date	End Date
Wilson Macharia Kairu	Susan Waiyego Karuga	International Atomic Energy Agency	Austria	University of Nairobi	May-19	Apr-23
Wilson Macharia Kairu	John Kiprotich Birir	International Atomic Energy Agency	Austria	University of Nairobi	2017	2021
Prof. Erik Kelder	Prof. Michael Gatari, Ms. Lindah Kiriinya	Shell - Netherlands	The Netherlands	Delft University of Technology	Sep-20	Sep-2024

Prof. Mwangi Mbuthia	Dr. Mutugi Kiruki (Project Manager)	Kenya Space Agency (KSA)	Kenya	University of Nairobi	Oct 2020	Nov 2021
John Birir	Prof. Micghael Gatari, Prof. Sixtus Mwea	NRF	Kenya	University of Nairobi	2020	2022
A. Faris	Peter Akuon,	AfDB	Kenya	University of Nairobi	Feb-21	Feb-2022
Peter Akuon		NRF	Kenya, South Africa	University of Nairobi	2017	2021
Peter Akuon	Tom Oloo	KENET	Kenya	University of Nairobi	2020	2021
Prof. Eng. Ayub Gitau	Dr. G.N. Kamucha	Innovate UK	UK	University of Nairobi	2022	2025
K. Wachira	H. A. Ouma, B.O. Ojwang	Energy Saving Trust	United Kingdom	University of Nairobi	Jun-20	Jun-2022
H.A. Ouma	K. Wachira, O. Ondeng	KENET	Kenya	University of Nairobi	Aug-20	Jun-2021

6.3 Students Receiving Excellence Awards

Student Name	Award	Details
Einstein Lewick Otieno	First Class Honors	BSc (Electrical & Electronic Engineering)
Gachine Alvin	First Class Honors	BSc (Electrical & Electronic Engineering)
Ghariba Ali Khamis	First Class Honors	BSc (Electrical & Electronic Engineering)
Maina Milcah Wangui	First Class Honors	BSc (Electrical & Electronic Engineering)
Maulid Alfani Kitoweo	First Class Honors	BSc (Electrical & Electronic Engineering)
Mjomba M Delvan	First Class Honors	BSc (Electrical & Electronic Engineering)
Muguai Clinton	First Class Honors	BSc (Electrical & Electronic Engineering)
Ndungu Simon Mbugua	First Class Honors	BSc (Electrical & Electronic Engineering)
Njoroge Brian Muthomi	First Class Honors	BSc (Electrical & Electronic Engineering)
Ochieng Amondi Viola	First Class Honors	BSc (Electrical & Electronic Engineering)
Odhiambo J. Akinyi	First Class Honors	BSc (Electrical & Electronic Engineering)
Oduor Joseph Otieno	First Class Honors	BSc (Electrical & Electronic Engineering)
Otieno Humphrey	First Class Honors	BSc (Electrical & Electronic Engineering)
Pindoria Khilna Premji	First Class Honors	BSc (Electrical & Electronic Engineering)
Wanjiru Diana Njeri	First Class Honors	BSc (Electrical & Electronic Engineering)

7. Departmental Full-Time Staff

As at 2021, the department had 48 academic staffs in the following grades

Associate Professor	- 5	Technical Staff	- 16
Senior Lecturer	- 2	Senior Admin Assistant	- 1
Lecturer	- 7	Assistant Reg. Supervisor	- 1
Tutorial Fellow	- 8	Secretaries	- 2
Graduate Assistant	- 5	Cleaner	- 1

7.1 Academic Staff List

Chairman of Department

George N. Kamucha: BTech, (Moi), MSc, (Aberdeen), PhD, (Kassel), MIEEE

Associate Professors

Elijah M. Mwangi: BSc Eng, MSc, (Nairobi), PhD, (Loughborough), MIEE, CEng.

Vitalice K. Oduol: B.Eng, MEng, PhD, (McGill), MIEEE

Jackson M. Mbutia: BSc, (Nairobi), MSc, D.I.C., PhD, (UMIST), REng

Heywood O. Absaloms: BSc, (Nairobi), MEng(UTS), PhD, (Kanagawa), SMIEEE

Michael J. Gatari: HND, (TUK), MPhil, (Chalmers), PhD, (Gothenburg)

Senior Lecturers

George N. Kamucha: BTech, (Moi), MSc, (Aberdeen), PhD, (Kassel), MIEEE

Wilfred N. Mwema: BTech, (Moi), MSc, (Nairobi), Dr.-Ing., (Kassel), MIEEE

Lecturers

Collins O. Ombura: B.E, (Mangalore), ME, (IIT-Delhi)

Victor Kyalo: BSc, (Nairobi), MEng, (Eindhoven), MIEEE, REng

Savero L. Ogaba: BSc, (Makerere), MSc, (Loughborough)

Peter O. Akuon: BSc, (Nairobi), MSc, PhD, (Kwazulu-Natal)

Peter M.M. Musau: BSc, MSc, PhD, (Nairobi)

Abraham M. Nyete: BSc, (Nairobi), MSc, PhD, (Kwazulu-Natal)

Michael J. Mangala: BSc, MSc, (Nairobi)

Tutorial Fellows

Sayyid A. Ali: BSc, (Nairobi), MSc, (Pretoria), PhD, (Nairobi-ongoing)

Oscar R. Ondeng': BSc, MSc, (Nairobi), PhD, (Nairobi-ongoing)

Davis Rene Segera BSc, MSc, PhD, (Nairobi)

Cosmas M. Kiruki: BSc, MSc, (Nairobi), PhD, (Kyushu)

Lindah K. Kiriinya: BSc, MSc, (Nairobi), PhD, (Nairobi-ongoing)

Susan W. Karuga: BSc, MSc, (Nairobi), PhD, (Nairobi-ongoing)

John Kiprotich Birir: BSc, MSc, (Nairobi), PhD, (Nairobi-ongoing)

Wilson M. Kairu: BSc, (JKUAT), MSc, (Nairobi), PhD, (Nairobi-ongoing)

Graduate Assistants

Gevira O. Otieno: BSc, MSc, (Nairobi) PhD, (Kwazulu-Natal-ongoing) (*On Study Leave*)

Kinyua Wachira: BSc, MSc, (Nairobi), PhD, (Nairobi-ongoing)

Benson Onyango Ojwang: BSc, (Nairobi), MSc

Faris Abdulrahman: BSc, (Nairobi), MSc, (Nairobi-ongoing)

James Murithi: BSc, (Nairobi), MSc, (Nairobi-ongoing)

7.2 Technical Staff List

Chief Technologist

Tom O. Oloo: Dip., (TUM), BSc, (Egerton), MBA, (Nairobi-ongoing)

Alice W. Wahome: HND, (TUK), MSc, (Egerton)

Christopher N. Waweru: Dip, HND, BPhil, (TUK), MSc, (KU-ongoing)

Boniface W. Munyole: Dip, HND, (TUK), BSc, (Dekut-ongoing)

Simion K. Bartilol: HND, (TUK), MSc, (KU)

Senior Technologist

Celestine K. Philip: Dip, (RTI), HND, (RTI), BPhil, (TUK), MSc, (Nairobi)

Edwin N. Rukenya: Dip, (Muranga), HND, (TUK), BPhil, (TUK)

Edwin K. Rotich: Dip, (Eldoret), HND, (TUK), BSc, (Dekut-ongoing)

James K. Kinuu: Dip, (Kiambu), HND, (TUK)

Winnie W. Ngugi: Dip, (TUK), HND, (TUM), BPhil, (TUK), MSc, (Murang'a-ongoing)

Dunn N Muraba: HND, (TUK)

Mathias M. Mailu: Dip, (KIMC)

Technologists

Martin W. Wanyoike: Dip, (TUM), BSc, (Dekut-ongoing)

Wilfred S. Meshami: Dip, (Kenya Navy), Dip, (Defence FTC), BSc, (Dekut-ongoing)

Daniel Njoroge: Dip, (TUK)

7.3 Senior Administrative Assistant

Josephine R. Ounza

7.4 Assistant Registry Supervisor

Catherine Mueni

7.4 Secretaries

Magdalene M. Wanduka

Elizabeth A. Okello

Key Events

- April, 2021** - Cosmas Kiruki and James Murithi were appointed as graduate assistants.
- May, 2021** - George Kamucha was re-appointed the Chairman of the department for a second term of three years.
- June, 2021** - The Kenya Space Agency (KSA) visited the Nanosatellite Platform for the University of Nairobi (NaSPUoN) team for progress review of the project. The NaSPUoN team demonstrated the nanosatellite operation to the visiting team at the UoN Towers Rm 401.
- July, 2021** - The programme of MSc in Nuclear Science and Technology was moved to the department from the Institute of Nuclear Science and Technology.
- October, 2021** - On 14th October 2021, KSA organized a practical demonstration and presentation by all the 5 participating universities at the Konza Technopolis City. KSA provided a drone to fly the various nanosatellite and evaluate their performance, including establishing communication link with the ground terminals. NaSPUoN operated successfully from the drone and was able to complete both the Camera and LoRa missions by capturing images atop the drone and transmitting them to the ground station, together with the LoRa data.
- November, 2021** - After the demonstration at Konza and evaluation by a panel of judges, KSA organized an awards ceremony on 16th Nov 2021 at Movenpick Hotel, Nairobi. The University of Nairobi (NaSPUoN) team emerged the Overall Winner of the year-long Nanosatellite Development research project, beating 4 other public universities that included JKUAT, Moi, KU & TUK.

Department of Environmental and Biosystems Engineering

Grants

The department received a grant from the Kenya Space Agency for Small Scale Crop Mapping Research

Curriculum Review

The Bachelor of Science Biosystems curriculum was revised and approved by the University of Nairobi Senate on 30th June 2021

Publications

Author	Title	Journal	Period
V. Too*, C.T. Omuto*, E.K. Biamah*, J.P. Obiero*	Analysis of soil water retention characteristics (SWRC) models using R computer program	Modeling Earth Systems and Environment https://link.springer.com/journal/40808	Aug, 2021
V. Too*, C.T. Omuto*, E.K. Biamah*, J.P. Obiero*	Performance Evaluation of The Popular SWRC Models at Different Soil Bulk Density Ranges	Journal of Engineering in Agriculture and the Environment https://doi.org/10.37017/jeae-volume7-no2.2021-4	Oct, 2021
A.K. Luvai*, J.P.O. Obiero*, C. T. Omuto*	Sediment Discharge Analysis for a Seasonal Stream (A Case Study of Maruba Stream, Machakos, Kenya)	International Journal of Engineering Research & Technology (IJERT)	Aug, 2021
J. Ndisya*, A.N. Gitau*, D.O. Mbuge*, A. Arefi, L. Bădulescu, E. Pawelzik, O. Hensel, B. Sturm	Vis-NIR Hyperspectral Imaging for Online Quality Evaluation during Food Processing: A Case Study of Hot Air Drying of Purple-Speckled Cocoyam (<i>Colocasia esculenta</i> (L.) Schott)	Processes, Multidisciplinary Digital Publishing Institute	Oct, 2021

Staff in the Department of Environmental and Biosystems Engineering

Names	Qualifications (include year awarded)	Designation	Specialization (Engineering)
Prof. Elijah Kipngetich Biamah	Dip. Agric. Eng. (Egerton, 1974), BSc., Agric. Eng. (Oklahoma, 1981) MSc. (Oklahoma, 1983) PhD (Wageningen, 2002), IEK, MASABE, MWASW	Associate Professor	Water and Irrigatio
Eng. Prof. Ayub Njoroge Gitau	BSc. Agric. Eng. (Egerton, 1990), MSc. (Nairobi, 1994), PhD (Nairobi, 2004) R. Eng. MIEK, MKENDAT, MKeSEBAE, MASABE	Associate Professor	Power and Machinery
Eng. Dr. Duncan Onyango Mbuge	BSc. Agric. Eng. (Egerton, 1996), MSc. (Nairobi, 2000); PhD (Nairobi, 2009) R. Eng., MIEK MKeSEBAE	Senior Lecturer	Food and Process
Eng. Daniel Amedi Mutuli	BSc. Agric. Eng. (Nairobi, 1980), M.Phil. (Newcastle Upon Tyne, 1988) MIEK, MASABE, MIAgrE, MCE (Britain)	Senior Lecturer	Processing & Structures
Eng. Joackim Mukumbu Mutua	BSc. Agric. Eng. (Nairobi, 1990), MSc. (Nairobi, 1994) REng, MIEK, MASABE, (PhD Ongoing).	Senior Lecturer	Food and Process
Dr. Muthumbi Wa Waweru	BSc. Mech. Eng. (Nairobi, 1989) MSc. (Ghent University Belgium, 1997), PhD, (Ghent University, 2002)	Senior Lecturer	Energy & Environment
Dr. John Paul Odhiambo Obiero	BSc. Agric. Eng. (Egerton, 1990), MSc. (Nairobi, 1994), PhD (Nairobi, 2013) MKeSEBAE, MUONAA	Senior Lecturer	Water and Irrigation
Mr. Albert Kenyani Inima	BSc. Agric. Eng. (Nairobi, 1984), MSc, (University of Dare-es-Salaam, 1991) MKeSEBAE, MALIN, MIAH, MKMS	Lecturer	Waste Water & Environment
Mr. Stephen Conrad Ondieki	Dip. Soil & Water Eng., (Egerton, 1988), (BSc. Agric. Eng. (Egerton, 1996), MSc, (Dar-Es-Salaam, 1999) MKeSEBAE	Lecturer	Water Resources
Dr. Christian Thine Omuto	BSc. Agric. Eng. (Egerton, 1998), MSc, (Nairobi, 2004), PhD (Nairobi, 2008)	Senior Lecturer	Water and Irrigation
Mr. Januarius Ondiek Agullo	BSc. Agric. Eng. (Nairobi, 2005), MSc, (Nairobi, 2000), PhD, (Ongoing)	Lecturer	Processing & Structures
Mr. Peter Kangethe Kimani	BSc. Env. and Biosystems Eng. (Nairobi, 2010), MSc. (Nairobi, 2016) PhD (Ongoing)	Tutorial Fellow	Processing & Structures
Ms. Dorcas Ndunge Benard	BSc. Env. and Biosystems Eng. (Nairobi, 2009), MSc. (Nairobi, 2018), PhD (Ongoing)	Tutorial Fellow	Irrigation and Drainage
Ms. Angela Wambui Hiuhu	BSc., MSc, (Nairobi 2015)	Lecturer	Power and Machinery
Mr. Alloys Luvai Kioko	BSc., MSc, (Nairobi 2014), PhD (Ongoing)	Lecturer	Processing & Structures
Mr. Simon Thuku Mwangi	BSc, MSc. (Nairobi, 2018)	Lecturer	Power and Machinery

Mr. Johannes Oropi Odhiambo	Dip. Farm Power and Machinery, (Egerton, 1985), BSc. Agric. Eng. (Egerton, 1993), MSc, (Nairobi, 2008), MKeSEBAE, PhD (Ongoing)	Principal Technologist	Water and Irrigation
Mr. Wilfred Mushogo Wamutitu	Trade Test Grade I, AutoCAD, Computer Packages	Technologist	Machinist
Mr. Boniface Anyika Muliro	Dip. Env. Resource Mgt., Computer Packages	Technologist	Water and Irrigation
Ms. Annrose Nyambura Mwangi	B.A. Geography, Dip. Env. Resource Mgt., GIS, Computer Packages	Senior Technologist	GIS
Mr. Robert Mwangi Mathenge	Cert. Mech. Eng. (2002), Dip. Mech Eng, AutoCAD, Civil 3D (2008), Computer Packages (2005)	Senior Technologist	Material Testing, Eng. Graphics, Graphic Design
Mr. Eliakim Mwamzi Mwachoni	Dip. Instrumentation (KDF)	Technologist	Instrumentation
Ms. Consolata Wairimu Mwangi	Dip. Computer studies (KIST), Dip. Tech Training (KTTC) B.Sc. Information Technology (KCA, 2019)	Technologist	ICT
Ms. Charity Kwamboka Onsongo	Dip. Civil Eng. Part 1 (2016)	Trainee Technologist	Processing and structures
Mr. Haron Onkundi Nyaberi	Cert. Automotive Eng. (Kamiruthu Poly, 2017) Grade Test II (Uthiru Vocational Training, 2018) Dip. Automotive Eng. (Ongoing- KIPS)	Driver	Power and Machinery

Department of Geospatial and Space Technology

1. Introduction

The Department of Geospatial and Space Technology changed its name from the Department of Surveying in 2004. It comprises three main thematic areas namely; Geodetic Science, Remote sensing and Photogrammetry and Hydrographic mapping.

Geospatial Engineering is a professional discipline concerned with the measurement, analysis and graphic representation of dimensional geo-spatial relationships, as well as with design, construction, maintenance, and the use of geospatial databases. It has its roots in surveying and mapping and encompasses the specialized areas of geodesy, surveying, topometry, hydrography, geoinformatics and navigation.

The Mandate and Strategic Issues

The Mandate of the Department is Teaching and Learning, Research and Innovation, Consultancy and Community Service.

It is my responsibility to provide the required leadership in designing suitable plans and strategies that will contribute to high and sustainable socio-economic development. It is my undertaking to ensure that the Department has a credible Annual Work Plan based on the corporate strategic plan and performance contract that will deliver the desired goals.

It is also my undertaking that I will perform my responsibilities diligently and to the best of my abilities to support the achievement of the agreed performance targets.

Vision, Mission and Strategic Objectives

Vision - “To be committed to scholarly excellence, consistently producing competitive graduates equipped with the cutting edge technology in the field of Geospatial Engineering”

Mission - To provide quality university education, training and research in the field of geospatial and space technology so as to produce internationally competitive geospatial engineers by equipping them with the necessary skills and knowledge through lectures, research, tutorials, practicals and field visits/industrial attachments.

Strategic Objectives

1. To manage the Department efficiently
2. To grow the Department’s resource base and enhance productivity
3. To produce quality and holistic graduates in the field of geospatial Engineering.
4. To contribute to the development of society through creation, storage, application and dissemination of knowledge
5. To enhance the competitiveness and image of the Department
6. To enhance value-adding partnerships and collaborations

The Department continues to offer both undergraduate and postgraduate degree programs in the field of geospatial technology.

2. Programs Offered

The Department offers the following approved programs:

- a) Undergraduate: - BSc. Geospatial Engineering
- b) Graduate (Masters): - MSc. in Geographical Information System
- MSc. in Geospatial Engineering (Under Review)
- c) PhD. in Geographic Information Systems (By thesis)
- d) PhD. in Geospatial Engineering (By thesis)

The courses offered within the undergraduate programs are

3. Student Enrolment

There were 305 students enrolled in various degree programmes in the Department and distributed as follows:

a) Undergraduate	b) Postgraduate (MSc. GIS)	c) Doctor of Philosophy
First Year - 68	First Year - 8	PhD - 4
Second Year - 56	Second Year - 16	
Third Year - 57		
Fourth Year - 48		
Fifth Year - 48		

4. International Students

There are Six international students in the Department as follows:-

- i) 1st Year - two students, Indian and Sudan
- ii) 4th Year - two students, Tanzanian and Ugandan
- iii) 5th Year - one student, Sudan
- iv) MSc. in GIS - one student from Liberia

5. Number of Graduands

Program	Female	Male	Total
Bachelor of Science (Geospatial Eng.)	21	57	78
Master of Science (GIS)	3	13	16
Doctor of Philosophy	-	-	-

6. Research Activities

Research Interest

Our members continued carrying out research in various fields as outlined below:

- Mulaku, G.C.;** - Flooding of Lake Nakuru National Park and Its Effects on the Resident Wildlife
- GIS Assessment of Environmental Footprints of the Standard Gauge Railway (SGR) on Nairobi National Park, Kenya
- Kiema, J. B.** - Predicting Displacement Effects of Tectonic Movements on the Kenyan Geodetic Reference Frame Network (KENREF)
- Karanja, F.N.;** - GIS Team Leader on “Enhancing Resilience Capacities in the Region through the 3PA”
- Team Leader on “A Tracer Study on destination of Engineering Graduates from Public and Private Universities in Kenya
- Earth observation and environmental sensing for climate-smart sustainable agropastoral ecosystem transformation in East Africa - ESSA
- Contribution index of land cover and land surface temperature changes in upper hill Nairobi, Kenya
- Musyoka, S.M.** - Predicting Displacement Effects of Tectonic Movements on the Kenyan Geodetic Reference Frame Network (KENREF)
- Siriba, D.N.** - A Tracer Study on destination of Engineering Graduates from Public and Private Universities in Kenya
- Towards a GNSS Data Accuracy Standard for Georeferencing
- Renewing Kenya’s Vertical Datum as an Integral Part of KENREF through the Definition of a Local Geoid Model
- From Surveying to Geospatial Engineering: Redefining Competencies of a Contemporary Kenyan Surveyor
- Predicting Displacement Effects of Tectonic Movements on the Kenyan Geodetic Reference Frame Network (KENREF)
- Mwange, C.M.** - Enhancing Resilience Capacities in the Region through the 3PA”
- Betsy Mugo** - Platform for the University of Nairobi(NaSPUoN) Funded by Kenya Space Agency
- Matara, S.M.** - Predicting Displacement Effects of Tectonic Movements on the Kenyan Geodetic Reference Frame Network (KENREF)
- Asala L.** - Enhancing Resilience Capacities in the Region through the 3PA”

7. International Links and Collaborations

World Food Programme (WFP) Regional Bureau and Universities in Africa - Enhancing Resilience Capacities in the Region through the 3PA”

Finland- Earth observation and environmental sensing for climate-smart sustainable agropastoral ecosystem transformation in East Africa - ESSA

ERAFRICA University of Pretoria (Project Coordinator), Swiss Federal Institute of Technology & Technical University of Berlin -MAXess - Measuring Accessibility in Policy Evaluation

UNESCO- Mapping the geographic spread of the UNESCO/GoK STEM Mentorship Camps, analysis of the impact and attitude of students and teachers who have gone through the program, views from the education officials, academic institutions and industry. Capacity building

Eastern Africa Land Administration Network (EALAN) - Promoting and improving Land Administration Education/ Training and Research in the Eastern Africa region through collaboration with academic partners (12 universities)

Karlsruhe University of Applied Sciences Germany and University of Pretoria - Cognitive Geomatics - Digital teaching to create awareness of intercultural differences in sense of place using Germany, South Africa and Kenya as case studies

Transforming Institutions to Advance women leaders in Science Technology Engineering and Mathematics (SISTARS): Lessons from Ghana and Kenya-IDRC GIST

8. Publications

Hongo P.O. and Mulaku G.C. (2021) Flooding of Lake Nakuru National Park and its effects on the resident wildlife.

Ambani M.M. and Mulaku G.C. (2021) GIS assessment of environmental footprints of the standard gauge railway (SGR) on Nairobi National Park, Kenya

Mwangi, P.W., Karanja, F.N., Kamau, P.K. and Letema, S.C., 2021. Contribution Index of Land Cover and Land Surface Temperature Changes in Upper Hill Nairobi, Kenya. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 3, pp.141-149.

Sammy Mwangi MATARA, David Nyang’au SIRIBA, John B.K. KIEMA, and Sammy Mulei MUSYOKA, Kenya. (2021), Predicting Displacement Effects of Tectonic Movements on the Kenyan Geodetic Reference Frame Network (KENREF)

Lengoiboni M, Katcho Karume, Siriba D, Ssengendo R, Potel J, Lemmen C, Zevenbergen J. “Strengthening the Eastern Africa Land Administration Network (SEALAN) project in enhancing inter-university Collaboration in land administration Eastern Africa.” *African Journal on Land Policy and Geospatial Sciences*. 2021;4(1):143-161

Siriba DN. “Towards a GNSS Data Accuracy Standard for Georeferencing.” *Kenya Surveyors’ Journal*. 2021;2021:5

Karanja, F.N., 2021. Geo-Intelligence for Ecosystem Services in Poverty Alleviation and Food Security. In *Geo-intelligence for Sustainable Development* (pp. 65-81). Springer, Book Chapter

9. Consultancies

- i) A Tracer Study on destination of Engineering Graduates from Public and Private Universities in Kenya - MoE
- ii) 1UNanosatellite Platform for the University of Nairobi (NaSPUoN) Funded by Kenya Space Agency (KSA)
- iii) MAXess - Measuring Accessibility in Policy Evaluation
- iv) Generating a National Integrated Context Analysis Report and three pilot Urban Integrated Context Analysis for Nairobi, Mombasa and Kisumu. This will inform programs on food security. Capacity building - WFP
- v) Carrying out Rural and Urban Seasonal Livelihood Programming for Kitui and Kisumu respectively. This will inform programs on food security and Capacity building - WFP

10. Staff Establishment

Names	Designation	Status
Prof. Galcano C. Mulaku	Professor	
Prof. John Bosco K. Kiema	Ass. Professor	
Dr.-Ing. Sammy M. Musyoka	Senior Lecturer	
Prof. Faith N. Karanja	Ass. Professor	
Dr.-Ing. David N. Siriba	Lecturer	
Mr. Peter C. Wakoli	Lecturer	
Mr. Benson M. Okumu	Lecturer	
Mr. Sammy M. Matara	Tutorial Fellow	
Mr. Livingstone Asala	Tutorial Fellow	
Ms. Betsy Makena Mugo	Tutorial Fellow	
Ms. Marion Mwaniki	Tutorial Fellow	
<i>Prof. Francis W. O. Aduol</i>	<i>Professor</i>	<i>Leave of Absence</i>
<i>Mr. David K. Macoco</i>	<i>Senior Lecturer</i>	<i>Retired</i>
<i>Dr. David Nyika</i>	<i>Lecturer</i>	<i>Retired</i>
<i>Mrs. Tabitha M. Njoroge</i>	<i>Lecturer</i>	<i>Retired</i>
<i>Mr. Jasper N. Mwenda</i>	<i>Lecturer</i>	<i>Terminal Leave</i>

The department had 22 in the following grades

Professor	- 2	Senior Technologist	- 3
Associate Professor	- 2	Technologist	- 1
Senior Lecturer	- 1	Senior Administrative Assistant	- 1
Lecturer	- 2	Secretary	- 1
Graduate assistant	- 0	Clerk	- 1
Tutorial Fellow	- 4	Office Assistant	- 1
Principal Technologist	- 0	Driver	- 1
Chief Technologist	- 1	Cleaner	- 1

11. Staff Portfolio

Lecturers

Technical Staff

Names	Designation	Status
Mr. Stanley Omucheni Matende	Chief Technologist	
Ms. Regina Wambui Ng'ang'a	Snr. Technologist DEF	
Mr. Harrison Njeru Nthiga	Technologist ABC	
<i>Mr. Naftali Arodi Oyugi</i>	<i>Snr. Technologist DEF</i>	<i>Retired</i>
<i>Mr. Erick Dzanga Mwandongo</i>	<i>Snr. Technologist DEF</i>	<i>Terminal Leave</i>

Administrative Staff

Names	Designation	Status
Ms. Carolyne Achieng Odundo	Snr. Administrative Asst.	
Ms. Catherine Wakere Njeru	Clerk	
Mrs. Felistar Nyambura Muchai	Secretary	
Mrs. Serebina N. Nyabwari	Cleaner	
Mr. Bob Kirinya Gogo	Office Asst.	
Mr. Mizpah Mutiso Ndambuki	Driver	
Mrs. Winnie Nduku Kimeu	Secretary	Retired

13. Opportunities for Improvements

Departmental Areas of Concern

The Department has experienced tremendous growth over the past years in terms of student population. In addition the Department offers service courses to other departments namely Civil and Construction Engineering, Environmental and Biosystems Engineering, Real Estate, Construction, Architecture and Geology which have also experienced growth in student population.

The main issues of concern revolve around staff, Laboratory Spaces, laboratory and field equipments, Lecture Rooms and Office Spaces.

- a) **Academic Staff:** At the moment the department has 13 academic staff members, one on leave of absence, one on terminal leave and 4 Tutorial Fellows. Three of the staff members are due to retire in the next two to three years upon attaining the retirement age of 70 years. The department has been relying on part-time lecturers which is not sustainable.
- b) **Technical Staff:** The technical component entails conducting field work and laboratory exercises. According to international standards, effective field exercises require one technologist to handle a maximum of 3 groups of 5 students. Taking a class of 60 students this translates to 12 groups requiring 4 technologists. The Department has lost 4 Technologists, 1 due to retirement and 2 resigned to join other institutions, 1 who was our Principal Technologist resigned to pursue personal interests. One retired leaving the department with only 3 technologists.
- c) **Labs:** Inadequate in terms of space, equipments and furniture. There is need for re-modelling, furnishing and adding more computers in E115 to optimize on the space. AW 408 which serves as a staff meeting room, lab as well as lecture room for MSc program requires the floor to be redone and re-furnished.
- d) **Field Equipments:** These are inadequate and therefore unable to conduct effective field work for our own students and for the other service departments' which have many students like Civil Engineering. Having adequate and state of the art field equipments would enable the department to also do research and consultancies thus generating money for the university.
- e) **Lecture Rooms:** Since the taking over of FSJ by Petroleum Department, the department was assigned AW 403, but we have been experiencing conflicts of interest in the room usage with Electrical Engineering Fifth Years. Our Student numbers has also been increasing and we require a sustainable solution.
- f) **Maintenance of Lecture Rooms:** This includes among others sitting benches, sockets, and cleanliness.
- g) **Staff Rooms:** Issues of worn out floors e.g. AW 300a and 300b, painting, internet cabling, cleanliness, furniture, staff office computers to be considered.
- h) **Lighting:** At the entrance of the American Wing for security purposes.

FACULTY OF HEALTH SCIENCES

Department of Anaesthesia

Vision - To be a centre of excellence committed to provision of world class anaesthesia and critical care training, research and quality care.

Mission - To train high quality health care anaesthesiologists; carry out creative and innovative research to address current and emerging anaesthesia and critical care challenges; set, promote and apply international standards in evidence based anaesthesia and critical care provision and be at the forefront of national and global anaesthesia and critical care policy formulation.

Objectives

1. To train in teaching, research and anaesthesia healthcare delivery systems.
2. To produce Anaesthesiologists with requisite knowledge and skills for provision of holistic health care.
3. To generate, disseminate and preserve new knowledge and skills relevant to anaesthesia and critical care provision.
4. To conduct continuing education, instil requisite skills and discipline expected of ethical service driven graduates for provision of anaesthesia and critical care services.

Core Values

1. Espouse and impart virtues of professional ethics and high moral standards in research and practice.
2. Espouse truth, honesty, integrity, tolerance and accountability.
3. Promote evidence based health-care provision.
4. Provide leadership in setting National and International Health Agenda.
5. Promote innovative research for benefit of human kind.
6. Promote meritocracy and team work in research and practice.
7. Nurture response professionalism through mentorship programs.
8. Promote gender sensitivity in training, research and practice.
9. Promote sensitivity and responsiveness to environment.
10. Promote good management of resources in training, research and practice.

Departmental Management Team

The Department of Anaesthesia is headed by a Chairman and Lecturers who were also Supervisors of various levels of academic programmes during the 2020/2021 Academic year as follows;

Chairman - Dr. Patrick R. Olang

Course Coordinators

MMed Anaesthesia Year I	- Dr. Caroline M. Mwangi
MMed Anaesthesia Year II	- Dr. Patrick R. Olang
MMed Anaesthesia Year III	- Dr. Thomas M. Chokwe
MMed Anaesthesia Year IV	- Dr. Antony P. Gatheru
MBChB Level VI	- Dr. Timothy M. Mwiti
Paediatric Anaesthesia Fellowship/Paediatric Surgery/BDS II	- Dr. Vernon M. Gacii
Examinations Coordinator/ Customer Care	- Dr. Antony P. Gatheru

Message from The Chairman

The Department of Anesthesia of the University of Nairobi offers the main focal point of training in critical spectra of medicine. Anaesthesia has evolved as a major specialty in facilitating care and progressively developed multiple lines of engagement.

Basic anesthetic training is offered to undergraduate students from School of Medicine and School of Dental Sciences, while exposure and clinical placement is facilitated for multiple postgraduate programs from Departments with strong surgical and clinical alignments. These include the Departments of Medicine, Pediatrics & Child Health, Obstetrics & Gynecology, Surgery and Otorhinolaryngology as well as Orthopedics.

The core program mounted by the department is the four year Master of Medicine in Anaesthesia which currently has an enrolment of 52 students and a fairly intensive one year Fellowship in Pediatric Anaesthesia which has significant international impact and support .

Apart from pediatric anesthesia, multiple subspecialty areas of focus are managed from the department which in sum total avail the holistic and quality care approach to anesthetic management. These thematic areas include Critical Care, Pain Management & Regional Anaesthesia, Neuro, Cardiothoracic as well as Transplantation Science. Staff in the department have endeavored to strengthen exposure in these subspecialty areas through their own initiative in training and resource mobilization as well as directed learning for the students in our set up.

Curriculum intention in wide exposure and experience for the students has resulted in strong collaboration with external institutions for elective placements and supervision. Many Level V county hospitals now host our three month third year elective rotations with positive feedback from both supervisors and elective residents.

With the establishment of complimentary training programs in the country, we have also endeavored to link the students to their peers through facilitation of The Graduates' in Anesthesia Training (GAT) forums with significant industry support to maintain a positive academic outlook.

Introduction

The Department of Anaesthesia has continued to train Anaesthesiologists at Masters Level graduating 11 of them and 3 Paediatric Anaesthesia Fellowship students in December 2018. The Paediatric Anaesthesia Fellowship programme is supported by the World Federation of Societies of Anaesthesiologists.

These training equips the graduates with skills and competencies to give anaesthesia skills in all surgical specialties, run critical care units, pain management, lead emergency teams and also take their place in all health care professional teams.

The Department also offers clinical care to surgical patients at the Kenyatta National Hospital, University of Nairobi dental Clinic and also services other University programmes in both didactic and clinical teaching including internal Medicine, Paediatrics, Surgical specialties and undergraduate students of MBChB VI and Bachelors of Dental Sciences.

Our main objective in the year 2021 was to train an Anaesthesiologist for each County Hospital in the next 5 to 10 years. We have enrolled and trained students from several County Hospitals including marginalized areas like Turkana, Garissa and Narok.

Programmes Offered

The following programmes are offered by the Department of Anaesthesia at postgraduate levels;

- i) Master of Medicine in Anaesthesia (4 Year Programme)
- ii) Fellowship in Paediatric Anaesthesia (1 Year Programme)

However, the Department also service undergraduate and postgraduate students from the Departments of Surgery, Internal Medicine and School of Dental Sciences as well as diploma students from the Kenya Medical Training College (KMTC) as follows;

- i) Bachelor of Medicine and Bachelor of Surgery (MBChB), and Bachelor of Dental Sciences.
- ii) Critical care Nursing
- iii) HND Anaesthesia - KMTC
- iv) Support programmes for MMed Surgery, MMed Ear, Nose & Throat (ENT), MMed Obstetrics & Gynaecology, Tropical Medicine, Paediatrics & Maxillofacial Surgery.

Enrolled Students in Postgraduate Programmes

The Department held pre entry admission interviews for the various programmes offered in the Department for the 2021/2022 academic year as follows;

Course	No
MMed Anaesthesia Year I	20
Paediatric Anaesthesia Fellowship	4
TOTAL	24

Candidates offered admission in the MMed Anaesthesia programme but deferred for various reasons were 20.

International Students' Component

During the 2020/2021 Academic Year, the Department had 3 International students pursuing Paediatric Anaesthesia Fellowship programme, and 4 students in the MMed program.

Number of Graduates Per Programme

The following table shows the number of graduates for the 2020/2021 academic year from the various programmes in the Department.

Programme	Graduates
MMed Anaesthesia	1
Fellowship in Paediatric Anaesthesia	3
TOTAL	4

Research Activities Undertaken

1. The faculty participated in the Global Perioperative Outcomes Study.
2. The Kenya Surgical Outcomes Study

International Links & Collaborations

a) International Links & Collaborations

- i) World Federation Society of Anaesthesiologists
- ii) The Vanderbilt University
- iii) Jimma University, Ethiopia;

b) Local Links & Collaborations

- | | |
|--|---------------------------------------|
| i) The Kenya Society of Anaesthesiologists | v) The Mater Hospital |
| ii) The Ministry of Medical Services | vi) AIC Kijabe Hospital |
| iii) The Kenyatta National Hospital | vii) The Aga Khan University Hospital |
| iv) The Gertrudes Children Hospital | viii) The Kenya Methodist University |

Publications and Presentations For The Year

	Details	Venue	Period
Workshops			
Dr. Hope, Dr. C. Mwangi	101 Clinical Publication and research workshop	Nairobi	2021
Conference			
Dr. T. Chokwe, Dr. P. Olang, Dr. V. Gacii, Dr. T. Mwitii, Dr. S. Nabalindo, Dr. C. Mwangi, Dr. A. Gatheru	The Annual KSA -CCSK Scientific conference	Nairobi	Aug 2021

2021-Joint Calender Presentation for Department of Anaesthesia

January 2021

15/1/2021: proposal presentation by Dr Joel Matingae- Incidence and risk factors for shivering during spinal anaesthesia in adult patients undergoing elective lower limb orthopaedic procedures.

26/1/2021: Proposal Presentations

1. Dr Eddy Mboya- Physiological and Biochemical Effects of Thoracic Epidural Analgesia in Thoracic and Upper Abdominal Surgery on Perioperative Stress and Morbidity
2. Dr Kiprop Biwott-Assessment of the effectiveness of 0.5% isobaric bupivacaine used in saddle blocks for elective urology and gynaecology procedures t KNH
3. 28/01/2021: Main ICU mortality and morbidity meeting for the year 2020
4. 29/1/2021: proposal presentation by Dr Mwanja - Incidence and factors associated with preoperative anxiety in children 5-12years undergoing surgery at KNH

February, 2021

02/2/2021: proposal presentation by Dr Cynthia Kamau - The association between baseline perfusion index and hypotension following spinal anaesthesia for Caesarean section at KNH

1. 4/2/2021: virtual symposium 1
2. Renal replacement therapy by Dr. Miyogo
3. Anaesthesia and oncology by Dr. Lesley
4. Capnography in critical care by Dr. Abel
5. The business of anaesthesia by Dr. Michira
6. 26/2/2021: Main ICU mortality and morbidity meeting for the month of January

March, 2021

1. 3/3/2021: virtual webinar - criteria for ICU admission by Dr. Chikophe
2. 9/3/2021: virtual webinar - severity scoring systems in the critically ill by Dr. Chikophe
3. 11/3/2021: Theatre morbidity and Mortality meeting for the month of January
4. 18/3/2021: virtual anaesthesia symposium II
5. Anaesthesia in patients with SCD by Dr. Hangalla

6. Obstetric neuraxial block at low platelet count by Dr. Ngoma
7. Complications of TURP for anaesthesia considerations by Dr. Nuahn
8. Rehabilitation of the critically ill patient by Dr. Khadija
9. 19/3/2021: virtual webinar- Equations in critical care by Dr Chikophe
10. 24/3/2021: proposal presentation by Dr. Mwanaisha Abdalla - The Incidence and Risk Factors for Hyponatremia in Severe Traumatic Brain Injury Patients at KNH
11. 25/3/2021: Main ICU Morbidity and Mortality meeting for the month of February.
12. 26/3/2021: virtual webinar - The Handerson Hasselbach Equation - Dr Chikophe
13. 30/3/2021: virtual webinar - Utility of Stewart's Approach in Diagnosis & Management of Complex Acid Base Disorders by Dr Chikophe

April, 2021

1. 1/4/2021: virtual anesthesia symposium III
2. Critical care in pregnancy by Dr. Navniel
3. Anaesthesia in haemophiliac patients by Dr. Kihara
4. Oncological emergencies by Dr. Oloo
5. 6/4/2021: results presentation by Dr John Mwanzia - Assessment of the influence of arterial tourniquet applied during limb surgery on postoperative haemoglobin level at KNH
6. 7/4/2021: proposal presentation by Dr. Frank N. Ngoma-Prospective study on pressure ulcer incidence and risk factors among critically ill patients at KNH
7. 8/4/2021: Theatre morbidity and mortality meeting for the month of February
8. 13/4/2021: results presentation by Dr Bryan Michira - Evaluation of Noise Sources and Levels at the Main Intensive Care Units of Kenyatta National Hospital and The Nairobi Hospital
9. 16/4/2021: virtual webinar - fluid shifts by Dr Chikophe
10. 29/4/2021: Main ICU morbidity and mortality meeting for the month of March

May 2021

1. 6/5/2021: virtual anesthesia symposium IV
2. Pain in the paediatric population by Dr. Odipo
3. Anaesthesia and psychiatric drugs by Dr. Mulatya
4. Anaesthesia in the obese, the pitfall by Dr. Muturi
5. Emergencies in PACU by Dr. Warau
6. 13/5/2021: Theatre morbidity and Mortality meeting for the month of March
7. 18/5/2021: results presentation by Dr Bryan Atandi - A Survey of Perioperative Monitoring Capacity of Major Referral Hospitals in Kenya
8. 25/5/2021: proposal presentation by Dr Namisi - A Survey of Factors affecting turnaround time at the Kenyatta National Hospital main theatres
9. 27/5/2021: Main ICU morbidity and mortality meeting for the month of April
10. 28/5/2021: proposal presentation by Dr Miyogo- Intranasal dexmedetomidine for sedation of paediatric patients during magnetic resonance imaging at the radiology at KNH

June 2021

1. 3/06/2021: Virtual Anaesthesia Symposium-Covid 19 Edition
2. Anaesthesia in ophthalmology by Dr. Nyabuti
3. Assessment of volume status by Dr. Gakuo
4. Monitoring the depth of Anaesthesia by Dr. Mwanzia
5. Anaesthesia in the child with upper respiratory tract infection by Dr. Nanyalo
6. 4/06/2021: Proposal Presentation by Dr. Navniel - Utility of perfusion index to monitor the quality of cardiopulmonary resuscitation.
7. 10/06/2021: Theatre morbidity and mortality Meeting for the month of April

July, 2021

1. 2/07/2021: Proposal presentation by Dr. Khadija -The perioperative care of diabetic patients undergoing elective surgery: a two center study.
2. 8/07/2021: Theatre morbidity and mortality meeting for the month of May
3. 9/07/2021: Proposal presentation by Dr. King- Post operative feeding practices in patients undergoing orthopaedic surgery at Kenyatta National Hospital
4. 23/07/2021: proposal presentation by Dr. Muturi - Adequacy of Acute Post-Traumatic Pain Relief in Adults Presenting with Long Bone Fractures.
5. 27/07/2021: Proposal presentation by Dr. Mulatya - Evaluating quality of handover reporting to PACU nurses at Kenyatta National Hospital: A Cross-sectional study.
6. 29/07/2021: Main ICU morbidity and mortality meeting for the month of June

August, 2021

1. 2/08/2021: Proposal presentation by Dr Kihara - Comparison of loss of resistance syringe to pilot balloon palpation in achieving recommended endotracheal tube cuff pressure: A quasi experimental study
2. 4/08/2021-Proposal presentation by Dr. Odipo-Effect of fluid overload on outcomes among children admitted to the intensive care in Kenyatta National hospital
3. 12/08/2021-Theatre morbidity and mortality meeting for the month of June, Dr. Nuahn and Dr. Namisi
4. 18-20/08/2021: KSA virtual Conference

September, 2021

1. 9/09/2021: Theatre morbidity and mortality meeting for the month of August
2. 16/09/2021: Results presentation by Dr. Mtula Fiona- Gylcemic response to intraoperative dexamethasone in non-diabetic patients undergoing brain tumor surgery at Kenyatta National Hospital.
3. 29/09/2021: Results presentation by Dr. Matingae - Incidence and risk factors for shivering during spinal anaesthesia in adult patients undergoing elective lower limb orthopaedic procedures
4. 30/09/2021: Main ICU morbidity and mortality meeting for the month of August

October, 2021

1. 5/10/2021: Results presentation:
2. Dr. Muthoka-Comparison of intraoperative blood loss measurement by visual estimate verses gravimetric measurement during orthopaedic surgical procedures
3. Dr. Mboya- Physiological and Biochemical Effects of Thoracic Epidural Analgesia in Thoracic and Upper Abdominal Surgery on Perioperative Stress and Morbidity
4. 6/10/2021: proposal presentation by Dr. Hangalla - Comprehensions and Compliance to Preoperative Fasting Instructions by Primary Care Givers of Paediatric Surgical Patients
5. 7/10/2021: KNH Antimicrobial stewardship presented by Dr. Gatheru - New Antimicrobial Stewardship sensitization
6. 14/10/2021: Theatre morbidity and mortality meeting for the month of September, by Dr. King
7. 15/10/2021: proposal presentation by Dr. Oloo - Incidence and Risk Factors of Acute Kidney Injury among the patients with Traumatic Brain Injury at the Kenyatta national Hospital
8. 26/10/2021: Results presentation by Dr. C.N. Kamau - A study on baseline perfusion index and hypotension following spinal anaesthesia for Caesarean section at Kenyatta national Hospital.
9. 28/10/2021: KNH Main CCU Morbidity and Mortality meeting for the month of September.

November 2021

10. 02/11/2021: First year Anaesthesia registrar introduction and welcome meeting by the surgery department.
11. 5/10/2021: proposal presentation by Dr. Abel oduor - Blood sugar patterns in critically ill patients with Traumatic brain injury at Kenyatta national Hospital.
12. 9/11/2021: Paediatric Morbidity and Mortality meeting

13. 11/11/2021: Theatre morbidity and mortality meeting for the month of October, Dr. Warau
14. 11/11/2021: KSA CME: Pragmatism in Acute Postoperative Pain treatment, by Dr. Timothy Mwiti.
15. 25/11/2021: KNH Main CCU Morbidity and Mortality meeting for the month of October.

December 2021

1. 02/12/2021: Proposal presentation by Dr. Gesare - The Prevalence and the Associated Predisposing factors for ongoing Post-Surgical pain following Caesarean Delivery.
2. 03/12/2021:
3. Results presentation by Dr. Mutinda - A Comparative Study on the Effectiveness of Dexmedetomidine and Bupivacaine versus Bupivacaine alone in Ultrasound Guided Rectus Sheath Block for postoperative Analgesia After pelvic Gynaecological Surgeries at KNH.
4. Results presentation by Dr. Mwanja-Prevalence and Factors Associated with Preoperative Anxiety in Children 5-12years Undergoing Surgery
5. 07/12/2021: Tutorial by Dr. Chikophe - Concept proposal Writing
6. 09/12/2021:
7. Theatre morbidity and mortality meeting for the month of November.
8. Healthcare Transformation and Digitization by Anaesthesia Kenya
9. 10/12/2021: Results presentation by Dr. Suresh - Perioperative Fasting and Glycaemic Control in Obstetric Care.
10. 14/12/2021: Tutorial by Dr. Chikophe- Measurements/Variables in Anaesthesia and Critical Care
11. 16/12/2021: KNH Main CCU Morbidity and Mortality meeting for the month of November.
12. 20/12/2021: Results presentation by Dr. Biwott - Effectiveness of Isobaric Bupivacaine Saddle Blocks in Pelvic Surgery.

Conference Presentations

Name	Details	Period
Dr. C. Mwangi	CCSK KSA i	Aug 2021
Dr. T. Chokwe	- Presentations KSA - Presentation NACOA	Aug 2021 Nov 2021
Dr. P. Olang	Presentations KSA	Aug 2021
Dr. V. Gacii	KSA CCSK	Aug 2021
Dr. T. Mwiti	- Pain Symposium Presentations - KSA CCSK	May 2021 Aug 2021
Dr. S. Nabulindo	- Paediatric Pain Workshop - Presentations KSA CCSK	April 2021 Aug 2021
Dr. A. Gatheru	- Presentations KSA Anticonvulsant	April 2021

Dissertations

The following dissertations were produced by the MMed Anaesthesia students who graduated in December 2021;

Student	Title	Supervisor
Joe M. Ambutu	Speaking out for patient safety and the associated factors among anaesthesia trainees in Kenya	Dr. Timothy Mwiti Dr. Thomas Muinga Chokwe
Sheila Nyakio Gitau	Patterns of perioperative antibiotic surgical prophylaxis among surgical patients undergoing surgery in KNH theatres	Dr. Thomas Chokwe Dr. Antony Gatheru Dr. George Njogu

Mulu Antony Katiku	Comparison of APGAR scores and umbilical vein oxygen saturation among neonates who's mothers had spinal anaesthesia for elective caesarean delivery with either supplemental oxygen or room air	Dr. Thomas Chokwe
Frank K. Gitonga	Predictors of extubation failure in neuro-critically ill patients in KNH ICUs	Dr. Antony Gatheru Dr. Idris Chikophe Dr. Thomas M. Chokwe
Dorcas Mokeira Bundi	Effect of plethysmography variability index based fluid therapy in enhancing recovery after major abdominal pelvic surgery	Dr. Antony Gatheru Dr. Idris Chikophe
Teddy Were	Gastric pH in critically ill patients on stress ulcer prophylaxis at the Kenyatta National Hospital intensive care units	Dr. Susane Nabulindo
Mercy w. Kamau	Immediate effects and outcomes of respiratory physical therapy on critically ill patients in Kenyatta National Hospital intensive care unit	Dr. Timothy Mwiti Dr. Thomas Chokwe
Samera Ramzan	Effectiveness of veno-occlusion with lignocaine for prevention of propofol-induced vascular pain at the Kenyatta National Hospital	Dr. Patrick R. Olang Dr. Thomas M. Chokwe

Journals

Acccos, 2021, Patient care and clinical outcomes for patients with COVID-19 infection admitted to African high-care or intensive care units (ACCCOS): a multicentre, prospective, observational cohort study, *Lancet*, 397 (10288) 1884-94, Articleswww.thelancet.com Vol 397, 397 Iss10288 pg 1885-1894

Alizeh Abbas, Lubna Samad Adesoji Ademuyiwa, Zipporah Gathuya, Susane Nabulindo, Kenneth Wong, Apr-21, online action planning forums to develop a roadmap to mitigate the impact of COVID 19 on the delivery of global children's surgical care. *Pediatric Surgery International*10, pg 021-049

Faye Evans, Mary Nabukenya, Nick Boyd, Susane Nabulindo, Sep-20 Paediatric Anaesthesia Oxford specialist handbook for global anaesthesia, in Rachel Craven, Hilary Edgcombe, Ben Gupta Oxford University Press, 9.7802E+12

Bryan A. Ogoti, Angela A. Otedo, Thomas M. Chokwe, 2021, Paediatric antiretroviral overdose: A case report from a resource-poor area, "Southern African Journal of HIV Medicine" ISSN: (Online) 2078-6751, (Print) 1608-9693

ACCOC- COVID Surg Collaborative 2020, Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. *Br J Surg.* 2020 Oct; 107(11):1440-1449.

Consultancies

1. The Kenyatta National Hospital
2. The Ministry of Health
3. The Kenya Medical Training College
4. Mater Hospital
5. Kijabe Hospital
6. Aga Khan University Hospital
7. Jaramogi Oginga Odinga Teaching & Referral Hospital
8. Nakuru Level 5 Hospital
9. Naivasha Level 5 Hospital
10. Mombasa County Hospital
11. Mbagathi Sub County Hospital
12. Karatina Level 5 Hospital
13. Embu Level 5 Hospital
14. Nanyuki Sub County Hospital

Staff Establishment

The following is a Staff establishment for the Department of Anaesthesia;

Designation	No. in position
Associate Professor	1
Senior Lecturer	2
Lecturers	6
TOTAL	9

Staff Portfolio

The following is the Staff Portfolio in the Department of Anaesthesia.

Name	Qualification	Position
Academic Staff		
Prof. Zipporah W.W. Ngumi	MMed Anaesthesia, UoN, FFARCS (England)	Associate Professor (Retired)
Dr. Patrick R. Olang	MMed Anaesthesia, UoN, Fellowship in Obstetrics & Gynaecology, Paediatric Anaesthesia, PDGRM	Senior Lecturer (Chairman)
Dr. Thomas M. Chokwe	MMed Anaesthesia, UoN, fellowship in Paediatric Cardiac Anaesthesia, Transplant Anaesthesia	Senior Lecturer
Dr. Julius M. Muriithi	MMed Anaesthesia, UoN	Lecturer
Dr. Vernon M. Gacii	MMed Anaesthesia, UoN, Certificate in Cardiac Anaesthesia	Lecturer
Dr. Timothy M. Mwiti	MMed Anaesthesia, UoN, Fellowship in Pain Medicine	Lecturer
Dr. Susane M. Nabulindo	MMed Anaesthesia, UoN, Fellowship in Paediatric Anaesthesia	Lecturer
Dr. Caroline M. Mwangi	MMed Anaesthesia, UoN, Fellowship in Cardiac Anaesthesia	Lecturer
Dr. Antony P. Gatheru	MMed Anaesthesia, UoN	Lecturer
Non Academic Staff		
Ms. Pollyn T. Mulanya	- Higher Diploma in Secretarial Management - Advanced Diploma in Business Management - Diploma in Secretarial Studies - Certificate in Computer Studies	Secretary
Mr. Peter O. Ongwae	-“O” Level Certificate	Messenger/Cleaner

Corporate Social Responsibility, Environmental and Outreach Activities

Community Outreach

Staff within the Department offer community service through a number of avenues;

- KAUS Outreach was held in Kitui County Referral hospital, Mutumo Mission hospital, Jordan hospital and Mwingi Sub County hospital from 21/2/2021 - 24/2/ 2021.

Major Achievements, Challenges and Strategic Projections

a) Major Achievements

KAUS Outreach was held in Kitui County Referral hospital, Mutumo Mission hospital, Jordan hospital & Mwingi Sub County hospital from 21/2/2021 - 24/2/ 2021.

b) Challenges

Challenge	Resolving Measure
Inadequate teaching facilities; venues, furniture, equipment & apparatus	Seeking financial input from the University of Nairobi
Insufficient number of teaching staff	University of Nairobi to increase recruitment of staff
Insufficient offices for members of staff	University of Nairobi to develop its infrastructure
Inconsistency of services of staff on contract after contract expiry	University of Nairobi to review terms of staff engagement
Poor support from HRMIS for departmental separation	University of Nairobi to facilitate
Need for international students facilitator in the College	College of Health Sciences to facilitate
Accommodation for postgraduate students	University of Nairobi to facilitate
Covid-19 Pandemic; Lack of PPEs	University of Nairobi (HR) to facilitate

- a) The Department was unable to utilize its allocated funds due to administrative issues from the top management.
- b) Due to lack of adequate PPEs for Covid-19 pandemic, some of the students from the department were infected in 2020 and also normal physical learning activities have not been fully embraced.
- c) Inadequate teaching venues: the Department has always had challenges of teaching venues in the College and this forces it to borrow rooms either in Kenyatta National Hospital or Kenya Medical Training College.
- d) Inadequate teaching apparatus: the Department had to solicit for donations of a LCD TV and also the faculties of UoN and KNH Anaesthesia together with the Kenya Society of Anaesthetists contributed to buy furniture and equipment for use by the students and UoN staff.
- e) Inadequate office space for the faculty: this is so dire in the Department that one office is shared by 5 Lecturers whose desks are squeezed together.

Strategic Projections

The following are the on-going Departmental projections.

1. The Department started the Curriculum Development process.
2. To ensure that the Department trains at least one Anaesthetist per County hospital in Kenya in the next 5 to 10 years.
3. To provide local and international graduates in all Anaesthetic fields.
4. To strive towards achieving the projected Performance Contract targets.
5. To continue adhering to and improving the ISO standards of operations in the Department.

Others

Professional Bodies

Name	Professional Bodies
Dr. Thomas M. Chokwe	<ul style="list-style-type: none"> • Kenya Medical Practitioners & Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • St. Johns Ambulance Services • Association of Anaesthesiologists of Great Britain and Ireland (AAGBI) • European Society of Anaesthesiologists (ESA) • The Transplantation Society (TTS) • Kenya Red Cross Society (KRCS)
Prof. Zipporah W.W. Ngumi	<ul style="list-style-type: none"> • Kenya Medical Practitioners & Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists KSA) • Kenya Medical Association (KMA) • International Anaesthesia Research Society (IARS) • Christian Medical Fellowship • Royal College of Surgeons (RCS)
Dr. Patrick R. Olang	<ul style="list-style-type: none"> • Kenya Medical Practitioners & Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA)
Dr. Julius M. Muriithi	<ul style="list-style-type: none"> • Kenya Medical Practitioners & Dentists Council (KMPDC) • Kenya Medical Association (KMA) • Kenya Society of Anaesthesiologists (KSA)
Dr. Vernon M. Gacii	<ul style="list-style-type: none"> • Kenya Medical Practitioners & Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • International Anaesthesia Research Society (IARS) • Kenya Cardiac Society (KCS)
Dr. Timothy M. Mwiti	<ul style="list-style-type: none"> • Kenya Medical Practitioners and Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • Kenya Society for Pain (KSP) • European Society for Regional Anaesthesia (ESRS) • International Society for the Study of Pain. (ISSP)
Dr. Susane M. Nabulindo	<ul style="list-style-type: none"> • Kenya Medical Practitioners and Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • Society for Paediatric Anaesthesia (SPA)
Dr. Caroline M. Mwangi	<ul style="list-style-type: none"> • Kenya Medical Practitioners and Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • European Association of Cardiothoracic Anaesthetists (EACA) • The Transplantation Society (TTS) • British Society of Ecocardiography (BSE)

Dr. Antony P. Gatheru	<ul style="list-style-type: none"> • Kenya Medical Practitioners and Dentists Council (KMPDC) • Kenya Society of Anaesthesiologists (KSA) • Kenya Medical Association (KMA) • Critical Care Society of Kenya (CCSK)
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Calendar of Departmental Activities

Calendar of events from January 2021 to 31st December, 2021

Period	Event
Every last Thursday of the month	Symposium in the Department of Anaesthesia
Tuesdays	Journal club
Fridays	Dissertation Clinics, Undergraduates common lectures
February 2021	MMed & MBChB VI Supplementary/Special examinations
May 2021	Examination setting & moderation
July 2021	Annual workshop for Anaesthesiologists for 1 week in Mombasa
August 2021	MMed Anaesthesia Year I and Paediatric Anaesthesia Fellowship end of year examinations
September 2021	Intake of MMed Anaesthesia Year I students in the Department of Anaesthesia
October to November 2021	MBChB Level VI end of year examinations
December 2021	Graduation of MMed Anaesthesia and Paediatric Anaesthesia Fellowship students

Department of Clinical Medicine and Therapeutics

Brief Introduction

The Department of Clinical Medicine is one of the departments at the Faculty of Health Sciences. The Department of Clinical medicine was created in 2005 in a major restructuring exercise within the University. It comprises of specialty based thematic areas of Neurology, Infectious diseases, Respiratory, Cardiology, Endocrinology, Nephrology, Haematology, Oncology, Dermatology, Gastroenterology and Rheumatology. The department is situated at the Faculty of Health Science next to the Kenyatta National Hospital (KNH). For teaching purposes, the department also uses Mbagathi Hospital, which is situated about 1 kilometre away from KNH. It also works closely with other hospitals to train our students, both postgraduates and undergraduates.

Members of staff are actively involved in research activities in their respective thematic areas

Objectives

1. To train in teaching, research and healthcare delivery systems.
2. To produce health service providers with knowledge and skills required in carrying their duties.
3. To generate, disseminate and preserve new knowledge and skills.
4. To conduct continuing education, to instill skills, discipline, service driven and ethical graduates.

Programmes Offered

The department conducts a three year Masters course of Medicine in Internal Medicine and also teaches in other programmes as follow;

- i) MBChB Year III - Junior Clerkship (Internal Medicine)
- ii) MBChB Year IV - Internal Medicine -I
- iii) MBChB Year VI - Internal Medicine II
- iv) BDS-Internal Medicine
- v) Master of Medicine Internal Medicine (MMed)
- vi) Master of Dental Surgery In Maxillofacial Surgery-Principles of Internal Medicine
- vii) MSc Tropical And Infectious Diseases- Non- Infectious Tropical Conditions
- viii) Fellowship in Oncology Training Programme
- ix) Fellowship In Infectious Diseases

Enrolled Students

MMed Intenal Medicine - 96

Fellowship in Oncology Training Programme - 2

Students Graduated Per Programme

In 2020/2021 academic year, the department graduated a total of 9 students for Master of Medicine in Internal Medicine and 8 more are due for graduation in September 2022.

Strategic Issues

1. There were limitations in the number of conferences attended due to COVID-19 pandemic
2. There were also limitations in collaboration and linkages with peer institutions and industry locally and internationally.

Major Achievements in The Year 2021

- Online interviews, Admissions and Registration of students were achieved
- The department emerged position 12 out of 56 departments in the University in the Financial Year 2020/2021 Performance Contract evaluation.

Staff Portfolio

Prof. Erastus O. Amayo	Fellowship	Chairman
Prof. Seth O. Mcligeyo	Fellowship	Professor
Prof. Elly O. Ogutu	MMed	Professor
Prof. Elijah Ogola	Fellowship	Assoc. Professor
Prof. Joshua Kayima	Fellowship	Assoc. Professor
Prof. Fredrick C.F. Otieno	Fellowship	Assoc. Professor
Prof. Mark David Joshi	Fellowship	Assoc. Professor
Prof. Titus M. Munyao	MMed	Assoc. Professor
Prof. George O. Oyoo	Fellowship	Assoc. Professor
Dr. Thomas O. Kwasa	Bachelors	Senior Lecturer
Dr. Marybeth C. Maritim	Tropical Medicine	Senior Lecturer
Dr. Loice Achieng	MSc.	Senior Lecturer
Dr. Enoch Omonge	MMed	Senior Lecturer
Dr. Christine Gichuhi	MMed	Senior Lecturer
Dr. Emma M. Karari	MMed	Lecturer
Dr. Jared O. Mecha	MSc.	Lecturer

Dr. Judith K. Kwasa	Fellowship	Lecturer
Dr. Adam Sheikh	MMed	Lecturer
Dr. Carolyn S. Ilovi	MMed	Lecturer
Dr. Edna W. Kamau	MMed	Lecturer
Dr. Andrew O. Odhiambo	Fellowship	Lecturer
Dr. Eugene Genga	Fellowship	Lecturer
Dr. Fredrick Wangai	MMed	Lecturer
Dr. Peter Oyiro	Fellowship	Lecturer
Dr. Simeon M. Ochanda	MMed	Lecturer
Dr. Christine K. Muasya	MMed	Lecturer
Dr. Mary N. Kubo	MMed	Lecturer
Dr. Ezzi Mohammed	Fellowship	Lecturer
Mr. Tom Omollo	B.Phil	Technologist
Mr. Brisson Muia	B.Phil	Technologist
Mr. Daniel W. Karume	HND	Technologist
Mr. Chrispinus Kulenya	BEEd (Arts)	Admin Assistant
M/s Caroline Owalla	Diploma	Secretary
Mr. Maurice Ogada	MBA, HR	Clerk
Mrs. Lilian Makori	KCSE	Office Assistant

Projections

1. Focus on realizing succession planning in the Department
2. Prioritize and align more programmes, projects and activities to the realization of the “Big Four” agenda through mounting research projects focusing on COVID - 19 in collaboration with partners and institutions
3. Alignment of the departmental programmes and activities with Commission of University Education guidelines and standards - already in process

Research Activities Undertaken

Title	Duration	Donor	Amount	Pi
Switching virally suppressed HIV-1 infected elderly adults (age above 60 years) without prior confirmed virological failure from current anti-retroviral regimen to bicitgravir, emtricitabine and tenofovir alafenamide - BFTAF Study	2 years	Gilead Sciences	\$ 575,000	Dr. Loice Achieng
Monitor and Prevent Antimicrobial Resistance in Kenya - MAP-AMR Kenya	5 years	Centre for Disease Control	\$ 597,000	Dr. Loice Achieng
2SD Study	2 years	ViiV	\$ 983,000	Dr. Loice Achieng
Solidarity Trial PLUS:	1 year	World Health Organisation	\$ 279,034	Dr. Loice Achieng
CVD Study	1 year	University of Strathclyde	Ksh. 4.4m	Dr. Loice Achieng

Molecular and Infectious Disease Research Laboratory (HCQIP)	5 years	Centers for Disease Control and Prevention (CDC)/CoEHM	Kshs. 50,966,041	Dr. Jared Mecha
United States Agency for International Development (USAID) Fahari ya Jamii Project		United States Agency for International Development (USAID)	Ksh. 4,450,549,445	Prof. C.F. Otieno/ Dr. Jared Mecha

Supervisions

Names	Supervisor	Mentor
Patrick Ciugu Kinyua.....	Dr. E. Mohamed	Prof. K.M. Bhatt
Aarif Ikbal Varvani	Dr. M. Kubo.....	Prof. S.M. Bhatt
Hassan Habiba Ibrahim.....	Dr. A. Sheikh	Prof. S. Mcligeyo
Otieno Davies.....	Dr. S. Ilovi	Prof. E. Amayo
Rua Sammy.....	Dr. T. Kwasa	Prof. E. Ogola
Mohamed Yarow	Dr. E. Genga	Prof. E. Ogutu
Abdi Mohamed Yusuf.....	Dr. A. Odhiambo.....	Prof. T. Munyao
Uzma Bagha.....	Dr. J. Mecha.....	Prof. J. Kayima
Brenda Juma.....	Dr. J. Kwasa.....	Prof. M. Joshi
Kinyanjui Mercy Wambui.....	Dr. E. Karari.....	Prof. G. Oyoo
Abigael Nyanduko Machuka.....	Dr. S. Ochanda.....	Prof. C.F. Otieno
Munguti Jeremiah Kilonzo	Prof. G. Oyoo	Dr. M. Maritim
Abade Pheena Asewe	Prof. M. Joshi	Dr. L. Achieng
Quincy Oyaro Mong'are	Prof. J. Kayima	Dr. E. Karari
Lavender Gift Awuor Otom	Prof. T. Munyao.....	Dr. J. Kwasa
Eugene Lihenzero Muhavi	Prof. E. Ogutu	Dr. J. Mecha
Audrey Suleh.....	Dr. E. Kamau	Dr. E. Odhiambo
Joseph Simel Karbolo.....	Prof. S. Mcligeyo	Dr. E. Genga
Miriam Kiyiapi	Prof. K.M. Bhatt.....	Dr. T. Kwasa
Siraja Ibrahim	Prof. S.M. Bhatt	Dr. S. Ilovi
Moguchi Nicholas.....	Dr. E. Omonge	Dr. A. Sheikh
Mark Ndungu Njoroge	Dr. L. Achieng.....	Dr. E. Omonge
Sheila Wanjiru Muchiri	Dr. M. Maritim	Dr. E. Kamau
Ahmed Hassan Adan	Prof. E. Ogola.....	Dr. E. Mohamed

Staff Establishment

The department had 34 in the following grades

Professors	- 3	Senior Technologists	- 2
Associate Professors	- 6	Secretary	- 1
Senior Lecturers	- 5	Record Clerk	- 1
Lecturers	- 14	Cleaner	- 1
Administrative Assistant	- 1		

Grants

Title	Duration	Donor	Amount	Pi
Switching virally suppressed HIV-1 infected elderly adults (age above 60 years) without prior confirmed virological failure from current anti-retroviral regimen to bicitgravir, emtricitabine and tenofovir alafenamide - BFTAF Study	2 years	Gilead Sciences	\$575,000	Dr. Loice Achieng
Monitor and Prevent Antimicrobial Resistance in Kenya -MAP-AMR Kenya	5 years	Centre for Disease Control	\$597,000	Dr. Loice Achieng
2SD Study	2 years	ViiV	\$983,000	Dr. Loice Achieng
Solidarity Trial PLUS:	1 year	World Health Organisation	\$ 279,034	Dr. Loice Achieng
CVD Study	1 year	University of Strathclyde	Kshs. 4.4m	Dr. Loice Achieng
Molecular and Infectious Disease Research Laboratory (HCQIP)	5 years	Centers for Disease Control and Prevention (CDC)/ CoEHM	Kshs. 50,966,041	Dr. Jared Mecha
United States Agency for International Development (USAID) Fahari ya Jamii Project		United States Agency for International Development (USAID)	Kshs. 4,450,549,445	Prof. C. F. Otieno/ Dr. Jared Mecha

Department of Dental Sciences

Name, Brief Introduction

a) Inception

The Department of Dental Sciences started from a humble beginning in 1974 as a department (The Department of Dental Surgery) in the then Faculty of Medicine. The first group of 18 students was admitted in 1974 to pursue the course leading to the degree of Bachelor of Dental Surgery (BDS) of the University of Nairobi. To facilitate its inception and growth, the department acquired and renovated the then building structures for the former Princess Elizabeth Maternity in 1977 with financial and material support from the Government of the Federal Republic of Germany.

The aim was to have a university teaching dental hospital. Initially, the department had only 9 dental units and would thereafter grow to have 52 dental units distributed in various clinics. In 2009, three units were added for purposes of Income Generation at the plaza wing bringing the total to 55. The Dental plaza provides dental services to clients who prefer not to be treated in the teaching clinics

The Department of Dental Sciences is mandated to train oral health professionals not only to satisfy the national needs but also the needs of East and Central African Countries at both undergraduate and specialist levels.

In 1996, ward, major and minor theatres were opened and became operational to complete the Dental Hospital complex where even complex oral maxillofacial and reconstructive surgical procedures are performed. Continued growth of the School depends on its ability to attract and efficiently utilize limited resources.

b) Constituent Units

The Department has 4 units namely:

1. Oral/Maxillofacial Surgery/Oral Medicine/Pathology and Oral/Maxillofacial Radiology
2. Conservative and Prosthetic Dentistry
3. Paediatric Dentistry and Orthodontics
4. Periodontology/Community & Preventive Dentistry

Programmes Offered

- a) Degree in Bachelor of Dental Surgery (BDS)
- b) Master of Dental Surgery (MDS) in Paediatric Dentistry
- c) Master of Dental Surgery (MDS) in Periodontology
- d) Master of Dental Surgery (MDS) in Prosthodontics
- e) Master of Dental Surgery (MDS) in Oral & Maxillofacial Surgery
- f) Doctor of Philosophy (PhD) in Dentistry

Enrolled Students

i) Undergraduates	ii) MDS (Masters)	iii) Doctor of Philosophy (PhD)	iv) International Students
Year 1 - 52	Year 1 - 7	2 Students	Bachelor of Dental Sciences - 3
Year 2 - 62	Year 2 - 17		Paediatrics Dentistry - 3
Year 3 - 41	Year 3 - 5		Periodontology - 1
Year 3 - 44	Year 4 - 4		Oral and Maxillofacial Surgery
Year 4 - 31			Prosthodontics
Year 5 - 40			

Number of Staff 2021

The department had 104 in the following grades

Professor	- 2	Secretary	- 3
Associate Professor	- 5	Nursing Officer	- 25
Senior Lecturer	- 14	Dental Hygienist	- 1
Senior Assistant Registrar	- 1	ICT	- 2
Lecturers	- 16	Health Record and Information Technologist	- 1
Chief Technologist (Lect Equiv)	- 2	Pharmaceutical Technologist	- 1
Tutorial Fellow	- 10	Radiographer	- 2
Senior Technologist/Technician (DEF)	- 4	Caretaker	- 1
Technologist (ABC)	- 8	Messenger/Cleaner	- 5
Accountant Assistant	- 1		

Number of Graduates in 2021

BDS - 29
MDS - 6

International Links and Collaborations

- i) Collaboration with Maharishi Markande Shwar University
- ii) University of Washington, Seattle
- iii) Columbia University, New York
- iv) World Dental Council

Research Activities Year 2021

Postgraduate Research

Postgraduate Research

- i) Oral Health Status and Treatment needs among 12-17 year old Juvenile Prisoners in Nairobi City and Kiambu Counties.
- ii) Oral Health Status and treatment needs among Paediatric Oncology patients at Kenyatta National Hospital.
- iii) A Randomized Clinical Trial comparing the hall technique and ART in restoring proximal carious lesions on primary molars of 5-6 year old children in Kenya.
 - a) Dr Anthony K. Bii - MDS Prosthodontics research
Thesis title: Analysis of Root and Canal Morphology of Second Permanent Molars in a Selected Kenyan Population using CBCT
Supervisors - Dr Tom M. Dienya, Dr Susan W. Maina, Dr James M. Nyaga
 - b) Dr Silas M. Toka - MDS Prosthodontics research
Thesis title: Effect of Phosphate-bonded investment materials and their Manipulation on the Marginal fit of Cast-metal crown copings
 - c) Dr Marion N. Mosomi - MDS Prosthodontics research
Thesis title: Evaluation of anterior maxillary teeth proportions to determine the existence of three aesthetic guidelines in Kenyan population
Supervisors - Dr Susan W. Maina, Dr Olivia A. Osiro, Dr Ben I. Omondi
 - d) Dr Catherine N. Maundu - MDS Prosthodontics research
Thesis title: Evaluation of Marginal fit of fixed restorations fabricated from conventional versus digital impressions
Supervisors - Dr Olivia A. Osiro, Dr James M. Nyaga, Dr Catherine N. Gichangi
 - e) Dr Lydia M. Obiero - MDS Prosthodontics research
Thesis title: Oral health related quality of life among complete denture wearers at the University of Nairobi Dental Hospital
Supervisors - Dr Bernina K. Kisumbi, Dr Ben I. Omondi, Dr Cyril N. Ogada
 - f) Dr Diana K. Masara - MDS Prosthodontics research
Thesis title: A CBCT analysis of root and canal morphology of mandibular premolars of a select Kenyan population
Supervisors - Dr. Tom M. Dienya, Dr Laura G. Edalia, Dr Benjamin N. Simiyu
 - g) Dr Alexander M. Mwangi - MDS Prosthodontics research
Thesis title: A comparison of manual and digital assessment using stereolithography datasets of tooth preparations for single crowns in Nairobi, Kenya
Supervisors - Dr James M. Nyaga, Dr Fred O. Otieno, Dr Olivia A. Osiro
 - h) Dr Elisha N. Ndakama - MDS Prosthodontics research
Thesis title: Root and canal morphology of permanent molars among a Tanzanian population of African inherent using CBCT
Supervisors - Dr. Tom M. Dienya, Dr James M. Nyaga, Dr Benjamin N. Simiyu
 - i) Dr Benson K. Njuguna - MDS Prosthodontics research
Thesis title: Quality of life of patients with acquired maxillary defects following prosthetic rehabilitation over a five-year period at two referral institutions in Nairobi
Supervisors - Dr Ben I. Omondi, Dr Catherine N. Gichangi, Dr. Mwirigi M. Kaaria.

- j) Dr. Mundia Kahura
Patterns and occurrence of maxillofacial injuries in traumatic head injury patients at Kenyatta National Hospital
Dr. Odhiambo W. Prof. Chindia, Dr. T J Ochola
- k) Dr. Okiramu Andrew
Morphology and variant anatomy of the mandibular canal in Kenyan population: a cone beam computed tomography study
Dr. Butt, Dr. Opondo, Prof. Onyango
- l) Dr. Muungani Welcome
Prevalence and characteristics of impacted teeth and associated pathologies at two referral and teaching institutions in Nairobi, Kenya
Dr. Kihara, Dr. Odhiambo, Prof. Loice Gathece
- m) Dr. Mutio K. Joseph
A 20-year Histopathology audit of oral and maxillofacial diseases at two centers in Nairobi, Kenya (2001-2020)
Dr. Dimba, Dr. Njiru, Dr. Odhiambo, Prof. Chindia

b) Staff Research

Dr Bernina K. Kisumbi - PhD Research

Thesis title: Development, implementation and evaluation of a dental amalgam phase down training programme among dentists in Kenya Supervisors - Dr Susan W. Maina, Dr Olivia A. Osiro

- Dr Cyril N. Ogada- PhD research, registered at School of Public Health, University of the Witwatersrand
- Dr Hazel O. Simila - DAAD PhD Scholarship, Germany An ecological study of the association between environmental indicators and early childhood caries.

Consultancies

Dental Services offered at the University Dental Plaza

Major Achievements, Challenges and Strategic Projections

a) Achievements in the Year 2021

- i) There was change of leadership in the department. A new Chairman was appointed, Dr Walter Odhiambo.
- ii) In response to Covid-19 pandemic, most of the operations of the school including teaching and learning for all programs were smoothly continued to be conducted on online platforms. The department conducted blended Lectures and examination through online and physical platforms.
- iii) Twenty Nine undergraduate and five postgraduate students graduated and have proceeded to serve the country in various capacities; the newly qualified dentists are now doing internship at various government facilities while the postgraduates are serving before specialist recognition in various hospitals.
- iv) A committee was tasked with responsibilities of advising the School on infection control prevention strategies in both clinics and external environments. The committee spearheaded the training for both students and staff on COVID-19 prevention protocols.
- v) Hippocratic oath was administered to the twenty five qualified Dentists before posting for internship

b) Challenges

Among the challenges facing the Department are:-

- i) Frequent and persistent shortage of consumables that adversely affect teaching as well as optimum patient care, due to convoluted and bureaucratic procurement processes and delayed payment of suppliers.
- ii) Worn out teaching and training infrastructure: The current clinical teaching facilities pose a real challenge since 50% of the dental units in use are obsolete and maintaining them is a daunting task. In addition, spares are not available and repairing the units is uneconomical. The dental chairs available for use are not adequate for the number of students admitted.

- iii) Theatre has been un-operational throughout the year due to anesthetic machine that has not been repaired for many months.
- iv) Provision of cleaning services by Nairobi hospital was stopped due to accrued debt.
- v) No operating ambulance and or utility vehicle that adversely affect other services such as food delivery and transport of linen to and from laundry.
- vi) The laboratory facilities are inadequate. Diagnostic and teaching services occupy the same space in the Oral Pathology laboratory, which compromises the safety of students who are taught in the same area where potentially toxic reagents are processed. The department acquired 6 new microscopes in the year 2019 but most of the challenges remain.
- vii) Lack of research funding and low compensation.
- viii) Lack of staff promotion.
- ix) Disruption of Hospital services when there is unscheduled closure of teaching services.

c) Strategic Projections

Improved Dental Care at the Teaching Outpatient Clinics

- i) Increase student intake at both Undergraduate and Postgraduate.
- ii) Expand infrastructure in teaching space
- iii) Increase income generating activities

Corporate and Community Outreach Activities

In the year 2021, despite prevailing COVID-19 challenges, the department mounted 4 successful Dental Community Outreach activities. In each of these, members of the public benefited from free dental treatment.

Department of Diagnostic Imaging and Radiation Medicine

Introduction

The Department of Diagnostic Imaging and Radiation Medicine is located within the second floor of the Old Hospital of the Kenyatta National Hospital. The department was established in 1974/1975 and admitted the first batch of postgraduate students in 1977. These five pioneer students have excelled in the field of diagnostic imaging and are key leaders in both public and private radiology practice. Since inception the postgraduate programme has successfully trained 188 specialist radiologists for Eastern, Central and Southern Africa. In 2012, the Department rolled out a higher diploma training program for ultrasound specialist training targeted to both medical and paramedical cadres. This was necessitated by the need to improve ultrasound practice in the country. To date the department has trained 35 ultrasound specialists who are running ultrasound specialist clinics in the periurban and rural areas thereby increasing the availability of ultrasound imaging.

In 2019, the Department begun the first training programme for Radiation Oncologists in the region with an inaugural class of 8 residents. This new programme requires acquisition of new faculty and expansion of the Staff establishment. The programme has continued to expand and to date has 20 residents in training.

Besides the teaching programmes, the Department runs an income generating unit which offers diagnostic imaging services in radiography and ultrasound. Imaging facilities in the teaching hospital include a state of art 3T MRI, digital mammography with tomosynthesis, digital radiography, 128-slice and 64-slice CT scanners, 9 ultrasound machines in main radiology (4) and one each in labour ward, gynecological clinic, newborn, intensive care and renal units and a dual head SPECT scanner.

There have been continued research activities in basic applied sciences of medical imaging and especially in the areas of physics of imaging, ultrasound, computerized tomography, conventional radiography, magnetic resonance imaging and radionuclide imaging.

Courses Offered

MMed In Radiology

Objectives

1. Equip the student with adequate knowledge on the physical principles of diagnostic imaging
2. Impart adequate knowledge to the trainee on the safe usage of ionizing and non-ionizing radiations used in medical imaging.
3. Equip the student with adequate skills in the techniques of performing imaging and interventional procedures, the interpretation of images in the background of sound clinical and pathological changes associated with disease and the presentation of reports.
4. Equip the student with the skills and ability to carry out research in Diagnostic Imaging.
5. Prepare the student to adequately manage Diagnostic Imaging Departments.

Entry Requirements

1. MBChB degree from the University of Nairobi or its equivalent from other institutions recognized by the University of Nairobi Senate which is registrable by the Medical Practitioners and Dentists' Board of Kenya.
2. Current valid practicing license registered or registrable by the Medical Practitioners and Dentists' Board of Kenya
3. Minimum one year of post-internship clinical experience.
4. Certificate of English language proficiency for applicants whose language of instruction for their basic medical degree was not English.
5. Valid professional indemnity cover during full period of training

MMed in Radiation Oncology

Objectives

1. Apply knowledge and skills in cancer diagnosis and treatment using ionizing radiation.
2. Justify cancer prevention programs, community surveillance and early detection.
3. Provide leadership for radiation oncology units.
4. Implement International Safety Standards to ensure environmental safety in the use and disposal of radioactive material.
5. Contribute to continuous professional development through evidence-based practice and cancer research.

Entry Requirements

1. MBChB degree of the University of Nairobi or an equivalent qualification from an institution recognised by the Senate.
2. Current valid practicing license registered or registrable by the Medical Practitioners and Dentists' Board of Kenya
3. Minimum one year of post-internship clinical experience.
4. Certificate of English language proficiency for applicants whose language of instruction for their basic medical degree was not English.
5. Valid professional indemnity certificate during the period of training.

Fellowship in Interventional Radiology

Objectives

1. Perform specialized interventional radiology procedures and clinical care.
2. Execute independent research in interventional radiology.
3. Mentor colleagues in interventional radiology practice
4. Manage interventional radiology facilities.
5. Contribute to continuous professional development activities in IR

Entry Requirements

1. Master of Medicine degree in Radiology of the University of Nairobi or an equivalent qualification from an institution recognized by the University of Nairobi Senate.
2. Current practicing license registered or registrable by the Medical Practitioners and Dentists Board of Kenya.
3. Certificate of English language proficiency for applicants whose language of instruction for their basic medical degree was not English.
4. Professional indemnity covers during the full period of training.
5. Pass pre-entrance interview & examination administered by the Department of Diagnostic Imaging and Radiation Medicine.

Higher Diploma in Medical Diagnostic Ultrasound

1. Perform diagnostic ultrasound and generate a comprehensive report.
2. Conduct research in diagnostic ultrasound
3. Mentor in ethical diagnostic ultrasound practice.
4. Manage a diagnostic ultrasound imaging facility
5. Contribute to continuous professional development in ultrasound knowledge and practice

Entry Requirements

1. Holders of Bachelor of Medicine and Bachelor of Surgery, Bachelor of Dental Surgery and BSc. Nursing degree or equivalent from institutions recognized by the senate.
2. Holders of Diploma in Clinical Medicine.
3. Holders of Diploma in Medical Imaging Science
4. Holders of Diploma in Registered Community Nursing.
5. Any other equivalent qualifications to the above from recognized institutions

Student Enrolments

MMED in Diagnostic Radiology	-	14
MMED in Radiology Oncology	-	8
Fellowship in Interventional Radiology	-	2
Higher Diploma in Diagnostic Medical Ultrasound	-	1
TOTAL	-	25

International Students

The Institute continues to attract international students to its programmes. In the 2021 calendar year, we hosted eight foreign students who enrolled in the postgraduate courses of the Institute.

International Student Component

Name Of The Student	Gender	Degree Programme	Country Of Origin
Dr. Kilubi Meli	Female	MMed in Radiology	Democratic Republic of Congo
Dr. Lesiamang Molatedi		MMed in Radiology	Botswana
Dr. Wazid Ali	Male	MMed in Radiology	Nepal
Dr. Omar Hassan Ahmed	Male	MMed in Radiology	Somalia
Dr. Calvin Moyo	Male	MMed in Radiology	
Dr. Ndlovu Sijabule	Female	MMed in Radiology	
Ms. Abdala Muna	Female	Higher Diploma in Diagnostic Medical Ultrasound	Somalia
Mbwana Bakari Hassani	Male	Higher Diploma in Diagnostic Medical Ultrasound	Tanzania

Publications/Consultancies

Article Title (s)	Name of Author (s)	Journal
Clinical Application of Magnetic Resonance Spectroscopy in Diagnosis of Intracranial Mass Lesions	C.K. Onyambu, M.N. Wajih, A.O. Odhiambo:	Hindawi Radiology Research and Practice, Vol 2021, 1-10
Cancer and COVID 19 experiences at African Cancer Centres: The silver Lining	L. Grossheim, P Ruff, T. Ngoma, V. Vanderpuye, G. Mwangi, P. Ochieng et al	JCO Global Oncology, 2021; 7, 410-415
The utility of Doppler and greyscale ultrasound in the assessment of treatment response in patients with rheumatoid arthritis of the wrist and hand	Noorany AMK, Oyoo GO, Onyambu CK	<i>Afr J Rheumatol</i> 2021; Vol 9(2): 96-102
Scholarly Books Published Chapter Title	Name of Author (s)	Edition No. & Pages
Anaphylactic reactions in radiology procedures, 10.5772/intechopen.95784	Dr. C.K. Onyambu, Dr. A. A. Aywak, Dr. S. Osiemo and Dr. T.M. Mutala	<i>Asthma DOI:</i>
Antenatal Diagnosis of Congenital Anomalies on Ultrasound Screening, 10.5772/intechopen.98586	Dr. Callen Kwamboka Onyambu and Dr. Norah Mukiri Tharamba	Midwifely DOI:

2021 Graduands

MMed in Diagnostic Radiology	-	10
Higher Diploma in Diagnostic Medical Ultrasound	-	6
TOTAL		16

Teaching Staff

Name Of Consultant	Qualifications	Designation
Academic Staff		
Dr. Angeline A. Aywak	MBChB (UoN), M.Med (Radiology, UoN), Fellowship Ultrasound (Jafferson University, PA, USA)	Senior Lecturer
Dr. Nelson M. Kimani	MBChB (UoN), M.Med (Radiology, UoN),	Senior Lecturer
Dr. Gladys N. Mwango	BSc Anatomy (UoN) MBChB (UoN), M.Med (Radiology, UoN); Fellowship in Diagnostic Radiology (Harvard, USA).	Senior Lecturer
Dr. Callen K. Onyambu	MBChB (UoN), M.Med (Radiology, UoN); Post graduate Diploma in research Methodology (UoN), Fellowship in MSK (University of Maryland USA).	Senior Lecturer/ Chairman
Dr. Alfred O. Odhiambo	MBChB (UoN), M.Med (Radiology, UoN); Fellowship Neuroradiology (Washington University, U.S.A).	Lecturer
Dr. Timothy M. Mutala	MBChB (UoN), M.Med (Radiology, UoN)	Lecturer
Dr. Ian M. Muriithi	MBChB (UoN), M.Med (Radiology, UoN)	Lecturer
Dr. Peter M. Chacha	MBChB (UoN), M.Med (Radiology, AgaKhan University Hospital), Interventional Radiology Fellowship (Israel); subspecialty in vascular malformation (Hadassah- Israel)	Lecturer
Mr. Enock O. Anyenda	BSc (Physics -UoN); MSc (Nuclear Science), PhD (Medical Science)	Tutorial Fellow
Technical Staff		
Mr. James Barkote	Diploma (Radiography -KMTTC); Higher Diploma (Ultrasound-KMTTC)	Senior Technologist DEF
Mr. David Mwonga Mulli	Diploma (Radiography -KMTTC); Higher Diploma (Ultrasound-KMTTC)	Technologist

Non Teaching Staff

Senior Administrative Assistant	- Ms. Linda Kapiyo
Secretary	- Ms. Susan Murima
Messenger	- Mr. Victor Andolo
Messenger/Cleaner	- Ms. Mercy Mwangi

Appointments

Four Adjunct lecturers were appointed to the department

- Prof Robert G. Dixon
- Prof Brian F. Baigori
- Dr Andrew Kesselman
- Dr Jessica K. Stewart

PhD

There are two students registered for PhD in our department: Dr Callen K. Onyambu and Dr Gladys G. Mwango- However, there were no PhD Graduates in the Department as yet.

1. RESEARCH FUNDING

Name of Project	Funding Agency	Department Co-PIs
Mayo clinic/Global Bridges COVID-19 Clinical Process improvement Program: Africa proposal to Pfizer Global Medical Grants, in response to COVID-19 Competitive RFP: Quality and Process improvement	Pfizer Global Medical Grants	Dr. Primus Ochieng, Dr Gladys Mwango
Four Year Masters in Medicine Radiation Oncology Programme Scholarships	Takeda Pharmaceuticals International & Global Access to Cancer Care Foundation	Dr. Primus Ochieng
Charitable donation of medical equipment	RADAID International	Dr. Peter C. Magabe

Collaborations

Title	Collaborating Institutions	Country	Participating Institutions
MOU with Takeda Pharmaceuticals international (2020)	Takeda Pharmaceuticals	Singapore	UON/Takeda Pharmaceuticals
MOU RAD-AID International, 2019 USA	Rad-Aid International	USA	UON/ RAD-AID international
MOU Mayo Clinic 2020, USA	Mayo Clinic	USA	UON/ MAYO CLINIC
MOU Queen's University 2020 Canada	Queens University	Canada	UON/Queen's University
MOU Kenyatta National Hospital, 2000	KNH	Kenya	UON/KNH
MOU PCEA Hospital 2011	PCEA Hospital	Kenya	UON/ PCEA Hospital
MOU Nairobi Hospital 2010	Nairobi Hospital	Kenya	UON/Nairobi Hospital

Conferences and Trainings Attended

Faculty Name	Conference/Training Name	Date
Dr. Gladys Mwango	Kenya annual scientific radiology conference	Oct 8-11th, 2021
Dr. Timothy Mutala	20 th Annual Teaching Course of International Cancer Imaging Society	19-22 September 2021
Dr. Timothy Mutala	International Cancer Imaging Society Read with the Experts: Liver Imaging Course	20-21 October 2021.
Dr. Callen Onyambu	Mentoring in Scientific Manuscript Writing	14 th June 2021 - 30 th November, 2021
Dr. Gladys Mwango	Kenya Association of Radiologists (KAR) Annual Scientific Conference	8 th - 11 th October, 2021
Dr. Callen Onyambu	International Skeletal Society 2021 Annual Meeting Online	October 17, 2021

DEPARTMENT OF HUMAN ANATOMY AND PHYSIOLOGY

Introduction

The Department of Human Anatomy and Physiology of the University of Nairobi offers a robust anatomy and physiology education for over 500 undergraduate and postgraduate students pursuing courses in Medicine, Surgery, dentistry, pharmacy and nursing. Through a combination of didactic and hands-on cadaveric dissection, the anatomy student at University of Nairobi undertakes a comprehensive and integrated course in Gross Anatomy, Neuroanatomy and Microscopic Anatomy and Developmental anatomy which firms a basis for a medical career. Our faculty are clinician-anatomists, global in their perspectives and offer a platform where anatomy is taught with emphasis on clinical applications in each course. Although dissection remains the main modality of study, the department has embraced IT in the instruction to undergraduate and postgraduate students.

We have the facilities and infrastructure to deliver our courses. The recent addition of the a world class surgical skills laboratory is a key feature of our development and purpose to offer custom made courses for residents, qualified surgeons from Kenya and around the region throughout other year.

Our research portfolio is impressive. We have continued to contribute to the anatomy literature from the strongpoint of clinical anatomy, cardiovascular and connective tissue biology, aging biology and neuroscience. Collaborations and linkages are key in our ability to advance research. The next platform is to engage colleagues in the university and industry for joint projects including medical device design and anatomy education materials.

Programs and Services Offered

- | | |
|---|---|
| i) Doctor of Philosophy in Medical Physiology | v) Bachelor of Science Anatomy |
| ii) Doctor of Philosophy in Human Anatomy | vi) Bachelor of Science Medical Physiology |
| iii) Master of Science in Medical Physiology | vii) Chiromo Funeral Palour (CFP) |
| iv) Master of Science in Human Anatomy | viii) Nairobi Surgical Skills Centre (NSSC) |

Major Achievements in the Year

- i) Teaching and Examinations were carried out successfully.
- ii) The Department has sourced for and received grants.
- iii) Various members of staff have attended and made presentations
- iv) The Department has created a log in system for students using a secure code, the only one of its kind in the university.

Corporate and Community Outreach Activities

Staff have participated in various community and outreach services as community education in Kajiado county, providing services at Kenyatta National Hospital among others.

Staff Portfolio

The Faculty Staff are involved in innovation and research in the Human Anatomy and Medical Physiology areas and have published heavily in these areas.

Department of Human Pathology

Introduction

The current Department of Human Pathology was initially constituted as a Department of Pathology and Microbiology in 1967 to service the then newly established medical school within the University College Nairobi. The University College Nairobi was at that time a constituent college of the University of East Africa. The Department was started through international collaboration with The Royal Infirmary Glasgow Medical School, UK. Microbiology later separated from Pathology in the 1975 -1979 period to become the present Department of Medical Microbiology.

The Department of Human Pathology has trained general pathologists and has graduated over 100 Pathologists (MMED Pathology) practicing in the different subspecialties of Anatomic Pathology, Immunology, Clinical Chemistry, Haematology & Blood transfusion and Medical microbiology. The majority of these Pathologists are serving in senior positions within the Kenya central Government's Ministry of Health, county hospitals, local Universities, the Private sector and laboratories in neighbouring countries.

In the late 1990s the Department launched the MSc Clinical Cytology course serving as a training centre for the ECSA region. The program has produced over 20 clinical cytologists and also launched a MSc Clinical Chemistry that is about to graduate pioneer class in December graduation 2020. Since 2019 the Department is involved in pioneering minimally invasive post mortem technique and has been involved in the training of ECSA region members.

The Department has four Thematic Areas namely: Anatomic Pathology, Clinical Chemistry, Haematology and Blood Transfusion and Immunology.

Vision, Mission and Strategic Objectives

Vision - An internationally recognized centre committed to excellence in teaching, research and provision of Pathology services.

Mission - To provide quality education in Human Pathology and related discipline, through Creation, preservation, integration, transmission and utilization of knowledge in the field of Pathology and related disciplines

Objectives

To manage the resources efficiently

1. To grow the Department resource base and enhance productivity.
2. To produce quality and holistic graduates in diverse fields
3. To contribute to the development of the society through creation, storage, application and dissemination of knowledge.
4. To enhance the competitiveness in image for the Department of Human Pathology.
5. To enhance value-adding and collaborations.

3.0 Programmes Offered

The Department offers the following programmes;

Name of Programme	Duration
PhD in Clinical Cytology	
Master of Medicine in Human Pathology	4 years
Master of Science in Clinical Cytology	2 years
Master of Science in Clinical Chemistry	2 years
Bachelor of Science in Medical Laboratory Science and Technology	4 Years

Strategic Issues

1. Create, preserve, integrate, transmit and utilize knowledge created through research and innovation;
2. Collaborate and link with peer institutions and industry, locally and internationally;
3. Cascade the Performance Contract of FY 2020/2021 to the individual members of staff of the department through the staff performance appraisal; and
4. Innovatively reengineer academic processes, core MIS applications and services for improved efficiency and effectiveness

Major Achievements in the Year 2021

Number of Enrolled Students – 2021/2022

Bachelor of Science in Medical Laboratory Science and Technology (MLST) - 218

Master of Medicine in Human Pathology - 23

Master of Science in Clinical Chemistry - 14

Master of Science in Clinical Cytology - 10

Online Registration of First Year Students

The Department ensured that all the first year students who reported Joining instructions of students uploaded and students verified online.

Research Projects

Name Of Grant	Title Of Grant	Funding Of Grant	Duration
World Bleeding Disorder Registry grant	Correlation between age at diagnosis with clinical and joint health outcomes in patients with severe and moderate haemophilia at Kenyatta National Hospital”	World Federation of Hemophilia	2020-2021
Kenya Hemophilia Association 5	Accelerating Care for patients with blood disorders in Kenya and Tanzania	Novo Nordisk Hemophilia Foundation	2020-Ongoing
World Bleeding Disorder Registry grant	Correlation Between Age At Diagnosis With Clinical and Joint Health Outcomes In Patients With Severe and Moderate Haemophilia At Kenyatta National Hospital	World Federation of Hemophilia	2020-ongoing
Charite University, University of Nairobi; Francine; Maturi P.M. Prof Olenja	Exchange Program and Research Training	DAAD	01.01.2021
Prof Elena; Dr. Nzamu; Dr Maturi P.M	Nutritional Monitoring in cancer patainets at KNH	IIPAN	01.01.2021

Links and Collaborations

The Department together with Department of Medical Microbiology have led the effort on behalf of Faculty of Health Sciences to partner with Siemens Healthineers and Accurite Health to create MicroPATH Laboratories on a futuristic model that will foster growth, innovation and continuous improvement in all our laboratories.

Online Solutions for University Business

Student queries have been handled using help desk created for the department and also the departmental complaints email address.

Mainstreaming of Online Teaching and Learning

The Department has successfully done online teaching and learning for both undergraduate and post graduate. Further Staff and students were trained on teaching and class enrollment.

66th Graduation

PROGRAM	FEMALE	MALE	TOTAL
Bachelor of Science in Medical Laboratory Science and Technology	17	17	34
Master of Medicine in Human Pathology	0	1	1
Master of Science in Clinical Cytology	1	1	2

Publications/Consultancies

Members of staff have continued to publish as follows:

Name of Author (s)	Date of Publication	Article Title	Journal
Brigid K. Grabeart, Jessica Y, Islam, Emmanue, IKabare, Nadja A. Vilot, Wairimu waweru, Kishor Mandaliya, Juma Shafi, Lucy adala, R. Scott McClelland, Jennifer S. Smith	2021	Sexually transmitted infection testing using Wet and Dry Self-Collected Samples	Journal of Sexually Transmitted Diseases
Inusa B, Inati A, Maes M, Githanga J, Ogutu B, Abboud MR, Miano M, Cela E, Nduba V, Niazi M, Åstrand M, Persson K, Berggren A, Carlson G.	2021	Pharmacokinetics and safety of ticagrelor in infants and toddlers with sickle cell disease aged <24 months.	Paediatr Blood Cancer
Anne Barasa, Ismail Ahmed Jamilla Rajab, Edwin Walong	Mar-21	Persistent Oral Candidiasis And Disseminated Bcgosis as Manifestations Of A Possible Inborn Error of Immunity	Current Allergy & Clinical Immunology
Thierry Zawadi Muvunyi, Eliane Rohner, Siobhan O'Connor, Ahmed Yakub Kalebi, Wairimu Waweru, John Kairu, Willis Ochuk, Jennifer Susan Smith, Lucy Wangari Muchiri.	2021	Utility of p16INK4a expression for the interpretation of uterine cervical cancer	Pan African Medical Journal
Phidelis Maruti, Stanslaus Musyoki, Amayo A	2021	Evaluation of Cellular Changes in Blood Stored for Transfusion at Bungoma County Referral Hospital, Kenya	Pan African Medical Journal
F.W Nangole, Daniel Zuriel	2021	Does Keloid Histology Influence Recurrence?	American Journal of Dermatopathology

Barasa A, Ahmed I, Rajab J, Walong E	2021	Persistent oral candidiasis and disseminated BCGosis as a manifestation of Primary Immune Deficiency - a case report	Journal of Current Allergy and Clinical Immunology
Rakislova N, Marimon L, Ismail M, Carrilho C, Fernandes F, Ferrando M, Castollo P, Rodrigo-Calvo M, Guerrero J, Ortiz E, Mufloz-Beatove A, Martinez M, Hurtado J, Navarro M, Bassat Q, Maixenchs M, Delgado V, Walong E Aceutino A, Kim J, Paganelli C, Gocco N, Aldecoa I, Martinez-Pozo A, Martinez D, Ramirez-Ruz J, Cathomas G, Haab M, Menendez C, Ordi J.	2021	Minimally Invasive Autopsy Practise in COVID-19 Cases: Biosafety and Findings	Pathogens
N.A.O. Abinya, S.W. Guthua, W. Waweru, R. Barasa, A. Nderitu, M.R. Khan, N. Gatete, A. K. Habib, J.R. Ndungu	2021	Choriocarcinoma presenting as an oral mass in a young female	JCO Global Oncology
Brigid K. Grabeart, Jessica Y, Islam, Emmanuel Kabare, Nadja A. Vilot, Wairimu waweru, Kishor Mandaliya, Juma Shafi, Lucy adala, R. Scott McClelland, Jennifer S. Smith	2021	Sexually transmitted infection testing using Wet and Dry Self-Collected Samples among Women in Mombasa, Kenya	Sexually Transmitted Infections

Staffing

FIRST NAME	RANK
Jamilla Ajema Rajab	Senior Lecturer
Jessie N. Githanga	Associate Professor
Lucy W Muchiri	Associate Professor
Angela Atieno Amayo	Associate Professor
Walter Otieno Mwanda	Professor
Wairimu Waweru	Senior Lecturer
George O Wandolo	Lecturer
Christopher Stuart Gontier	Lecturer
Zakayo Limiri Thaimuta	Lecturer
Parmenas Miinda Okemwa	Lecturer
Julius Gikonyo Kuria	Lecturer
Peter Maturi Mwamba	Senior Lecturer
Ndungu Joseph Rugumi	Lecturer
Edwin Owino Oloo Walong	Lecturer
Daniel Zuriel	Senior Lecturer

FIRST NAME	RANK
Anne Kasyoka Barasa	Lecturer
Micah Onger Oyar	Lecturer
Peter Shikuku Kibet	Lecturer
Josephine Nyabeta Rioki	Lecturer
Francis W Maina	Lecturer
Ephantus Njagi Chomba	Lecturer
Joshua Akelo Nyagol	Associate Professor
Fredrick Otieno Okinyi	Lecturer
Caroline Wanjiku Njeru	Tutorial Fellow
Valerie Kemunto Magutu	Tutorial Fellow
Mary W. Kamuyu	Chief Technologist
Edith Karimi Gitonga	Senior Technologist DEF
Joseph Kamau	Technologist ABC
Mr. Willis Otieno Ochuk	Chief Technologist
Mr. Robert Sagara Barake	Assistant Chief Technologist
Beatrice Nyambeki Omweri	Senior Technologist DEF
Washington Ochieng Owino	Senior Technologist DEF
Walter Nyambati Barake	Trainee Technician III
Mrs. Deborah Maiko Mogi	Chief Technologist - Lecturer & Equiv.
Mr. Francis Mugeni Wanyama	Senior Technologist DEF
Mrs. Joyce Kavindu Maganga	Senior Technologist DEF
Mr. Ignatius Wanyonyi Wabwile	Senior Technologist DEF
Mr. Samuel Kamau Waweru	Technologist ABC
Dr. Jackson I. Mrama	Principal Technologist
Mr. Charles S Namutembi	Chief Technologist
Ms. Mary W. Nyaga	Assistant Chief Technologist
Mr. Samuel Asande Siriba	Senior Technologist Def
Beatrice Njoki Githui	Assistant Senior Secretary Grade C
Juliet Wanjiru Muhuthu	Secretary Grade A
Veronica Muthike Kimilu	Record's Clerk
Charles Wambua Mutua	Messenger/Cleaner Grade II
Barnaba Simatwo	Messenger/Cleaner Grade II
Zachary Mose	Messenger/Cleaner Grade II
Doris Mokaya Monyangi	Senior Administrator DEF

Future Projections

1. To increase international links and collaborations
2. To attract more international students.

Department of Medical Microbiology and Immunology

Background

The department of Medical Microbiology & Immunology has been at the forefront of teaching, research and clinical diagnostic care in infectious diseases and has generated two important institutes in the University - University of Nairobi Institute of Tropical and Infectious Diseases (UNITID) and Kenya AIDS Vaccine Initiative Institute of Clinical Research (KAVI-ICR). It services the Schools of Medicine, Nursing, Pharmacy, and Dental Sciences and provides diagnostic support & mentorship to Kenyatta Teaching & Referral Hospital (KNH), Mbagathi County Hospital and other sentinel clinics countrywide.

Besides teaching undergraduate students, the department teaches and supervises clinical diagnostic laboratory rotations and research to Master of Medicine (MMed) students in Pathology (Part I & II), Surgery (Part I), and Neurosurgery (Part I), Master of Dental Surgery (MDS), Master of Science in Clinical Cytology students and its own postgraduate students undertaking Master of Science (MSc) and PhD in Medical Microbiology programmes. The department annually teaches more than 1200 undergraduate students consisting of second and third year Bachelor of Medicine and Bachelor of Surgery (MBChB) students, second year Bachelor of Pharmacy (B.Pharm), Bachelor of Dental Surgery (BDS) and Bachelor of Science in Nursing (BScN) students, and second and third year Bachelor of Science in Medical Laboratory Science and Technology (BSc MLST) students.

Introduction

The department of Medical Microbiology is located on the Kenyatta National Hospital University of Nairobi. It is part of the Faculty of Health Sciences.

The department offers the following courses:-

- | | |
|---|---|
| i) MSc Medical Microbiology, | v) PhD in Immunology |
| ii) MSc. Tropical & Infectious Diseases | vi) PhD in Tropical and Infectious diseases |
| iii) PhD in Virology | vii) PhD in Clinical Research. |
| iv) PhD in Medical Microbiology | |

Mission, Vision, and Core Values

Vision - A centre of excellence for training and research in medical microbiology and immunology.

Mission - To train quality healthcare professionals carry out creative, innovative and inventive research, and provide reliable diagnostic services in the field of medical microbiology and Immunology.

Core Values

1. We shall uphold truth, integrity, honesty, tolerance, and accountability as our guiding principles.
2. We pledge to promote creative, innovative and inventive research in medical microbiology for the benefit of all.
3. Meritocracy and teamwork in research and practice shall be our hallmark.
4. We shall nurture responsible professionalism through a culture of mentorship.
5. We shall promote gender sensitivity in training, research and practice.
6. We shall practice good management of resources in training and research.

Enrolled International Postgraduate Students in The Programme Offered by The Department Master of Science Degree Programme

DEGREE PROGRAMME: H549-MASTER OF SCIENCE IN MEDICAL MICROBIOLOGY	
Student Names	Country
Bahizire Namegabe Esto	D.R. Congo
Derow Saido Mohamud	Somal
Mire Nimca Abdullahi Mire	Somali
Ahmed Ayan Osman Abdi	Somali
Yusuf Abdiaziz Mohamed	Somali
Ifrah Khaireh Robleh Khaireh	Djibouti
DEGREE PROGRAMME: W64-MASTER OF SCIENCE IN TROPICAL & INFECTIOUS DISEASES	
Student Names	Country
Awilling Mary Martin Ayuak	Southern Sudan
Malual Adut	Sudan
Abdulle Hafso Mohamed	Somali
Adam Abdikarim Abdullahi	Somali
Hussein Abdulkadir Mohamed	Somali
Abdullahi Omar	Somali
Ahmed Liban Ibrahim	Somali
Abdirazak Dirie Mohamed	Somali
Sheikdon Mohamed Dahir	Somali
Mohamed Iman Salad	Somali
Kalobo Glory	D.R. Congo
Habibullah Mustaf Ibrahim Haji	Somali
Amina Abdulaziz Farah	Somali
Samiiro Abdullahi Hussein	Somali
Hussein Zakarie Said	Somali
Moallim M. Ikram Abdulwahab	Somali
Mumin Abdikarin Mahad	Somali
Mohamed Sadia Ahmed	Somali
Moalim Abdirahman Ahmed	Somali
Salad Shukri Mohahmed	Somali
Salad Muad Dek	Somali
Abdulle Nafisa Hassan	Somali
Yusuf Ali Jama Farah	Somali
Ali Muhiadin	Somali
Mubalama Eugene Cizungu	D.R. Congo
Hussein Ilyas Mohamud	Somali
Artan Saida Ahmed	Somali
Yusuf Abdirizak Ali Yusuf	Somali
DEGREE PROGRAMME: H84-DOCTOR OF PHILOSOPHY IN INFECTIOUS DISEASES - KAVI	
Student Names	Country
Mohamed Sheikh Abdulrahman	Somali

DEGREE PROGRAMME: W80-DOCTOR OF PHILOSOPHY IN TROPICAL & INFECTIOUS DISEASES	
Student Names	Country
Umuhoza Therese	Rwanda
Stevens Mb Kisaka	Uganda
Rutayisire Robert	Rwanda
Mekonnen Yitagele Terefe	Ethiopia
Musewa Angella	Uganda
Tetuh Kyeng Mercy	Mozambique
Jaswant Gurdeep	Tanzania
Muhammad Bashir Sharif	Nigeria

Number of Staff and their Designations

The department had 25 in the following grades

Professor	- 2	Senior technologists	- 4
Associate Professor	- 1	Technologist	- 1
Senior Lecturers	- 3	Administrator	- 1
Lecturers	- 3	Secretary	- 1
Assistant Lecturer	- 1	Assistant Registry Supervisor	- 1
Tutorial Fellows	- 4	Messenger	- 1
Chief Technologist	- 1	Cleaners	- 2

Table 1: Summary of the current number of teaching staff

Category of staff	Current Numbers		
	In-post	Establishment	Variance
Professor	3	2	-1
Associate Professor	1	3	-2
Senior Lecturer	3	4	1
Lecturer	3	6	-3
Ass. Lecturer	1	1	0
Tutorial Fellow	4	3	1
Chief Technologist	1	2	-1
Senior Technologist	5	5	0
Technologist	3	2	-2
Technicians	0	1	-1
	25		

Research Activities Undertaken in 2021

Publications

1Low-Dose Acetylsalicylic Acid Reduces T Cell Immune Activation: Potential Implications for HIV Prevention.

Lajoie J, Kowatsch MM, Mwangi LW, Boily-Larouche G, Oyugi J, Chen Y, Kimani M, Ho EA, Kimani J, Fowke KR. *Front Immunol.* 2021 Nov 18;12:778455. doi: 10.3389/fimmu.2021.778455. eCollection 2021. PMID: 34868050
Free PMC article.

HIV-Exposed Seronegative Sex Workers Express Low T-Cell Activation and an Intact Ectocervical Tissue Microenvironment. Röhl M, Tjernlund A, Lajoie J, Edfeldt G, Bradley F, Bergström S, Kaldhusdal V, Åhlberg A, Månberg A, Omollo K, Boily-Larouche G, Asghar M, Kwon DS, Oyugi J, Kimani J, Nilsson P, Fowke KR, Broliden K. *Vaccines (Basel)*. 2021 Mar 4;9(3):217. doi: 10.3390/vaccines9030217. PMID: 33806390 Free PMC article.

Impact of livestock interventions on maternal and child nutrition outcomes in Africa: A systematic review and meta-analysis protocol. Muema J, Oyugi J, Bukania Z, Nyamai M, Jost C, Daniel T, Njuguna J, Thumbi SM. *AAS Open Res*. 2021 Oct 1;4:1. doi: 10.12688/aasopenres.13150.2. eCollection 2021. PMID: 34761161 Free PMC article.

Central obesity is a contributor to systemic inflammation and monocyte activation in virally suppressed adults with chronic HIV in Kenya. Temu TM, Wagoner J, Masyuko S, O'Connor A, Zifodya JS, Macharia P, Wanjalla CN, Mogaka JN, Chohan B, Omodi VM, Gervassi AL, Oyugi J, Page ST, Farquhar C, Polyak SJ. *AIDS*. 2021 Sep 1;35(11):1723-1731. doi: 10.1097/QAD.0000000000002956. PMID: 34033591 Free PMC article.

Differential Elevation of Inflammation and CD4+ T Cell Activation in Kenyan Female Sex Workers and Non-Sex Workers Using Depot-Medroxyprogesterone Acetate. Omollo K, Lajoie J, Oyugi J, Wessels JM, Mwaengo D, Kimani J, Kaushic C, Fowke KR. *Front Immunol*. 2021 Feb 23;11:598307. doi: 10.3389/fimmu.2020.598307. eCollection 2020. PMID: 33717049 Free PMC article.

Prevalence of human respiratory syncytial virus, parainfluenza and adenoviruses in East Africa Community partner states of Kenya, Tanzania, and Uganda: A systematic review and meta-analysis (2007-2020).

Umuhuza T, Bulimo WD, Oyugi J, Musabyimana JP, Kinengyere AA, Mancuso JD. *PLoS One*. 2021 Apr 27;16(4):e0249992. doi: 10.1371/journal.pone.0249992. eCollection 2021. PMID: 33905425 Free PMC article.

Regular Use of Depot Medroxyprogesterone Acetate Causes Thinning of the Superficial Lining and Apical Distribution of Human Immunodeficiency Virus Target Cells in the Human Ectocervix.

Edfeldt G, Lajoie J, Röhl M, Oyugi J, Åhlberg A, Khalilzadeh-Binicy B, Bradley F, Mack M, Kimani J, Omollo K, Wählby C, Fowke KR, Broliden K, Tjernlund A. *J Infect Dis*. 2022 Apr 1;225(7):1151-1161. doi: 10.1093/infdis/jiaa514. PMID: 32780807 Free PMC article.

Late antiretroviral refills and condomless sex in a cohort of HIV-seropositive pregnant and postpartum Kenyan women. Eastment MC, Kinuthia J, Wang L, Wanje G, Wilson K, Kaggiah A, Simoni JM, Mandaliya K, Poole DN, Richardson BA, Jaoko W, John-Stewart G, McClelland RS. *PLoS One*. 2021 Jul 19;16(7):e0254767. doi: 10.1371/journal.pone.0254767. eCollection 2021. PMID: 34280229 Free PMC article.

Derivation of an HIV Risk Score for African Women Who Engage in Sex Work.

Willcox AC, Richardson BA, Shafi J, Kabare E, Kinuthia J, Jaoko W, Mandaliya K, Overbaugh J, McClelland RS. *AIDS Behav*. 2021 Oct;25(10):3292-3302. doi: 10.1007/s10461-021-03235-7. Epub 2021 Apr 16. PMID: 33861378

In vitro antifungal susceptibility of yeasts and molds isolated from sputum of tuberculosis relapse and retreatment patients. Tonui J, Mureithi M, Jaoko W, Bii C. *Pan Afr Med J*. 2021 Mar 1;38:227. doi: 10.11604/pamj.2021.38.227.26485. eCollection 2021. PMID: 34046132 Free PMC article.

A Prospective Study of Depressive Symptoms, Condomless Sex, and HIV Viral Load in HIV-Positive Female Sex Workers in Kenya. Rosenthal MA, Wanje G, Richardson BA, Shafi J, Wang L, Masese L, Poole DN, Jaoko W, Simoni J, McClelland RS. *AIDS Behav*. 2021 Oct;25(10):3047-3056. doi: 10.1007/s10461-021-03258-0. Epub 2021 Apr 20. PMID: 33880670

Association between bacterial vaginosis and fecundability in Kenyan women planning pregnancies: a prospective preconception cohort study.

Lokken EM, Manhart LE, Kinuthia J, Hughes JP, Jisuvei C, Mwinyikai K, Muller CH, Mandaliya K, Jaoko W, McClelland RS. *Hum Reprod*. 2021 Apr 20;36(5):1279-1287. doi: 10.1093/humrep/deab002. PMID: 33594429 Free PMC article.

Cultivable vaginal *Lactobacillus* is not associated with fecundability in Kenyan women attempting to conceive.

Lokken EM, Jisuvei C, Hughes JP, Mandaliya K, Manhart LE, Mwinyikai K, Muller CH, Jaoko W, Kinuthia J, McClelland RS. *Fertil Steril*. 2022 Mar;117(3):603-611. doi: 10.1016/j.fertnstert.2021.11.032. Epub 2022 Jan 17. PMID: 35058047

Adaptation of a social vulnerability index for measuring social frailty among East African women.

Prabhu S, Wanje G, Oyaro B, Otieno F, Mandaliya K, Jaoko W, McClelland RS, McCormick W, Andrew MK, Aunon

FM, Simoni JM, Graham SM. *BMC Public Health*. 2022 Jan 24;22(1):167. doi: 10.1186/s12889-022-12597-z. PMID: 35073906 Free PMC article.

Vaginal washing behaviour and fecundability among Kenyan women in a prospective preconception cohort.

Lokken EM, Pulei A, Oyaro B, Nyaigero M, Jaoko W, Mandaliya K, Kinuthia J, McClelland RS. *Paediatr Perinat Epidemiol*. 2022 Mar;36(2):205-210. doi: 10.1111/ppe.12864. Epub 2022 Jan 18. PMID: 35041230

Comparative analysis of DNA extraction and PCR product purification methods for cervicovaginal microbiome analysis using cpn60 microbial profiling. Shvartsman E, Richmond MEI, Schellenberg JJ, Lamont A, Perciani C, Russell JNH, Poliquin V, Burgener A, Jaoko W, Sandstrom P, MacDonald KS. *PLoS One*. 2022 Jan 13;17(1):e0262355. doi: 10.1371/journal.pone.0262355. eCollection 2022. PMID: 35025956 Free PMC article.

Nugent Score, Amsel's Criteria, and a Point-of-Care Rapid Test for Diagnosis of Bacterial Vaginosis: Performance in a Cohort of Kenyan Women. Lokken EM, Jisuvei C, Oyaro B, Shafi J, Nyaigero M, Kinuthia J, Mandaliya K, Jaoko W, McClelland RS. *Sex Transm Dis*. 2022 Jan 1;49(1):e22-e25. doi: 10.1097/OLQ.0000000000001469. PMID: 33993164

Results of a cluster randomized trial testing the systems analysis and improvement approach to increase HIV testing in family planning clinics.

Eastment MC, Wanje G, Richardson BA, Mwaringa E, Sherr K, Barnabas RV, Perla M, Mandaliya K, Jaoko W, McClelland RS. *AIDS*. 2022 Feb 1;36(2):225-235. doi: 10.1097/QAD.0000000000003099. PMID: 34628439 Clinical Trial.

Does Keloid Histology Influence Recurrence?

Nangole FW, Ouyang K, Anzala O, Ogeng'o J, Agak GW, Zuriel D. *Am J Dermatopathol*. 2021 Sep 1;43(9):642-646. doi: 10.1097/DAD.0000000000001880. PMID: 33464754

Association Between Vaginal Bacterial Microbiota and Vaginal Yeast Colonization.

Eastment MC, Balkus JE, Richardson BA, Srinivasan S, Kimani J, Anzala O, Schwebke J, Fiedler TL, Fredricks DN, McClelland RS. *J Infect Dis*. 2021 Mar 3;223(5):914-923. doi: 10.1093/infdis/jiaa459. PMID: 32726445 Free PMC article.

Multiple Cytokines Elevated in Patients with Keloids: Is It an Indication of Auto-Inflammatory Disease?

Nangole FW, Ouyang K, Anzala O, Ogengo J, Agak GW. *J Inflamm Res*. 2021 Jun 10;14:2465-2470. doi: 10.2147/JIR.S312091. eCollection 2021. PMID: 34140794 Free PMC article.

Cohort Profile: IAVI's HIV epidemiology and early infection cohort studies in Africa to support vaccine discovery. Price MA, Kilembe W, Ruzagira E, Karita E, Inambao M, Sanders EJ, Anzala O, Allen S, Edward VA, Kaleebu P, Fast PE, Rida W, Kamali A, Hunter E, Tang J, Lakhi S, Mutua G, Bekker LG, Abu-Baker G, Tichacek A, Chetty P, Latka MH, Maenetje P, Makkan H, Hare J, Kibengo F, Priddy F, Landais E, Chinyenze K, Gilmour J. *Int J Epidemiol*. 2021 Mar 3;50(1):29-30. doi: 10.1093/ije/dyaa100. PMID: 32879950 Free PMC article. No abstract available.

Seroevidence of Zoonotic Viruses in Rodents and Humans in Kibera Informal Settlement, Nairobi, Kenya.

Ogola JG, Alburkat H, Masika M, Korhonen E, Uusitalo R, Nyaga P, Anzala O, Vapalahti O, Sironen T, Forbes KM. *Vector Borne Zoonotic Dis*. 2021 Dec;21(12):973-978. doi: 10.1089/vbz.2021.0046. PMID: 34958268

High Prevalence of Multidrug-Resistant *Clostridioides difficile* Following Extensive Use of Antimicrobials in Hospitalized Patients in Kenya. Mutai WC, Mureithi MW, Anzala O, Revathi G, Kullin B, Burugu M, Kyany'a C, Odoyo E, Otieno P, Musila L. *Front Cell Infect Microbiol*. 2021 Feb 8;10:604986. doi: 10.3389/fcimb.2020.604986. eCollection 2020. PMID: 33628744 Free PMC article.

High seroprevalence of SARS-CoV-2 but low infection fatality ratio eight months after introduction in Nairobi, Kenya. Ngere I, Dawa J, Hunsperger E, Otieno N, Masika M, Amoth P, Makayotto L, Nasimiyu C, Gunn BM, Nyawanda B, Oluga O, Ngunu C, Mirieri H, Gachohi J, Marwanga D, Munywoki PK, Odhiambo D, Alando MD, Breiman RF, Anzala O, Njenga MK, Bulterys M, Herman-Roloff A, Osoro E. *Int J Infect Dis*. 2021 Nov;112:25-34. doi: 10.1016/j.ijid.2021.08.062. Epub 2021 Sep 2. PMID: 34481966 Free PMC article.

In vitro antimicrobial activity of daptomycin alone and in conjunction with either amoxicillin, cefotaxime or rifampicin against the main pathogens responsible for bacterial meningitis in adults. Maldiney T, Bonnot D, Anzala N, Albac S, Labrousse D, Varon E, Amoureux L, Chapuis A, Bador J, Neuwirth C, Croisier D, Chavanet P. *J Glob Antimicrob Resist*. 2021 Jun;25:193-198. doi: 10.1016/j.jgar.2021.03.007. Epub 2021 Mar 24. PMID: 33774218 Free article.

Antimicrobial Resistance Profiling and Phylogenetic Analysis of *Neisseria gonorrhoeae* Clinical Isolates From Kenya in a Resource-Limited Setting. Juma M, Sankaradoss A, Ndombi R, Mwaura P, Damodar T, Nazir J, Pandit A, Khurana R, Masika M, Chirchir R, Gachie J, Krishna S, Sowdhamini R, Anzala O, Meenakshi IS. *Front Microbiol.* 2021 Jul 27;12:647565. doi: 10.3389/fmicb.2021.647565. eCollection 2021. PMID: 34385981 Free PMC article.

Vaginal Bacteria and Risk of Incident and Persistent Infection With High-Risk Subtypes of Human Papillomavirus: A Cohort Study Among Kenyan Women.

Carter KA, Srinivasan S, Fiedler TL, Anzala O, Kimani J, Mochache V, Wallis JM, Fredricks DN, McClelland RS, Balkus JE. *Sex Transm Dis.* 2021 Jul 1;48(7):499-507. doi: 10.1097/OLQ.0000000000001343. PMID: 33346587 Clinical Trial.

Keloids: Does patients' sex influence the presentation and recurrence post-excision?

Wanjala NF, Joseph G, Anthony M, Primus O, Ogeng'o JJ, Anzala O, Dohil I, Agak GW. *J Plast Reconstr Aesthet Surg.* 2022 Jan;75(1):366-368. doi: 10.1016/j.bjps.2021.08.030. Epub 2021 Sep 20. PMID: 34642061

Safety and immunogenicity of 2-dose heterologous Ad26.ZEBOV, MVA-BN-Filo Ebola vaccination in healthy and HIV-infected adults: A randomised, placebo-controlled Phase II clinical trial in Africa.

Barry H, Mutua G, Kibuuka H, Anywaine Z, Sirima SB, Meda N, Anzala O, Eholie S, Bétard C, Richert L, Lacabaratz C, McElrath MJ, De Rosa S, Cohen KW, Shukarev G, Robinson C, Gaddah A, Heerwegh D, Bockstal V, Luhn K, Leyssen M, Douoguih M, Thiébaud R; EBL2002 Study group. *PLoS Med.* 2021 Oct 29;18(10):e1003813. doi: 10.1371/journal.pmed.1003813. eCollection 2021 Oct. PMID: 34714820 Free PMC article. Clinical Trial.

Cross-reactivity of glycan-reactive HIV-1 broadly neutralizing antibodies with parasite glycans.

Huettner I, Krumm SA, Serna S, Brzezicka K, Monaco S, Walpole S, van Diepen A, Allan F, Hicks T, Kimuda S, Emery AM; IAVI Protocol C Investigators & The IAVI African HIV Research Network, Landais E, Hokke CH, Angulo J, Reichardt N, Doores KJ. *Cell Rep.* 2022 Mar 29;38(13):110611. doi: 10.1016/j.celrep.2022.110611. PMID: 35354052

Host range and molecular variability of the sadwavirus dioscorea mosaic associated virus.

Umber M, Filloux D, Svanella-Dumas L, Bonheur L, Acina-Mambole I, Gomez RM, Faure C, Anzala F, Pavis C, Roumagnac P, Marais A, Theil S, Candresse T, Teycheney PY. *Arch Virol.* 2022 Mar;167(3):917-922. doi: 10.1007/s00705-022-05379-w. Epub 2022 Feb 2. PMID: 35107668

Associations Between Vaginal Bacteria and Bacterial Vaginosis Signs and Symptoms: A Comparative Study of Kenyan and American Women. Carter KA, Balkus JE, Anzala O, Kimani J, Hoffman NG, Fiedler TL, Mochache V, Fredricks DN, McClelland RS, Srinivasan S. *Front Cell Infect Microbiol.* 2022 Mar 4;12:801770. doi: 10.3389/fcimb.2022.801770. eCollection 2022. PMID: 35310847 Free PMC article.

Quantifying rates of HIV-1 flow between risk groups and geographic locations in Kenya: A country-wide phylogenetic study.

Nduva GM, Otieno F, Kimani J, Wahome E, McKinnon LR, Cholette F, Majiwa M, Masika M, Mutua G, Anzala O, Graham SM, Gelmon L, Price MA, Smith AD, Bailey RC, Baele G, Lemey P, Hassan AS, Sanders EJ, Esbjörnsson J. *Virus Evol.* 2022 Mar 3;8(1):veac016. doi: 10.1093/ve/veac016. eCollection 2022. PMID: 35356640 Free PMC article.

Immune profile and responses of a novel dengue DNA vaccine encoding an EDIII-NS1 consensus design based on Indo-African sequences.

Sankaradoss A, Jagtap S, Nazir J, Moula SE, Modak A, Fialho J, Iyer M, Shastri JS, Dias M, Gadepalli R, Aggarwal A, Vedpathak M, Agrawal S, Pandit A, Nisheetha A, Kumar A, Bordoloi M, Shafi M, Shelar B, Balachandra SS, Damodar T, Masika MM, Mwaura P, Anzala O, Muthumani K, Sowdhamini R, Medigeshe GR, Roy R, Pattabiraman C, Krishna S, Sreekumar E. *Mol Ther.* 2022 Jan 7;S1525-0016(22)00013-2. doi: 10.1016/j.ymthe.2022.01.013. Online ahead of print. PMID: 34999210 Free PMC article.

Safety and immunogenicity of 2-dose heterologous Ad26.ZEBOV, MVA-BN-Filo Ebola vaccination in children and adolescents in Africa: A randomised, placebo-controlled, multicentre Phase II clinical trial.

Anywaine Z, Barry H, Anzala O, Mutua G, Sirima SB, Eholie S, Kibuuka H, Bétard C, Richert L, Lacabaratz C, McElrath MJ, De Rosa SC, Cohen KW, Shukarev G, Katwere M, Robinson C, Gaddah A, Heerwegh D, Bockstal V, Luhn K, Leyssen M, Thiébaud R, Douoguih M; EBL2002 Study group. *PLoS Med.* 2022 Jan 11;19(1):e1003865. doi: 10.1371/journal.pmed.1003865. eCollection 2022 Jan. PMID: 35015777 Free PMC article. Clinical Trial.

Seroevidence of Zoonotic Viruses in Rodents and Humans in Kibera Informal Settlement, Nairobi, Kenya.

Ogola JG, Alburkat H, Masika M, Korhonen E, Uusitalo R, Nyaga P, Anzala O, Vapalahti O, Sironen T, Forbes KM. *Vector Borne Zoonotic Dis.* 2021 Dec;21(12):973-978. doi: 10.1089/vbz.2021.0046.PMID: 34958268

Evaluation of facial cleanliness and environmental improvement activities: Lessons learned from Malawi, Tanzania, and Uganda. Sanders AM, Dixon R, Stuck L, Kelly M, Woods G, Muheki EM, Baayenda G, Masika M, Kafanikhale H, Mwingira U, Wohlgenuth L. *PLoS Negl Trop Dis.* 2021 Nov 29;15(11):e0009962. doi: 10.1371/journal.pntd.0009962. eCollection 2021 Nov.PMID: 34843480 Free PMC article.

High seroprevalence of SARS-CoV-2 but low infection fatality ratio eight months after introduction in Nairobi, Kenya. Ngere I, Dawa J, Hunsperger E, Otieno N, Masika M, Amoth P, Makayotto L, Nasimiyu C, Gunn BM, Nyawanda B, Oluga O, Ngunu C, Mirieri H, Gachohi J, Marwanga D, Munywoki PK, Odhiambo D, Alando MD, Breiman RF, Anzala O, Njenga MK, Bulterys M, Herman-Roloff A, Osoro E. *Int J Infect Dis.* 2021 Nov;112:25-34. doi: 10.1016/j.ijid.2021.08.062. Epub 2021 Sep 2.PMID: 34481966 Free PMC article.

Viromes and surveys of RNA viruses in camel-derived ticks revealing transmission patterns of novel tick-borne viral pathogens in Kenya. Zhang Y, Hu B, Agwanda B, Fang Y, Wang J, Kuria S, Yang J, Masika M, Tang S, Lichoti J, Fan Z, Shi Z, Ommeh S, Wang H, Deng F, Shen S. *Emerg Microbes Infect.* 2021 Dec;10(1):1975-1987. doi: 10.1080/22221751.2021.1986428.PMID: 34570681 Free PMC article.

Antimicrobial Resistance Profiling and Phylogenetic Analysis of *Neisseria gonorrhoeae* Clinical Isolates From Kenya in a Resource-Limited Setting. Juma M, Sankaradoss A, Ndombi R, Mwaura P, Damodar T, Nazir J, Pandit A, Khurana R, Masika M, Chirchir R, Gachie J, Krishna S, Sowdhamini R, Anzala O, Meenakshi IS. *Front Microbiol.* 2021 Jul 27;12:647565. doi: 10.3389/fmicb.2021.647565. eCollection 2021.PMID: 34385981 Free PMC article.

Impact of a Thoracic Multidisciplinary Conference on Lung Cancer Outcomes. Gaudio C, Sykes A, Whalen PE, Attwood KM, Masika MM, Demmy TL, Dexter EU, Hennon MW, Picone AL, Yendamuri SS, Nwogu CE. *Ann Thorac Surg.* 2022 Feb;113(2):392-398. doi: 10.1016/j.athoracsur.2021.03.017. Epub 2021 Mar 18.PMID: 33744217

Quantifying rates of HIV-1 flow between risk groups and geographic locations in Kenya: A country-wide phylogenetic study. Nduva GM, Otieno F, Kimani J, Wahome E, McKinnon LR, Cholette F, Majiwa M, Masika M, Mutua G, Anzala O, Graham SM, Gelmon L, Price MA, Smith AD, Bailey RC, Baele G, Lemey P, Hassan AS, Sanders EJ, Esbjörnsson J. *Virus Evol.* 2022 Mar 3;8(1):veac016. doi: 10.1093/ve/veac016. eCollection 2022. PMID: 35356640 Free PMC article.

Speciation and antifungal susceptibility of *Candida* isolates from diabetic foot ulcer patients in a tertiary hospital in Kenya. Musyoki VM, Mutai W, Ngugi N, Otieno F, Masika MM. *Pan Afr Med J.* 2022 Jan 13;41:34. doi: 10.11604/pamj.2022.41.34.30815. eCollection 2022.PMID: 35382049 Free PMC article.

Immune profile and responses of a novel dengue DNA vaccine encoding an EDIII-NS1 consensus design based on Indo-African sequences. Sankaradoss A, Jagtap S, Nazir J, Moula SE, Modak A, Fialho J, Iyer M, Shastri JS, Dias M, Gadepalli R, Aggarwal A, Vedpathak M, Agrawal S, Pandit A, Nisheetha A, Kumar A, Bordoloi M, Shafi M, Shelar B, Balachandra SS, Damodar T, Masika MM, Mwaura P, Anzala O, Muthumani K, Sowdhamini R, Medigeshe GR, Roy R, Pattabiraman C, Krishna S, Sreekumar E. *Mol Ther.* 2022 Jan 7:S1525-0016(22)00013-2. doi: 10.1016/j.ymthe.2022.01.013. Online ahead of print.PMID: 34999210 Free PMC article.

The genotypic and phenotypic impact of hypoxia microenvironment on glioblastoma cell lines. Macharia LW, Muriithi W, Heming CP, Nyaga DK, Aran V, Mureithi MW, Ferrer VP, Pane A, Filho PN, Moura-Neto V. *BMC Cancer.* 2021 Nov 19;21(1):1248. doi: 10.1186/s12885-021-08978-z.PMID: 34798868 Free PMC article.

High Prevalence of Multidrug-Resistant *Clostridioides difficile* Following Extensive Use of Antimicrobials in Hospitalized Patients in Kenya. Mutai WC, Mureithi MW, Anzala O, Revathi G, Kullin B, Burugu M, Kyany'a C, Odoyo E, Otieno P, Musila L. *Front Cell Infect Microbiol.* 2021 Feb 8;10:604986. doi: 10.3389/fcimb.2020.604986. eCollection 2020.PMID: 33628744 Free PMC article.

In vitro antifungal susceptibility of yeasts and molds isolated from sputum of tuberculosis relapse and retreatment patients. Tonui J, Mureithi M, Jaoko W, Bii C. *Pan Afr Med J.* 2021 Mar 1;38:227. doi: 10.11604/pamj.2021.38.227.26485. eCollection 2021.PMID: 34046132 Free PMC article.

Diagnostic accuracy of the syndromic management of four STIs among individuals seeking treatment at a health centre in Nairobi, Kenya: a cross-sectional study. Maina AN, Mureithi MW, Ndemi JK, Revathi G. *Pan Afr Med J.* 2021 Nov 4;40:138. doi: 10.11604/pamj.2021.40.138.25166. eCollection 2021.PMID: 34909106 Free PMC article.

Imported SARS-COV-2 Variants of Concern Drove Spread of Infections Across Kenya During the Second Year of the Pandemic. Nasimiyu C, Matoke-Muhia D, Rono GK, Osoro E, Obado DO, Mwangi JM, Mwikwabe N, Thiongâ O K, Dawa J, Ngere I, Gachohi J, Kariuki S, Amukoye E, Mureithi M, Ngere P, Amoth P, Were I, Makayotto L, Nene V, Abworo EO, Njenga MK, Seifert SN, Oyola SO. medRxiv. 2022 Feb 28:2022.02.28.22271467. doi: 10.1101/2022.02.28.22271467. Preprint.PMID: 35262086 Free PMC article.

HIV Prevention in a Time of COVID-19: A Report from the HIVR4P // Virtual Conference 2021. Fatima Laher 1, Simone I Richardson, Philip Smith 3, Patrick S Sullivan, Andrea G Abrahams, Osaretin E Asowata, Patrick Bitangumutwenzi, Smritee Dabee, Annabell Dollah, Natalia Fernandez, Robert K Langat, Devi Leena Bose, Udom Likhitwonnawut, Ranajoy Mullick, Rachel S Resop, Jyoti Sutar, Ashaki Nzingha Thompson-Hall, Michael W Traeger, Marina Tuyishime, Jacque Wambui, Linda-Gail Bekker, Pontiano Kaleebu, Sheena McCormack, David H O'Connor, Mitchell Warren, Tamara Torri, Bargavi Thyagarajan. AIDS Res Hum Retroviruses 2021 Nov 25. doi: 10.1089/AID.2021.0138.

Robert K. Langat, Bashir Farah, Jackton Indangasi, Simon Ogola, Gloria Omosa-Manyonyi, Omu Anzala, Jean Bizimana, Emmanuel Tekirya, Caroline Ngetsa, Moses Silwamba, Enoch Muyanja, Paramesh Chetty, Maureen Jangano, Nancy Hills, Jill Gilmour, Len Dally, Josephine H. Cox, Peter Hayes. Performance of International AIDS Vaccine Initiative African clinical research laboratories in standardised ELISpot and peripheral blood mononuclear cell processing in support of HIV vaccine clinical trials. African Journal of Laboratory Medicine | Vol 10, No 1 | a1056. 2021.51

Robert K. Langat, Bashir Farah, Jackton Indangasi, Simon Ogola, Gloria Omosa-Manyonyi, Omu Anzala, Jean Bizimana, Emmanuel Tekirya, Caroline Ngetsa, Moses Silwamba, Enoch Muyanja, Paramesh Chetty, Maureen Jangano, Nancy Hills, Jill Gilmour, Len Dally, Josephine H. Cox, Peter Hayes. Performance of International AIDS Vaccine Initiative African clinical research laboratories in standardised ELISpot and peripheral blood mononuclear cell processing in support of HIV vaccine clinical trials. African Journal of Laboratory Medicine | Vol 10, No 1 | a1056. 2021.

Karim F, Gazy I, Cele S, Zungu Y, Krause R, Bernstein M, Khan K, Ganga Y, Rodel H, Mthabela N, Mazibuko M, Muema D, Ramjit D, Ndung'u T, Hanekom W, Gosnell B; COMMIT-KZN Team, Lessells RJ, Wong EB, de Oliveira T, Moosa MS, Lustig G, Leslie A, Kløverpris H, Sigal A. HIV status alters disease severity and immune cell responses in Beta variant SARS-CoV-2 infection wave. Elife. 2021 Oct 5;10:e67397. doi: 10.7554/eLife.67397.

Snyman J, Hwa SH, Krause R, Muema D, Reddy T, Ganga Y, Karim F, Leslie A, Sigal A, Ndung'u T; COMMIT-KZN Team. Similar antibody responses against SARS-CoV-2 in HIV uninfected and infected individuals on antiretroviral therapy during the first South African infection wave. Clin Infect Dis. 2021 Sep 2:ciab758. doi: 10.1093/cid/ciab758.

Nduati EW, Gorman MJ, Sein Y, Hermanus T, Yuan D, Oyaro I, Muema DM, Ndung'u T, Alter G, Moore PL. Coordinated Fc-effector and neutralization functions in HIV-infected children define a window of opportunity for HIV vaccination. AIDS. 2021 Oct 1;35(12):1895-1905. doi: 10.1097/QAD.0000000000002976. Mdlletshe N, Thobakgale C, Malaba TR, Madlala H, Myer L, Muema DM, Mogeni P, Gray CM, Altfeld M, Newell ML, Ndung'u T. Low immune activation in early pregnancy is associated with preterm but not small-for-gestational age delivery in HIV infected women initiating antiretroviral therapy in pregnancy: a PIMS case-control study in Cape Town, South Africa. Clin Infect Dis. 2021 Feb 19:ciab151.

Advances in Microbiology, 2022, 12, 67-82 <https://www.scirp.org/journal/aim> ISSN Online: 2165-3410 ISSN Print: 2165-3402 DOI: 10.4236/aim.2022.122006 Feb. 18, 2022 67 Advances in Microbiology Bacteriome in Ticks Collected from Domestic Livestock in Kenya. Beth Mutai^{1,2}, Kariuki Njaanake², Kimita Gathii¹, Benson B. Estambale^{2,3}, John N. Waitumbi^{1*}

Diagnostic accuracy of the syndromic management of four STIs among individuals seeking treatment at a health centre in Nairobi, Kenya: a cross-sectional study. Maina AN, Mureithi MW, Ndemi JK, Revathi G. Pan Afr Med J. 2021 Nov 4;40:138. doi: 10.11604/pamj.2021.40.138.25166. eCollection 2021.PMID: 34909106 Free PMC article.

High Prevalence of Multidrug-Resistant *Clostridioides difficile* Following Extensive Use of Antimicrobials in Hospitalized Patients in Kenya. Mutai WC, Mureithi MW, Anzala O, Revathi G, Kullin B, Burugu M, Kyany'a C, Odoyo E, Otieno P, Musila L. Front Cell Infect Microbiol. 2021 Feb 8;10:604986. doi: 10.3389/fcimb.2020.604986. eCollection 2020.PMID: 33628744 Free PMC article.

"As long as the patient tells you it was a dog that bit him, why do you need to know more?" A qualitative study of how healthcare workers apply clinical guidelines to treat dog bite injuries in selected hospitals in Uganda.

Kisaka S, Makumbi FE, Majalija S, Kagaha A, Thumbi SM. PLoS One. 2021 Jul 14;16(7):e0254650. doi: 10.1371/journal.pone.0254650. eCollection 2021. PMID: 34260651 Free PMC article.

Impact of livestock interventions on maternal and child nutrition outcomes in Africa: A systematic review and meta-analysis protocol. Muema J, Oyugi J, Bukania Z, Nyamai M, Jost C, Daniel T, Njuguna J, Thumbi SM. AAS Open Res. 2021 Oct 1;4:1. doi: 10.12688/aasopenres.13150.2. eCollection 2021. PMID: 34761161 Free PMC article.

Serological evidence of single and mixed infections of Rift Valley fever virus, *Brucella* spp. and *Coxiella burnetii* in dromedary camels in Kenya. Muturi M, Akoko J, Nthiwa D, Chege B, Nyamota R, Mutiiria M, Maina J, Thumbi SM, Nyamai M, Kahariri S, Sitawa R, Kimutai J, Kuria W, Mwatondo A, Bett B. PLoS Negl Trop Dis. 2021 Mar 26;15(3):e0009275. doi: 10.1371/journal.pntd.0009275. eCollection 2021 Mar. PMID: 33770095 Free PMC article.

Rabies Elimination in Rural Kenya: Need for Improved Availability of Human Vaccines, Awareness and Knowledge on Rabies and Its Management Among Healthcare Workers. Chuchu VM, Kitala PM, Bichanga P, Ksee D, Muturi M, Mwatondo A, Nasimiyu C, Maritim M, Mutono N, Beyene TJ, Druelles S, Hampson K, Thumbi SM. Front Public Health. 2022 Mar 10;10:769898. doi: 10.3389/fpubh.2022.769898. eCollection 2022. PMID: 35356016 Free PMC article.

An optimization of four SARS-CoV-2 qRT-PCR assays in a Kenyan laboratory to support the national COVID-19 rapid response teams. Mohammed KS, de Laurent ZR, Omuoyo DO, Lewa C, Gicheru E, Cheruiyot R, Bartilol B, Mutua S, Musyoki J, Gumba H, Mwacharo J, Riako D, Mwangi SJ, Gichuki BM, Nyamako L, Karani A, Karanja H, Mugo D, Gitonga JN, Njuguna S, Gumbi W, Tawa B, Tendwa M, Cheruiyot W, Sein Y, Nyambu JK, Patta SO, Thani TS, Maitha EK, Kitole B, Mwakinangu MS, Muslih BS, Otieno JO, Nyiro JU, Kiyuka P, Ndwiga L, Wamae K, Kimani D, Makale J, Morobe JM, Osoti V, Lambisia AW, Odundo C, Mwarumba S, Mutunga M, Bejon P, Tsofa B, Agoti CN, Ochola-Oyier LI. Wellcome Open Res. 2022 Mar 4;5:162. doi: 10.12688/wellcomeopenres.16063.2. eCollection 2020. PMID: 35330938 Free PMC article.

Efficiency of transplacental transfer of respiratory syncytial virus (RSV) specific antibodies among pregnant women in Kenya.

Nyiro JU, Bukusi E, Mwaengo D, Nyaguara A, Nyawanda B, Otieno N, Bigogo G, Murunga N, Widdowson MA, Verani JR, Chaves SS, Mwangudza H, Odundo C, Berkley JA, Nokes DJ, Munywoki PK. Wellcome Open Res. 2022 Apr 1;7:43. doi: 10.12688/wellcomeopenres.17636.2. eCollection 2022. PMID: 35402734 Free PMC article.

Workshops and Conferences Attended

1. HIV Vaccine Awareness Day (HVAD) May 2021, Virtual
2. COVID-19 Pandemic, Vaccines and other Viruses February 2021
3. Ending the HIV/AIDS Epidemic, World AIDS Day, MasterCard Foundation: Virtual
4. HIV/AIDS, Global Health Series, McGill University, Canada: Virtual
5. Annual Review Meeting 2020 University Of Nairobi STD/HIV/SRH Collaborative Research

Benchmarking

Members of the department undertook a benchmarking visit to the Institute for Primate Research in Kenya led by Chair of the department Dr. Marianne Mureithi and Senior Researcher Prof. Omu Anzala. They were joined by Dr. Kariuki Njanaake, Dr. Robert Langat and Dr. Terry Muhomah of KAVI - Institute of Clinical Research, all of the University of Nairobi, and Prof. Thomas Hope and Dr. Anne-Marie Carias from Northwestern University.

The team participated in collaborative discussions with the leadership of the Institute, and the goal was to discuss future collaborations between the institutions in HIV Vaccine Research. At the IPR, the team met with Dr. Atunga Nyachieo, the IPR Chief Scientist and other scientists and staff within the Institute. Ongoing programs, available resources and facilities, procedures for engaging scientists within the IPR, and protocols for setting up contracts with other institutions were discussed during these meetings. The Institute of Primate Research, a part of the National Museums of Kenya, performs field and laboratory studies on various primates on-site in Kenya and focuses on conservation biology, reproductive health and biology, infectious diseases, and animal sciences and care

Members of the department lead by Prof. Walter Jaoko joined other researchers from the University of Washington, KNH, KEMRI, JKUAT amongst others to discuss the UNIVERSITY OF WASHINGTON KENYA RESEARCH & TRAINING CENTRE (KRTC) 2022 Strategic plan. KRTC brings faculty, students, and researchers together to support research and training that improves health and informs policy in Kenya and other resource-limited settings across the globe. The collaboration aspires to improve health in Kenya and globally through high-quality mentoring, rigorous scientific research, and strong collaborations

Achievements

1. The Department emerged as the best overall performing unit and best performing teaching department in the performance contracting awards category in 2020- 2021.
2. **Introducing MicroPATH Laboratory**

The Department of Medical Microbiology & Immunology and Human Pathology have led the effort on behalf of FHS to partner with Siemens Healthineers and Accurite Health to create MicroPATH Laboratories on a futuristic model that will foster growth, innovation and continuous improvement in all our laboratories. The technical advisory team is led by Prof. Walter Jaoko, Prof. Angela Amayo, Dr. Marianne Mureithi and Dr. Wairimu Waweru. From Accurite Health, the team is led by M. Timothy M'barine. MicroPATH Laboratory at the University of Nairobi Faculty of Health Sciences, Kenyatta National Hospital campus has recently renovated and reopened its invitro diagnostics laboratory to support and enhance clinicians and health service providers provide high quality health services to the people of Kenya. The MicroPATH Laboratory will also support Student lead research and has set aside funds that will support various student led projects at the Faculty of Health.
3. Members of the Department Prof. Walter Jaoko, Prof. Omu Anzala and Prof Julius Oyugi were both recently featured on the Alper Doger (AD) Scientific Index 2022 ranking.
4. The University of Nairobi had a total of 18 scientists across various disciplines in the top 50 rankings with both department members on the list. Prof. Jaoko, who is also the Director of the KAVI-Institute of Clinical Research was ranked 4th overall in the country and 2nd in the University. He was also ranked as the 2nd Best Scientist in the country for Medical & Health Sciences and 1st in the country for Infectious Diseases. Prof. Anzala was ranked 33rd overall in the country and 16th in the University. He also ranked 1st as the Best Virologist in both the University and the Country. Prof. Oyugi was ranked 92nd overall in the country and 38th in the University.
5. The Department has teamed up with an International Registry of Men with Prostate Cancer known as IRONMAN. The main goal of this registry is to improve outcomes in men with advanced prostate cancer around the world. The Registry will have an international cohort of a minimum of 5,000 men with advanced prostate cancer, including men with Metastatic Hormone-Sensitive Prostate Cancer (mHSPC) and M0/M1 Castrate-Resistant Prostate Cancer (CRPC). The Kenyan team includes Principal Investigator Dr. Charles Waihenya, Co-Principal Investigators Prof. Muthoni Musibi, Dr. Andrew Gachii, Dr. Samuel Gatherere and Chair of the Department Dr. Marianne Mureithi, Molecular Biology PhD Candidate and Instructor George Ichoho among others. The team of Medical Doctors and Scientists aim to recruit a minimum of 150 study participants. The Department will act as the regional biorepository site for all samples collected which will aid in the identification and validation of molecular phenotypes of the disease that predict response and resistance to specific therapeutics. The study will run until 2029 and the selected sites are Kenyatta National Hospital (KNH) and MP Shah Hospital.
6. UANDISHI-Building Capacity for Writing Scientific Manuscripts” is an innovative and experiential training program in mentoring and scientific manuscript writing, aimed at fostering scientific manuscripts writing skills and output, at the Faculty of Health Sciences (FHS), University of Nairobi (UoN). This program complements other existing research training ventures within FHS and is hosted at KAVI-Institute of Clinical Research (KAVI-ICR). IAVI funds UANDISHI through a collaborative grant secured by Dr. Gloria Omosa-Manyonyi (Principal Investigator) of the Department of Medical Microbiology and Immunology, UoN.
7. Dr. Gloria Omosa-Manyonyi Pioneers A Program On Capacity Building For Scientific Manuscript Writing At Fhs-Uon Uandishi is modeled on the International Traineeships in AIDS Prevention Studies program (ITAPS) at the University of California, San Francisco (UCSF). Dr. Gloria Omosa-Manyonyi, was one of five experienced researchers who were trained in the inaugural 2015 ITAPS program. Since then, she and other ITAPS mentor alumni from East Africa have successfully spearheaded regional scientific writing

and data analysis workshops involving participants from research organizations in Africa. By means of workshops and individualized mentoring, UANDISHI program delivers experiential training in Mentorship and Scientific Manuscript Writing. Mentors-in-training are supported in a structured fashion, to provide mentoring of mentees while developing manuscripts and ultimately submitting to peer reviewed journals. Participants are postgraduate students (mentees) and faculty/researchers (mentors).

Challenges

The Department of Medical Microbiology is busy and annually serves more than 1500 undergraduate and postgraduate students consisting of second and third-year Bachelor of Medicine and Bachelor of Surgery (MBChB) students, second-year Bachelor of Pharmacy (B.Pharm), Bachelor of Dental Surgery (BDS) and Bachelor of Science in Nursing (BScN) students, and second, third and fourth-year Bachelor of Science in Medical Laboratory Science and Technology (BSc MLST) students. The postgraduate students include; first and second-year MSc Medical Microbiology students, MSc in Tropical and Infectious Diseases students, MSc in Clinical Chem and Cytology, MMed Pathology and MMed Surgery.

All the above are against a workforce of 10 full-time lecturers. Due to the large number of students we handle and the heavy workload delivering both theory and practical aspects of medical microbiology, we urgently request additional teaching staff consisting of Tutorial Fellows/Graduate Assistants, lecturers, senior lecturers. In addition, the department urgently needs an extra 11 non-teaching staff members (technologists) to adequately support the department's teaching, research, and learning.

Collaboration with Other Institutions

The department has collaborated with several institutions over the years, some of them include;

- | | |
|---|--|
| 1. Micro PATH Laboratories | 11. University of Arkansas |
| 2. Pharmacy and Poisons Board | 12. University of Oxford |
| 3. National AIDS & STI Control Programme | 13. Imperial College London |
| 4. National Center For Biological Sciences | 14. Medical Research Council |
| 5. Biozeq Kenya | 15. University of KwaZulu-Natal |
| 6. The African Academy of Sciences | 16. Washington State University |
| 7. National Research Fund | 17. University of Washington |
| 8. KEMRI Wellcome Trust | 18. Northwestern University |
| 9. International Livestock Research Institute | 19. National Commission for Science, Technology and Innovation |
| 10. The University of Tokyo | |

Name	Qualification	Designation
Prof. Aggrey Omu Anzala	MBChB, PhD	Professor
Prof. Walter Godfrey Jaoko	MBChB, PhD	Professor
Prof. Julius Otieno Oyugi	PhD - Medical Microbiology	Ass. Professor
Dr. Fibi Achieng Odhiambo	MBChB, MMed	Senior Lecturer
Dr. Stephen Juma Ndombi	MBChB, MMed	Senior Lecturer
Dr. Marianne Wanjiru Mureithi	PhD - Medical Microbiology	Lecturer
Dr. Florence Mueni Mutua	MBChB, MSc.	Lecturer
Dr. Humphrey Njaanake Kariuki	PhD - Tropical & Infectious Diseases	Lecturer
Dr. Gloria S. Omosa-Manyonyi	MBChB, MSc.	Lecturer
Dr. Julius Manyasi Otido	MBChB	Assistant Lecturer
Dr. Anne Njeri Maina	MBChB, MSc.	Tutorial Fellow
Dr. Moses Muia Masika	MBChB, MSc.	Tutorial Fellow
Ms. Susan Akinyi Odera	MSc.	Tutorial Fellow
Ms. Winnie Chepkurui Mutai	MSc.	Tutorial Fellow

Non- Teaching Staff Members

Names	Designation
Felista Wayua Muthini	Chief Technologist
Jonathan Olenyo Oloo	Senior Technologist
Magdaline W. Burugu	Senior Technologist
Fred Mose	Senior Technologist
Gitau Wilfred	Technologist
Victor Moses Musyoki	Technologist
Caren Awilly	Administrator
Mary Njoki Mwaniki	Senior Clerk
Gaudencia Masingu	Secretary
Valentine R. Ojiambo	Messenger/Cleaner
Ms Hellen Atai Milkah	Cleaner
Jackson Odutsa Maloba	Cleaner

Department of Nursing Sciences



Department of Nursing Sciences, Faculty of Health Sciences (Kenyatta National Hospital Campus)

Introduction

The Department of Nursing Sciences is one of the Departments of Faculty of Health Sciences. It was initially a department in the faculty of Medicine for close to 38 years which was offering training of nurses both at undergraduate and postgraduate levels. The administrative unit of the Department of Nursing Sciences is the Chairman's' office. The department has 4 Thematic units namely: Medical/ Surgical Nursing, Obstetrics / Midwifery and Gynaecological Nursing, Community Health Nursing and Nursing Education & Administration.

Vision, Mission and Strategic Objectives

Vision - A centre of excellence in nursing education, research, community service and consultancy with scholars and professionals

Mission - To train nurse professionals, carry out research in current and emerging health issues, provide community service and consultancy.

Objectives

1. To design and implement relevant and innovative teaching and learning progress
2. To be a leading institutions in Scholarly research and creative productivity in Africa
3. Improve student welfare services through development and implementation of appropriate minimum standards
4. To build a sustainable resource base
5. To enhance competitiveness and image of the department

Programmes Offered

The School offers the following programmes;

- i) Diploma in Renal Nursing - 1 Years
- ii) Bachelor of Science in Nursing (Bsc.N) - 4 Years
- iii) Bachelor of Science in Nursing - KRCHN to BSc.N - 3 Years
- iv) Master of Science in Nursing (MSc.N) - 2 years (Various Specialties)
- v) Ph.D in Nursing

Strategic Issues

1. Institutionalize an appropriate culture in the Department of Nursing Sciences by Increasing commitment, loyalty and responsibility among staff by ensuring compliance with the teaching schedule and keeping to timelines
2. Market the Department locally and internationally by establishing new linkages/partnerships with industry and by documenting key achievements on foyer/websites
3. Establish and operationalize mechanisms that empower staff. This will be achieved by developing and implementing staff recognition & appreciation programme for exceptional talent and excellent performance in the Department
4. Review existing graduate programmes to attract more students by increasing the number of partnerships established with international universities/institutions and also increased the number of graduate students in diverse fields/specialties in Nursing field
5. Improve the quality and quantity of STEM programme by ensuring that all the of academic units have adequate and equipped skills laboratory for STEM programs such as Nursing
6. To produce quality graduates in diverse fields of nursing by improving quality and delivery of teaching and learning programmes

Major Achievements in The Year 2020

Item	Remarks
Online Thesis defense	Two students successfully defended Ph.D online and graduated
Criteria for academic staff recruitment and promotion	Given by Senate and used to advertize for the School these posts in 2020 and in process - Post of Professor - Post of Ass. Prof
Mainstreaming of online teaching and learning	- Successfully done for Diploma , undergraduate and post graduate - Staff and students were trained on teaching and class enrollment on e-class
Online solutions for university business	- Lots of queries handled using help desk created for the School and the department email - More email accounts created for solving various issues at the School e.g verification of documents, examination queries, indexing with Nursing Council

Online examinations	<ul style="list-style-type: none"> - Conducted successfully university provided Telkom lines with bundles to staff and students - Challenges with power issues and proper gadgets not available for some students
Virtual 65 th and 66 th Graduations	<ul style="list-style-type: none"> - 2 PhD graduand in 65th graduation - 10 Diploma in Nursing 131 undergraduate graduands, 17 MSc. N in the 66th graduation
Online Registrations of 1 st Year Students	Joining instructions of students uploaded and students verified online, biometric done
Student Progression	Students academic progress done
Webinars	20 webinars Organized by the Departments staff
Anchoring the pivotal role of the course leader, in examination process	Course leaders were successfully set in the System by UoN ICT team and were able to administer examinations online
Publications	Twenty three publications on various issues of health produced from the Department

Cooperate and Community Outreach Activities

The year 2021 had challenges due to the outbreak of covid-19 which led to most activities to a halt. Staff and students were not able to organize medical camps but some students managed to offer community outreach services in various parts of the country

Narok Free Kidney Screening

Students studying Diploma in Renal Nursing and the staff members from the Department of Nursing joined the Kenya Renal Association and the Kenya Renal Nursing Association in conducting free kidney screening in Narok County. Apart from screening the public for renal disease, the staff and students also educated them on renal diseases.

Staffing

There are 21 Academic members of staff and 6 support staff as follows:

Associate Professor	- 1	Library Assistant	- 1
Senior Lecturers	- 8	Secretary	- 2
Lecturers	- 9	Records Clerk	- 1
Administrator	- 1	Messenger/Cleaner	- 2

Future Projections

1. To increase international links and collaborations
2. Establishment of Advanced (Bachelors) training in, physiotherapy, occupational therapy, orthopedic technology among others.
3. Provision of clinical services to include; Maternal Child Health/Family Planning and Nutrition, Counseling services, Substance Abuse rehabilitation, outreach and home based nursing care

Department of Obstetrics and Gynaecology

Research Activities Undertaken

Initiative	Collaborators	Pi
WHO Multicountry Randomized Trial of Antenatal Corticosteroids for Women in Preterm Labour to Improve Newborn Outcomes (ACTION Trial Study)	WHO	Prof. Zahida Qureshi
Understanding Effectiveness of Implementation of Postpartum Haemorrhage Initial Response Bundle (e-MOTIVE Formative)	University of Birmingham University of Nairobi	Prof. Zahida Qureshi
To advance Health Equity through innovation and Partnerships in relation to Devices, Diagnostics and Drugs to address Women's Needs (PATH Study)	PATH International University of Washington University of Nairobi	Zahida Qureshi Prof. Omondi Ogutu
To Estimate the Burden and Characteristics of Metabolic Syndrome among Women in Kenya (MetSA Study)	University of Washington University of Nairobi	Dr. Alfred Osoti
To understand presence and progress of a Symptomatic Cardiovascular Diseases after pregnancies complicated with Hypertensive Disorders in Pregnancy (CADA Study)	University of Nairobi University of Washington	Dr. Alfred Osoti
Building Capacity to Address the Burden of Cardiometabolic Risk Factors and Diseases in LMICs (LMICs Study)	University of Washington University of Nairobi	Dr. Alfred Osoti

Publications

Author	Title	Journal	Month & Year
A.Mitchell, EJ, Benjamin S, Ononge S, Ditai J, Qureshi Z , Masood SN, Whitham D, Godolphin PJ, Duley L.	Identifying women giving birth preterm and care at the time of birth: a prospective audit of births at six hospitals in India, Kenya, Pakistan and Uganda. BMC Pregnancy Childbirth20, 439 (2020).	https://doi.org/10.1186/s12884-020-03126 (See Fig1	July 2020
Prof. Zahida Qureshi	WHO Guidelines/ Recommendations on Drug Treatment for non-severe Hypertension in Pregnancy	See Fig 2	August 2020
Joshua Peter Vogel, Valerie Vannevel, Gianna Robbers, George Gwako , Tina Lavin, Abiodun Adanikin, Tsakane Hlongwane, Robert C Pattinson, Zahida P. Qureshi , Olufemi T. Oladapo.	Prevalence of Abnormal Umbilical Arterial Flow on Doppler Ultrasound in Low-risk and Unselected Pregnant Women: A Systematic Review.	DOI: https://doi.org/10.21203/rs.3.rs-96851/v1 (see Fig2)	August 2020

Author	Title	Journal	Month & Year
Vogel JP, Comrie-Thomson L, Pingray V, Gadama L, Galadanci H, Goudar S, Rose Laisser, Lavender T, Lissauer D, Misra S, Pujar Y, Qureshi ZP, Amole T, Berrueta M, Dankishiya F, Gwako G, Homer CSE, Jobanputra J, Meja S, Nigri C, Mohaptra V, Osoti A, Roberti J, Solomon D, Suleiman M, Robbers G, Sutherland S, Vernekar S, Althabe F, Bonet M, Oladapo O	Usability, acceptability, and feasibility of the World Health Organization Labour Care Guide: A mixed-methods, multicountry evaluation.	"https://onlinelibrary.wiley.com/doi/full/10.1111/birt.12511	
The WHO ACTION Trials Collaboratores.	Antenatal Dexamethsone for Early Preterm Birth in Low-Resource Countries	DOI: 10.1056/NEJMoa2022398	23 October 2020
George N.Gwako ¹ Fredrick Were ² Moses M. Obimbo ^{1,3} John Kinuthia ^{1,4} Onesmus W. Gachuno ¹ Peter B. Gichangi ^{3,5}	Association between utilization and quality of antenatal care with stillbirths in four tertiary hospitals in a low-income urban setting.	AOGS Wileyonlinelibrary.com/journal/aogs	July 2020
G. Gwako, M. Obimbo, P.B. Gichangi, O. Gachuno, J. Kinuthia and F. Were	Association Between Quality Of Intrapartum Care With Fresh Stillbirth In A Low-Income Urban Setting	East African Medical Journal	September 2020
George N. Gwako ¹ Moses M. Obimbo ^{1,2} Peter B. Gichangi ^{2,3} John Kinuthia ^{1,4} Onesmus W. Gachuno ¹ Fredrick Were ⁵	Association between obstetric and medical risk factors and stillbirths in a low-income urban setting	IJGO Wileyonlinelibrary.com/journal/ijgo	December 2020
Gwako N.G ¹ , Gichangi B.P ^{2,3} , Were F ⁵ , Kinuthia J ^{1,4} , Gachuno O ¹ , Bosire N.B ¹ , Obimbo M.M ^{1, 2}	Determinants Of Stillbirths in Nairobi, Kenya.	JOGECA	
Hussein S.I, Kimani V.N., Ndavi PM, J.J. Chesang JJ and Jaldesa GW:	Knowledge and Perceptions of Complications Associated with Female Genital Mutilation/Cutting among the Somali Community in Wajir County, Kenya,	East African Medical Journal Vol. 97:8:2912-24, 2020	August 2020
Stark M1*, Mynbaev O1, Belci D1, Danilov A2, Vassilevski Y2,3, Ogutu O1,4	Toward Universal Unified Cesarean Section Method in Africa	https://www.easpublisher.com/easjms	October 2020
Koigi M. K, Kosgei R. J, Kihara A. B, Kamau R. K, Koigi P. K	Serum Anti-Mullerian Hormone as a Predictor of Metaphase II Oocyte Yield During Controlled Ovarian Stimulation in a Private Clinic in Nairobi, Kenya	JOGECA 2021 33(1)	February 2021

Author	Title	Journal	Month & Year
Wanyoike J. G, Machira J, Owiti M, Murage A, Kireki O, Obimbo M. M	Fellowship in Reproductive Endocrinology and Infertility in the Department of Obstetrics and Gynaecology, University of Nairobi	JOGECA 2021 33(1)	February 2021

International Conferences Attended

Conference	Theme	Date	Documentation
Post-Partum Haemorrhage Community of Practice Annual Meeting July 21-23, 2020 (See Fig3)	Aligning Strategies, Mobilizing Support, Accelerating Progress	July 21-23, 2020	Prof. Zahida Qureshi - https://www.jhpiego.org/pph-cop-virtual-annual-meeting/
EMOTIVE Formative Research Training (See Fig 7)		September 7-9, 2020	Prof. Zahida Qureshi - Program
World Sepsis Conference 9 th September 2020-certificate (See Fig4)	World Sepsis Congress Spotlight: Sepsis, Pandemics and Antimicrobial Resistance - Global Health threats of the 21 st Century	September 9, 2020	Certificate - Prof. Zahida Qureshi
Glow 2020 Conference - World Sepsis Congress Spotlight (See Fig5)	Implementing Respectful Care: Science and Practice	September 10 - 11, 2020	Certificate - Prof. Zahida Qureshi
Poster presentation on Uterine Balloon Tamponade, at the Glow conference (See Fig6)			Prof. Zahida Qureshi - See Fig 6
Grand Challenges Annual Meeting 2020 (ACTION Trial) - See Fig 4	Optimizing Birth, Growth and Development	October 19-21, 2020	Snap Shot while presenting - Prof. Zahida Qureshi
GLOW (Global Women's Research Society) webinar, (See figure 5)	Complications of caesarean section in low-and-middle-income countries, a systematic review. The power of evidence synthesis.	November 16, 2020	Prof. Zahida Qureshi - Certificate of Attendance
Africa Population & Health Research Center Policy Engagement and Communication Tools Virtual Training (See Fig6)		July 14 - November 24, 2020	Prof. Zahida Qureshi - Schedule of Virtual training
Kenya Association of Muslim Professionals Webinar Presentation (See Fig7)	Challenges and Solutions of Medical Education During Covid-19 Pandemic Era.	November 21, 2020	Prof. Zahida Qureshi - in the List of Panelists
Webinar's at St. Mary's Mission Hospital (See figure 8)	UBT and in person	December 1, 2020	Prof. Zahida Qureshi - Snap shot during presentation
Chaired the Guideline Development for Antiplatelets for Prevention of Pre-Eclampsia - (See figure 9)		November 23 - 24, 2020	Prof. Zahida Qureshi - Program

Write up of ACTION II meeting (See figure 10)	To discuss the findings of ACTION II and draft the manuscript	November 19, 2020	Prof. Zahida Qureshi - Meeting Objectives & Schedule
NIHR Global Health Research Group Meeting (See figure 11)	Stillbirth Prevention and Management in Sub-Saharan Africa-Advisory	December 3, 2020	Prof. Zahida Qureshi - Schedule of Meeting
1 Hour FMF Webinar Course	Fetal Medicine	November 15, 2020	Prof. Omondi Ogutu - Certificate of Attendance
2 Hours FMF Webinar Course	Fetal Medicine	November 29, 2020	Prof. Omondi Ogutu - Certificate of Attendance
FIGO Africa Regional, Kigali Congress		December 13-15, 2020	Prof. Omondi Ogutu - Invitation Letter
Nairobi Muthaiga North Rotary club in Collaboration with UON Dept. of Obstetrics and Gynaecology MNH Workshop held at Hadassah Hotel, Nairobi, Kenya	Emergency Obstetrics and neonatal care	November 27 - 29, 2020	Dr. Anne-Beatrice Kihara - Schedule
Kenya Obstetrical and Gynaecological Society Conference	Addressing Reproductive Health Barriers and Closing the Gap in the Wake of COVID-19 Pandemic and Beyond	February 17-19, 2021	Dr. Anne-Beatrice Kihara - Schedule of Presentation
EAPM Webinar	Delayed Cord Clamping	January 12, 2021	Certificate of Attendance
1 Hour FMF Webinar Course	Fetal Medicine	January 17, 2021	Prof. Omondi Ogutu - Certificate of Attendance
2 Hours FMF Webinar Course	Fetal Medicine	February 14, 2021	Prof. Omondi Ogutu - Certificate of Attendance
2 Hours FMF Webinar Course	Fetal Medicine	February 28, 2021	Prof. Omondi Ogutu - Certificate of Attendance
EAPM Webinar	Perinatal Sepsis	March 9, 2021	Prof. Omondi Ogutu - Certificate of Attendance
2 Hours FMF Webinar Course	Fetal Medicine	March 28, 2021	Prof. Omondi Ogutu - Certificate of Attendance
Hands on Training	Basic Obstetrics Ultrasound Skills	March 30-April 1, 2021	Prof. Omondi Ogutu - Certificate of Attendance
Kenya Obstetrical and Gynaecological Society Conference	Addressing Reproductive Health Barriers and Closing the Gap in the Wake of COVID-19 Pandemic and Beyond	February 17-19, 2021	Prof. Omondi Ogutu - Schedule of Presentation

GLOW (Global Women's Research Society) webinar	Demystifying qualitative research in Global Maternal and Newborn Health.	January 25, 2021 (See figure 5)	Prof. Zahida Qureshi - Certificate of Participation
45thKOGS Annual Scientific Congress Programme, Greehills Hotel, Nyeri,	Addressing Reproductive Health Barriers And Closing The Gaps In The Wake Of Covid-19 Pandemic And Beyond.	17th to 19th February 2021 (See figure 6)	Prof. Zahida Qureshi - Schedule of Presentation
1st Virtual Africa Health Agenda International Conference 2021 (AHAIC 2021),		8 th to 10 th March 2021. (See figure 7)	Prof. Zahida Qureshi - Certificate of Participation
AMREF Health Africa in Kenya Board Retreat at Radisson Blu, Nairobi.	Board Succession Planning	March 5 th 2021 (See figure 8)	Prof. Zahida Qureshi - Certificate of Participation
Conducted an in-person Ellavi UBT training at the Department of Obs/Gynae boardroom for 14 participants, which included 13 nurses and the lead Obstetrician/ Gynaecologist at Kenyatta National Hospital.		Friday 29 th January 2021 (See figure 9)	Prof. Zahida Qureshi - Schedule of Activities
I was part of the Ellavi UBT team that trained 100 participants (nurses and doctors) from Kenyatta National Hospital, University of Nairobi -Department of Obs/Gynae and Mbagathi County Hospital.		Monday 8 th - Friday 12 th March 2021 (See figure 10)	Prof. Zahida Qureshi - Schedule of Activities & Snap Shot
Technical Consultation on Evaluation of a Novel Magnesium Sulfate Regimen for the Treatment of Pre-Eclampsia and Eclampsia -Virtual meeting -	AGENDA; Develop a work plan for the non-inferiority trial: STEPMag, comparing an alternative magnesium sulfate regimen with a standard dosing regimen in the treatment of pre-eclampsia.	3-4 February 2021 (See figure 11)	Prof. Zahida Qureshi - Schedule of Activities
As a mentor for the Kenyatta Hospital chapter of Muslim student's association of University of Nairobi (MSAUN) continue to guide them on working with the community issues.	Currently working on the planning of a surgical (29 Mar-1 Apr 2021) and medical (2-4 Apr 2021) camp-at Kajiado County referral hospital	29 Mar-1 Apr 2021 and 2-4 Apr 2021 (See figure 12)	Prof. Zahida Qureshi - Snap Shot
Medical camp organized by the Light Sisters at the Masjid Al Ameen mosque complex on Juja Road Nairobi.	Provided support for fundraising and organizing of post-graduate doctors to participate in the camp.	6-7 February 2021 (See figure 13)	Prof. Zahida Qureshi - Snap Shot
Hands on Training	Basic Obstetrics Ultrasound Skills	30 th March - 1 st April 2021	Dr. Kireki Omanwa - Certificate of Participation
Adolescent and Youth Webinar	A Holistic Health Approach	12 - 15 April 2021	Dr. Diana Ondieki - Certificate of Participation

Collaborations

Memorandum of Understanding Between the University of Nairobi (Department of Obstetrics and Gynaecology) Liverpool School of Tropical Medicine

Memorandum of Understanding between the University of Nairobi (Department of Obstetrics and Gynaecology) and the University of Alexandria, Egypt.

Memorandum of Understanding Between Department of Obstetrics & Gynecology, University of Nairobi, Omaera Pharmaceuticals Limited and Shenzhen Mindray Bio-Medical Electronics Co., Ltd, having its principal place of business at Mindray Building, Keji 12th Road South, High-Tech Industrial Park, Nanshan, Shenzhen 518057, P. R. China ("Mindray")

DEPARTMENT OF OPHTHALMOLOGY

Introduction

The University of Nairobi Department of Ophthalmology started training ophthalmologists in 1978. It is domiciled at the Faculty of Health Sciences in the Kenyatta National Referral Hospital campus on Ngong Road, Nairobi. We train undergraduate medical students in the 4th and 6th years of the MBChB program to and postgraduate Master of Medicine in Ophthalmology that is 3 years long. This is the largest Ophthalmology training program in Africa. There is a huge shortage of ophthalmologists in Africa. There are 12 academic staff who are also examiners in the College of Ophthalmology of Eastern Central and Southern Africa (COECSA).

The training program incorporates a blend of the traditional apprenticeship model of medical and surgical training with modern online and simulation models. There is a wetlab where trainees first practice surgery on animal eyes and an eye surgery simulation unit where they use model eyes for surgical training, and finally when competent they get to operate on humans with the trainers. The Department has advanced precision equipment such as microscopes, various lasers, a Retcam for taking photos and videos of the retina, and refraction training models among others. We work in the Kenyatta National Referral Hospital facility and also have an eye clinic and theatre in the nearby University of Nairobi Dental Department facility. Until Covid-19 disruptions, we had an active outreach program where twice a month we visit various rural hospitals in Kenya to conduct eye camps where we run clinics and perform many surgeries. Outreach provides an opportunity for trainees to engage with communities, learn how to manage eye clinics and also tour various parts of Kenya. Our trainees also attend the annual Ophthalmology conferences in Kenya. The training program includes 2 elective terms on 2-months duration done in the second and third year in a hospital of one's choice anywhere in the world.

We have an exchange program with the University of Munich involving both academic staff and students. Staff participate in observerships while the trainees do elective terms. The specialists from Munich give varied short courses every year in the Department.

Programmes Offered

- i) MBChB Year IV - Ophthalmology I (HSU 403)
- ii) MBChB Year VI - Ophthalmology II (HSU 603)
- iii) Master of Medicine in Ophthalmology - MMed Ophth (H545)
- iv) Doctor of Philosophy

Academic Year

In 2020/2021 academic year the department graduated a total of 5 students during the December 2021 ceremony.

Enrolled Students - MMed Ophthalmology - 49

Students Graduated - MMed Ophthalmology - 5

Strategic Issues

- i) With the COVID-19 pandemic there were less patients seen in our clinics
- ii) Outreach activities to rural hospitals in Kenya were also limited by this pandemic.
- iii) International travel to conferences was similarly affected.
- iv) University restructuring merged or department with the Department of Surgery for most of this year then we were reconstituted thus affecting staff compliment.

Major Achievements In The Year 2021

1. We were able to admit MMed students through online verification, shortlisting and interviews.
2. Graduated 5 postgraduate students during the 64th graduation ceremony.
3. Teaching, learning and examinations continued with online engagement increased. Any teaching that could be done online was so done and we conducted online onsite examinations.
4. Students were allowed to spend more time on elective term units to get more exposure in other hospitals
5. Research and publications continued.
6. Our staff were named among the top research scientists in Kenya 2022
7. Online conferencing compensated for missed in-person meetings. One of us was a keynote speaker.
8. One of our staff was appointed on special Ministry of Health Committees
9. We developed an eye surgery simulation unit at the Department
10. With relaxation of international travel 2 postgraduate students went for an elective term at the University of Munich
11. We obtained a new laser system for treating retinoblastoma from one our collaborators
12. We changed the clinical logbook to a paperless online system reducing use of paper and merging with the online teaching and learning process

Corporate and Community Outreach Activities

Lecturer	Programme	Sch/Dept/Unit	Extension/Outreach	Date
Prof. Jefitha Karimurio	Member		Ministry of Health Committee on Neglected Tropical Diseases	2021-2022
Prof. Jefitha Karimurio	Member		Ministry of Health Committee on Migration of Health workers	May 2022
Prof. Dunera Ilako	Evaluation expert		International Paralympics Committee & International Blind Association	2021-2022
Dr. Stephen Gichuhi	Member		Lancet Commission on Global Eye Health	August 2021
Dr. Stephen Gichuhi	Chairman	Ophthalmological Society of Kenya (OSK)	Professional Standards & Ethics Committee	24/3/2021 to date

Staff Portfolio

Name	Qualification	Position
Dr. Stephen Gichuhi	MBChB (Nrb), MMed Ophth (Nrb), MSc Epid (London), MBA (Leicester), PhD (London), FEACO	Senior Lecturer (Chairman)
Prof. Jefitha Karimurio	MBChB (Nrb), MMed Ophth (Nrb), MSc CEH (London), PhD (Melbourne), FEACO	Associate Professor

Prof. Dunera Ilako	MBChB (Nrb), MMed Ophth (Nrb), MBA (Durban), FEACO	Associate Professor
Dr. Kahaki Kimani	MBChB (Nrb), MMed Ophth (Nrb), MSc CEH (London), FEACO	Senior Lecturer
Dr. Millicent M. Wanyoike	MBChB (Nrb), MMed Ophth (Nrb), FEACO	Senior Lecturer
Dr. Margaret Wanjiku Njuguna	MBChB (Nrb), MMed Ophth (Nrb), FEACO, FPaed Ophth	Senior Lecturer
Dr. Sheila Akinyi Marco	MBChB (Nrb), MMed Ophth (Nrb), FEACO, FGlaucoma	Senior Lecturer
Dr. Lucy Njambi Njeri	MBChB (Nrb), MMed Ophth (Nrb), FEACO, FPaed Ophth	Lecturer
Dr. Emmanuel Nyenze	MBChB (Moi), MMed Ophth (Nrb), FEACO, FOculoplastics	Lecturer
Dr. Joseph Nyamori Maina	MBChB (Nrb), MMed Ophth (Nrb), FEACO, FVitreoretina	Lecturer
Dr. Mukiri Mukuria	MBChB (Nrb), MMed Ophth (Nrb), FEACO, FCornea	Lecturer
Dr. Millicent Chepchirchir Bore	MBChB (Moi), MMed Ophth (Nrb), FEACO, FCornea	Lecturer
Wilkister Bwocha		Records Clerk IV
Alice Waithiegeni Mugi		Secretary A
Peter Sagana Osoro		Messenger II

8. Projections

- i) Focus on attaining performance contract goals in the short time we have been a Department
- ii) Sign more MOUs
- iii) Revise the curriculum

9. Any Other Pertinent Information/Issues in The Year 2021

- i) Some few students had to defer for financing/sponsorship challenges.
- ii) Outstanding promotions negatively affect morale. Succession planning depends on this.

10. International Students Component

We had 10 international students this academic year

Name	Country	Programme
Dr. Eric Nizigama	Burundi	MMed Ophthalmology
Dr. Hafsa Abdulkadir Mohamed	Somalia	MMed Ophthalmology
Dr. Jean Junior Nkuyubwatsi	Burundi	MMed Ophthalmology
Dr. Emade Ketchemen Nerice	Cameroon	MMed Ophthalmology
Dr. Unoda Lorato Fane	Botswana	MMed Ophthalmology
Dr. Rediet Zemedkun Alebachew	Ethiopia	MMed Ophthalmology
Dr. Engelinah Josiah	Botswana	MMed Ophthalmology
Dr. Melvin Temo	Cameroon	MMed Ophthalmology
Dr. Ruth Manu	Ghana	MMed Ophthalmology
Dr. Mabaka Tshегоfatso Tiny	Botswana	MMed Ophthalmology

13. International Links and Collaboration

- i) One MOU was signed between University of Nairobi and Alliance Mondiale Contre le Cancer (AMCC), Paris, France.
- ii) The Scholarship program with Christoffel Blinde Mission (CBM) continued to support some MMed students providing tuition fees and living costs.
- iii) Joint activities with the University of Munich Eye Clinic continued. Their specialists held an orthopaedics workshop in our Department in December 2021 and 2 of our students went for an elective term there in April 2022.

14. Publications - 10

Author	Title	Name Of The Journal	Month & Year
Gichuhi S et al	Performance and resource requirements of in-person versus voice call versus automated telephone-based socioeconomic data collection modalities for community-based health programmes: a systematic review protocol.	BMJ Open	2022 Apr
Gichuhi S et al	Grand Challenges in global eye health: a global prioritisation process using Delphi method.	Lancet Healthy Longev.	2022 Jan
Gichuhi S et al	How can we improve the quality of cataract services for all? A global scoping review.	Clin Exp Ophthalmol.	2021 Sep
Gichuhi S et al	Effectiveness of an mHealth system on access to eye health services in Kenya: a cluster-randomised controlled trial.	Lancet Digit Health.	2021 Jul
Gichuhi S et al	Experiences and Perceptions of Ophthalmic Simulation-Based Surgical Education in Sub-Saharan Africa.	J Surg Educ.	2021 Nov-Dec
Njambi L et al	Opportunities and barriers for genetic service delivery in Kenya from a health personnel perspective	J Community Genet.	2021 Oct
Njambi L, Kimani K et al	A Concurrent Retinoblastoma and Morning Glory Disc Anomaly	JOECSA	July 2021
Ilako D et al	Prevalence of Trichomatous Trichiasis in Ten Evaluation Units of Embu and Kitui Counties, Kenya.	Ophthalmic Epidemiol.	2022 Jan
Kimani K et al	Defining High-risk Retinoblastoma: A Multicenter Global Survey.	JAMA Ophthalmol.	2022 Jan
Kimani K et al	Changes in Eye Health and Service Coverage in Nampula, Mozambique between 2011 and 2018.	Ophthalmic Epidemiol.	2022 Feb

14. Conferences/Webinars

Name Of Lecturer	Topics / Function	Venue/Place	Period/Date
Dr. Gichuhi S	Research capacity development in Africa - experience from 5FU trial	London	31 st March 2022
Dr. Gichuhi S	College of Ophthalmologists in Eastern Central & Southern Africa (COECSA) Congress Keynote speaker	Virtual	20-21 st August 2021
Dr. Gichuhi S	Ophthalmological Society of Kenya (OSK) Congress	Mombasa	26 th -27 th November 2021
Dr. Njambi L	Ophthalmological Society of Kenya (OSK) Congress	Mombasa	26 th -27 th November 2021
Dr. Njuguna MW	1st Scientific Conference of the African Ophthalmological Council (AOC)	Virtual	27 th October 2021
Dr. Nyenze E	College of Ophthalmologists in Eastern Central & Southern Africa (COECSA) Congress Keynote speaker	Virtual	20-21 st August 2021
Dr. Nyenze E	Ophthalmological Society of Kenya (OSK) Congress	Mombasa	26 th -27 th November 2021
Dr. Kahaki K	The first case of intra-arterial chemotherapy in Kenya for retinoblastoma	OSK Conference, Mombasa,	25-26 th November 2021
Dr. Kahaki K	Experience with Kenya National Retinoblastoma Best Practice Guidelines	Addis Ababa, Ethiopia	10 th -12 th February 2022
Dr. Kahaki K	Early Diagnosis for Retinoblastoma-Where we are in Kenya	Speke Munyonyo Conference Centre: Uganda	15 th March 2022
Dr. Kahaki K	Current Situation of Retinoblastoma in Kenya	Speke Munyonyo Conference Centre: Uganda	15 th March 2022

16. Supervisions (MMed)

Supervisors	Students
Dr. Stephen Gichuhi	Dr. Emma Mukulu Nzioka Dr. Victor Obong'o Omondi Dr. Nerice Ketchemen Emade Dr. Michael Ng'ang'a Njoroge Dr. Ateeq Khan
Prof. Jefitha Karimurio	Dr. Beatrice Moraa Nyabuga Dr. Teresia Wangui Chege Dr. Hafsa Abdulkadir Mohamed Dr. Ateeq Khan Dr. Nadya Mustafa Salim
Prof. Dunera Ilako	Dr. Edwin Kamau Mbugua Dr. Nadya Mustafa Salim Dr. Brenda W'mosi Achieng Dr. Melvin Temo Mbah

Dr. Kahaki Kimani	Dr. Yusra Sharif Mohamed	Dr. Shabbir Mustafa Abdulrasul
Dr. Millicent M. Wanyoike	Dr. Eric Nizigama Dr. Kennedy Gituma Muriungi	Dr. Shabbir Mustafa Abdulrasul
Dr. Margaret Wanjiku Njuguna	Dr. Patrick Gathitu Nyamweya Dr. Nerice Ketchemen Emade	Dr. Agnes Wangechi Wang'ombe Dr. Kennedy Gituma Muriungi
Dr. Sheila Akinyi Marco	Dr. Shukri Ahmed	Dr. Patrick Gathitu Nyamweya
Dr. Lucy Njambi Njeri	Dr. Emma Mukulu Nzioka Dr. Paul Gathuku Irari	Dr. Victor Obong'o Omondi Dr. Agnes Wangechi Wang'ombe
Dr. Emmanuel Nyenze	Dr. Eric Nizigama Dr. Michael Ng'ang'a Njoroge	Dr. Shukri Ahmed
Dr. Joseph Nyamori Maina	Dr. Edwin Kamau Mbugua Dr. Melvin Temo Mbah Dr. Nerice Ketchemen Emade	Dr. Dennis Muthomi Kinyua Dr. Yusra Sharif Mohamed Dr. Ateeq Khan
Dr. Mukiri Mukuria	Dr. Dennis Muthomi Kinyua Dr. Uba Abdulkadir Hemed Dr. Jean Junior Nkuyubwatsi	Dr. Paul Gathuku Irari Dr. Hafsa Abdulkadir Mohamed
Dr. Millicent Chepchirchir Bore	Dr. Brenda W'mosi Achieng Dr. Uba Abdulkadir Hemed	Dr. Beatrice Moraa Nyabuga Dr. Teresia Wangui Chege

17. Staff Establishment

The department had 20 in the following grades

DESIGNATION	ESTABLISHMENT POSITIONS
Full Professor	1
Associate Professor	2
Senior Lecturer	3
Lecturer	5
Tutorial Fellow	0
Senior Administrative Assistant E/F	1
Senior Technologist D/E/F	1
Optician C	1
Assistant Senior Secretary C	1
Technologist A/B/C	1
Secretary B	1
Assistant Secretary A	1
Messenger II	1
Cleaner I	1

Department of Paediatrics and Child Health

Foreword

The Department of Paediatrics and Child Health is one of the departments that constitute the Faculty of Health Sciences (FHS) in the University of Nairobi. It is situated at Kenyatta National Hospital along old Mbagathi Road, about 5 Km West of Nairobi. Presently it has a student population of approximately 150 students enrolled in postgraduate programmes including fellowship programmes. The department also trains undergraduates in MBChB in their 3rd and 4th years of studies.

The Department meets the expectations of its stakeholders by: ensuring that the programmes offered meet the national and international requirements for Medical Doctors preparation and ensuring that the curricula are reviewed from time to time. In addition, the programmes are demand-driven and

meet market needs. The Department has established linkages and collaborations with similar institutions in various parts of the world thus providing a conducive working environment and ensuring good relations with the outside community. These linkages and collaborations benefit the Department in the development of programmes to meet the needs of stakeholders; enhance capacity building, facilitate research and publications, promote staff and student exchange programmes, improve infrastructural facilities and benchmark academic programmes to ensure quality.

The Department of Paediatrics and Child Health is the only Department in the University of Nairobi with the mandate of offering quality Training in the Paediatrics and Child Health profession in support of academic pursuits.

Our Vision - To be a centre of excellence for Paediatrics and Child Health training, undertake quality research, determine standards of care provided to all children, be part of the technical leadership in all issues relating to paediatric and child health in Kenya and internationally.

Our Mission - To develop high quality undergraduate, general postgraduate and sub-specialty training programs which offer degrees and fellowships in the field of paediatrics and child health using modern information technology and human development innovations to cope with present and future market need for Kenya and the East and Central Africa region.

Core values

- To provide quality training in Paediatrics and Child Health
- To espouse and impart the virtues of professional ethics and moral standards in training, research and practice.
- To promote evidence-based health care provision.
- To provide leadership in setting national and international health agenda.
- To promote creative, innovative and inventive research for the benefit of mankind.
- To nurture responsible professionalism through a culture of mentorship.

Strategic Objectives

In the current strategic plan period, the activities of the Department revolve around seven strategic issues:

- Governance, Leadership and Culture
- Teaching and Learning
- Competitiveness and Image of the College-
Department and Programmes
- Resources, Facilities and Infrastructure
- Research, Innovation and Technology
- Collaboration and Partnerships

Program Goals

The objectives of the course are to train physician scientists in paediatrics and child health who are able to:

- Effectively prevent disease and promote health in children at individual, family and community levels.
- Master the requisite diagnostic and therapeutic skills to competently evaluate and manage paediatric disease conditions in various clinical settings
- Demonstrate clear understanding of the design, implementation, monitoring and evaluation of child health programmes, and provide leadership in the organisation and running of preventive and curative health services for children; Be strong advocates for the rights of children, especially with regards to health.
- Provide health education to individuals, families and communities on child health, as well as provide continual medical education in child health to the health team.
- Design and implement research, analyse and utilise emerging evidence and available resources to address paediatric and child health problems, taking note of local priorities.

Structure of The Department

The Department has the following sections namely,

- Departmental Laboratory
- Departmental Training section
- Departmental Fellowship coordination Departmental administration and management wings
- The department has established rich programmes in the following areas
- Masters of Medicine in Paediatrics and Child Health
- Fellowship in Neonatal and Perinatal Medicine
- Fellowship in Paediatric and Adolescent Endocrinology
- Fellowship in Paediatric Emergency and Critical Care
- Fellowship in Epidemiology
- Fellowship in Paediatric Nephrology

Collaboration

The Department collaborates with the following institutions to support patients management and practicals

- Kenyatta National Hospital
- Kijabe Hospital
- Mbagathi Hospital
- Kangemi Health Center
- Kisii Teaching and Referral Hospital
- Maseno University

Staff Portfolio

Name of staff	Designation
Prof. Elizabeth M. Obimbo	Professor
Prof. Ezekiel M. Wafula	Professor
Prof. Ruth Nduati	Professor
Prof. Aggrey wasunna	Professor
Prof. Fred Were	Professor
Prof. Rachel Musoke	Associate Professor
Prof. Grace Irimu	Associate Professor
Prof. Christine Yuko-Jowi	Associate Professor
Prof. Dalton Wamalwa	Associate Professor
Dr. Nyambura Kariuki	Senior Lecturer
Dr. Florence Murila	Senior Lecturer
Dr. Ahmed Laving	Senior Lecturer
Dr. Admani Bashir	Senior Lecturer
Dr. Lucy W. Mungai	Senior Lecturer

Dr. Rashmi Kumar	Lecturer
Dr. Donald Oyatsi	Lecturer
Dr. Bonface Osano	Lecturer
Dr. Bhupinder Reel	Lecturer
Dr. Paul Laigong	Lecturer
Dr. Martin Aluvaala	Lecturer
Dr. Anjumanara Omar	Lecturer
Dr. Beatrice Mutai	Lecturer
Dr. Lawrence O. Okongo	Lecturer
Dr. Brian Maugo	Lecturer
Dr. Jacqueline Oliwa	Lecturer
Dr. Diana Marangu	Lecturer
Dr. Yvonne Mbithi	Tutorial Fellow
Dr. Edna Ojee	Tutorial Fellow
Dr. Maureen Kinge	Tutorial Fellow

Non-Teaching Staff, 2019/2020

Name of staff	Designation
Mr. Elijah Chege	Chief Technologist-12
Ms. Mercy Ngure	Senior Technologist - D/E/F
Ms. Josephine Kyalo	Senior Technologist D/E/F
Ms. Elizabeth Muyala	Technologist A/B/C
Mr. Augustine Wafula	Clerk A/B

Mr Jeremiah Ogolla	Ass Registrar - Department Administrator
Mr. Jones Onduko	Junior Technician II
Ms. Mary Mwangi	Asst. Secretary B
Ms. Cecilia Nzuve	Clerk IV
Ms. Martha	Cleaner IV
Ms. Peter Khalai	Messenger II

Achievements

The Department has made the following achievements:

ITEM	COMMENT
Integrated short courses in the syllabus (ETAT+, introduction to Diabetic in Paediatrics and adolescents, HIV course, Young Infant and Child Nutrition, Leadership Courses, Research Methods)	Fully implemented
Department has introduced four fellowship programme (Fellowship in Neonatology, Paediatric and adolescent endocrinology, Paediatric Critical Care and Epidemiology)	All programme running well and teaching have blended learning
Online Thesis defense	Master Students defended successfully
Mainstreaming of online teaching and learning	Fully implemented and functional
Online solutions for university business	Students and staff issues are received through departmental email and responses given to students and stakeholders through the same.
Online examinations	All post graduate and fellowship students take examinations using E-platform.
Recognition of outstanding	one postgraduate student awarded the Hillman Leadership award One postgraduate student awarded Hillman Medical Profession award Four undergraduate students (MBChB 5) who had the top three highest marks in Paediatrics and Child Health award the Hillman Award of Academic Excellence.
Award	The department awarded the best improved in teaching in UoN
Anchoring the pivotal role of the course leader, in examination process	Chair delegates her role to a leader in the specialized areas in the department.
Research	Leading in research grants award. An introductory course for literature search given to all postgraduates and will be given as an induction course for all first years to support practice in evidenced-based medicine

Staff Publications

Authors	Title	Journal Name/Period
GwakoGN, Were F, Obimbo MM, Kinuthia J, Gachuno OW, Gichangi PB.	Association between utilization and quality of antenatal care with stillbirths in four tertiary hospitals in a low-income urban setting.	ActaObstetGynecol Scand. 2020 Jul 10. doi: 10.1111/aogs.13956.
Inwani I, Chhun N, Agot K, Cleland CM, Rao SO, Nduati R, Kinuthia J, Kurth AE.	Preferred HIV Testing Modalities Among Adolescent Girls and Young Women in Kenya.	J Adolesc Health. 2020 Aug 10;S1054-139X(20)30404-3.
Wagner AD, Wilson KS, Babigumira JB, Mugo C, Mutiti PM, Neary J, Wamalwa DC, Bukusi D, John-Stewart GC, Kohler PK, SlykerJA..	Can Adolescents and Young Adults in Kenya Afford Free HIV Testing Services?	J Assoc Nurses AIDS Care. 2020 Jul-Aug;31(4):483-492
Njuguna IN, Wagner AD, Neary J, Omondi VO, Otieno VA, Orimba A, Mugo C, BabigumiraJB, Levin C, Richardson BA, Maleche-Obimbo E, Wamalwa DC, John-Stewart G, Slyker J.	Financial incentives to increase pediatric hiv testing: a randomized trial.	AIDS. 2020 Oct 8.
Karman E, Wilson KS, Mugo C, Slyker JA, Guthrie BL, Bukusi D, Inwani I, John-Stewart GC, Wamalwa D, Kohler PK.	Training Exposure and Self-Rated Competence among HIV Care Providers Working with Adolescents in Kenya.	J IntAssocProvid AIDS Care. 2020 Jan-Dec
Slyker JA, Guthrie B, Pankau M, Tapia K, Wamalwa D, Benki-Nugent S, Ngugi E, Huang ML, Njuguna I, Langat A, John-Stewart G, Lehman D.	Cytomegalovirus and Epstein-Barr virus viremia are associated with HIV DNA levels in the reservoir of Kenyan infants on antiretroviral therapy	. J Infect Dis. 2020 Oct
Culhane J, Sharma M, Wilson K, Roberts DA, Mugo C, Wamalwa D, Inwani I, Barnabas RV, Kohler PK.	Modeling the health impact and cost threshold of long-acting ART for adolescents and young adults in Kenya.	EClinicalMedicine. 2020 Jul
Akech S, Chepkirui M, Ogero M, Agweyu A, Irimu G, English M, Snow RW.	The Clinical Profile of Severe Pediatric Malaria in an Area Targeted for Routine RTS,S/AS01 Malaria Vaccination in Western Kenya.	Clin Infect Dis. 2020 Jul 11;71(2):372-380.
Ogero M, Akech S, Malla L, Agweyu A, Irimu G, English M;	Clinical Information Network Author Group. Examining which clinicians provide admission hospital care in a high mortality setting and their adherence to guidelines: an observational study in 13 hospitals.	Arch Dis Child. 2020 Jul;105(7):648-654.
Mugo C, Njuguna I, Nduati M, Omondi V, Otieno V, Nyapara F, Mabele E, Moraa H, Sherr K, Inwani I, Maleche-Obimbo E, Wamalwa D, John-Stewart G, Slyker J, Wagner AD.	From research to international scale-up: stakeholder engagement essential in successful design, evaluation and implementation of paediatric HIV testing intervention.	Health Policy Plan. 2020 Sep

Oliwa JN, Odero SA, Nzinga J, van Hensbroek MB, Jones C, English M, Van'tHoog A.	Perspectives and practices of health workers around diagnosis of paediatric tuberculosis in hospitals in a resource-poor setting - modern diagnostics meet age-old challenges.	BMC Health Serv Res. 2020 Aug 1;20(1):708.
Aluvaala J, English M..	Implementing change for facility-based peripartum care in low-income and middle-income countries	. Lancet Glob Health. 2020 Aug;8(8):e980-e981
Seminario AL, Kemoli A, Benki-Nugent S, Chebet D, Gomez L, Wamalwa D, John-Stewart G, Slyker JA.	Caregivers' report of HIV-associated oral manifestations among HIV-unexposed, exposed, and infected Kenyan children.	Int J Paediatr Dent. 2020 Dec 25.
Slyker JA, Guthrie B, Pankau M, Tapia K, Wamalwa D, Benki-Nugent S, Ngugi E, Huang ML, Njuguna I, Langat A, John-Stewart G, Lehman D.	Cytomegalovirus and Epstein-Barr virus viremia are associated with HIV DNA levels in the reservoir of Kenyan infants on antiretroviral therapy.	J Infect Dis. 2020 Oct 16
Mugo C, Wang J, Begnel ER, Njuguna IN, Maleche-Obimbo E, Inwani I, Slyker JA, John-Stewart G, Wamalwa DC, Wagner AD.	Home- and Clinic-Based Pediatric HIV Index Case Testing in Kenya: Uptake, HIV Prevalence, Linkage to Care, and Missed Opportunities.	J Acquir Immune Defic Syndr. 2020 Dec 15
Mugo C, Njuguna I, Nduati M, Omondi V, Otieno V, Nyapara F, Mabele E, Moraa H, Sherr K, Inwani I, Maleche-Obimbo E, Wamalwa D, John-Stewart G, Slyker J, Wagner AD.	From research to international scale-up: stakeholder engagement essential in successful design, evaluation and implementation of paediatric HIV testing intervention.	Health Policy Plan. 2020 Nov 20;35(9):1180-1187
Njuguna IN, Beima-Sofie K, Mburu CW, Mugo C, Neary J, Itindi J, Onyango A, Richardson BA, Rubin Means A, Sharma M, Weiner BJ, Wagner AD, Oyiengo L, Wamalwa D, John-Stewart G.	Adolescent transition to adult care for HIV-infected adolescents in Kenya (ATTACH): study protocol for a hybrid effectiveness-implementation cluster randomised trial.	BMJ Open. 2020 Dec 2
English M, Nzinga J, Irimu G, Gathara D, Aluvaala J, McKnight J, Wong G, Molyneux S.	Programme theory and linked intervention strategy for large-scale change to improve hospital care in a low and middle-income country - A Study Pre-Protocol.	Wellcome Open Res. 2020 Dec 18;5:265
English M, Ogola M, Aluvaala J, Gicheha E, Irimu G, McKnight J, Vincent CA	. First do no harm: practitioners' ability to 'diagnose' system weaknesses and improve safety is a critical initial step in improving care quality.	Arch Dis Child. 2020 Dec 23:archdischild-2020-320630.
Gwako GN, Obimbo MM, Gichangi PB, Kinuthia J, Gachuno OW, Were F.	Association between obstetric and medical risk factors and stillbirths in a low-income urban setting.	Int J Gynaecol Obstet. 2020 Dec 11

English M, Strachan B, Esamai F, Ngwiri T, Warfa O, Mburugu P, Nalwa G, Gitaka J, Ngugi J, Zhao Y, Ouma P, Were F.	The paediatrician workforce and its role in addressing neonatal, child and adolescent healthcare in Kenya.	Arch Dis Child. 2020 Oct;105(10):927-931. doi: 10.1136/archdischild-2019-318434. Epub 2020 Jun 18.
Kariuki EW, Kuria MW, Were FN, Ndetei DM.	Effectiveness of a brief psychoeducational intervention on postnatal depression in the slums, Nairobi: a longitudinal study.	Arch WomensMent Health. 2020 Nov 16
Mitchell EJ, Qureshi ZP, Were F, Daniels J, Gwako G, Osoti A, Opira J, Bradshaw L, Oliver M, Pallotti P, Ojha S.	Feasibility of using an Early Warning Score for preterm or low birthweight infants in a low-resource setting: results of a mixed-methods study at a national referral hospital in Kenya.	BMJ Open. 2020 Oct 28;10(10):e039061
Aluvaala J, Collins G, Maina B, Mutinda C, Waiyego M, Berkley JA, English M.	Prediction modelling of inpatient neonatal mortality in high-mortality settings.	Arch Dis Child. 2020 Oct 22
Oliwa JN, Nzinga J, Masini E, van Hensbroek MB, Jones C, English M, Van'tHoog A.	Improving case detection of tuberculosis in hospitalised Kenyan children-employing the behaviour change wheel to aid intervention design and implementation.	Implement Sci. 2020 Nov 25;15(1)
Omar AA, Nyaga G, Mungai LNW.	Pseudotumor cerebri in patient on leuprolide acetate for central precocious puberty.	Int J Pediatr Endocrinol. 2020 Dec 3;2020
English M, Irimu G, Akech S, Aluvaala J, Ogero M, Isaaka L, Malla L, Tuti T, Gathara D, Oliwa J, Agweyu A	. Employing learning health system principles to advance research on severe neonatal and paediatric illness in Kenya Clinical Information Network authors, et al. Neonatal mortality in Kenyan hospitals: a multisite, retrospective, cohort study	BMJ global health. 2021 Mar1;6(3):e005300. BMJ Global Health 2021;6:e004475.
English, M., Irimu, G., Akech, S., Aluvaala, J., Ogero, M., Isaaka, L., Malla, L., Tuti, T., Gathara, D., Oliwa, J., & Agweyu, A	: Employing learning health system principles to advance research on severe neonatal and paediatric illness in Kenya	(2021). <i>BMJ global health</i> , 6(3), e005300. https://doi.org/10.1136/bmjgh-2021-005300
English M, Irimu G, Akech S, Aluvaala J, Ogero M, Isaaka L, Malla L, Tuti T, Gathara D, Oliwa J, Agweyu A	. Employing learning health system principles to advance research on severe neonatal and paediatric illness in Kenya Clinical Information Network authors, et al. Neonatal mortality in Kenyan hospitals: a multisite, retrospective, cohort study	BMJ global health. 2021 Mar1;6(3):e005300. BMJ Global Health 2021;6:e004475.

Challenges

- Low level of funded research activity in the department
- Lack of skills laboratory
- Delayed disbursement of funds for practicum exercises
- Lack of office space, equipment and internet connectivity for academic staff
- Inadequate student and staff welfare facilities and services
- Inadequate ICT infrastructure and connectivity Insufficient staffing
- Slow procurement process
- Increase fees leading to high drop out

Plans for 2022/2023 Financial Year

- Re-branding, restructuring and re-engineering of the departmental operations
- Installation of WIFI in common areas to enable students continue with online teaching and learning
- Construction of skills lab

Technology

- The department continue using IT to manage its activities:
- Students information management system - SMIS
- Human Resources Management - HRMIS
- Leave Processing - ALMIS
- Staff Performance appraisal - USPAS

Performance Contracting

The department continues to comply with the Performance Contract between the Faculty and further cascaded the Performance Contract to the Departmental staff.

Department of Pharmacy

Brief History of The School

The former School of Pharmacy started as a Department of Pharmacy in the Faculty of Medicine in 1974 and attained Faculty status in July 1995. It was one of the five Schools which, together with University of Nairobi Institute of Tropical and Infectious Diseases (UNITID) and CHIVPRI constituted the College of Health Sciences of the University of Nairobi. The School comprised of three departments based on thematic areas that existed since 1974 namely: Department of Pharmaceutical chemistry, Department of Pharmacology and Pharmacognosy and Department of Pharmaceutics and Pharmacy Practice.

Following University of Nairobi Organizational Change in July 2022, The School of Pharmacy reverted to a Department of Pharmacy comprising three units namely: Pharmaceutical chemistry, Pharmacology and Pharmacognosy; and Pharmaceutics and Pharmacy Practice. Pre-clinical courses are taught by a complement of service departments based at Faculty of Science and Technology, and Faculty of Health Sciences.

Programmes Offered

- i) Bachelor of Pharmacy
- ii) Master of Pharmacy in Pharmaceutical Analysis
- iii) Master of Pharmacy in Pharmacy in Clinical Pharmacy
- iv) Master of Pharmacy in Industrial Pharmacy

- v) Master of Pharmacy in Pharmacoepidemiology and Pharmacovigilance
- vi) Master of Science in Pharmacognosy & Complementary Medicine
- vii) Master of Science in Molecular Pharmacology
- viii) PhD in Clinical Pharmacy
- ix) PhD in Pharmacognosy and Complementary Medicine
- x) PhD in Pharmaceutical Chemistry
- xi) PhD in Pharmaceutics
- xii) PhD in Molecular Pharmacology
- xiii) PhD in Industrial Pharmacy
- xiv) PhD in Pharmacoepidemiology and Pharmacovigilance

Strategic Issues

Objective	Strategy	Strategic Issues
Design and implement relevant and innovative teaching and learning programmes	Strategy 1.1: Enhance the quality and the delivery of academic programmes in compliance with all regulatory requirements on University education and professional bodies of KMPDB, PPB, the Nursing Council of Kenya, the Kenya Medical Laboratory Technicians and Technologists Board(KMLTTB)	COVID-19 Pandemic
	Strategy 1.2: Rationalize workload and professionally align academic staff to teaching and supervising students based on their specialized areas	Under staffing
	Strategy 1.3: Provide a suitable working environment for all the academic staff	Tree Planting
	Strategy 1.5: Upscale access to quality education and training in health through increased adoption of new skills and innovative technology	Paradigm shift from physical to virtual operations
	Strategy 1.6: Produce practical oriented graduates in diverse fields suitable for employment	
To be a leading institution in scholarly, research and creative productivity in Africa	Strategy 2.3: Grow research, collaboration and training, consultancy and commercialization revenue	Funding to initiate a fully-fledged IGU for supply of Hand sanitizers and cleaning materials
To improve student welfare services through development and implementation of appropriate minimum standards	Strategy 3.2: Re-engineer student affairs processes to become more efficient Strategy 3.3: Change student culture to a more positive outlook	COVID-19 Pandemic socio-economic challenges
Rationalized staffing and productive staff	Strategy 4.1.3: Establish and operationalize a succession planning programme	Not fully operationalized due institutional financial challenges
	Strategy 4.1.4: Structured engagement with the staff unions leadership	Industrial action paralyzed learning in

Physical Infrastructure and Facilities	Strategy 4.2.1: Improve land utilization for higher financial returns	Incomplete New School of Pharmacy Building
	Information and Communication Technology	Strategy 4.2.4: Implement a secure, robust and integrated ICT infrastructure Strategy 4.2.7: Reduced use of paper in governance meetings
Physical Infrastructure and Facilities	Strategy 4.2.1: Improve land utilization for higher financial returns	Incomplete New School of Pharmacy Building
	Information and Communication Technology	Strategy 4.2.4: Implement a secure, robust and integrated ICT infrastructure Strategy 4.2.7: Reduced use of paper in governance meetings
Financial resources and sustainability	Strategy 4.3.2: Strengthen controls in management of income generation	Reduced budgetary allocations that compromise quality
	Strategy 4.3.3: Enhance the financial management systems	
To enhance the competitiveness and image of the Faculty	Strategy 5.2: Strategic engagement with the industry	Lock-down due to COVID-19 Pandemic interfered with the calendar year

Major Achievements in The Year 2022

DATE	ITEM	DEPARTMENT	REMARKS
Continuous	Online teaching and learning commences	Pharmacy	Improvement of service provision via blended physical and online learning
April 2022	Online Fourth Term Induction of student	Pharmacy	Successful induction of BPharm IV students in readiness for Fourth Term Rotations between May - July 2022
Ongoing	Online Thesis Defense for post graduate students	Pharmacy	Supported the Examination process enabling completion and graduation of postgraduate students
Continuous	Online Trainings and Webinar Conferences	Department	Saved on operational costs and played a significant role in the spread of COVID-19

Corporate and Community Outreach Activities

Consultancies Undertaken

i) Pharmacy and Poisons Board (PPB)

- | | | |
|----------------------|-------------------------|---------------------------|
| a) Dr. Peter Karimi | d) Dr. Stanley Ndwigah | e) Prof. Faith A. Okalebo |
| b) Dr. Lucy J. Tirop | c) Dr. Beatrice Amugune | f) Dr. Eric M. Guantai |

ii) Dromedary Antibodies for Diagnosis and Therapeutics

Dr. George O. Osanjo

iii) **Regulatory Pharmacovigilance**

Dr. George O. Osanjo

iv) **University of Nairobi - Kenyatta National Hospital**

Prof. Julius W. Mwangi

Prof. Anastasia N. Guantai

Dr. Kipruto A. Sinei

Dr. Margaret O. Oluka

Dr. Faith A. Okalebo

Dr. Kefa O. Bosire

Dr. Nelly N. Mungai

Dr. Eric M. Guantai

Dr. Pegotty C. Mutai

Dr. Nillian A Mukungu

Dr. Esther W. Karumi

Dr. Mercy N. Mulaku

Dr. David G. Nyamu

Dr. Peter N. Karimi

Dr. Sylvia A. Opanga

Dr. George A. Mugendi

Dr. Shital M. Maru

Dr. Lucy J. Tirop

Dr. John M. Bururia

v) **CHIVPR (Centre for HIV Prevention and Research)**

Dr. Nelly N. Mungai

vi) **Drug Analysis & Research Unit (DARU):-**

(Stability Testing, Quality Control)

Dr. Kennedy O. Abuga

Dr. Peter M. Njogu

Dr. Beatrice K. Amugune

Mr. Joseph M. Nguyo

vii) **University of Nairobi/Kenyatta National Hospital - Ethical Review Committee**

Prof. Anastasia N. Guantai

Dr. Beatrice K. Amugune

viii) **Representative of the East Africa Community Partner States in the African Medicines Regulatory Harmonization Advisory Committee**

Prof. Grace N. Thoithi

ix) **National Vaccine and Immunization Program (NVIP)**

a) Prof. Faith A. Okalebo

b) Dr. Eric M. Guantai

Staff Portfolio

Designation	NO. OF STAFF
Professor	4
Assoc. Professor	3
Senior Lecturer	10
Lecturer	11
Tutorial Fellow	-
Asst. Registrar	-
Sen. Admin. Assistant	1
Principal Technologist	3
Chief Technologist	3
Sen. Technologist	5
Asst. Executive Secretary	-
Asst. Senior Secretary	1

Technologist	6
Asst. Secretary	2
Statistician	1
Library Assistant	1
Junior Technologist	2
Driver	1
Animal Attendant	2
Laboratory Attendant	1
Records Clerk	2
Messenger	3
Cleaner	4
	66

7. International Links and Collaborations:

- a) African Union staff exchange programme 2018 University of NKwame Nkruma and School of Pharmacy - Dr. Shital M. Maru (Nov. 2016)
- b) AIBST and University of Nairobi
- c) Tianjin University and University of Nairobi (www.cucas.edu.cn/Tianjin)
- d) MIMS Project - University of Nairobi
- e) National Quality Control Laboratories (NQCL) and University of Nairobi
- f) University of Kwa Zulu Natal (www.ukzn.ac.za)
- g) Capetown and University of Nairobi (www.southafrica.net)
- h) International Atomic Energy Agency (IAEA) through RAF6049 Strengthening and improving radiopharmacy services in Africa
- i) (AFRA) project as country coordinator.
- j) MAPRONANO

Department of Psychiatry

Introduction

The Department of Psychiatry is one of the departments at the School of Medicine, Faculty of Health Sciences. It was established in 1971 soon after the start of the medical college in 1967. The department is situated at the medical school, Kenyatta National Hospital (KNH). For teaching purposes, the department also uses Mathari Hospital, which is situated about 10 kilometres away from KNH. At KNH together with staff from KNH we run outpatient clinics for both adults and children. We also work closely with Mathari hospital to train our students, both postgraduates and undergraduates.

Apart from teaching undergraduates in medicine and postgraduate students in psychiatry and clinical psychology, PGD in social work and PGD in clinical psychiatry, the Department of Psychiatry service other Departments for example, the department teaches "Social and Behavioural Pharmacy" to 2nd year Pharmacy students. The department also teaches postgraduate students in Medicine and Paediatrics who rotate in Psychiatry.

Programmes Offered

The Postgraduate Diploma programmes were archived so the Department stopped enrolling students for PGD in Psychiatric Social work, Clinical psychiatry, Substance Abuse and Psychotrauma. However, there are ongoing students in the PGD Social Work and Clinical Psychiatry programmes. Currently, the Department offers and teaches the following programmes.

- i) MBChB Year I - Behavioural Sciences
- ii) MBChB Year IV - Psychiatry I
- iii) MBChB Year VI - Psychiatry II
- iv) Master of Medicine degree in psychiatry (MMed Psych)
- v) Master of Science in clinical psychology (MSc Clinical Psychology)
- vi) Doctor of Philosophy and Doctor of Science in Psychiatry
- vii) Doctor of Philosophy and Doctor of Clinical Psychology

Enrolled Students

- i) MMed Psychiatry - 28
- ii) MSc. Clinical Psychology - 14

Students Graduated Per Programme

- | | | | |
|-----------------------------|------|-------------------------------|-----|
| 1. MMed Psychiatry | - 19 | 3. PGD in Clinical Psychiatry | - 4 |
| 2. MSc. Clinical Psychology | - 4 | 4. Doctor of Philosophy (PhD) | - 3 |

In 2020/2021 academic year the department graduated a total of 30 students. The number of Mmed psychiatry students graduated was the highest recorded in history.

Strategic Issues

- i) Due to the COVID - 19 pandemic conferences attended were limited therefore full dissemination was not realized
- ii) There was also limitation in collaboration and linkages with peer institutions and industry locally and internationally.
- iii) Challenges in automation of course evaluation tool. However, in 2021 this was realized

Major Achievements in The Year 2021

- i) Online interviews, Admissions and Registration of students were achieved
- ii) Graduated 27 postgraduate students during the 64th graduation ceremony.
- iii) Despite the COVID - 19 pandemics, the department was committed to conducting outreach programmes with people in the community particularly vulnerable individuals - women and the youth.
- iv) The department was number 16 out of 300 in the PC evaluation.

Cooperate and Community Outreach Activities

Lecturer	Programme	Sch/Dept./ Unit	Extension/Outreach	Date
Prof. David Ndetei	Family TV Meeting	Psychiatry	Family TV Panic Attack/Anxiety Talk	August 2021

Staff Portfolio

Name	Qualification	Position
Prof. Anne A. Obondo	B.A (Hons) Sociology (Delhi), MSW (Bombay), PGD Psychiatric Social Work (UK), PhD (UoN)	Associate Professor (Chairman)
Prof. David M. Ndetei	Mbchb Nbi., MD and Dpm, (London), Frc Pych (UK), DSc. (UoN), Cert In Psychotherap	Professor
Prof. Mary Wangari Kuria	Mbchb, M.Med, Phd, (UoN)	Professor
Prof. Anne Muthoni Mathai	Mbchb, M.Med (UoN), PhD. Social Work (Kassel)	Associate Professor
Dr. John M. Mburu	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Pius A. Kigamwa	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Rachel N. Kang'ethe	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Fredrick R. Owiti	Mbchb (Nbi), Mrcpsych. (UK)	Senior Lecturer
Dr. Anne Mbwayo	BA Cou B.A.Counseling Psychology, (UON), MSc. Clinical Psychology (UON), PhD Clinical Psychology (UON)	Lecturer
Dr. Lincoln Imbugwa Khasakhala	MBChB (UON), MSc. Clinical Psychology (UoN) and PhD in Clinical Psychology (UoN)	Lecturer

Ms. Teresa Mutavi	B.A Social Work (Catholic University), MA Sociology (UON), PhD in Psychiatric Social (UON)	Lecturer
Ms. Roseline Okoth	B.A Counseling Psychology MSC, Clinical Psychology (Nbi), PhD Student	Tutorial Fellow
Mr. Mumo Mueke	Master of Arts	Senior Admin Assistant
Florence Flevy Adhiambo	Diploma	Asst. Senior Secretary
Ziporrah Osikuku	Diploma	Asst. Senior Secretary
Oremo Benson Omondi	MSc.	Records Clerk
Mwachofi Nickson M.	Class (7)	Messengerial
Kambai Kalekye Kasakai	Class (3)	Cleaner

Projections

- i) Focus on realizing succession planning in the Department of Psychiatry
- ii) Prioritize and align more programmes, projects and activities to the realization of the “Big Four” agenda through mounting research projects focusing on COVID - 19 in collaboration with partners and institutions
- iii) Alignment of the various programmes with CUE guidelines and standards - already in process

Any Other Pertinent Information/Issues In The Year 2021

- i) The Department of Psychiatry lost two members of the academic staff in 2019 and to date they have not been replaced even after several requests were made for their replacement.
- ii) Four members of staff left the department to pursue other interests.
- iii) The Department is grossly understaffed, and almost half of the academic members are above 60 years of age and will be retiring almost at the same time. The Department urgently needs to replace the two members who died and four members who left. We need to recruit tutorial fellows for succession planning.

International Students Component

We have sixteen (20) international students

nane	country	programme
Grace L. Obalim	Uganda	Msc. Clinical Psychology
Dr. Wilma Albertina Tubman	Liberian	M.Med Psychiatry
Dr. Ketshephile Pelaelo	Botswana	M.Med Psychiatry
Dr. Toguen Guy Michael	Cameroonian	M.Med Psychiatry
Dr. Magdaleena Ndapewa Shivute	Namibian	M.Med Psychiatry
Patience Kobusingye	Ugandan	PGD Psychiatric Social Work
Dr. Warsame Abulkadir	Somali	PGD Clinical Psychiatry
Dr. Isse Maimuna Mohamud	Somali	PGD Clinical Psychiatry
Adoko Mahouri	Benin	M.Med Psychiatry
Hodan Cawil JamaC	Somali	M.Med Psychiatry
Othalephile Enamasi Othapile	Botswana	M.Med Psychiatry
Lesogo Baikanande	Botswana	M.Med Psychiatry

Kelebogile Kelapile	Botswana	M.Med Psychiatry
Kahinde Janet Fareye	Nigeria	MSc. Clinical Psychology
Suma Kulkarni	India	MSc. Clinical Psychology
Malebogo Thuli Legwada	Botswana	MSc. Clinical Psychology
Rebecca Nkalanga	Botswana	MSc. Clinical Psychology
Onalenna Antonia Kalantle	Botswana	MSc. Clinical Psychology
Imran Versi	Somalia	M.Med Psychiatry
Mariama Abdullahi	Somalia	M.Med Psychiatry

Research Activities Undertaken

Title	Duration	Donor	Activities	Pi
SMART AFRICA	2015 - 2019 Extension to May 2021 2023	New York University	<p>Main activity of this project is working with parents and their children to improve on respectful communication. This is to be done through:</p> <ul style="list-style-type: none"> i Adaptation of the American manual 4Rs and 2 Ss- almost done. This has been through engagement of stakeholders ii Selecting of the three schools to be involved in the pilot study and to randomly assign them to either peer parents training, community health workers training or giving educational materials - almost done. iii Training of Trainers - was done in December 2018 iv Selecting peer parents and CHW- was done in January 2019 v Training the parent and CHW trainers- was done in January 2019 vi Started the intervention in Feb 2019 	Dr. Anne W. Mbuyo
ASPIRE	2018 - 2023	US Fogarty International Center & NIMH	The major activity of the project is focusing on mental health needs of pregnant adolescents. Since the award of the grant in September 2018, PI has submitted her protocol to IRB and carried out two stakeholder meetings. She has made plans for research training activities for the remainder of the year.	Dr. Manasi Kumar
DAPPER	2018 - 2023	NIMH	The purpose of the project is to conduct effectiveness implementation hybrid randomized clinical trial of psychotherapy versus pharmacotherapy delivered by non-specialist in Kisumu County. Ongoing project	Prof. Muthoni Mathai
WHO EQUIP	2019 - 2020	WHO	Training and intervention	Prof. Muthoni Mathai

International Links and Collaboration

MOU signed between University of Nairobi and Walden University for collaborated fieldwork supervision of Walden University student attached to the Department of Psychiatry.

Publications - 29

Author	Title	Name of The Journal	Month & Year
David M. Ndetei, Victoria Mutiso, Christine Musyimi, Frida Kameti	Psychosocial Response to COVID-19 in Africa With Special Reference To Kenya.	World Social Psychiatry. 2020, Vol 2 Issue 2. http://www.worldsocpsychiatry.org IP: 10.232.74.22	August 2020
GBD 2019 Universal Health Coverage Collaborators.	GBD 2019 Universal Health Coverage Collaborators. Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019.	The Lancet. 27 August 2020. doi:10.1016/S0140-6736(20)30750-9.	27 August 2020.
Local Burden of Disease WaSH Collaborators	Mapping geographical inequalities in access to drinking water and sanitation facilities in low-income and middle-income countries, 2000-17.	The Lancet Global Health. August 2020. doi:10.1016/S2214-109X(20)30278-3.	August 2020.
Local Burden of Disease Diarrhoea Collaborators	Mapping geographic inequalities in oral rehydration therapy coverage in low- and middle-income countries, 2000-17. The Lancet Global Health. August 2020. doi:10.1016/S2214-109X(20)30230-8.	August 2020. doi:10.1016/S2214-109X(20)30230-8.	August 2020.
Yator, O., Khasakhala, L., John- Stewart, Kumar, M. (2020)	Acceptability and Feasibility of Group Interpersonal Therapy (IPT-G) for Depressed HIV+ Postpartum Adolescents Delivered by Community Health Workers: A Protocol Paper	Clinical Medicine Insights Psychiatry 11:117955732095122 DOI: 10.1177/1179557320951222	August 2020
Yator O, Kagoya M, Khasakhala L, John-Stewart G, Kumar M.	Task-sharing and piloting WHO group interpersonal psychotherapy (IPT-G) for adolescent mothers living with HIV in Nairobi primary health care centers: a process paper. AIDS Care.	-6.11:1 doi: 10.1080/09540121.2020.1801981. Epub ahead of print. PMID: 32781831.	2020 Aug

Flückiger C, Rubel J, Del Re AC, Horvath AO, Wampold BE, Crits-Christoph P, Atzil-Slonim D, Compas A, Falkenström F, Ekeblad A, Errázuriz P, Fisher H, Hoffart A, Huppert JD, Kivity Y, Kumar M, Lutz W, Muran JC, Strunk DR, Tasca GA, Vísňá A, Voderholzer U, Webb CA, Xu H, Zilcha-Mano S, Barber JP.	The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis.	J Consult Clin Psychol. 2020 Sep;88(9):829-843. doi: 10.1037/ccp0000594. PMID: 32757587.	2020 Sep
Sinha, M. Kumar, M, Kumar, Dietz, L. Atwoli, L.	Towards mental health friendly cities during and after COVID-19, Cities & Health August 2020. Cities & Health	DOI: 10.1080/23748834.2020.1790251	August 2020
Catherine Mawia Musyoka, Anne Mbwayo, Dennis Donavan, Muthoni Mathai	Alcohol Substance Use Among First-year Students at the University of Nairoibi, Kenya: Prevalence Patterns	Journal Pone	August 2020
Yvonne Olando, Mary KuriMuthoni Mathai, Mark D, Huffman	Barriers and Facilitators to cessation among Tobacco Users with concomitant mental illness attending group behavioural tobacco cessation: A qualitative Study		August 2020
Manasi Kumar ^{1*} , Keng-Yen Huang ² , Caleb Othieno ¹ , Dalton Wamalwa ³ , Kimberly Hoagwood ⁴ , Jurgen Unutzer ⁵ , Shekhar Saxena ⁶ , Inge Petersen ⁷ , Simon Njuguna ⁸ , Beatrice Amugune ⁹ , Onesmus Gachuno ¹⁰ , Fred Ssewamala ¹¹ and Mary McKay ¹²	Implementing combined WHO mhGAP and adapted group interpersonal psychotherapy to address depression and mental health needs of pregnant adolescents in Kenyan primary health care settings (INSPIRE): a study protocol for pilot feasibility trial of the integrated intervention in LMIC settings	Kumar et al. Pilot and Feasibility Studies (2020) 6:136 https://doi.org/10.1186/s40814-020-00652-8	2020
Dr. Manasi Kumar	Mapping routine measles vaccination in low- and middle-income countries	https://doi.org/10.1038/s41586-020-03043-4	Nov, 2020
Dr. Manasi Kumar	The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis	2020, American Psychological Association. DOI: 10.1037/ccp0000594	2020

Dr. Manasi Kumar	Five insights from the Global Burden of Disease Study 2019	Europe PMC Funders Group Author Manuscript Lancet. Author manuscript; available in PMC 2020 November 13.	
Judy Machuka ¹ , Grace Nduku Wambua ² , Otsetswe Musindo ² , David Bukusi ³ , Violet Okech ⁴ , Peter Muiruri ¹ , Rachel Maina ¹ , Nelly Opiyo ¹ , Pauline Ng'ang'a ⁵ and Manasi Kumar ^{5,6*}	Positive and Healthy Living Program Manual Development for Young People Living With HIV at the Comprehensive Care Center at the Kenyatta National Hospital: An Open Pilot Implementation Trial	Frontiers in Psychiatry	Nov, 2020
Dr. Manas Kumar	Burden of injury along the development spectrum: associations between the Socio-demographic Index and disability-adjusted life year estimates from the Global Burden of Disease Study 2017	Haagsma JA, et al. Inj Prev 2020;26:i12-i26. doi:10.1136/injuryprev-2019-043296	2020
Dr. Manasi Kumar	Estimating global injuries morbidity and mortality: methods and data used in the Global Burden of Disease 2017 study	Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY. Published by BMJ.	24 August 2020
GBD 2019 Universal Health Coverage Collaborators	Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019	www.thelancet.com Published online August 27, 2020 https://doi.org/10.1016/S0140-6736(20)30750-9	August 27, 2020
Ruth Kioko, Teresia Mutavi	The Association of Family Functions Among Juvenile Delinquent Children in Rehabilitation Centres in Nairobi and Kiambu Counties-Kenya	Research on Humanities and Social Sciences www.iiste.org ISSN 2224-5766 (Paper) ISSN 2225-0484 (Online) Vol.10, No.21, 2020	December, 2020
Moitreyee Sinha , Manasi Kumar , Lian Zeitz , Pamela Y. Collins , Suresh Kumar , Steve Fisher , Nathaniel Foote , Norman Sartorius , Helen Herrman & Lukoye Atwoli	Towards mental health friendly cities during and after COVID-19, Cities & Health	SN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcah20	August 2020

David Ndetei ^{1,2} , Kathleen Pike ³ , Victoria Mutiso ² , Albert Tele ² , Isaiah Gitonga ² , Tahilia Rebello ³ , Christine Musyimi ² , Daniel Mamah ⁴	Patterns and predictors of symptoms of affectivity and psychosis in adults who screened positive on the WHO mhGAP-IG in a rural setting in Kenya	International Medicine 2020; 2(5): 284-293 https://www.theinternationalmedicine.com	Nov, 2020
Daniel Mamah*, ¹ , C. Robert Cloninger ¹ , Victoria N. Mutiso ² , Isaiah Gitonga ² , Albert Tele ² , and David M. Ndetei ^{2,3}	Personality Traits as Markers of Psychosis Risk in Kenya: Assessment of Temperament and Character	Schizophrenia Bulletin Open doi:10.1093/schizbullopen/sgaa051	2020
Victoria Mutiso Christine Musyimia Tahilia Rebellob Isaiah Gitongaa Albert Telea Kathleen Pikeb David Ndetei iac	Predictors of intimate partner violence in patients attending general health services at rural health facilities In Makueni County, Kenya	Mental Health & Prevention Volume 20,200191 https://doi.org/10.1016/j.mhp.2020.200191 Get rights and content	Dec, 2020,
Tom L Osborn , ^{1,2} Akash R Wasil, ³ John R Weisz, ¹ Arthur Kleinman, ^{4,5} David M Ndetei ^{6,7}	Where is the global in global mental health? A call for inclusive multicultural collaboration	Osborn TL, <i>et al General Psychiatry</i> 2020;33 :e100351. doi:10.1136/gpsych-2020-100351	Sept, 2020
Dr. Manasi Kumar	Europe PMC Funders Group	Lancet. Author manuscript; available in PMC 13.	2020 Nov
Christine W. Musyimi ^{ID} ^{1*} , Victoria N. Mutiso ¹ , Darius N. Nyamai ¹ , Ikenna Ebuenyi ^{ID} ² , David M. Ndetei ^{1,3}	Suicidal behavior risks during adolescent pregnancy in a low-resource setting: A qualitative study	https://doi.org/10.1371/journal.pone.0236269	July 2020
Shanley, J. R., Armistead, L. P., Musyimi, C., Nyamai, D., Ishiekwene, M., Mutiso, V., & Ndetei, D. (2021).	Engaging community voices to assess Kenya's strengths and limitations to support a child maltreatment prevention program.	Child Abuse & Neglect. https://doi.org/https://doi.org/10.1016/j.chiabu.2020.104772	2021

Mezzich, J.E., Kallivayalil, R.A., Bennegadi, R., Botbol, M., Christodoulou, G., Cozman, D., Javed, A., Kastrup, M., Lolas, F., Ndetei, D. and Soghoyan, A.,	Articulating Social Psychiatry and Person-Centered Medicine: Conceptual Bases and International Implications for COVID-19.	World Social Psychiatry, 2(2), p.58.	2020
Ndetei D, Pike K, Mutiso V, Tele A, Gitonga I, Rebello T, Musyimi C, Mamah D.	Patterns and predictors of symptoms of affectivity and psychosis in adults who screened positive on the WHO mhGAP-IG in a rural setting in Kenya.	International Medicine 2020, 2(5): 284-293	2020

Bookchapters (2)

AUTHOR*	TITLE	JOURNAL	Period
Ndetei D.M., Mutiso V.N., Musyimi C.W., Nyamai D.N	Setting Up Community Mental Health.	Innovations in Global Mental Health. Springer, Cham. https://doi.org/10.1007/978-3-319-70134-9_15-1	2020
Ndetei D.M., Musyimi C.W., Mutiso V.N., Ruhara R.W., Boycheva E., Gitonga I.	Promotion of Recovery Through Socio-economic Inclusion for People Living with Severe Mental Illness.	Innovations in Global Mental Health. Springer, Cham DOI. https://doi.org/10.1007/978-3-319-70134-9_80-1 Online ISBN978-3-319-70134-9	2020

Conferences/Webinars - 30

NAME OF LECTURER	TOPICS / FUNCTION	VENUE/PLACE	PERIOD/DATE
David Ndetei and WPA Board members	WPA Board Virtual meeting – WPA 2020-2023 Action Plan	Webinar (Organized by WPA Geneva)	29 th September 2020; at 14:00-17:30
David Ndetei (WPA Zone 14) and WPA Zone 15 and 16 Representatives	WPA webinar Evidence Based Psychopharmacology	Webinar (Organized by WPA Geneva)	19 th September 2020; at 12.00 - 14.00
David Ndetei	Suicide and How To Handle Stress	Family TV Media	28 th September 2020 at 11.00 - 12:00
David Ndetei	Discussion on Anxiety /Panic attacks	Family TV Media	21 st September 2020 at 13:00-14:00
David Ndetei and others (Uganda Team)	World Suicide Prevention day: Working together to prevent suicide	Zoom meeting - (The Sanctuary, a youth organization in Uganda)	10 th September 2020; at 10:00

David Ndetei and WPA Board members	WPA Task Force Minimizing coercion in mental health	Zoom meeting - (Organized by WPA Geneva)	9 th September 2020 at 14:00 - 16:00
David Ndetei	Talk on Depression.	Family TV Media	18 th August 2020 13:00 - 14.30
Talk on COVID-19 – How it affected many Kenyans have been rendered jobless, their source of livelihoods disrupted and there have been an increase in Domestic violence	Family TV Media	11 th August 2020 13:00 – 14.30	
WPA Joint Executive Committee and Board Meeting	Zoom meeting - (Organized by WPA Geneva)	31 st July 2020; at 14:00 – 15.30	
Participated in CitiesRise MHFC consultation		June 2020	
Presented to KNH COVID meeting on psychological first aid		10 June and 18 July, 2020	
Presented to CitiesRise on ‘addressing trauma, depression and stress during COVID’		August 12, 2020	29 September 2020
WPA	Virtual Webinar	October, 16 2020	September 03, 2020 5
WPA	Virtual Webinar	October, 12 2020	
WPA Evidence based psychopharmacology	Virtual Webinar	19 th September, 2020	

Name Of Lecturer	Topics / Function	Venue/Place	Period/Date
David Ndetei and WPA Board members	WPA Board Virtual meeting – WPA 2020-2023 Action Plan	Webinar (Organized by WPA Geneva)	29 th September 2020; a 14:00-17:30
David Ndetei (WPA Zone 14) and WPA Zone 15 and 16 Representatives	WPA webinar Evidence Based Psychopharmacology	Webinar (Organized by WPA Geneva)	19 th September 2020; at 12.00 – 14.00
David Ndetei	Suicide and How To Handle Stress	Family TV Media	28 th September 2020 at 11.00 – 12:00
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David Ndetei and others (Uganda Team)	World Suicide Prevention day: Working together to prevent Suicide	Zoom meeting – (The Sanctuary, a youth organization in Uganda)	10 th September 2020; at 10:00
David Ndetei and WPA Board members	WPA Task Force Minimizing coercion in mental health	Zoom meeting - (Organized by WPA Geneva)	9 th September 2020 at 14:00 – 16:00
David Ndetei	Talk on Depression.	Family TV Media	18 th August 2020 13:00 – 14.30
David Ndetei	Talk on COVID-19 – How it affected many Kenyans have been rendered jobless, their source of livelihoods disrupted and there have been an increase in Domestic violence	Family TV Media	11 th August 2020 13:00 – 14.30
David Ndetei and WPA Board members	WPA Joint Executive Committee and Board Meeting	Zoom meeting – (Organized by WPA Geneva)	31 st July 2020; at 14:00 – 15.30
Manasi Kumar	Participated in CitiesRise MHFC consultation		June 2020
Manasi Kumar	Presented to KNH COVID meeting on psychological first aid		10 June and 18 July, 2020
Manasi Kumar	Presented to CitiesRise on ‘addressing trauma, depression and stress during COVID’		August 12, 2020

Supervisions

SUPERVISORS	STUDENTS
Prof. Anne Obondo	Dr Linet Kendi Mbae Dr Gloria N Sane James Letoo Ahmed Hussein Keziah Wanjau Julia Wambui
Prof. Wangari Kuria	Dr Ruth Jepchumba Korir George Githambo Dr. Caroline Makau Dr. Alfred Gitonga Dr. Samuel Orok Yvonne Olando (PhD) Roseline Okoth (PhD) Peter Owuor

Prof. Caleb Othieno	Dr Muia Mwendu Janet Grace Okoba Grace Obalim Mary Mugambi		Dr Linda N Nyamute Dr Ruth Jepchumba Korir Dr Eric Njuguna Mercy Chege Martha Kagoya George Githambo Selfine Otieno Dr. Caroline Makau Dr. Mugira George Itabari Dr. Muburi Catherine Muthoni Catherine Musyoka (PhD) Keziah Wanjau Simon Ngipuo Sheilla Shavulimo
Prof. Muthoni Mathai	Dr Mumbi Chege Dr. Linda N Nyamute Dr Eric Njuguna Segametsi Bongani Mthunzi William Otieno Shillah Mwavua Mercy Chege Sandra Kimuge Dr. Mustafa Ali Dr. Stanley Muange Dr. Edward Odhiambo Dr. Samuel Oroko Ahmed Hussein Sylvia Mita Esther Gathoni Simon Kintu Nancy Ngathi	Dr. Anne Mbwayo	
Dr. F.R. Owiti	Dr Joseph Makenga Masila Dr Mumbi Chege Dr. Elizabeth Ngarachu Dr. Mugira George Itabari Dr. Muburi Catherine Muthoni Seline Okumu Jackline Araya	Dr. Judy Kamau	Dr Milka A. Olando Sandra Kimuge Ruth Kioko Faith Muhindi Stephen Mucheu Sheilla Shavulimo
Dr. Manasi Kumar	Dr Milka A. Olando Joan Mutahi	Dr. Teresia Mutavi	Ruth Kioko Maureen Mbuge Elizabeth Epirong Dr. Mustafa Ali Dr. Ruth Masha Dr. Erica Adagala Dr. Stanley Nzau Muange Dr. Alfred Gitonga Mustafa Ali Esther Gathoni Elizabeth Ipurong
Dr. Lincoln Khasakhala	Dr Joseph Makenga Masila Dr Linet Kendi Mbae Shillah Mwavua Damaris Osoro Elizabeth Epirong Maureen Mbuge Dr. Amos Kariuki Mogotsi Thapelo Josephe Kathono Simon Ngipuo Elizabeth Ipurong	Dr. Pius Kigamwa	Segametsi Bongani Mthunzi William Otieno Martha Kagoya Dr. Erica Adagala Dr. Amos Kariuki Dr. Edward Odhiambo Monica Otiende Kevin Lime Sheila Mwangi Sylvia Mita Julia Wambui
Dr. Judy Kamau	Joan Mutahi Joan Ahero Sandra Kamuge Nelly Kamwaro Milka Olando Grace Obalim	Dr. Rachel Kang'ethe	Selfine Otieno Dr. Penina Kibuti Kevin Lime Joan Ahero
Dr. John Mburu	Dr Gloria N Sane Dr. Elizabeth Ngarachu Dr Muia Mwendu Janet Dr. Ruth Masha Dr. Mustafa Ali Dr. Penina Kibuti Mogotsi Thapelo Mustafa Ali Seline Okumu Peter Owuor		

17. Consultancies by Staff Members/Unit

1. Dr. Pius Kigamwa - Offers psychiatric services at University Health Services
2. Dr. Fredrick Owiti - Offers psychiatric services at University Health Services
3. All members of staff offer services both at Kenyatta National Hospital and University Health Services

18. Staff Establishment

The department had 17 academic staffs in the following grades

Professor	- 2	Senior/Administrative Assistant	- 1
Associate Professor	- 2	Senior Technologist	- 0
Senior Lecturer	- 4	Secretary	- 2
Lecturer	- 2	Record Clerk	- 1
Tutorial Fellow	- 1	Messenger	- 1
Senior/Assistant Registrar	- 0	Cleaner	- 1

19. Grants

Name Of Lecturer	Topics / Function	Period/Date
Dr. Manasi Kumar	K43 Emerging Global Leader Award (award number TW010716-01A1)	2018-2023
Prof. Muthoni Mathai	DAPPER, NIH, USD 796096	2018 - 2023
Prof. Muthoni Mathai	WHO - EQUIP	2019 - 2020
Dr. Anne Mbwayo	SMART AFRICA	2018 - 2023

Department of Public and Global Health



1. Historical Background



The Department of Public and Global Health was established in September 2010 following the approval by Senate and appointment of Director and subsequent appointment of Thematic Heads in October 2010. The department, earlier established in 1967 as department of Community Health alongside the Faculty of Medicine, had Dr. Dismas Ongore as the first Director who served from 2010 to 2016. He was succeeded by Professor Mutuku A. Mwanthi who served from 2016-2020, then succeeded by the current Chair, Professor Joyce Olenja.

*Prof. Joyce M. Olenja, BEd; MPhil; PhD
Chair, Department of Public and Global Health*

2. Vision, Mission and Strategic Objectives

Vision - A world class Department of Public and Global Health committed to excellence in scholarly pursuit, scientific research and service delivery.

Mission - To provide quality public health education and training, research and service delivery that embodies the aspirations of the Kenya people and global community through creation, preservation, integration, transmission and utilization of public health knowledge.

Strategic Objectives

Overall objective:

To develop a world class institution that facilitates the realization of the vision to strengthen public health training, research capacity and provision of services to the local and international communities.

Specific objectives:

- i) Facilitate training of trans-disciplinary experts capable of meeting the emerging challenges in the field of public health in developing countries as well as promotion of health.
- ii) Facilitate cross disciplinary research by experts from diverse backgrounds, thus creating an environment that appreciates strength and unity in diversity.
- iii) Provide multidisciplinary services and consultancies to communities at local and international levels
- iv) Be the public health institution of choice for training and research to undergraduate, graduate health care providers and other health and social science students of the University of Nairobi and beyond.
- v) Provide the forum for interrogating important current and emerging issues on national, regional and international public health agenda.

3. Achievements of The Department

Date	Item	Department	Remarks
January 18 to 29, 2021	Examinations	PGH	MPH Semester I examinations
January 29, 2021	Examinations	PGH	MBChB II Community Health supplementary examination
February 10, 2021	Examinations	PGH	MBChB V Community Health supplementary examination
February 23-24, 2021	Examinations	PGH	MPH II and MSc. HSM Defence and concept paper presentations
March 8, 2021	Examinations	PGH	MBChB V Community Health CAT

March 10, 2021	Retirement	PGH	Prof. Mutuku Mwanthi
April 28, 2021	Defence	PGH	MPH II Defence presentation
May 31, 2021	Examination	PGH	MBChB V Community Health CAT
June 14-25, 2021	Examination	PGH	MPH Semester II examinations
June 16, 2021	Promotion	Corporate, PGH	Shortlisting of Senior Administrative Assistant I and Senior Secretary Grade D was done
June 24, 2021	Recruitment	Corporate, PGH	Three (3) tutorial fellows were hired on a two-year contract terms
September 2, 2021	Examination	PGH	MBChB II Community Health examination
September 6-9, 2021	Examination	PGH	MBChB V written and oral Community Health examination
September 24, 2020	Virtual 65 th Graduation Ceremony held successfully at the Great Court	Corporate	3 Master of Public Health graduands were among those conferred degrees by the Chancellor, Dr. Vijoo Rattansi.
October 19, 2021	Dissertation defense	Corporate, PGH	Two candidates successfully defended their MPH and MSc. HSM Dissertations
November 23, 2021	MPH Dissertation defense	PGH	One candidate (1) successfully defended his MPH dissertation online.
November, 24, 2021	Launch of COVID 19 Video Training Project	Corporate, Rotary International, Nairobi, PGH and FHS	Project launched to cover four counties: Kajiado, Busia, Nairobi and Mombasa
November 21 to 26 2021	Development of strategic plan for One Health, Sarova Woodlands Nakuru	PGH and Public Health, Pharmacology and Toxicology	Strategic Plan for One Health
December 7, 2021	PhD Thesis defense	Corporate, PGH	One candidate (1) successfully defended his PhD thesis.
December 17, 2021	Virtual 66th graduation ceremony held successfully at the Great Court	Academic Affairs	4 Master of Public Health, 2 MSc. Health Systems Management and 2 MSc. Medical Statistics graduands were among those conferred degrees by the Chancellor, UON, Dr. Vijoo Rattansi.
December, 2021	Curriculum Review	Academic Affairs, PGH	Master of Public Health curriculum was revised and approved by the Senate, and is being implemented.
December, 2021	Conference room	HORN Project PGH	Installed a video-conference facility/ room at the Department, former PGH library.

4. Members of Staff

Teaching Staff

Name	Designation	Gender
Prof. Joyce M. Olenja	Chairperson, PGH and Professor, Medical Anthropology	Female
Prof. Joseph K. Wang'ombe	Emeritus Professor, Health Economics & Policy Development	Male
Dr. Dismas Ongore	Senior Lecturer, Communicable Diseases	Male
Dr. Faith M. Thuita	Senior Lecturer, Public Health Nutrition	Female
Dr. Peter Njoroge	Lecturer, Maternal & Child Health	Male
Dr. Peterson J. Muriithi	Lecturer, Health Systems Management	Male
Mrs. Mary Kinoti	Lecturer, Environmental & Occupational Health	Female
Dr. Rose Opiyo	Lecturer, Public Health Nutrition	Female
Dr Tom Olewe	Lecturer, Non-communicable Diseases	Male
Dr. Marshal Mweu	Lecturer, Biostatistics and Epidemiology	Male
Dr. Pamela Godia	Lecturer, Primary Health Care & Global Health	Female
Dr. Jacqueline Chesang	Lecturer, Epidemiology	Female
George N. Agot	Tutorial Fellow, Health Economics	Male
Kellen J. Karimi	Tutorial Fellow, Occupational Health	Female
Veronica S. Ojiambo	Tutorial Fellow, Health Communication	Female

Non-Teaching Staff

Name	Designation	Gender
Kenneth B. Owuori	Senior Administrative Assistant	Male
Mary W. Kaguima	Snr. Assistant Executive Secretary	Female
Collins Ndondo Ongore	Administrative Assistant	Female
Jane Mungai	Assistant Secretary	Female
Lynet Kaloo	Records Clerk	Female
Mr. Stephen Muriithi	Messenger	Male
Ms. Hellen Kelelyo	Cleaner	Female
Ms. Hannah Gitau	Cleaner	Female

5. Enrolment

Title	Current Number of Students Enrolled
Master of Public Health (MPH)	24 (2021)
Master of Science in Medical Statistics (MSc. Med. Stats)	6 (2021)
Community Health Year 4 and 5 (Service course for MBChB Programme)	300 (2021)
PhD in Public Health	8
PhD in Medical Statistics	2
PhD in Implementation Science	8

Graduands

Course	2021	2020	2019	Total
Masters in Public Health	7	9	6	22
MSc. Health Systems Management	2	-	2	4
MSc. Medical Statistics	2			2
PhD in Public Health	-	1	-	1
Total	11	10	8	29

Programmes Reviewed

MPH curriculum

Thematic Areas

- | | |
|---|---|
| i) Epidemiology and Biostatistics | iii) Disease Prevention, Control & Health Promotion |
| ii) Health Care System and Policy Development | iv) Community Health Sciences |

Epidemiology & Biostatistics	Health Care System & Policy Development	Disease Prevention, Control & Health Promotion	Community Health Sciences
Disciplines/Courses	Disciplines/Courses	Disciplines/Courses	Disciplines/Courses
<ul style="list-style-type: none"> Epidemiology Biostatistics & Computing Population Sciences Research Methods and Methodology 	<ul style="list-style-type: none"> Health Planning and Policy Development Health Services Administration & Evaluation Primary Health Care Health Economics International Health 	<ul style="list-style-type: none"> Communicable & Non Communicable Disease Prevention & Control Family Health Nutrition Environmental Health Occupational & Industrial Health and Safety 	<ul style="list-style-type: none"> Social Sciences & Health Health Promotion & Communication Gender and Health Disaster Management

Teaching Facilities

Item	Quantity	Seating Capacity
Lecture rooms	-	0-20
	2	21-40
	-	41-60
	-	61-100

11. Proposed Centers of Excellence

- Centre for Gender and Health
- Centre for Disaster Preparedness and Management
- Centre for Health Systems Analysis and Quality Assurance
- Centre for Health and Behavior
- Centre for Applied Epidemiology and Disease Surveillance

10. Research Grants

- i) **HORN Project. Contact person: Dr. Dismas Ongore.**
Collaborative agreement with the University of Liverpool (UoL) signed on the 6th of February 2018 to release an initial Kshs 68 million (£ 485,631) for full time postdoctoral training at UoN as well as setting up of a project office at the School of Public Health. This was part of the launch of a £7.7 million project for One Health Regional Network for the Horn of Africa or HORN which in turn was part of £1.5 billion Global Challenges Research Fund (GCRF) supported by the UK's Official Development Assistance (ODA) research support for developing countries.
HORN is an international partnership between UoN, UoL, Addis Ababa University (AAU), Hamelmalo Agricultural College (HAC) of Keren, Eritrea, International Livestock Research Institute (ILRI), IGAD-Sheikh Technical Veterinary School (ISTVS), Sheikh, Somaliland and Liverpool School of Tropical Medicine (LSTM). HORN's mission is to improve the health and wealth of the people of the Horn of Africa by increasing the local capacity to undertake high quality research. HORN aims to build a regional network of individuals and institutions able to deliver high quality research into the linkage of the health and wealth of people to their livestock and environment, in the context of how people interact now and how they interacted in the past.
- ii) Programme to Evaluate and Inform Disability Action (PENDA) Collaboration Agreement between London School of Hygiene & Tropical Medicine and University of Nairobi (acting through the Department of Public and Global Health) **Prof. Joyce Olenja**
- iii) COVID 19 Video Training Project. Rotary International. **Prof. Joyce Olenja, Dr. Pamela Godia and Veronica Ojiambo**
- iv) COVID 19 Public Health Communication - University of Central Lancashire QR GCRF and UoN **Prof. Joyce Olenja**
- v) CREATE: NIHR Global Health Research Group on collaborative care for cardiometabolic disease in Africa. **Dr. Pamela Godia**
- vi) **Dr. Faith Thuita** Principal Investigator Anaemia Study, UNITID
- vii) Neglected Tropical Diseases in Kenya: A study into the causes, diagnosis and control of leishmaniosis in East Pokot Sub County, Baringo County, Nakuru and Nyandarua Counties; **Prof. Joseph Wang'ombe**

11. Linkages and Collaborations

- i) **Dr. Dismas Ongore:** HORN is an international partnership between UoN, UoL, Addis Ababa University (AAU), Hamelmalo Agricultural College (HAC) of Keren, Eritrea, International Livestock Research Institute (ILRI), IGAD-Sheikh Technical Veterinary School (ISTVS), Sheikh, Somaliland and Liverpool School of Tropical Medicine (LSTM).
- ii) **Prof. Joyce Olenja;** Berlin-Nairobi Global HEART, Charité Berlin) Masters Exchange programme Supported by DAAD.
- iii) **Dr. Peter Njoroge;** Jointly with the Centre for Global Public Health, University of Manitoba, NASCOP, NACC and the World Bank.
- iv) **Dr. Peter Njoroge;** Links with the College of Public Health, University of Nebraska, USA.
- v) **Dr. Rose Opiyo;** AFROHUN-PGH Focal person.
- vi) **Dr. Tom Olewe;** Collaboration between the University of Plymouth, University of Nairobi and Northern Rangelands Trust.
- vii) **Dr. Richard Ayah;** Focal Person PGH-UoN - Health Alliance, Africa hub; Developing capacity for Health Systems Research (HSR) across East & Central Africa. Project to assess and build capacity for HSR, Knowledge Translation and Implementation Research, on-going.

12. Activities/Programmes Directly or Indirectly Contributing to The Big Four Agenda

- i) The quarterly Community feedback exercise and medical camp organized by the Department that involves year five Medical (MBChB V) students, undertaken in rural settings.
- ii) HORN - Periodic One Health demonstration site trainings involving staff conducted at Oloitokitok, Kenya.
- iii) Polio Campaigns involving staff, organised periodically in over 10 counties countrywide.

Department of Surgery

Introduction

The Department of Surgery has continued to provide top clinical services at Kenyatta National Hospital (KNH) and also leads in training top specialists for the country and region. International students continue to increase in our programs and the new Smile Train Collaboration has created new interest in Plastic, Reconstructive and Aesthetic unit from the students interested in joining the programs.

The department is now focusing on research and the Chairman is now leading in the new changes to increase output in publication and PhD students. There is new interest in Grants projects lead by Dr. Charles Waihenya. The department will open new channels of grants.

Message from The Chairman

The Department of Surgery of the University of Nairobi (UoN) is situated within the Kenyatta National Hospital (KNH) campus of UoN. It is part of UoN Faculty of Health Sciences (FHS) on Ngong Road opposite The Nairobi Hospital. The department is dedicated to optimal training in General Surgery, Neurosurgery, Ear Nose Throat and Head Neck Surgery, Cardiothoracic Surgery, Paediatric Surgery, and Plastic, Aesthetic and Reconstructive Surgery, Urology and Orthopaedic Surgery.

The Covid 19 confirmed that the department of Surgery had to innovate in new ways of delivering teaching and learning with the ever evolving excellence in transfer of surgical skills in a safe, efficient and effective way with quality production of top specialists for our beloved country, the region and the world. The interest in our flagship MMED programmes has increased as evidenced by overwhelming applicants from both local and international countries. We shall continue to increase our capacity while looking at maintaining quality training, research and promoting registration of PhD candidates to advance this great opportunity.

When the Chinese write the word crisis it is composed of two characters, one for danger and the other for opportunity. Surgical operations during the Covid 19 encompasses both spheres in this arena but the department remained focused in looking at various opportunities especially in teaching and learning. The training of both postgraduates and undergraduates continued with feelings of future hope and excellent atmosphere created by experienced departmental faculty members.

Surgical specialties and super specialties are quickly making their presence felt in our region and our department has not been left behind in this evolutionary journey. In this regard, we conduct annual surgical skills courses for undergraduate and postgraduate students and some of our staff are already involved in minimally invasive surgery and microsurgery. Endoscopic skills training is among the well-established surgical program with advanced complex neuroendoscopy treatment of our patients in the region.

The department is engaged in various academic collaborations and exchange programmes involving various surgical sub-specialties with selected world leaders in surgical care. All in all, the department is constantly striving to offer excellent surgical training, care and research in more and more emerging surgical disciplines.

You are all invited to visit our department and you can get in touch through the email below;

dept-surgery@uonbi.ac.ke

Dr. Julius G. Kiboi

Chairman Department of Surgery

Consultant Neurosurgeon

Vision - A centre of choice for quality training, innovative research and policy development for the production of world-class surgeons and surgical health care providers.

Mission - To train high calibre surgical professionals, carry out creative, innovative and inventive research in current and emerging challenges, set and apply international standards in evidence and science based surgical healthcare provision, and be at the forefront of surgical policy formulation.

1. Strategic Objectives

- Strive to be a leader in surgical training, surgical research and surgical practice locally, regionally and internationally.
- Espouse and impart the virtues of professional ethics and moral standards in training, research and practice.
- Promote evidence based health care provision.
- Promote research.
- Promote teamwork.
- Nurture responsible professionalism through a culture of mentorship.
- Promote sensitivity and responsiveness to the community and its environmental needs.
- Promote gender sensitivity in training, research and practice.
- Promote optimum utilization of resources in surgical training, research and practice.
- Encourage and champion continuing surgical education.

2. Departmental Management Team

The Department of Surgery is headed by a Chairman and Thematic Heads of various Units as follows;

Chairman - Dr. Julius G. Kiboi

Thematic Heads

Orthopaedic Surgery - Dr. Vincent Mutiso
 Urology - Acting Dr. Francis Owillah
 ENT - Dr. Joyce Aswani
 Neurosurgery - Acting Dr. Christopher Musau
 Plastic, Reconstructive & Aesthetic Surgery - Dr. Ferdinand Nang'ole
 Paediatric Surgery - Acting Dr. Francis Osawa
 Thoracic & Cardiovascular Surgery - Dr. Mark Awori
 General Surgery - Dr. Elly Nyaim

3. Programmes Offered

The following programmes are offered by the Department of Surgery at postgraduate levels;

Master of Medicine in Orthopaedic Surgery - (5 Year Programme)
 Master of Medicine in Urology - (5 Year Programme)
 Master of Medicine in ENT - (5 Year Programme)
 Master of Medicine in Plastic, Reconstructive & Aesthetic Surgery - (5 Year Programme)
 Master of Medicine in Thoracic & Cardiovascular Surgery - (5 Year Programme)
 Master of Medicine in paediatric Surgery - (5 Year Programme)
 Master of Medicine in General Surgery - (5 Year Programme)
 Master of Medicine in Neurosurgery - (6 Year Programme)

4. Enrolled Students in Postgraduate Programmes

The Department enrolled 67 postgraduate students for the 2021/2022 academic year as follows;

Course	No
Master of Medicine in Orthopaedic Surgery	14
Master of Medicine in Urology	8
Master of Medicine in ENT	11
Master of Medicine in Plastic, Reconstructive & Aesthetic Surgery	4
Master of Medicine in Thoracic & Cardiovascular Surgery	8

Master of Medicine in Paediatric Surgery	6
Master of Medicine in General Surgery	7
Master of Medicine in Neurosurgery	9
TOTAL	67

5. International Students Component

In 2021, the Department of Surgery had 5 international students which translated to 10%.

6. Number of Graduates Per Programme

The following table shows the number of graduates for the 2020/2021 academic year from the various programmes in the Department;

Programme	Graduates
Master of Medicine in Orthopaedic Surgery	14
Master of Medicine in Urology	4
Master of Medicine in ENT	8
Master of Medicine in Plastic, Reconstructive & Aesthetic Surgery	4
Master of Medicine in Thoracic & Cardiovascular Surgery	4
Master of Medicine in Paediatric Surgery	4
Master of Medicine in General Surgery	5
Master of Medicine in Neurosurgery	2
TOTAL	45

Research Activities Undertaken

Four staff from the Department were on active grant/funded research projects as follows;-

Project Name	Funder	Duration	Staff	Remarks
Smile Train	Smile Train Inc.	10 Years	Dr. F. Nangole Prof. S. Khainga Dr. A. Muoki Dr. J. Wanjeri	Fund Postgraduate students, micro-vascular and workshops
Cleft Pallate	Cleft Kinder	Indefinite	Prof. S. Khainga Dr. F. Nang'ole	Cleft Pallate

International Links & Collaborations

- i) Smile Train Inc.
- ii) Cleft Pallate
- iii) Yangtze University, China
- iv) Dnipro Medical Institute, Ukraine
- v) Beihua University, China

Local Links & Collaborations

- | | |
|--|--|
| i) The Ministry of Health | iv) Coast General Teaching and Referral Hospital |
| ii) The Kenyatta National Hospital | v) Nakuru County Teaching & Referral Hospital |
| iii) Moi Teaching & Referral Hospital, Eldoret | vi) Kenyatta University Teaching & Referral Hospital |

Publications and Presentations for the Year

	Details	Venue	Period
Conferences			
Dr. J. Aswani	24th KENTS Annual Scientific Conference	Naivasha	20-23/10/2021
Dr. J. Aswani	28th Annual ENT scientific conference & meeting	Naivasha	13-15/5/2021
Dr. J. G. Kiboi	EAANS Conference	Naivasha	2-4/12/2021
Dr. J. Aswani Dr. C. Irungu Prof. I. Macharia Dr. J. Ayugi Dr. Peter Mugwe	28th Scientific conference	Naivasha	13-15/5/2021
Dr. F. Owillah Prof. P. Ndaguatha	KAUS Conference	Kitui	21-24/2/2021
Dr. F. Owillah	10th Emirates International Urological Conference of the Emirates Urological Society (EUS)	Dubai, UAE	8-16/11/2021
Prof. Peter Ngugi, Dr. Francis Owillah, Dr. Charles Waihenya	KAUS workshop & Annual scientific conference	Parkside Villa Hotel	21-24/2/2021
Prof. Peter Ngugi	Role of ADT in Prostate Cancer	Virtual	27/5/ 2021

Dissertations Produced in 2021

The following dissertations were produced by the MMed students who graduated in December 2021;

- i) Preoperative factors affecting the outcomes of open decortication for Empyema tural in adults at the Kenyatta National Hospital by Dr. Obed O. Makori.
- ii) Utility of CT scan in determining the resectability of C.A. Esophagus at KNH by Dr. Enock N. Makori.
- iii) Outcomes of haemodialysis arteriovenous fistula creation and factors that affect the maturation of the created arteriovenous fistula at Kenyatta National Hospital by Dr. Leon Ondieki.
- iv) Factors associated with operative mortality among patient admitted with thoracic aortic aneu dissection in KNH by Dr. Joseph Mutie.
- v) Pattern & determinants of early thyroid hormone profile changes following radiotherapy for HNC at KNH by Dr. Thomas Mureithi.
- vi) Assessment of vestibular function in patients with CSom at the Kenyatta National Hospital by Doctor.
- vii) Effects of endoscopic sinus surgery on lung function in patients with chronic Rhinosinusitis at the KNH by Dr. Justine Nyangaresi.
- viii) Middle ear effusion in children with cerebral palsy. A case control study at the KNH by Dr. Ovamba Daniel.
- ix) Diagnostic yield of laryngeal pathologies during upper GI endoscopy at KNH by Dr. Loise Nyawira.
- x) Assessment of voice handicap in total laryngectomy patients at KNH by Dr. Michelle Sibanda.
- xi) The prevalence & patterns of presentation of cholesteatoma amongst patients with CSOM at KNH by Dr. Kariuki Kabogo.
- xii) Patterns of head & neck cancers as seen at the cancer diseases hospital in Lusaka, Zambia by Dr. Uhenya Chumba.

Journals

Date	Publisher	Topic	Journal
MARCH 2021	Ojuka, Daniel; Aseta, Faith; Githambo, Beth; Wambua, Brian;	Medical Students' Perceptions of the Medical Education Learning Environment at the University of Nairobi: II. A Qualitative Study	Annals of African Surgery -18(2): 96-102
MAY 2021	Bandyopadhyay, Soham; Baticulon, Ronnie E; Kadhum, Murtaza; Alser, Muath; Ojuka, Daniel K; Badereddin, Yara; Kamath, Archith; Parepalli, Sai Arathi; Brown, Grace; Iharchane, Sara;	Infection and mortality of healthcare workers worldwide from COVID-19: a systematic review	BMJ global health-5(12) e003097
APRIL 2021	Mogere, Edwin; Githaiga, Joseph; Owilla, Francis; Mungania, Mary; Ojuka, Daniel;	Predicting Response to Neoadjuvant Chemotherapy in Women with Locally Advanced Breast Cancer in Kenya: Utility of Ki67	Annals of Surgery18(2):103-108
MARCH 2021	Ojuka, Daniel; Aseta, Faith; Githambo, Beth; Wambua, Brian;	The Medical Education Environment at the University of Nairobi, Kenya: an assessment with the DREEM tool	Annals of African Surgery
JANUARY 2021	Ojuka, Daniel; Aseta, Faith; Githambo, Beth; Wambua, Brian;	Medical Students' Perceptions of the Medical Education Learning Environment at the University of Nairobi: II. A Qualitative Study	Annals of African Surgery-18(1): 23-28
MAY 2021	Mwenda, Kinyua Isaiah; Ojuka, Daniel; Awori, Mark;	Utility of World Society of Emergency Surgery Sepsis Severity Score in Predicting Outcomes of Intra-abdominal Infections	Annals of African Surgery 17(2):55-59
MAY 2021	Ojuka, Daniel; Elly, Nyaim; Dan, Kiptoon; Peter, Ndaguatha;	Objective Structured Clinical Examination Tests: Comparison with Traditional Clinical Examinations in Surgery	BMJ global health-5(12) e003097
MARCH 2021	Nangole Wanjala, S.O Khainga T. Mogire, J.P Ogallo	Limb reconstruction	JPRAS OPEN
SEPTEMBER 2020	Mark Awori, Nikita Mehta, Obed Makori	Monocusp Valves Do Not Improve Early Operative Mortality in Tetralogy of Fallot: A Meta-Analysis	World J Paediatr congenital heart surgery

Consultancies

- i) The Kenyatta National Hospital
- ii) Moi Teaching & Referral Hospital, Eldoret
- iii) Coast General Teaching and Referral Hospital
- iv) Nakuru County Teaching & Referral Hospital
- v) Kenyatta University Teaching & Referral Hospital

Staff Establishment

The following is a summary of staff establishment for the Department of Surgery.

DESIGNATION	NO. IN POSITION
Professor	3
Associate Professor	3
Senior Lecturer	14
Lecturers	26
Tutorial Fellows	4
Honorary/Adjunct Lecturers	3
TOTAL	53

Staff Portfolio

The following is the Staff Portfolio in the Department of Surgery

Name	Qualification
Academic Staff	
Professors	
Pankaj Jani	MBChB, MMed (Nairobi), FRCPS, FCS (ECSA)
Ernest Atinga	MBChB, MMed (Nairobi), MCh Ortho (Liverpool)
Isaac Macharia	MBChB, MMed (Nairobi) Magoha, G. A. O., MBBS (Lagos), FRCS, FMCS (Urol.) FWACS, FICS, FABI, FIBA, FCS, (ECSA), MKNAS
Associate Professors	
Peter Ngugi	MBChB, MMed (Nairobi), Cert Urol (RCS)
Peter Ndaguatha	MBChB, MMed
Stanley Khainga	MBChB, MMed
Senior Lecturers	
Julius Githinji Kiboi	MBChB, MMed, (Nairobi), Neurosurg Fellowship (Univ. Of Pretoria)
Peter Mugwe	MBChB, MMed, (Nairobi)
Elly Nyaim	MBChB, MMed (Nairobi), EMBA (JKUAT), LEHMO (Cert. Strath.).
Mark Awori	MBChB, MMed, (Nairobi), Fel. PCCS (New Zealand)
Joyce Aswani	MBChB, MMed, (Nairobi), Head & Neck Surg Oncology Fellowship (UCT)

Vincent Mutiso	MBChB, MMed,
George Museve	MBChB, MMed, (Nairobi), FCS, ECSA
John Ayugi	MBChB, MMed (Nairobi)
Daniel Ojuka	MBChB, MMed, (Nairobi), PhD
Fred Sitati	MBChB, MMed (Nairobi)
Ferdinand Nang'ole	MBChB, MMed (Nairobi)
Lecturers	
John King'ori Kabia	Mbchb, Mmed
Christopher Musau	MBChB, MMed,(Nairobi)
Okoth Patrick Akuku	MBChB, MMed (Nairobi), Neurosurg. (UK)
Edward Gakuya	MBChB, MMed,(Nairobi)
Tom Omulo	MBChB, MMed
Tom Mogire	MBChB, MMed, (Nairobi)
Joseph Mwangi	MBChB, MMed (Nairobi)
Ezekiel Oburu	MBChB, MMed (Nairobi)
Peter Wambugu	MBChB, MMed (Nairobi)
Francis Owillah	MBChB, MMed (Nairobi)
Francis Osawa	MBChB, MMed (Nairobi)
Joseph Wanjeri	MBChB, MMed (Nairobi)
Abdullahi Adan	MBChB, MMed (Nairobi)
Vincent Wekesa	MBChB, MMed (Nairobi)
David Kuria	MBChB, MMed (Nairobi)
Dan Kiptoon	MBChB, MMed (Nairobi)
Catherine Irungu	MBChB, MMed (Nairobi)
Sarah Ndegwa	Dip. Clinical Audiology, MSc. Aud, (Manchester)
Peter Kitunguu	MBChB, MMed
Michael Magoha	MBChB, MMed
Nikita Mehta	MBChB, MMed
Marilynn Akinyi	MBChB, MMed
Tutorial Fellows	
Angela Muoki	MBChB, MMed (Nairobi)
Peter Mwika	MBChB, MMed
Fredrick Mitema	MBChB, MMed
Omar Nasir	MBChB, MMed
NON ACADEMIC STAFF	
Senior Administrative Assistant	
Esther Ogoro	BA (Econs), Med (KU), PhD (JKUAT)
Senior Technologist	
Julius Irungu	Higher dip. Electronics, (Kenya Polytechnic)
Secretaries	
Naomi Mugira	Certificate in Secretarial Studies
Caroline Kariuki	Diploma in Business Management, Diploma in Secretarial Studies
Pollyn Mulanya	Higher dip. Secretarial Management, Advanced dip. Business Management (Westford International College)

Registry Clerk	
Lillian Florence Nyakwaka	Dip. Records & archives Management (Kenya Polytechnic), Office Management
Support Staff	
Alison Kiraithe	KCSE
Hyline Kwamboka	KCSE
Peter Ongwae	KCSE
Josephine Kaling'a	KCSE

13. Corporate Social Responsibility, Environmental & Outreach Activities

Community Outreach

Staff within the Department offered community service through a number of avenues;

- i) The Plastic Reconstructive & Aesthetic Surgeons camp was held in Garissa County Referral Hospital from 22-24 June 2021.
- ii) Free Cleft Lip & Cleft Palate surgery in Transmara West Sub-County hospital from 26-28 May 2021.
- iii) Cleft Lip & Cleft Palate surgery in Kangundo Level 4 Sub-County hospital from 17-19 March 2021

14 Major Achievements, Challenges & Strategic Projections

a) Major Achievements

Through the community outreach activities and camps that were held in No. 18 above, a number of patients were successfully treated and reformed their lives.

b) Challenges

Challenge	Resolving Measure
Review of the departmental staff establishment	With the merging of the department of Orthopaedic into the department of Surgery, there is need to review the staff establishment of the merged department.
Inadequate teaching facilities; venues, furniture, equipment & apparatus	UoN to provide adequate financial support through the relevant Vote Allocated to the department.
Insufficient number of teaching staff	University of Nairobi to increase recruitment of both academic & non academic staff.
Insufficient offices for members of staff	University of Nairobi to develop its infrastructure to solve this.
Accommodation for postgraduate students	University of Nairobi to facilitate
Covid-19 Pandemic; Lack of PPEs for non academic staff	University of Nairobi (HR) to facilitate

c) Strategic Projections

- i) The following are the on-going Departmental projections;
- ii) The Department started the Curriculum Review process and so far three programmes have been approved by Senate.

- iii) To ensure that the Department trains at least one Specialist per County hospital in Kenya in the next 5 to 10 years.
- iv) To provide local and international graduates in all surgical fields.
- v) To strive towards achieving the projected Performance Contract targets.
- vi) To continue adhering to and improving the ISO standards of operations in the Department.

d) Others Professional Bodies

NAME	PROFESSIONAL BODIES
Urology	
Prof. P. Ngugi	Kenya Association of Urological Surgeons Kenya Medical Association
Dr. F. Owillah	Kenya Association of Urological Surgeons Kenya Medical Association
General Surgery	
Prof. Pankaj Jani	Surgical Society of Kenya Kenya Medical Association
Prof. D. Ojuka	Surgical Society of Kenya Kenya Medical Association
Dr. P. Mwangi	Surgical Society of Kenya Kenya Medical Association
Dr. E. Nyaim	Surgical Society of Kenya Kenya Medical Association
Dr. D. Kiptoon	Surgical Society of Kenya Kenya Medical Association
Plastic Reconstructive & Aesthetic Surgery	
Dr. F. Nang'ole	Kenya Society of Plastic Reconstructive & Aesthetic Surgeons Kenya Medical Association
Dr. J. Wanjeri	Kenya Society of Plastic Reconstructive & Aesthetic Surgeons Kenya Medical Association
Dr. A. Muoki	Kenya Society of Plastic Reconstructive & Aesthetic Surgeons Kenya Medical Association
Dr. A. Adan	Kenya Society of Plastic Reconstructive & Aesthetic Surgeons Kenya Medical Association
Neurosurgery	
Dr. J. Kiboi	Kenya Society of Neurosurgeons Kenya Medical Association

Dr. P. Okoth	Kenya Society of Neurosurgeons Kenya Medical Association
Dr. M. Magoha	Kenya Society of Neurosurgeons Kenya Medical Association
Dr. C. Musau	Kenya Society of Neurosurgeons Kenya Medical Association
Dr. V. Wekesa	Kenya Society of Neurosurgeons Kenya Medical Association
Dr. P. Kitunguu	Kenya Society of Neurosurgeons Kenya Medical Association
ENT	
Prof. I. Macharia	Kenya Ear, Nose and Throat Society Kenya Medical Association
Dr. J. Aswani	Kenya Ear, Nose and Throat Society Kenya Medical Association
Dr. C. Irungu	Kenya Ear, Nose and Throat Society Kenya Medical Association
Dr. J. Ayugi	Kenya Ear, Nose and Throat Society Kenya Medical Association
Dr. P. Mugwe	Kenya Ear, Nose and Throat Society Kenya Medical Association
Ms. S. Ndegwa	Kenya Ear, Nose and Throat Society Kenya Medical Association
Paediatric Surgery	
Dr. F. Osawa	Kenya Paediatric Association Kenya Medical Association
Dr. D. Kuria	Kenya Paediatric Association Kenya Medical Association
Dr. P. Mwirichia	Kenya Paediatric Association Kenya Medical Association

Thoracic & Cardiovascular Surgery	
Dr. T. Omulo	Kenya Cardiac Society Kenya Medical Association
Dr. M. Awori	Kenya Cardiac Society Kenya Medical Association
Orthopaedic Surgery	
Dr Kingori	Kenya Orthopaedic Association Kenya Medical Association
Dr. V. Mutiso	Kenya Orthopaedic Association Kenya Medical Association
Dr. George Museve	Kenya Orthopaedic Association Kenya Medical Association

Dr. F. Sitati	Kenya Orthopaedic Association Kenya Medical Association
Dr. Edward Gakuya	Kenya Orthopaedic Association Kenya Medical Association
Dr. Tom Mogire	Kenya Orthopaedic Association Kenya Medical Association
Dr. J. Mwangi	Kenya Orthopaedic Association Kenya Medical Association

Calendar of Departmental Activities

Calendar of events from January 2021 to 31st December 2021

Period	Event
February 2021	Regular/Special/Re-sit examinations
May - June 2021	Intake of the 2021/2022 postgraduate students; shortlisting, interviews and admission Completion of postgraduate syllabi & CAT administration
June - July 2021	Postgraduate end of year examinations
August 2021	Preparations for undergraduate examinations
September - November 2021	Undergraduate end of year examinations (MBChB Levels III, IV & VI) Preparation of postgraduate students for graduation
December 2021	Graduation of postgraduate students

Department of Psychiatry

Introduction

The Department of psychiatry is one of the departments at the School of Medicine, College of Health Sciences. It was established in 1971 soon after the start of the medical college in 1967. The department is situated at the medical school, Kenyatta National Hospital (KNH). For teaching purposes, the department also uses Mathari Hospital, which is situated about 10 kilometres away from KNH. At KNH together with staff from KNH we run outpatient clinics for both adults and children. We also work closely with Mathari hospital to train our students, both postgraduates and undergraduates.

Programmes Offered

1. MBChB Level I Behavioural Sciences
2. MBChB Level IV Psychiatry lectures
3. MBChB Level V Psychiatry lectures
4. Master of Medicine degree in psychiatry (MMed Psych)

5. Master of Science in clinical psychology (MSc Clinical Psychology)
6. Post graduate Diploma in Psychotrauma
7. Post graduate Diploma in Substance abuse
8. Post graduate Diploma in Psychiatry Social Work
9. Postgraduate Diploma in Clinical Psychiatry
10. Doctor of Philosophy and Doctor of Medicine
11. Doctor of Philosophy and Doctor of Clinical Psychology

We also service other departments in teaching postgraduate students, like the Department of Medicine and Paediatrics.

Enrolled Students

- MMed Psychiatry - 26
- MSc. Clinical Psychology - 14

Strategic Issues

- Graduated only 23 students which was much lower than the previous year. The low production of student in the 2020 FY was due to COVID - 19 pandemic.
- Due to the COVID - 19 pandemic conferences attended were limited therefore full dissemination was not realized
- There was also limitation in collaboration and linkages with peer institutions and industry locally and internationally.
- Challenges in automation of course evaluation tool.

Major Achievements in The Year 2021

- Online interviews, Admissions and Registration of students
- Graduated 23 postgraduate students during the 64th graduation ceremony.
- Despite the COVID - 19 pandemics, the department was committed to conducting outreach programmes with people in the community particularly vulnerable individuals - women and the youth.
- The department was number 16 out of 300

Cooperate and Community Outreach Activities

LECTURER	PROGRAM ME	SCH/DEPT/ UNIT	EXTENSION/OUTRE ACH	DATE
Prof. David Ndetei	Family TV Meeting	Psychiatry	Family TV Panic Attack/Anxiety alk	August 2021

7. Staff Portfolio

NAME	QUALIFICATION	POSITION
Prof. Anne A. Obondo	B.A (Hons) Sociology (Delhi), MSW, (Bombay), PGD Psychiatric Social Work (UK), PhD (UoN)	Associate Professor (Chairman)
Prof. David M. Ndetei	Mbchb Nbi., MD and Dpm, (London), Frc Pych (UK), DSc. (UoN), Cert In Psychotherap	Professor
Prof. Mary Wangari Kuria	Mbchb, M.Med, Phd, (UoN)	Professor
Prof. Anne Muthoni Mathai	Mbchb, M.Med (UoN), PhD. Social Work (Kassel)	Associate Professor

Dr. John M. Mburu	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Pius A. Kigamwa	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Rachel N. Kang'ethe	Mbchb, M,Med (UoN)	Senior Lecturer
Dr. Fredrick R. Owiti	Mbchb (Nbi), Mrcpsych. (UK)	Senior Lecturer
Dr. Anne Mwayo	u B.A.Counseling Psychology, (UON), MSc. Clinical Psychology (UON), PhD Clinical Psychology (UON)	Lecturer
Dr. Lincoln Imbugwa Khasakhala	MBChB (UON), MSc. Clinical Psychology (UoN) and PhD in Clinical Psychology (UoN)	Lecturer
B.A Social Work (Catholic University), MA Sociology (UON), PhD in Psychiatric Social (UON)	Lecturer	
B.A Counseling Psychology MSC, Clinical Psychology (Nbi), PhD Student	Tutorial Fellow	
Master of Arts	Senior Admin Assistant	
Diploma	Asst. Senior Secretary	
Diploma	Asst. Senior Secretary	
Msc.	Records Clerk	
Class (7)	Messengerial	
Class (3)	Cleaner	

Projections

- Focus on realizing succession planning in the Department of Psychiatry
- Prioritize and align more programmes, projects and activities to the realization of the “Big Four” agenda through mounting research projects focusing on COVID - 19 in collaboration with partners and institutions
- Alignment of the various programmes with CUE guidelines and standards - already in process

Any Other Pertinent Information/Issues in The Year 2021

- The Department of Psychiatry lost two members of the academic staff in 2019 and to date they have not been replaced even after I requested for their replacement.
- Four members of staff left the department to pursue other interests.
- The Department is grossly understaffed, and almost half of the academic members are above 60 years of age and will be retiring almost at the same time. The Department urgently needs to replace the two members who died and four members who left. We need to recruit tutorial fellows for succession planning.

International Students Component

We have sixteen (20) international students

NAME	COUNTRY	PROGRAMME
Grace L. Obalim	Uganda	MSc. Clinical Psychology
Dr. Wilma Albertina Tubman	Liberian	MMed Psychiatry
Dr. Ketshephile Pelaelo	Botswana	MMed Psychiatry
Dr. Toguen Guy Michael	Cameroonian	MMed Psychiatry
Dr. Magdaleena Ndapewa Shivute	Namibian	MMed Psychiatry
Patience Kobusingye	Ugandan	PGD Psychiatric Social Work
Dr. Warsame Abulkadir	Somali	PGD Clinical Psychiatry
Dr. Isse Maimuna Mohamud	Somali	PGD Clinical Psychiatry
Adoko Mahouri	Benin	M.Med Psychiatry
Hodan Cawil JamaC	Somali	M.Med Psychiatry
Othalephile Enamasi Othapile	Botswana	M.Med Psychiatry
Lesogo Baikanande	Botswana	M.Med Psychiatry
Kelebogile Kelapile	Botswana	M.Med Psychiatry
Kahinde Janet Fareye	Nigeria	MSc. Clinical Psychology
Suma Kulkarni	India	MSc. Clinical Psychology
Malebogo Thuli Legwada	Botswana	MSc. Clinical Psychology
Rebecca Nkalanga	Botswana	MSc. Clinical Psychology
Onalenna Antonia Kalantle	Botswana	MSc. Clinical Psychology
Imran Versi	Somalia	MMed Psychiatry
Mariama Abdullahi	Somalia	MMed Psychiatry

Number of Those Graduated Per Programme

1. M.Med Psychiatry - 19
2. MSc. Clinical Psychology - 4
3. PGD in Clinical Psychiatry - 4

12. Research Activities Undertaken

TITLE	DURATION	DONOR	ACTIVITIES	PI
SMART AFRICA	2015 - 2019 Extension to May 2021 2023	New York University	<p>Main activity of this project is working with parents and their children to improve on respectful communication. This is to be done through:</p> <ul style="list-style-type: none"> i) Adaptation of the American manual 4Rs and 2 Ss- almost done. This has been through engagement of stakeholders ii) Selecting of the three schools to be involved in the pilot study and to randomly assign them to either peer parents training, community health workers training or giving educational materials - almost done. iii) Training of Trainers - was done in December 2018 iv) Selecting peer parents and CHW- was done in January 2019 v) Training the parent and CHW trainers- was done in January 2019 vi) Started the intervention in Feb 2019 	Dr. Anne W. Mwayo
ASPIRE	2018 - 2023	US Fogarty International Center & NIMH	<p>The major activity of the project is focusing on mental health needs of pregnant adolescents. Since the award of the grant in September 2018, PI has submitted her protocol to IRB and carried out two stakeholder meetings. She has made plans for research training activities for the remainder of the year.</p>	Dr. Manasi Kumar
DAPPER	2018 - 2023	NIMH	<p>The purpose of the project is to conduct effectiveness implementation hybrid randomized clinical trial of psychotherapy versus pharmacotherapy delivered by non-specialist in Kisumu County.</p> <p>Ongoing project</p>	Prof. Muthoni Mathai
WHO EQUIP	2019 - 2020	WHO	Training and intervention	Prof. Muthoni Mathai

13. International Links and Collaboration

MOU signed between University of Nairobi and Walden University for collaborated fieldwork supervision of Walden University student attached to the Department of Psychiatry.

14. Publications - 46

AUTHOR	TITLE	NAME OF THE JOURNAL	MONTH & YEAR
David M. Ndetei, Victoria Mutiso, Christine Musyimi, Frida Kameti	Psychosocial Response to COVID-19 in Africa With Special Reference To Kenya.	World Social Psychiatry. 2020, Vol 2 Issue 2. http://www.worldsocy psychiatry.org IP: 10.232.74.22	August 2020
GBD 2019 Universal Health Coverage Collaborators.	GBD 2019 Universal Health Coverage Collaborators. Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019.	The Lancet. 27 August 2020. doi:10.1016/S0140-6736(20)30750-9.	27 August 2020.
Local Burden of Disease WaSH Collaborators	Mapping geographical inequalities in access to drinking water and sanitation facilities in low-income and middle-income countries, 2000-17.	The Lancet Global Health. August 2020. doi:10.1016/S2214-109X(20)30278-3.	August 2020.
Local Burden of Disease Diarrhoea Collaborators	Mapping geographic inequalities in oral rehydration therapy coverage in low- and middle-income countries, 2000-17. The Lancet Global Health. August 2020. doi:10.1016/S2214-109X(20)30230-8.	August 2020. doi:10.1016/S2214-109X(20)30230-8.	August 2020.
Yator, O., Khasakhala, L., John- Stewart, Kumar, M. (2020)	Acceptability and Feasibility of Group Interpersonal Therapy (IPT-G) for Depressed HIV+ Postpartum Adolescents Delivered by Community Health Workers: A Protocol Paper	Clinical Medicine Insights Psychiatry 11:117955732095122 DOI: 10.1177/1179557320951222	August 2020
Yator O, Kagoya M, Khasakhala L, John-Stewart G, Kumar M.	Task-sharing and piloting WHO group interpersonal psychotherapy (IPT-G) for adolescent mothers living with HIV in Nairobi primary health care centers: a process paper. AIDS Care.	-6.11:1 doi: 10.1080/09540121.2020.1801981. Epub ahead of print. PMID: 32781831.	2020 Aug
Flückiger C, Rubel J, Del Re AC, Horvath AO, Wampold BE, Crits-Christoph P, Atzil-Slonim D,	The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis.	J Consult Clin Psychol. 2020 Sep; 88(9):829-843. doi: 10.1037/ccp0000594. PMID: 32757587.	2020 Sep
Compare A, Falkenström F, Ekeblad A, Errázuriz P, Fisher H, Hoffart A, Huppert JD, Kivity Y, Kumar M, Lutz W, Muran JC, Strunk DR, Tasca GA, Vísňá A, Voderholzer U, Webb CA, Xu H, Zilcha-Mano S, Barber JP.			

Sinha, M. Kumar, M, Kumar, Dietz, L. Atwoli, L.	Towards mental health friendly cities during and after COVID-19, Cities & Health August 2020. Cities & Health	DOI: 10.1080/23748834.2020.1790251	August 2020
Catherine Mawia Musyoka, Anne Mbwayo, Dennis Donavan, Muthoni Mathai	Alcohol Substance Use Among First-year Students at the University of Naioribi, Kenya: Prevalence Patterns	Journal Pone	August 2020
Yvonne Olando, Mary Kuri Muthoni Mathai, Mark D, Huffman	Barriers and Facilitators to cessation among Tobacco Users with concomitant mental illness attending group behavioural tobacco cessation: A qualitative Study		August 2020
Manasi Kumar1* , Keng-Yen Huang2, Caleb Othieno1, Dalton Wamalwa3, Kimberly Hoagwood4, Jurgun Unutzer5, Shekhar Saxena6, Inge Petersen7, Simon Njuguna8,	Implementing combined WHO mhGAP and adapted group interpersonal psychotherapy to address depression and mental health needs of pregnant adolescents in Kenyan primary health care	Kumar et al. Pilot and Feasibility Studies (2020) 6:136 https://doi.org/10.1186/s40814-020-00652-8	2020
Beatrice Amugune9, Onesmus Gachuno10, Fred Ssewamala11 and Mary McKay12	settings (INSPIRE): a study protocol for pilot feasibility trial of the integrated intervention in LMIC settings		
Dr. Manasi Kumar	Mapping routine measles vaccination in low- and middle-income countries	https://doi.org/10.1038/s41586-020-03043-4	Nov, 2020
Dr. Manasi Kumar	The reciprocal relationship between alliance and early treatment symptoms: A two-stage individual participant data meta-analysis	2020, American Psychological Association. DOI: 10.1037/ccp0000594	2020
Dr. Manasi Kumar	Five insights from the Global Burden of Disease Study 2019	Europe PMC Funders Group Author Manuscript Lancet. Author manuscript; available in PMC 2020 November 13.	
Judy Machuka1, Grace Nduku Wambua2, Otsetswe Musindo2, David Bukusi 3, Violet Okech4, Peter Muiruri 1, Rachel Maina1, Nelly Opiyo1, Pauline Ng'ang'a 5 and Manasi Kumar 5,6*	Positive and Healthy Living Program Manual Development for Young People Living With HIV at the Comprehensive Care Center at the Kenyatta National Hospital: An Open Pilot Implementation Trial	Frontiers in Psychiatry	Nov, 2020

Dr. Manas Kumar	and disability-adjusted life year estimates from the Global Burden of Disease Study 2017	Haagsma JA, et al. Inj Prev 2020; 26:i12-i26. doi:10.1136/injuryprev-2019-043296	2020
Dr. Manasi Kumar	Estimating global injuries morbidity and mortality: methods and data used in the Global Burden of Disease 2017 study	Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY. Published by BMJ.	24 August 2020
GBD 2019 Universal Health Coverage Collaborators	Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019	www.thelancet.com Published online August 27, 2020 https://doi.org/10.1016/S0140-6736(20)30750-9	August 27, 2020
Ruth Kioko, Teresia Mutavi	The Association of Family Functions Among Juvenile Delinquent Children in Rehabilitation Centres in Nairobi and Kiambu Counties-Kenya	Research on Humanities and Social Sciences www.iiste.org ISSN 2224-5766 (Paper) ISSN 2225-0484 (Online) Vol.10, No.21, 2020	December, 2020
Moitreyee Sinha, Manasi Kumar, Lian Zeitz , Pamela Y. Collins, Suresh Kumar, Steve Fisher , Nathaniel Foote , Norman Sartorius , Helen Herrman & Lukoye Atwoli	Towards mental health friendly cities during and after COVID-19, Cities & Health	SN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcah20	August 2020
David Ndetei ^{1,2} , Kathleen Pike ³ , Victoria Mutiso ² , Albert Tele ² , Isaiah Gitonga ² ,	Patterns and predictors of symptoms of affectivity and psychosis in adults who screened positive on the WHO mhGAP-IG in a rural setting in Kenya	International Medicine 2020; 2(5): 284-293 https://www.theinternationalmed	Nov, 2020
Tahilia Rebello ³ , Christine Musyimi ² , Daniel Mamah ⁴		icine.com	
Daniel Mamah*, ¹ , C. Robert Cloninger ¹ , Victoria N. Mutiso ² , Isaiah Gitonga ² , Albert Tele ² , and David M. Ndetei ^{2,3}	Personality Traits as Markers of Psychosis Risk in Kenya: Assessment of Temperament and Character	Schizophrenia Bulletin Open doi:10.1093/schizbullopen/sgaa051	2020
Victoria Mutisoa Christine Musyimia Tahilia Rebellob Isaiah Gitongaa Albert Telea Kathleen Pikeb David Ndetei	Predictors of intimate partner violence in patients attending general health services at rural health facilities In Makueni County, Kenya	Mental Health & Prevention Volume 20,200191 https://doi.org/10.1016/j.mhp.2020.200191 Get rights and content	Dec, 2020,

Tom L Osborn,1,2 Akash R Wasil,3 John R Weisz,1 Arthur Kleinman,4,5 David M	Where is the global in global mental health? A call for inclusive multicultural collaboration	Osborn TL, <i>et al General Psychiatry</i> 2020;33 :e100351. doi:10.1136/gpsych-2020-100351	Sept, 2020
Ndetei6,7			
Dr. Manasi Kumar	Europe PMC Funders Group	Lancet. Author manuscript; available in PMC 13.	2020 Nov
Christine W. Musyimi 1*, Victoria N. Mutiso1, Darius N. Nyamai1, Ikenna Ebuenyi 2, David M. Ndetei1,3	Suicidal behavior risks during adolescent pregnancy in a low-resource setting: A qualitative study	https://doi.org/10.1371/journal.pone.0236269	July 2020
Shanley, J. R., Armistead, L. P., Musyimi, C., Nyamai, D., Ishiekwe, M., Mutiso, V., & Ndetei, D. (2021).	Engaging community voices to assess Kenya's strengths and limitations to support a child maltreatment prevention program.	Child Abuse & Neglect. https://doi.org/https://doi.org/10.1016/j.chiabu.2020.104772	2021
Mezzich, J.E., Kallivayalil, R.A., Bennegadi, R., Botbol, M., Christodoulou, G., ozman, D., Javed, A., Kastrup, M., Lolas, F., Ndetei, D. and Soghoyan, A.,	Articulating Social Psychiatry and Person-Centered Medicine: Conceptual Bases and International Implications for COVID-19.	World Social Psychiatry, 2(2), p.58.	2020
Ndetei D, Pike K, Mutiso V, Tele A, Gitonga	Patterns and predictors of symptoms of affectivity and psychosis in adults who screened positive on the WHO mhGAP-IG in a rural setting in Kenya.	International Medicine 2020, 2(5): 284-293	2020
Rebello T, Musyimi C, amah D.			

Book Chapters Produced (4)

AUTHOR*	TITLE	JOURNAL	Period
Ndetei D.M., Mutiso V.N., Musyimi C.W., Nyamai D.N	Setting Up Community Mental Health.	Innovations in Global Mental Health. Springer, Cham. https://doi.org/10.1007/978-3-319-70134-9_15-1	2020
Ndetei D.M., Musyimi C.W., Mutiso V.N., Ruhara R.W., Boycheva E., Gitonga I.	Promotion of Recovery Through Socio-economic Inclusion for People Living with Severe Mental Illness.	Innovations in Global Mental Health. Springer, Cham DOI. https://doi.org/10.1007/978-3-319-70134-9_80-1 Online ISBN978-3-319-70134-9	2020

15. Conferences - 21

NAME OF LECTURER	TOPICS / FUNCTION	VENUE/PLACE	PERIOD/DATE
David Ndetei and WPA Board members	WPA Board Virtual meeting - WPA 2020-2023 Action Plan	Webinar (Organized by WPA Geneva)	29 th September 2020; at 14:00-17:30
David Ndetei (WPA Zone 14) and WPA Zone 15 and 16 Representatives	WPA webinar Evidence Based Psychopharmacology	Webinar (Organized by WPA Geneva)	19 th September 2020; at 12.00 - 14.00
David Ndetei	Suicide and How To Handle Stress	Family TV Media	28 th September 2020 at 11.00 - 12:00
David Ndetei	Discussion on Anxiety/Panic attacks	Family TV Media	21 st September 2020 at 13:00- 14:00
David Ndetei and others (Uganda Team)	World Suicide Prevention day: Working together to prevent suicide	Zoom meeting - (The Sanctuary, a youth organization in Uganda)	10 th September 2020; at 10:00
David Ndetei and WPA Board members	WPA Task Force Minimizing coercion in mental health	Zoom meeting - (Organized by WPA Geneva)	9 th September 2020 at 14:00 - 16:00
David Ndetei	Talk on Depression.	Family TV Media	18 th August 2020 13:00 - 14.30
Talk on COVID-19 - How it affected many Kenyans have been rendered jobless, their source of livelihoods disrupted and there have been an increase in Domestic violence	Family TV Media	11 th August 2020 13:00 - 14.30	
WPA Joint Executive Committee and Board Meeting	Zoom meeting - (Organized by WPA Geneva)	31 st July 2020; at 14:00 - 15.30	
Participated in CitiesRise MHFC consultation		June 2020	
Presented to KNH COVID meeting on psychological first aid		10 June and 18 July, 2020	
Presented to CitiesRise on „addressing trauma, depression and stress during COVID“		August 12, 2020	29 th September 2020
WPA	Virtual Webinar	October, 16 2020	September 03, 2020 5
WPA	Virtual Webinar	October, 12 2020	
WPA Evidence based psychopharmacology	Virtual Webinar	19 th September, 2020	

NAME OF LECTURER	TOPICS / FUNCTION	VENUE/PLACE	PERIOD/DATE
David Ndetei and WPA Board members	WPA Board Virtual meeting - WPA 2020-2023 Action Plan	Webinar (Organized by WPA Geneva)	29 th September 2020; at 14:00-17:30
David Ndetei (WPA Zone 14) and WPA Zone 15 and 16 Representatives	WPA webinar Evidence Based Psychopharmacology	Webinar (Organized by WPA Geneva)	19 th September 2020; at 12.00 - 14.00
David Ndetei	Suicide and How To Handle Stress	Family TV Media	28 th September 2020 at 11.00 - 12:00
David Ndetei	Discussion on Anxiety / Panic attacks	Family TV Media	21 st September 2020 at :00-14:00
David Ndetei and others (Uganda Team)	World Suicide Prevention day: Working together to prevent suicide	Zoom meeting - (The Sanctuary, a youth organization in Uganda)	10 th September 2020; at 10:00
David Ndetei and WPA Board members	WPA Task Force Minimizing erosion in mental health	Zoom meeting - organized by WPA Geneva)	9 th September 2020 At 14:00 - 16:00
David Ndetei	Talk on Depression.	Family TV Media	18 th August 2020 13:00 - 14.30
David Ndetei	Talk on COVID-19 - How it affected many Kenyans have been rendered jobless, their source of livelihoods disrupted and there have been an increase in Domestic violence	Family TV Media	11 th August 2020 13:00 - 14.30
WPA Joint Executive Committee and Board Meeting	Zoom meeting - (Organized by WPA Geneva)		
Participated in CitiesRise MHFC consultation			
Presented to KNH COVID meeting on psychological first aid			
Presented to CitiesRise on „addressing trauma, depression and stress during COVID“			

16. Supervisions

SUPERVISORS	STUDENTS
Prof. Anne Obondo	Dr Linet Kendi Mbae Dr Gloria N Sane James Letoo Ahmed Hussein Keziah Wanjau Julia Wambui
Prof. Wangari Kuria	Dr Ruth Jepchumba Korir George Githambo Dr. Caroline Makau Dr. Alfred Gitonga Dr. Samuel Orok Yvonne Olando (PhD) Roseline Okoth (PhD) Peter Owuor

Prof. Caleb Othieno	Dr Muia Mwende Janet Grace Okoba Grace Obalim Mary Mugambi
Prof. Muthoni Mathai	Dr Mumbi Chege Dr. Linda N Nyamute Dr Eric Njuguna Segametsi Bongani Mthunzi William Otieno Shillah Mwavua Mercy Chege Sandra Kimuge Dr. Mustafa Ali Dr. Stanley Muange Dr. Edward Odhiambo Dr. Samuel Oroko Ahmed Hussein Sylvia Mita Esther Gathoni Simon Kintu Nancy Ngathi
Dr. F.R. Owiti	Dr Joseph Makenga Masila Dr Mumbi Chege Dr. Elizabeth Ngarachu Dr. Mugira George Itabari Dr. Muburi Catherine Muthoni Seline Okumu Jackline Araya
Dr. Manasi Kumar	Dr Milka A. Olando Joan Mutahi
Dr. Lincoln Khasakhala	Dr Joseph Makenga Masila Dr Linet Kendi Mbae Shillah Mwavua Damaris Osoro Elizabeth Epirong Maureen Mbuge Dr. Amos Kariuki Mogotsi Thapelo Josephe Kathono Simon Ngipuo Elizabeth Ipurong
Dr. Judy Kamau	Joan Mutahi Joan Ahero Sandra Kamuge Nelly Kamwaro Milka Olando Grace Obalim
Dr. John Mburu	Dr Gloria N Sane Dr. Elizabeth Ngarachu Dr Muia Mwende Janet Dr. Ruth Masha Dr. Mustafa Ali Dr. Penina Kibuti Mogotsi Thapelo Mustafa Ali Seline Okumu Peter Owuor
Dr. Anne Mwayo	Dr Linda N Nyamute Dr Ruth Jepchumba Korir Dr Eric Njuguna Mercy Chege Martha Kagoya George Githambo Selfine Otieno Dr. Caroline Makau Dr. Mugira George Itabari Dr. Muburi Catherine Muthoni Catherine Musyoka (PhD) Keziah Wanjau Simon Ngipuo Sheilla Shavulimo
Dr. Judy Kamau	Dr Milka A. Olando Sandra Kimuge Ruth Kioko Faith Muhindi Stephen Mucheu Sheilla Shavulimo

Dr. Teresia Mutavi	Ruth Kioko Maureen Mbuge Elizabeth Epirong Dr. Mustafa Ali Dr. Ruth Masha Dr. Erica Adagala Dr. Stanley Nzau Muange Dr. Alfred Gitonga Mustafa Ali Esther Gathoni Elizabeth Ipurong
Dr. Pius Kigamwa	Segametsi Bongani Mthunzi William Otieno Martha Kagoya Dr. Erica Adagala Dr. Amos Kariuki Dr. Edward Odhiambo Monica Otiende Kevin Lime Sheila Mwangi Sylvia Mita Julia Wambui
Dr. Rachel Kang'ethe	Selfine Otieno Dr. Penina Kibuti Kevin Lime Joan Ahero

17. Consultancies by Staff Members/Unit

1. Dr. Pius Kigamwa - Offers psychiatric services at University Health Services
2. Dr. Fredrick Owiti - Offers psychiatric services at University Health Services
3. Members of staff offer services both at Kenyatta National Hospital and University Health Services

18. Staff Establishment

The department had 15 in the following grades

Professor	-	2	Senior/Administrative Assistant	-	1
Associate Professor	-	2	Senior Technologist	-	0
Senior Lecturer	-	4	Secretary	-	2
Lecturer	-	2	Record Clerk	-	1
Tutorial Fellow	-	1	Messenger	-	1
Senior/Assistant Registrar	-	0	Cleaner	-	1

19. Number of Graduates

PhD	-	3
M.Med Psychiatry	-	19
MSc. Clinical Psychology	-	4

20. Grants

NAME OF LECTURER	TOPICS / FUNCTION	PERIOD/DATE
Dr. Manasi Kumar	<i>K43 Emerging Global Leader award (award number TW010716-01A1)</i>	2018 - 2023
Prof. Muthoni Mathai	DAPPER, NIH, USD 796096	2018 - 2023
Prof. Muthoni Mathai	WHO - EQUIP	2019 - 2020
Dr. Anne Mbwayo	SMART AFRICA	2018 - 2023

17. Consultancies by Staff Members/Unit

1. Dr. Pius Kigamwa - Offers psychiatric services at University Health Services
2. Dr. Fredrick Owiti - Offers psychiatric services at University Health Services
3. All members of staff offer services both at Kenyatta National Hospital and University Health Services

18. Staff Establishment

Professor	- 2	Senior/Administrative Assistant	- 1
Associate Professor	- 2	Senior Technologist	- 0
Senior Lecturer	- 4	Secretary	- 2
Lecturer	- 2	Record Clerk	- 1
Tutorial Fellow	- 1	Messenger	- 1
Senior/Assistant Registrar	- 0	Cleaner	- 1

19. Grants

NAME OF LECTURER	TOPICS / FUNCTION	PERIOD/DATE
Dr. Manasi Kumar	K43 Emerging Global Leader award (award number TW010716-01A1)	2018-2023
Prof. Muthoni Mathai	DAPPER, NIH, USD 796096	2018 - 2023
Prof. Muthoni Mathai	WHO - EQUIP	2019 - 2020
Dr. Anne Mbwayo	SMART AFRICA	2018 - 2023

FACULTY OF SCIENCES AND TECHNOLOGY

Department of Biology

Introduction

The School of Biological Sciences (SBS) is set in a serene environment at Chiromo Campus, located about 2 km from Nairobi City. It offers training in three well-structured undergraduate degree programs, as well as MSc. and PhD. programs in over 12 bioscience specialty areas. The School is structured into the following eight thematic areas; each with a thematic head:

- | | |
|--|-----------------------------------|
| i) Microbiology, Parasitology and Immunology | v) Marine and Fisheries |
| ii) Genetics and Biotechnology | vi) Ethnobiology and Taxonomy |
| iii) Ecology and Environmental Sciences | vii) Physiology and Biochemistry |
| iv) Insect Science | viii) Biological Natural Products |

The School is involved in different types of researches within the biological arena and has links with several local, regional and international institutes. Besides teaching and research, the School offers other services to the public and private sector, and the general public such as consultancies in many biosciences areas, taxonomic identification of plants and animals, and sale of biological products, such as seedlings, mice and insects, among others.

Programmes Offered

The School offers three undergraduate degree programmes, namely:

- i) Bachelor of Science in Biology
- ii) Bachelor of Science in Environmental Conservation & Natural Resource Management
- iii) Bachelor of Science in Microbiology and Biotechnology

Student Enrolment

Undergraduate

Degree Program	Total
BSc. (Biology)	357
BSc. (Microbiology & Biotechnology)	676
BSc. (Environmental Conservation & Natural Resource Management)	482
Total	1,515

Postgraduate

Programmes	Number of Students Enrolled
MSc. Agricultural Entomology	3
MSc. Applied Parasitology	4
MSc. Biology of Conservation	11
MSc. Cell Biology and Physiology	1
MSc. Genetics	4
MSc. Hydrobiology (Aquaculture)	4
MSc. Medical & Veterinary Entomology	2
MSc. Microbiology	6
MSc. Plant Physiology & Biochemistry	1
Total	36

International Student

Degree Program	Number of Students Enrolled
BSc. (Microbiology & Biotechnology)	4
BSc. (Environmental Conservation & Natural Resource Management)	2
Postgraduate (MSc)	3
Postgraduate (PhD)	2
TOTAL	11

Number of Graduands

Degree Program	No. of Graduands
BSc. (Biology)	67
BSc. (Microbiology & Biotechnology)	69
BSc. (Environmental Conservation & Natural Resource Management)	135
MSc.	11
PhD.	6
Total	288

National and International Links and Collaborations

Title	Industry Partners
Training and Scientific Research and University of Nairobi	North East Forestry University (NEFU), Harbin, P.R. China
Kamuthanga Farm Ltd and The University of Nairobi	Kamuthanga Farm Ltd
NARA Institute of Science and Technology, Japan and The University of Nairobi	NARA Institute of Science and Technology, Japan
Yokohama National University (YNU), Japan and The University of Nairobi	Yokohama National University (YNU), Japan
City university of Mogadishu, Somalia and The University of Nairobi	City university of Mogadishu, Somalia

Publications

Author*	Title	Journal
D. Odongo et. al	The Rhipicephalus appendiculatus tick vector of Theileria parva is absent from cape buffalo (Syncerus caffer) populations and associated ecosystems in northern Uganda	Parasitology Research https://doi.org/10.1007/s00436-020-06728-x
David O. Odongo et. al	Equid infective Theileria cluster in distinct 18S rRNA gene clades comprising multiple taxa with unusually broad mammalian host ranges	Parasit Vectors. 2020; 13: 261 doi: 10.1186/s13071-020-04131-0 PMID: 32430015

Author*	Title	Journal
Odongo D. O et. al	Multilocus genotyping of <i>Theileria parva</i> isolates associated with a live vaccination trial in Kenya provides evidence for transmission of immunizing parasites into local tick and cattle populations	Transboundary and Emerging Diseases 2020 Mar; 67 Suppl 1:88-98. doi: 10.1111/tbed.13417. PMID: 32174043
Bishop RP, Odongo D et. al	A review of recent research on <i>Theileria parva</i> : implications for the infection and treatment vaccination method for control of East Coast fever	Transboundary and Emerging Diseases 2020 Mar; 67 Suppl 1:56-67. doi: 10.1111/tbed.13325. PMID: 32174044
Odongo D, Bishop RP, Skilton RA, et. al	Antigen gene and variable number tandem repeat (VNTR) diversity in <i>Theileria parva</i> parasites from Ankole cattle in southwestern Uganda: evidence for conservation in antigen gene sequences combined with extensive polymorphism at VNTR loci	Transboundary and Emerging Diseases 2020 Mar; 67 Suppl 1:99-107. doi: 10.1111/tbed.13311. PMID: 32174038
Odongo D, Kuate JR, et. al	First detection of <i>Theileria parva</i> in cattle from Cameroon in the absence of the main tick vector <i>Rhipicephalus appendiculatus</i>	Transboundary and Emerging diseases 2020 Mar; 67 Suppl 1:68-78. doi: 10.1111/tbed.13425. PMID: 32174039
Daniel Nthiwa, David Odongo et. al	Seroprevalence of foot-and-mouth disease virus in cattle herds raised in Maasai Mara ecosystem in Kenya	Preventive Veterinary Medicine 2020 Mar 13;176:104929. Epub 2020 Feb 13
Virginia V. Wang'ondou	Mangrove Degradation: Reversing the trend through community engagement	©2020 Authors Published by Office of DVC Research, Innovation and Enterprise, https://uonresearch.org/journal/kpb University of Nairobi, http://www.uonbi.ac.ke
Nathan Gichuki Catherine Lukhoba et. al	Medicinal Plants of the Maasai of Kenya: A Review.	Plants, 9, 44; (https://doi.org/10.3390/plants9010044).
Nathan Gichuki Catherine Lukhoba et. al	Sustainability of the Loita Maasai Childrens' Ethnomedicinal Knowledge	Sustainability, 11(19), 5530; (https://doi.org/10.3390/su11195530).
Catherine Kitonde Judith Odhiambo et. al	Morphological Traits as Indicators of Bitterness in Traditional Vegetables: The Case of Spider Plant (<i>Gynandropsis gynandra</i>) in Kenya	Asian Journal of Research in Botany, 2(3): 1-15.
Catherine Kitonde Catherine Lukhoba et. al	In vitro studies of 3-O-Methylquercetin against phytopathogenic fungi of major cereals	Journal of Agricultural Science and Practice Volume 4(4), pages 102-112, August 2019 Article Number: CF2BA5C52 ISSN: 2536-7072 https://doi.org/10.31248/JASP2019.145 https://integrityresjournals.org/journal/JASP

Author*	Title	Journal
Catherine Kitonde Catherine Lukhoba Maina Wagacha	Effect of Vernodalol, a Sesquiterpene Lactone, on Economically Important Agricultural Fungi.	International Journal of Innovative Science & Research Technology, 4 (3): 685-694
David Odongo et. al	Theileriosis in mountain Bongo repatriated to Kenya: a clinical and molecular investigation	Journal of Zoo and wildlife medicine Vol.50,issue 2, pgs 342-349
David Odongo et. al	Assessment of the prevalence of Theileria lestoquardi in sheep from the Sudan using serological and molecular methods	Journal of Preventive Veterinary Medicine Vol. 169, pgs 104697
David Odongo et. al	A participatory epidemiology study of major cattle diseases amongst Maasai pastoralists living in wildlife-livestock interfaces in Maasai Mara, Kenya	Journal of Tropical Animal Health and Production. pp 1-7
David Odongo et. al	Molecular identification of zoonotic hookworms in dogs from four counties of Kenya.	Journal of helminthology. pp 1-8, Cambridge University Press
Nathan Gichuki et. al	Woody species composition in upper Tana River flood plain of Kenya: potential effects of change in flood regimes	Journal of Sustainability, Environment and Peace Vol. 1 issue 3, pp 91-97
Joyce Kanini Omari	Woody species composition in upper Tana River flood plain of Kenya: potential effects of change in flood regimes	Journal of Sustainability, Environment and Peace Vol. 1 issue 3, pp 91-97
George Ong'amo	Decanal as a major component of larval aggregation pheromone of the greater wax moth, Galleria mellonella	Journal of Applied Entomology Vol. 143, issue 4 pgs 417-429
Florence A. Oyieke et. all	Larval species diversity, seasonal occurrence and larval habitat preference of mosquitoes transmitting Rift Valley Fever and Malaria in Baringo County, Kenya.	Journal of parasites & vectors. Vol. 12, Issue 1, pp 295. By BioMedical Central.
Wolfgang Richard Mukabana	Artisanal fishing supports breeding of malaria mosquitoes in Western Kenya	Malaria Journal Vol. 18, issue 1 pp 77 by BioMedical Central.
John Maina Wagacha	Influence of socio-economic and agronomic factors on aflatoxin and fumonisin contamination of maize in Western Kenya	Journal of Food Science & Nutrition
Mary Mwangi et. all	Insights into the diet and feeding behaviour of Red-capped lark Calandrella cinerea (Aves: Passeriformes: Alaudidae)	Journal of threatened taxa Vol. 11, issue 6 pp 137217-13733
Sheila Okoth et. all	Activation of the p38/MAPL pathway regulates autophagy in response to CYPOR-dependent oxidative stress induced by zearalenone in porcine intestinal epithelial cells	Journal of food and chemical toxicology Vol. 131, Sept. 2019, 110527
Sheila Okoth et. al	Curcumin-based photosensitization inactivate aspergillus flavus and reduces aflatoxin B1 in maize kernels	Journal of food microbiology Vol 82, issue 0740-0020 pp. 82-88
Francis Mwaura et. al	Biosynthesis of silver Nanoparticles from Eucalyptus Corymbia leaf extract at optimized conditions	Journal of Thermodynamics & Catalysis 8 (1), 5 -Nano hybrids and composites vol. 25 pp 32-45, by Trans Tech Publications
Robert Chira	Insights into the diet and feeding behaviour of Red-capped Lark Calandrella cinerea (Aves: Passeriformes: Alaudidae)	Journal of Threatened Taxa

Author*	Title	Journal
Evans Mwangi	Seasonal abundance of <i>Plutella xylostella</i> (Lepidoptera: Plutellidae) and diversity of its parasitoids along altitudinal gradients of the eastern Afromontane	Phytoparasitica
Paul Ndegwa et al	Decanal as a major component of larval aggregation pheromone of the greater wax moth, <i>Galleria mellonella</i>	Journal of Applied Entomology Vol. 143, issue 4 pp 417-429
H. Ochanda	A search for snail-related answers to explain differences in response of <i>Schistosoma mansoni</i> to praziquantel treatment among responding and persistent hotspot villages along the Kenyan shore of Lake Victoria	The American journal of tropical medicine and hygiene
Mwaura B. Francis	Silver-zinc oxide nanocomposite antiseptic from the extract of <i>Bidens pilosa</i>	SN Applied Sciences
Mwaura B. Francis	Bacteriophages Isolated in China for the Control of <i>Pectobacterium carotovorum</i> Causing Potato Soft Rot in Kenya	Virologica Sinica
Lucy Irungu Paul N. Ndegwa	Species composition, phenotypic and genotypic resistance levels in major malaria vectors in Teso North and Teso South Subcounties in Busia County, Western Kenya	Journal of Parasitology Research
Paul N. Ndegwa Valentine ngowi	Potential effects of Climate Change on Tritrophic Interactions in Crucifer Farming Systems of Mount Kilimanjaro and Taita Hills	ICIPE digital repository
Sheila Okoth et. al	Preharvest Management Strategies and their Impact on Mycotoxigenic Fungi and Associated Mycotoxins in the book title: Mycotoxins impact and management strategies by Patrick Berka Njobeh	eBook (PDF) ISBN:978-1-83881-848-7
Francis Mwaura et. al	Screening of Kenyan Soybean Cultivars For Resistance to different Races of <i>Phakopsora pachyrhizi</i> (Soybean Rust) and Determination of Molecular Basis or rust Resistance	Journal of food and chemical toxicology Vol. 131, Sept. 2019, 110527
Sheila Okoth et. al	Occurrence of Fungi and Mycotoxins in Fish Feeds and their impact on Fish Health	International Journal of Microbiology
Sheila Okoth et. al	Effects of aflatoxin B, on reproductive performance of farmed Nile Perch	International Journal of Veterinary Science and Medicine
Sheila Okoth et. al	Genetic Profiling of <i>Aspergillus</i> Isolates with varying Aflatoxin production potential from different Maize-Growing regions of Kenya	Toxins journal MDPI
Sheila Okoth et. al	Correction: Mitema, A. et al. The Development of a qPCR Assay to measure <i>Aspergillus flavus</i> Biomass in maize and the use of a biocontrol strategy to limit Aflatoxin production.	Toxins journal MDPI, 11, 179
Sheila Okoth et. al	Aflatoxin Binders in Foods for Human Consumption-can this be promoted safely and ethically?	Toxins journal MDPI
Sheila Okoth et. al	Curcumin-based photosensitization inactivates <i>Aspergillus flavus</i> and reduces aflatoxin B1 in Maize kernels	Science direct: Food Microbiology

Author*	Title	Journal
Sheila Okoth et. al	Activation of the p38/MAPK pathway regulates autophagy in response to the CYPOR-dependent oxidative stress induced BY Zearalenone in porcine intestinal epithelial cells	Food and Chemical Toxicology
Sheila Okoth et. al	Infestation mechanisms of two woodborer species in the mangrove <i>Sonneratia alba</i> J. Smith in Kenya and co-occurring endophytic fungi	PLOS ONE: https://doi.org/10.1371/journal.pone.0221285
Richard W. Mukabana	Artisanal fishing supports breeding of malaria mosquitoes in western Kenya	Malaria Journal
George Ong'amo et. al	Pathogens, endosymbionts, and blood-meal sources of host seeking ticks in the fast-changing Maasai Mara wildlife ecosystem	Journal of Medical Entomology
Sheila Okoth et. al	Influence of growth temperature on thermal tolerance of leading foodborne pathogens	Journal of Food Science and Nutrition
Sheila Okoth et. al	Preharvest Management Strategies and their Impact on Mycotoxigenic Fungi and Associated Mycotoxins	Journal of Applied Biosciences
E. Ndegwa et. al	Longitudinal Shedding Patterns and Characterization of Antibiotic Resistant <i>E. coli</i> in Pastured Goats Using a Cohort Study	Antibiotics MPDPI
Richard W. Mukabana	A Guide to Biological Control of Fall Armyworm in Africa Using Egg Parasitoids	International Journal for Parasitology
Richard W. Mukabana	Seasonal abundance of <i>plutella xylostella</i> (Lepidoptera: plutellidae) and diversity of its parasitoids along altitudinal gradients of eastern afro-montane	International Journal for Parasitology
Wagacha Maina et. al	Nutrient characteristics of swine manure and waste water	Journal of Agricultural, Biological, and Environmental Statistics
George Ong'amo et. al	Do parasitoids reduce cereal losses? Estimating the impact of parasitoids on stem borer pest infestation and maize yield	Journal of Applied Biosciences

Major Achievements in the Year 2020

- i) Increased enrolment of postgraduate students in the School.
- ii) Increased number of PhD graduates from the School.
- iii) Increased completion rates of postgraduate students
- iv) Increased publication output
- v) Increased collaborative research projects
- vi) Online lectures and examinations conducted successfully
- vii) Online meetings and trainings conducted successfully
- viii) Interviews for various positions conducted online
- ix) Established and equipped an Aquaculture Laboratory.
- x) Revived the School's Insectary.

Staff Establishment

Job Title	No. in Position
Professors	6
Associate Professors	5
Senior Lecturers	14
Lecturers	8
Assistant Lecturers	2
Tutorial Fellows	4
Assistant Registrar	1
Chief Technologist	6
Secretary	1

Administrative Assistant	1
Senior Technologist	11
Technologist	3
Registry Clerk	1
Technical Assistant	1
Trainee Technical Assistant	1
Driver	1
Technical Assistant	1
Subordinate Staff	1
TOTAL	68

Department of Chemistry



Chairman, Department of Chemistry



Department of Chemistry Building

1.0 Introduction

The Department of Chemistry is located in Chiromo Campus, Off-Riverside Drive. It is part of the Faculty of Science and Technology, the Department has over 800 students' comprising of PhD, MSc and Undergraduate including servicing the Department of Pharmacy, Faculty of Engineering, Faculty of Agriculture and Faculty of Education.

In the 2020/2021 academic year the Department handled about 600 BSc undergraduates and BSc ODL (Analytical and Industrial Chemistry 36, MSc 27 and 3 PhD students. In addition, we handled a total of about 706 students from other Departments and Faculties. These students were served by 67 staff. In this period, we offered 3 undergraduate (BSc Analytical; Chemistry, BSc Industrial Chemistry and BSc Chemistry and 4 postgraduate programs (MSc Chemistry, MSc Analytical Chemistry, MSc Industrial Chemistry and MSc Environmental Chemistry).

Prof David K. Kariuki is the current Chairman of the Department of Chemistry.



Department of Chemistry Group photo

Academic Staff December, 2021

Professors

Prof. J.O. Midiwo
Prof. I. O. Jumba
Prof. D.O. Orata
Prof. Abiy Yenesew

Associate Professor

Prof. B. Bhatt
Prof. P.M. Shiundu
Prof. L.W. Njenga
Prof. J.M. Onyari
Prof. H. N. Njenga
Prof. A.O. Yusuf
Prof. J.P. Kithinji
Prof. D.K. Kariuki
Prof. L. Kerubo Omosa

Senior Lecturers

Dr. J.M. Mwaniki
Dr. Solomon Derese
Dr. J.M. Wanjohi
Dr. J.A. Ndakala
Dr. F. D. Oduor
Dr. P.M. Guto
Dr. D.W. Mbui
Dr. Immaculate Michira

Lecturers

Mr. J.M. Makopa
Mr. C.W. Mirikau
Mr. G. Wafula
Dr. B. Wamalwa
Dr. D.A. Abong'o

Dr. John Onyatta
Dr. J.N. Wabomba
Dr. Njagi Njomo
Dr. Vincent Madadi
Dr. Joyce G. Njagi-Kithure
Dr. Marina Mukabi
Dr. Beth Ndunda
Dr. Patrick Tum
Dr. G. Bosire
Dr Ruth A. Odhiambo

Tutorial Fellows

Mr. Fredreck M. Mwazighe
Ms. Racheal N. Njogu

1.1 Number of Staff and their Designations

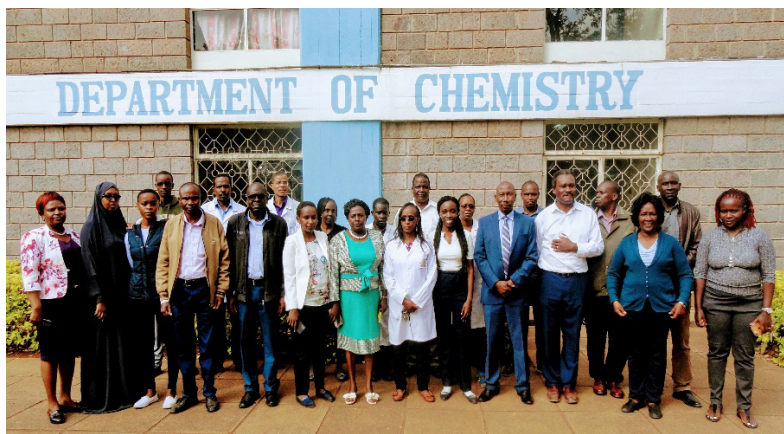
As at December 2021, the department had 73 staffs in the following grades

Professor	- 4	Technical Assistant II	- 1
Assistant Chief Technologist	- 2	Tutorial Fellows	- 2
Associate Professor	- 9	Document list	- 1
Senior Technologist DEF	- 8	Principal Technologist	- 1
Senior Lecturers	- 8	Senior Administrative Assistant	- 1
Technologist ABC	- 9	Chief Technologist	- 1
Lecturers	- 15	Secretary	- 1

The Department received a new Chairman Prof David K. Kariuki in August 2021



Chairman, Department of Chemistry



Staff welcoming the New Chairman

1.2 Programmes Offered and Services Offered

The Department has over 800 students' comprising of PhD, MSc and undergraduate including servicing the Department of Pharmacy, Faculty of Engineering, Agriculture and Education.

The Department offers the following undergraduate and postgraduate degree programs

Undergraduate Programs

- BSc. in Industrial Chemistry
- BSc. in Chemistry
- BSc. in Analytical Chemistry

Postgraduate Programs

- MSc. in Chemistry
- MSc. in Environmental Chemistry
- MSc. in Analytical Chemistry
- MSc. in Industrial chemistry

Doctor of Philosophy

- PhD in Chemistry

1.3 Number of Students Enrolled in Undergraduate and Postgraduate Programmes 2021

1.3.1 Undergraduate Program Enrolment

Programme	Female	Male	Nos. of Students	Total
Bachelor of Science in Chemistry	26	50	76	161
Bachelor of Science in Industrial Chemistry	21	32	53	
Bachelor of Science in Analytical Chemistry	11	21	32	

1.3.2 Postgraduate Program Enrolment

Programme	Female	Male	Nos. of Students	Total
Master of Science in Environmental Chemistry	1	4	5	18
Master of Science in Analytical Chemistry	2	4	6	
Master of Science in Chemistry	2	5	7	

1.3.3 Doctor of Philosophy in Chemistry (PhD)

Programs Female	Male	Nos. of Students	Total	
Doctor of Philosophy in Chemistry	1	2	3	3

1.4 International Students

The Department hosts a number of international students. They were as follows:

Names of International Students & Staff	Country	Programme	Documentation*
Dwivedi Sandesh	India	BSc Industrial Chemistry	SMIS List
David Bielo Ingulu	Dr. Congo	BSc Industrial Chemistry	SMIS List

2.0 Strategic Issues

2.1 Research Facilities in The Department

The department conducted trainings and provided consultancy services to various clients from both Public and Private sectors. The major clients included Pest Control Products Board, KEWI, Nation Media, various Universities on application of GC/MS, HPLC, FTIR, AAS, UV/Visible, as well as emissions measurements etc.



Gas Chromatograph Mass Spectrometry (Gc/Ms) Equipment

Atomic Absorption Spectrometer

The equipment is important in analysis of heavy metals in environmental samples such as water, soil and sediment; and industrial samples. The AAS is also important in teaching of undergraduate and postgraduate students undertaking units in spectroscopic methods of analysis. It has also been used to support analysis of postgraduate research on heavy metals. The equipment can be used for analysis of heavy metals: Cd, Cu, Pb, Fe, Hg, Mg, Mn, Ni and Zn. The Department of Chemistry has acquired magritek spinsolve 60 nmr, spectrometer



AAS Machine



Spinsolve 60 NMR, Spectrometer

The National Research Fund - Kenya (NRF-K) has awarded the Department of Chemistry, University of Nairobi KSh 42,796,236 to establish a Kenya National Nuclear Magnetic Resonance (NMR) Centre (KNMRC). The center is to provide services by analyzing samples using NMR spectrometers for researchers and postgraduate students from various universities and research institutions. NMR is the single most important analytical tool for identification of unknown compounds. In this regard, the Department of Chemistry has acquired a brand new 60MHz Nuclear Magnetic Resonance Spectrometer (Magritek Spinsolve 60 NMR, Germany) at a cost of KShs. 11,072,727.80 from the NRF-K grant and the instrument is already installed, staff trained and is functional. This instrument is capable of analyzing ^1H , ^{13}C and ^{19}F , both one-dimensional and two-dimensional spectra, which will substantially improve the teaching, research and consultancy capability of the department. We are highly grateful to the National Research Fund-Kenya for the award of the Infrastructure Development Grant, and the University of Nairobi for facilitating and handling of the grant.

The Department also has a Physical Chemistry laboratory with capacity to do various analyses and specialized equipment such as bomb calorimeter, GC, HPLC and Ion Chromatograph that has also increased the scope of analyses. The Department has specialized laboratory for analysis of water, air, natural products, biodiesel and fuels, amongst others samples.

2.2 Research Activities

2.2.1 PhD Research

Table 2 (Appendices) shows a list of students undertaking PhD projects and their supervisors.

PhD Students Supervision

- Munyao Joshua Sila** : Development of a Novel Voltammetric methods for determination of Phenoxyethyl penicillin & in animal products and Pharmaceutical samples.
Supervisor: Dr. P. Guto, Dr. J. Onyatta
- Mungai George Ng'ang'a** : Genesis Of Carbon Dioxide and Associated Characteristics of Selected Mofette Springs In The Eastern Mt. Kenya Region
Supervisor: Prof. Hellen N. Njenga, Prof. Eliud Mathu, Dr. Vincent Madadi
- Osoro Enock Moses** : Assessment of the Concentrations and Distribution of Selected Polybrominated Diphenyl Ethers in Nairobi River Basin and their Photocatalytic Degradation Pathways,
Supervisor: Prof. Shem O. Wandiga, Dr. Vincent O. Madadi, Dr. Deborah A. Abong'o
- James Kamau Mbugua** : Fabrication and Optimization of an Effective Anaerobic Digester for Biogas Production Using Vegetable Waste From Wakulima and Kangemi Markets in Nairobi county, Kenya
Supervisor: Dr. Jooseph Mwaniki, Dr. Damaris Mbui

2.2.2 Master of Science Research

- Chebet Ngeno Olivia:** Induction of Secondary Metabolites by Endophytic Fungi to Reduce Leaf Miner Attach on The Common Bean *Phaseolus Vulgaris*.
Supervisor: Dr. John O. Onyatta
- Hillary Otieno Owuor:** Stability Pyrethrins in Drying Methods of Pyrethrum
Supervisor: Dr. Patrick Tum, Prof. David K. Kariuki
- Susan Cherotich:** "Major Inorganic Nutrient in soil from small scale tea farms, water and sediments from Sulal River, Bureti Sub-County, Kericho County
Supervisor: Dr. Deborah A. Abong'o, Dr. John O. Onyatta

Andanyi Humphey: Lidweye	Enzymatic hydrolysis of chromium tanned leather waste amino acid composition analysis and chemical characterization of hydrolysate Supervisor: Prof. John Onyari
David Were:	Determination of Phenolic Content Level And Free Radical Scavenging Ability In Freshly Prepared And Commercial Orange Juice In Nairobi County-Kenya Supervisor: Dr. Joyce Kithure, Dr. Deborah Abon'go
Mwai Lillian Njeri:	Evaluation of Lead, Chromium and Cadmium In Automotive Paints In Kenyan Market Supervisor: Dr. John O. Onyatta, Dr. Faridah Were
Michael James Welimo:	Survey and assessment of Acaricide residue levels in home cattle sprays, soil and water from Ewaso River, Kajiado County, Kenya. Supervisor: Dr. Deborah Abon'go, Prof. Shem O. Wandiga
Njagi Timothy Nyaga:	Assessment of airborne particulate matter around cement industries in Athi River, Machakos County, Kenya. Supervisor: Dr. John O. Onyatta, Mr. Godfrey Angoe Wafula
Stephene Matinde Joel	Assessment of Domestic water quality for residents of Kuria West in Migori County Supervisor: Prof. D.K. Kariuki
Aloo, Lawrence Odhiambo:	Determination of aflatoxins strains and nutritive levels associated with <i>Rastrineobola Argentea</i> in selected localities in Kenya Supervisor: Dr. Vincent O. Madadi
Philip Sheridan Wanjiku:	Assessment of Veterinary Drugs and Pesticides Residues Levels in Cow and Camel Milk from Kiambu, Laikipia and Isiolo Counties, Kenya' Supervisor: Dr. Vincent O. Madadi
Were Arthur Ouma:	Improving aquaculture fisheries productivity through mitigation of pesticides contamination in fishponds, Kisumu County Supervisor: Dr. Vincent O. Madadi, Dr. Joyce Kithure

2.3 International Links and Collaborations

- 1) Prof. Abiy Yenesew, Prof. Midiwo, Prof. Leonida Kerubo & Dr. Solomon Derese attended Pan Africa Network Congress, 2019. The Theme "Riches of the Natural World: sustainable use of Africa's natural products and materials.
- 2) International E-waste Day attended by UNICSA at the WEE center, Embakasi.
- 3) As part of efforts to promote innovation and technology transfer; the Department Linked/Collaborated with the following;

a) Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR)

Industry Partners: The University of Nottingham of University Park, The University of Nairobi, Maseno University, Jomo Kenyatta University of Agriculture & Technology, Maasai Mara University & Kenyatta University

Details: Academic Collaboration agreement between The University of Nottingham of University Park, The University of Nairobi, Maseno University, Jomo Kenyatta University of Agriculture & Technology, Maasai Mara University & Kenyatta University. SPHEIR (Strategic Partnerships for Higher Education Innovation and Reform) aims to transform higher education systems in focus countries in Sub-Saharan Africa, Asia and the Middle East to better meet the needs of graduates and employers.

Duration: 4yrs, 2months

b) Corporate Agreement between The University of Nairobi & Western Cape

Industry Partners: University of Nairobi & Western Cape

Details: MOU between University of Nairobi & Western Cape on Staff & Students Exchange, Collaboration in Research & Student and Staff Development

Duration: 5yrs

c) Memorandum of Cooperation between the University of Nairobi & DOW

Industry Partners: University of Nairobi & DOW

Details: The purpose of this cooperation is to enhance the capacity of both institutions to fulfill their corporate objectives through educational and industrial engagements.

Duration: 5yrs

d) National Lead Poisoning Prevention Week

Industry Partners: University of Nairobi & Basco Paints

Details: Report on 6th National Lead Poisoning Prevention week Campaign, Programme, email communication between Dr Faridah Were and Basco Paints, Request letter for refund by Dr Faridah for the 6th National Lead Poisoning Prevention Week, Request Letter requesting the Vice Chancellor, Certificate of gratitude awarded to the University of Nairobi.

e) Launching of Sustainable Management of Waste Paper program within Chiromo Campus

Industry Partners: University of Nairobi & Chandaria Ltd

Details: Letter to the Principal on launch of Sustainable management waste paper, request letter of transfer of funds to UNICSA accounts, request letter from UNICSA to the Principal to Sensitize Kenya Science Campus about sustainable management of waste & budget.

f) Short Term Research Scholarship Programme at NAPRECA

Industry Partners: University of Nairobi & DAAD

Details: Visa application letter for Richard Oriko Owor & letter of award for scholarship.

G) Investigation of Natural Compounds for Overcoming Drug Resistance in Cancer and Infective Disease and Study of Their Mechanism of Action

Industry Partners: Laboratory of Parasitology, General Karol Kaezkozski Military Institute of Hygiene and Epidemiology WARSAW, Poland & State Key Laboratory of Quality Research in Chinese Medicine Macau University of Science & Technology (MUST) & University of Nairobi, Department of Chemistry

Details: Cooperative framework between partners within the scope and realization of research project, Correspondence, abstract of Journal article

h) To Establish a University-Industry Cooperation Anchored on Science, Technology, Engineering and Mathematics (STEM)

Industry Partners: MCA Group (Manuel Couto Alves Group)

Details:

- Capacity building of the Department of Chemistry (University of Nairobi) in teaching, research, and participating in ongoing joint projects in various subject areas
- Mutual participation of staff in conferences, training workshops & seminars organized by each institution.
- Sharing of research and published materials in disciplines & areas of interest to both institutions.
- Joint projects in research & curriculum development in STEM disciplines.
- Supporting students to develop soft skills for career development.
- Student internships/attachments for varying lengths of time.

Duration: 5years

2.4 List of Research Publications 2021

The Department produced the following Journal publications in the year 2021

Summary of Publications

Title: COVID-19 and Cancer Therapy: Interrelationships and Management of Cancer Cases in the Era of COVID-19
Journal: Source Journal of Chemistry Volume 2021 Publisher Hindawi
Author: Simon N Mbugua, Lydia W Njenga, Ruth A Odhiambo, Shem O Wandiga, Martin O Onani
Month/Year: 2021

Title: Antibacterial Secondary Metabolites from *Vernonia auriculifera* Hiern (Asteraceae) against MDR Phenotypes
Journal: Natural Product Research Pages 1-4, Publisher
Author: Clara Jepkoech, Leonidah Kerubo Omosa, Vaderament-A Nchiozem-Ngnitedem, Evans O Kenanda, Michel-Gael F Guefack, Armelle T Mbaveng, Victor Kuete, Matthias Heydenreich
Month/Year: July 2021

Title: Microplastics Pollution in the Sediments of Creeks And Estuaries of Kenya, Western Indian Ocean
Journal: African Journal of Marine Science, Volume 43, Issue 3, Pages 337-352, Publisher Taylor & Francis
Author: JO Kerubo, AWN Muthumbi, JM Onyari, D Robertson-Andersson, E Kimani
Month/Year: July 2021

Title: A coumestan and a Coumaronochromone from *Millettia Lasiantha*
Journal: Biochemical Systematics and Ecology Volume 97, Pages 104277, Publisher Pergamon
Author: Daniel Buyinza, Solomon Derese, Albert Ndakala, Matthias Heydenreich, Abiy Yenesew, Andreas Koch, Richard Oriko
Month/Year: Aug 2021

Title: Daniel Buyinza, Li Jun Yang, Solomon Derese, Albert Ndakala, Paolo Coghi, Matthias Heydenreich, Vincent Kam Wai Wong, Heiko M Möller, Abiy Yenesew
Journal: Natural Product Research, Volume 35, Issue 16, Pages 2744-2747
Author: Cytotoxicity of isoflavones from *Millettia dura*
Month/Year: Aug 2021

Title: Application of renewable technology for mitigating environmental hazards of palm oil industry: Strategy for climate change and adaptation
Journal: African Journal of Environmental Science and Technology, Volume 15, Issue 10, Pages 428-438, Publisher Academic Journals
Author: TB Onifade, AO Akanni, SO Wandiga, PJ Harvey
Month/Year: Oct 2021

Title: *Artemia salina* as an animal model for the preliminary evaluation of snake venom-induced toxicity
Journal: Toxicon: X, Volume 12, Pages 100082, Publisher Elsevier
Author: Mitchel Otieno Okumu, James Mucunu Mbaria, Joseph Kangangi Gikunju, Paul Gichohi Mbuthia, Vincent Odongo Madadi, Francis Okumu Ochola, Mercy Seroney Jekporir
Month/Year: Nov. 2021

Title: Artemia salina as an animal model for the preliminary evaluation of snake venom-induced toxicity
Journal: Toxicon: X, Volume 12, Pages 100082, Publisher Elsevier
Author: Mitchel Otieno Okumu, James Mucunu Mbaria, Joseph Kangangi Gikunju, Paul Gichohi Mbutia, Vincent Odongo Madadi, Francis Okumu Ochola, Mercy Seroney Jepkorir
Month/Year: Nov. 2021

Title: Influence of Divestment Strategy on Performance of Large Manufacturing Firms in Kenya
Journal: American Journal of Strategic Studies, Volume 3, Issue 1, Pages 21-33
Author: Jacob Kithinji, Gladys Rotich, Allan Kihara
Month/Year: Nov. 2021

Title: Re-engineering Strategy and Performance of Large Manufacturing Firms in Kenya.
Journal: Journal of Business and Strategic Management, Volume 6, Issue 3, Pages 102-118
Author: Jacob Kithinji, Gladys Rotich, Allan Kihara
Month/Year: Nov. 2021

Title: Synergistic anti-inflammatory activities of a new flavone and other flavonoids from Tephrosia hildebrandtii vatke
Journal: Natural product research, Volume 35, Issue 22, Pages 4486-4493, Publisher Taylor and Francis
Author: Richard Oriko Owor, Kibrom Gebreheiwot Bedane, Yolande Ikala Openda, Sebastian Zühlke, Solomon Derese, George Ong'amo, Albert Ndakala, Michael Spitteller
Month/Year: Nov. 2021

Title: Effects of temperature and catalytic reduction of sulfur content on kinematic viscosity and specific gravity of tire pyrolysis oil
Journal: Chemical Engineering Communications, Pages 1-8, Publisher Taylor & Francis
Author: Job Bosire Omwoyo, Richard Kyalo Kimilu, John Mmari Onyari
Month/Year: Dec 2021

Title: In Vitro Cytotoxicity and Anti-HIV Activity of Crude Extracts of Croton macrostachyus, Croton megalocarpus and Croton dichogamus
Journal: Journal of Experimental Pharmacology, Volume 13, Pages 971-979, Publisher Dove Press
Author: Ermias Mergia Terefe, Faith Apolot Okalebo, Solomon Derese, Joseph Muriuki, Gaber El-Saber Batiha
Month/Year: Dec 2021

Title: Microplastic Polymers in Surface Waters and Sediments in the Creeks Along the Kenya Coast, Western Indian Ocean (WIO)
Journal: European Journal of Sustainable Development Research, Volume 6, Issue, Pages em0177, Publisher Veritas Publications LTD
Author: Joyce O Kerubo, John M Onyari, Agnes WN Muthumbi, Deborah Robertson Andersson, Edward Ndirui Kimani
Month/Year: Dec 2021

Title: Optimization of C/N Ratio for Mesophilic Anaerobic Digestion from Food Wastes Found In Nairobi-A Lab-Scale Case Study
Journal: Journal of Kenya Chemical Society, Vol. 9., Issue No. 1
Author: Joseph M Mwaniki*, Fredrick Mwazighe and Duncan Mbela Masimba
Month/Year: Dec 2021

Author: Patrick K. Tum1, Gift M. Kasha1, Joyce G.N. Kithure1, Fredrick M. Mwazighe
Title Optimization of Essential Oil Extraction from Eucalyptus grandis leaves by Clevenger Distillation
Journal Journal of Kenya Chemical Society, Vol. 9., Issue no. 1
Month/Year: Dec 2021

Title Synthesis and characterization of ionomer-type cements from alkaline-activated kaolinite
Journal: Journal of Non-Crystalline Solids: X, Pages 100079, Publisher Elsevier
Author: Olivia A Osiro, David K Kariuki, Loice W Gathece
Month/Year: Dec 2021

Title: Useful Products from Microalgae: Case Study of Ruai Wastewater Treatment Plant in Nairobi
Journal Journal Kenya Chemical Society, Volume 9:, Issue 1, Pages: 15
Author: Joseph M Mwaniki*, Fredrick M Mwazighe, Daniel W Gitura, Samuel M Gakuo and Geoffrey N Kamau
Month/Year: Dec 2021

Title Synergism in Antiplasmodial Activities of Artemether and Lumefantrine in Combination with Securidaca longipedunculata Fresen (Polygalaceae)
Journal: Journal Plants, Volume 11, Issue 1, Pages 47, Publisher Multidisciplinary Digital Publishing Institute
Author: Douglas O Ochora, Esezah K Kakudidi, Jane Namukobe, Perpetua Ipulet, Dancan M Wakoli, Winnie Okore, Edwin W Mwakio, Redemphah A Yeda, Agnes C Cheruiyot, Dennis W Juma, Ben Andagalu, Amanda L Roth, Bernhards R Ogotu, Abiy Yenesew, Hoseah M Akala
Month/Year: Jan 2022

2.5 Conference Presentation in 2021/2022

Conference: Natural Products Research Network for Eastern and Central Africa-Kenya (NAPRECA-K)
Title: Rotenoids from millettia species-structure, stereochemistry and biological activity presented by Prof. Abiy Yenesew
Theme: 'Utilization of natural products for the betterment of the livelihood of mankind in the face of unexpected disasters'.
Date: 31st July 2020
Documentation: Email communication & a programme

Conference: Natural Products Research Network for Eastern and Central Africa-Kenya (NAPRECA-K)
Title Anti-inflammatory flavonoids from Tephrosia species Presented by Chemistry PhD student Mr. Richard Oriko
Theme 'Utilization of natural products for the betterment of the livelihood of mankind in the face of unexpected disasters'.
Date 31st July 2020
Documentation: Programme

Conference: Commonwealth Chemistry Posters-Building the Partnership
Title Respiratory Health Impact due to Exposure to Inhalable Dust among communities in Kenya.
Theme: Bridging Chemistry across the commonwealth to tackle the SDGs
Date: 25th-27th Aug 2020
Documentation: Certificate of participation

- Conference:** UoN, CBPS Annual Research Week
Title: 'The Kenyan higher plant diversity-a potential source of antiparasitic compounds for neglected tropical diseases by Prof. Jacob Midiwo, Prof. Kerubo Omosa and Dr. Beth Ndunda
Theme: 'Sciences and cross disciplinary research and practices transforming society for sustainable development'.
Date: 12th-16th 2020
Documentation: Programme
- Conference:** UoN, CBPS Annual Research week
Title: Research4life and OA: Impact on access to e-resources in Africa.
Theme: 'Sciences and cross disciplinary research and practices transforming society for sustainable development'.
Date: 12th-16th 2020
Documentation: Programme& Abstract
- Conference:** The 5th Natural Products Research Network for Eastern and Central Africa-Zimbabwe Symposium (NAPRECA-Zimbabwe)
Title: Pytochemical investigation of pentas species (Rubiaceae) towards Management of malaria presented by Prof. Abiy Yenesew
Theme: 'Natural Products Remedies: present and future prospects.
Date: 10th Dec 2020
Documentation: Programme& Abstract
- Conference:** The 5th Natural Products Research Network for Eastern and Central Africa-Zimbabwe Symposium (NAPRECA-Zimbabwe)
Title: Short presentation by Prof. Leonidah Kerubo
Theme: 'Natural Products Remedies: present and future prospects.
Date: 10th Dec 2020
Documentation: Programme
- Conference:** Dedan Kimathi University PhD Chemistry Stakeholders Meeting
Title: Brief presentation on stakeholder's expectations of PhD Chemistry by Prof. Abiy Yenesew.
Theme: PhD Chemistry stakeholders' forum
Date: 12th May 2021
Documentation: Invitation letter & a Programme
- Conference:** Pan Africa Chemistry Network, Royal Society of Chemistry Training
Title: Local trainer for Kenya for the Pan Africa Chemistry Network(PACN) GC-MS training courses- Prof. Abiy Yenesew
Theme: GC-MS workshop
Date: 29th March, 24th-26th May and 21st-25th June 2021
Documentation: Invitation letter & a Programme
- Conference:** Mentorship Webinar on 'Towards Excellence of Postgraduate Female Students in Stem for The Celebration of Uon@50
Title: Towards excellence of postgraduate female students in STEM for the celebration of UoN@50
Theme: Resilience and Resolution: keys for a STEM woman to unlock the Door to a Successful career.
Date: 25th June 2021
Documentation: Invitation letter, programme& attendance register

Proactive Research/Training Collaborative Engagements

Initiative	Institution
Physical-Chemical studies of Osho Chemicals	- Pest Control Products Board
Effluent and Sludge analysis report	- Bata shoe company

2.5 Consultancies/Research Projects

Funder: UNEP
Project: Small Scale Funding Agreement (SSFA) Establishing Tools and Methods for New POPs into GMPP
Amount: USD 15,000
Duration: 17/4/2014 - 30/06/2014
Comments: Active

Funder: Bill Gates
Project: Zeolite Hydrogel Nano-Mop for Contraception
Principal Investigator/Project leader: Dr. Benson Wamalwa
Amount: US Dollars 100,000
Duration: 01/05/2010 - 30/11/2021
Comments: Active

Funder: Hannover University
Project: Polyxtremophil Exploration
Principal Investigator/Project leader: Dr. Benson Wamalwa
Duration: 3/06/2011
Comments: Active

Funder: Grand Challenges Canada
Project: Saving Lives at Birth A Loyally Program
Principal Investigator/Project leader: Dr. Benson Wamalwa
Amount: USD 331383
Duration: 01/01/2016 - 31/12/2018
Comments: Active

Funder: Grand Challenge Canada
Project: Bar Codes for Improved Child Vaccination and Famine Nutrition
Principal Investigator/Project leader: Dr. Benson Wamalwa
Amount: USD 113000
Duration: 23/03/2012 - 01/04/2014
Comments: Active

Funder: IDRI
Project: Infectious Diseases Research
Principal Investigator/Project leader: Prof. Jacob Midiwo
Duration: 10/05/2011
Comments: Active

Funder; Uppsala University
Project: Ken02 Chemistry
Principal Investigator/Project leader: Prof. Jacob Midiwo
Amount: Sek 2,881,975
Duration: 01/01/2011 - 31/12/2017

Funder: National Research Fund (NRF)
Project: Xploring Kenya Biodiversity Chemistry, Phamacology and Commercialization
Principal Investigator/Project leader: Prof. Jacob Midiwo
Amount: Euro 44,000
Duration: 01/04/17 - 31/05/2018
Comment: Active

Funder: GEF-NPIF (Kenya Wildlife Service)
Project: Developing the Microbial Biotechnology Industry from Soda Lakes in Kenya
Principal Investigator/Project leader: Prof. L. Kerubo
Amount: USD 440,000
Duration: 31/08/2017
Comment: Active

Funder: ICIPE
Project: Promoting Small Holder Access to Fungal Bio Pesticides Through Public Private Partnership in East Africa
Principal Investigator/Project leader: Prof. L. Kerubo
Amount: USD 54,758
Duration: 01/03/2018 - 30/12/2021
Comment: Active

Funder The welcome trust
Project Cement Dust Exposure and Related Effects in Kenya
Principal Investigator/Project leader:
 Dr. Faridah Were
Amount KES400,000
Duration 13/10/2017
Comment Active

Funder Uppsala University
Project Capacity Building for PhD Students
Principal Investigator/Project leader:
 Prof. Lydia Njenga
Amount SEK 101,760
Duration 9/02/2016 - 31/05/2016
Comment Active

2.6. Graduation 2021

2.6.1. Below Shows the Number of Students Per Program Graduated in September 2021 Academic Year 2021/2022

Bachelor of Science in Chemistry	-	66
Bachelor of Science in Industrial Chemistry	-	73
Bachelor of Science in Analytical Chemistry	-	48
Master of Science In Chemistry	-	5
Master of Science in Industrial Chem	-	2
Master of Science in Environmental Chemistry	-	5
Master of Science in Analytical chem	-	4
Doctor of Philosophy in Chemistry	-	7
Total	-	210

2.6.2 Postgraduate Students Graduated in September 2021

Master of Science in Analytical Chemistry
 - Chebet Ngeno Olivia - Hillary Otieno Owuor
 - Susan Cherotich - Aloo Lawrence Odhiambo

Master of Science in Chemistry
 - Andanyi Humphery lidweye - David Were
 - Mwai Lillian Njeri - Onyango Erica Atieno
 - Sunguti Elizabeth Majani

Master of Science in Environmental Chemistry
 - Philip Sheridan Wanjiku - Were Arthur Ouma
 - Michael James Welimo - Njagi Timothy Nyaga
 - Stephen Mainde Joel

Master of Science in Industrial Chemistry

- Mwakazi Eva Dama
 - Ochieng Sharon Alice Okuku

Doctor of Philosophy Degree in Chemistry

- Mungai George Ng'ang'a
 - Osoro Enock Moseti
 - Munyao Joshua Sila

2.7 EBE Staff As P1 on Active Grant

Title; Providing frontline workers and caregivers skills in vaccination
Cordinator/P1 Dr. Benson Wamalwa
Documentation Statement from the Grants Office

Title; Developing the Microbial Biotechnology Industry
Cordinator/P1; Prof. Leonidah Kerubo
Documentaion Statement from Grants office

Title; KEN02 Chemistry
Cordinator/P1 Prof. Jacob Midiwo
Documentaion Statement from Grants office

Title; Kenya GMP2 POPS Project
Cordinator/P1 Dr. Vincent Madadi
Documentaion Statement from Grants office

Title; Pan Africa Chemistry Network
Cordinator/P1 Prof. Shem Wandiga
Documentaion Statement from Grants office

Title; To Establish NMR Center of Excellence
Cordinator/P1 Prof. John Onyari
Documentaion Statement from Grants office

Title; Computer Guided Development of Antifungal Agents for Candidiasis
Cordinator/P1 Dr. Albert Ndakala
Documentaion Correspondence letters

Title; Inorganic Chemistry Research Group-Synthesis, Characterization & Application of Coordination Complexes (KEN-01)
Cordinator/P1 Prof. Lydia Njenga
Documentaion Memo

2.8 Visiting Professor in The Department

Professor Jane Catherine Ngila,
Ag. Executive Director of the African
Academy of Sciences (AAS). Professor of
Analytical Chemistry/Environmental Chemistry

Fourth Year Project Oral Examination for Class 2020/2021 (Virtual Oral Examination)

i) Main Session Examiners

Prof. J. Onyari	Prof. L. Kerubo	Prof. D. Orata
Dr. G. Bosire	Dr. A. Ndakala	Mr. C. Mirikau
Dr. D. Abong'o	Ms. I. Adero	Dr. V. Madadi
Dr. B. Wamalwa	Mr. G. Wafula	Dr. R. Odhiambo
Dr. J. Onyatta	Dr. I. Michira	Dr. J. Wabomba
Mr. J. Makopa		

Name: Joan Waruguru Waweru
Project Title: Application of Augmented reality
technology on molecular symmetry
Demonstration as a tool in e-learning

Name: Abdulali Shirin Zulfikarali
Project Title: Analysis of fluoride and arsenic
concentration in borehole water from
Karen suburban in the city of Nairobi

Name: Tuzinde Sylvester Terrence
Project Title: Assessment of some physico-chemical
parameters along Ngong river from
Mbagathi road to industrial area

Name: Joy Njambi Kabuga
Project Title: Phytochemical Investigation of
Milletia oblata roots for Anticancer
Principles

Name: Musembi Mercy Kavivi
Project Title: Phytochemical investigation of stem
bark of milletia usaramensis for
anticancer principles

Name: Lagat Claire Jepkemoi
Project Title: Assessment of some physico-chemical
parameters along River Athi in Athi
River, Machakos County, Kenya

Name: Ochieng David Sande
Project Title: Assessment of avocado oil from some
regions in Kenya

ii) Main Session Examiners

Prof. A. Yenesew	Prof. J.P. Kithinji	Prof. H. Njenga
Prof. L. Njenga	Dr. F. Mwazighe	Dr. R. Odhiambo
Dr. D. Mbui	Dr. W. Odinga	Mr. C. Mirikau
Mr. G. Wafula	Dr. W. Odinga	Ms. I. Adero
Dr. N. Njagi	Dr. I. Michira	Dr. D. Abong'o
Dr. V. Madadi	Dr. J. Wabomba	Dr. F. Were

Name: Omondi Erick
Project Title: Assessment of selected heavy metals
concentration in Nairobi River

Name: Wambua Keith Mumo
Project Title: Analysis of effluent before and after
treatment emanating from a Paint
Factory in Nairobi County

Name: Wamalwa Gideon Masinde
Project Title: Determination of some essential
elements in selected infant
formula

Name: Mugendi Jackline Murugi
Project Title: Analysis of selected heavy metals
from river Rupingazi in Embu County

Name: Samuel Thuita Ndiritu
Project Title: Development of a cellulose-derived
adsorbate from banana peelings for
effective removal of lead in waters

Name: Alice Waithera Mwangi
Project Title: Wastewater Management in a Paint
Manufacturing Industry in Industrial
Area, Nairobi, Kenya.

Name: Oronje Gideon Odhiambo
Project Title: Analysis of Paracetamol levels in
some selected over the counter sold
painkillers.

iii) Main Session Examiners

Prof. L. Njenga	Prof. D.K Kariuki	Prof. J. Midiwo
Prof. B. Bhatt	Dr. J. Kithure	Dr. R. Njogu
Dr. S. Derese	Dr. F.D.O Oduor	Dr. N. Njagi
Dr. J. Wanjohi	Dr. J. Mwaniki	Dr. Beth Ndunda
Dr. M. Mukabi	Dr. P. Guto	Dr. P. Tum

Name: Lando Moses Vincent
Project Title: Determination of heavy metals and
Physio-Chemical parameters in the
effluent treatment plant of paint and
coating industry in Nairobi County,
Kenya

Name Michael Muuo Masila
Project Title: A computational tool for the production and manufacturing industries using a chemical kinetics approach

Name Kioko Mark Finipah
Project Title: Solutions of Schrodinger equation (Probability Density formula)

Name Angela Njeri Karanja
Project Title: Analysis of heavy metal concentration in cow's milk

Name Peris Wambui
Project Title: Determination of immune boosting trace elements in selected food grains

3.8. Corporate Social Responsibility/Outreach Services

1. Faridah Hussein Were: Chairlady, Technical Committee for the East Africa Standard for Paints and Allied Products & Member of Advisory Council of Lead Alliance Partner.
2. Prof. D.K Kariuki, External Examiner, University of Zambia & University of Malawi, Harzadious & Toxic Materials Committee member, NEMA, Threshold Pollution in Waste Water Committee, WARMA.
3. Dr. Wanjohi John: External Examiner; Kenyatta University.
4. Dr. Derese, Solomon: External Examiner; Masinde Muliro & Karatina University.

3.9 Other Activities

Staff Promotions & Recruitment in 2021 - Alice Mutua

4.0 Major Achievements and Challenges

a) Achievement

- Curriculum Review Stakeholders Workshop
- Research publication were 19
- Consultancies were 12
- Graduated 16 MSc students and 3 PhD students
- Conferences attended were 8

b) Challenges Experienced in the Year 2021

- Delay in postgraduate students in completion of thesis.
- Small numbers for Postgraduates Admission 2021
- Procurement Process (EPMIS) - delay in procuring and delivery of lab materials.

Department of Computing and Informatics

Introduction

The School of Computing and Informatics (SCI) was formally established in 1977 as the Institute of Computer Science whose mandate included academic as well as University ICT services. In the year 2002, and in the interest of realizing more focused management and efficiency of the two functions, ICS was split into two units i.e. ICTC and SCI. The School takes its name from the core competencies that it seeks to nurture: *Computing*, to cover the theory and science of computation and *Informatics* to exemplify the practical outworking of this theory in technology and application. The School is a regional leader in research, research and development (R&D) and advanced education in computing. It was the first to offer Bachelors and Postgraduate degrees in Computer Science in the region.

Our objective in teaching and learning is to produce high quality, well-rounded, sophisticated graduates who are productive, innovative, and capable of lifelong learning. Our courses are therefore developed and delivered to a high standard of educational and technological competence.

We aim to institute a dynamic programme of aggressive research in our core areas of competence: information systems, distributed systems and artificial intelligence, in line with national and regional priorities.

Consultancy

We seek to engage productively with the public and private sector to solve problems of national or organizational economic importance in order to foster progress in our environment. A number of our academic staff members are involved in consultancy work through UNES.

Research and Development and Extension Services

Based on sound research, relevant teaching, and problem-solving experience gained through consultancy opportunities, we develop training programmes, policies, methodologies and information technology software and hardware products for the local, regional and international market and increase awareness of the same in the community at large.

Thematic Areas

The research mandate of the School of Computing and Informatics is carried out under three research groups in the following thematic areas:

- i) ICT for development (ICT4D)
- ii) Computational Intelligence
- iii) Distributed Computing

Programmes Offered

Programmes	Summary
Diploma in Computer Science BSc. Computer Science	It Started in 1993. This is the School's flagship programme. Continues to attract high caliber students. We admit a second class at Kenya Science Campus in addition to the class based in Chiromo Campus. Curriculum has been reviewed 5 times. Most recent review in 2019 March.
MSc. Computational Intelligence	This is an evening programme targeting applicants with first degree in Computer Science or related Engineering, Mathematics or Statistics discipline. Mode of study is coursework and project. Curriculum is currently under review. It started in 2013.
MSc. Distributed Computing Technology	This is an evening programme targeting applicants with first degree in Computer Science or a related discipline (e.g. Engineering, Mathematics and Physics). Mode of study is coursework and project. Curriculum is currently under review. It started in 2013.
MSc. Information Technology Management	This is an evening programme targeting applicants with first degree in Computer Science or Information Technology or a related discipline. Mode of study is coursework and project. Curriculum is currently under review. It started in 2013.
PhD. Information Systems, PhD. Computer Science	These are PhD. purely by research. The program was reviewed in May 2019 and its course work and Research. The programmes have produced 24 graduates so far. Currently over 60 students are registered. It started in 2000.

Undergraduate Enrolment

Year of Study	Government Sponsored	Privately Sponsored	Totals
1	47	50	97
2	45	92	137
3	33	86	119
4	34	53	87
Total	159	281	440

Postgraduate Enrolment

a) Masters

Year of study	MSc. IT Management	MSc. Computational Intelligence	MSc. Distributed Computing Technology	Total
1	24	33	15	72
2	50	29	23	102
Total	74	62	38	174

b) PhD

Level	Male	Female	Total
1	16	5	21
2	17	6	22
3	22	7	29
Total	55	18	72

c) International Student Component

During the year 2020, the Department had 16 international students.

Number of Graduates

Degree Programmes	Total
Diploma in Computer Science	36
BSc in Computer Science	63
MSc in Information Systems	1
MSc in Computer Science	4
MSc. IT Management	25
MSc Applied Computing	4
MSc Computational Intelligence	7
MSc Distributed Computing Technology	16
PhD. Computer Science	2
Total	158

Research Projects

Title	Partners
Health IT Project	USAID
Digital Matatus	Costworld Foundation
HIV Capacity building (UNITID)	UNITID
Africa Climate Change Leadership Program (AFRICLP)	Institute of research Assessment (IRA, IDRC)
Quantifying the contribution of forage technology adoption and advise on policy targets under the Kenya Climate Smart Agriculture Strategy	KALRO
Data Center Management, Maintenance and Support Services	KeeRA

Publications

Author	Title	Journal	Month & Year
Frankline Makokha, Christopher K. Chepken, and Elisha T. Opiyo	A Comparative Study of a Client Based Vendor Neutral Cloud QoS Monitoring Tool and Cloud Providers' Platform Integrated QoS Monitoring Tools	EJECE, European Journal of Electrical Engineering and Computer Science	January 2020
Benard Mutisya Nzyoka Nzyoka, David Muchangi Mugo, Stephen Mburu Ng'ang'a	Medical Device Integration with Electronic Health Records: A Case Study of University of Nairobi Health Services, Kenya	International Journal of Computers & Technology	January 2020
Grace Leah Akinyi and Robert Oboko	Proposed Self-Regulation Model for Collaborative E-Learning Systems in Kenyan Public Universities	American Journal of Engineering and Applied Sciences	January 2020
Eric Araka, Elizaphan Maina, Rhoda Gitonga and Robert Oboko	Research trends in measurement and intervention tools for self-regulated learning for e-learning environments—systematic review (2008-2018)	Research and Practice in Technology Enhanced Learning	2020
Rachael Njeri Kibuku, Prof. Daniel Orwa Ochieng and Prof. Agnes Nduku Wausi	e-Learning Challenges Faced by Universities in Kenya: A Literature Review	The Electronic Journal of e-Learning	February 2020
David Gureya, João Neto, Reza Karimi, João Barreto, Pramod Bhatotia, Vivien Quema, Rodrigo Rodrigues, Paolo Romano, Vladimir Vlassov	Bandwidth-Aware Page Placement in NUMA Systems	34th IEEE International Parallel & Distributed Processing Symposium (IPDPS)	March 2020
Kevin Obiero, Ted Lawrence, Jessic alves, Stephanie Smith, Friday Njaya, Robert Kayanda, Herwig Waidbacher, Dan Olago, Evans Miriti, R.E.Hecky	Advancing Africa's Great Lakes research and academic potential: Answering the call for harmonized, long-term, collaborative networks and partnerships	Journal of Great Lakes Research	February 2020
Kwale F.M., Wagacha P.W. and Kahonge A.M.	A Clustering Accuracy Comparison Framework	African Journal of Education, Science and Technology	March 2020
Boniface Akuku, Timothy Mwololo Waema and Robert Oboko	Institutionalization of knowledge management strategies in agricultural research organizations: a systematic literature review	Knowledge Management for Development Journal	March 2020
Walter Buyu, Elisha O. Abade	Forensic Analysis of Dropbox Data Remnants on windows 10	International Journal of computer Application	July 2020
Michael M Kangethe, Elisha O, Abade	Dynamic Directional NxN Chart Based Text Based Substitution Cipher	Journal of Computer Science and Applications	September 2020

Author	Title	Journal	Month & Year
Michael M Kangethe, Robert Oboko	Association Rankings Model for Cellular Surveillance Analysis	Journal of Computer Science and Applications	July 2020
Simon Kihui, Elisha Abade	Comparative Analysis of Distinctive Features of the Ransomware tactics in Relation to other Malware	International Journal of Computer	July 2020
Justin M Njeru, Elisha O, Abade	A Survey on Big Data Analytics Architecture for Urban Transport System: A case for Nairobi Metropolitan	International Journal of computer Application	September 2020
John Onyiego, Odira Elisha Abade	Supervisory Control and Data Acquisition(SCADA) System Forensics Based on the Modbus Protocol	International Journal of Computer	August 2020
Boniface Akuku, Timothy Mwololo Waema and Robert Oboko	Institutionalization of knowledge management strategies in agricultural research organizations: a systematic review of the international literature	Knowledge Management for Development Journal	September 2020.
Jecinta Muthoni Ndungu, Christopher A. Moturi	Determinants of Mobile Fintech Update in Kenyan Microfinance Sector	Current Journal of Applied Science and Technology	September 2020
Wanjiku Nganga, Ikechukwu Achebe	Spoken word Corpus and dictionary definition for an African language	Journal data Mining and digital Humanities	August 2020
Dennis M. Muriuki, Lawrence G. Muchemi	A Recommendation System for retail Banking products	African Journal of Mathematics and Computer Science Research	September 2020
Veronicah Owino, Timothy Waema	Digital Transformation as A Source of Competitiveness among Small and Medium Enterprises in Nairobi City County, Kenya	Journal of Business and management	August 2020
Erick O. Otieno, Agnes N. Wausi, Andrew M. Kahonge	Exploring the Factors That Contribute Towards Information Security Policy Compliance Culture	Information and Knowledge Management	August 2020
Edward Buhasho, Agnes Wausi, James Njihia	Business Intelligence Capability, Complementary Resources and Performance among Public Listed Firms in Kenya	Information and Knowledge Management	August 2020
Noel K. Joseph, Peter M. Macharia, Paul O. Ouma, Jeremiah Mumo, Rose Jalang'o, Peter W. Wagacha, Victor O. Achieng, Eunice Ndung'u, Peter Okoth, Maria Muñiz, Yaniss Guigoz, Rocco Panciera, Nicolas Ray & Emelda A. Okiro	Spatial access inequities and childhood immunization uptake in Kenya	BMC Public Health	September 2020

Author	Title	Journal	Month & Year
Christopher Moturi; Geofrey Ogoti	Strengthening technology risk management in mobile money lending	International Journal of Financial Services Management	October 2020
Charles Lwande, Robert Oboko & Lawrence Muchemi	Learner behavior prediction in a learning management system	Educ Inf Technol	November 2020
Edwin O. Ngwawe, Elisha O. Abade, Stephen N. Mburu	Context-Aware Computational Trust Model for Recommender Systems	EJECE, European Journal of Electrical Engineering and Computer Science	November 2020
Erick. O. Otieno, Agnes N. Wausi, Andrew M. Kahonge	A Theoretical Model for Information Security Policy Compliance Culture	International Journal of Applied Information Systems	September 2020

Links/Collaborations/Partnerships

Partners	Details	Duration
KALRO	Quantifying the contribution of forage technology adoption and advise on policy targets under the Kenya Climate Smart Agriculture Strategy	2020 - 2021
USAID	Providing support to the sustaining use of District Health Information System II in Kenya Program	September 2020 to September 2021
Costworld	Supporting Digital Matatu Project	September 2020 to September 2021
Pompeu Fabra University Spain	Mobility for learners and staff	2020-2021
KeRRA	Data Center Management, Maintenance and Support Services	2020-2021

Staff Portfolio

The department had 34 in the following grades

Designation/Grade	No of Staff
Professor	3
Associate Professor	4
Senior Lecturer	8
Lecturer	4
Tutorial Fellow	4
Senior Administrative Assistant	1
Senior Secretary	1

Network Engineer	1
Senior Technologist	2
Technologists	2
Library Assistant	1
Record Clerk	1
Cleaners	1
Driver	1
Total	34

Other Events

Huawei Awards



A third year student at the School of Computing and Information, Maluki Muthusi, was awarded the first prize for winning in the global Huawei ICT Competition in the network track. This is a skill-based competition involving hands-on experience in computer networks and network security. Over 109 teams from Asia, Europe, Southern, and Eastern Africa participated in the global finals. A total of 327 students managed to get to the global finals out of the 150,000 who had registered for the competition. The award ceremony that took place on January 18, 2020, at Serena Hotel, Nairobi and was presided by the PS for Education, Amb. Simon Nabukwesi, who reiterated the government's commitment to nurture ICT skills among the youths. The student later presented the prize to the Vice-Chancellor Prof Stephen Kiama.

Machine Learning with Azure Event on 19th February 2020

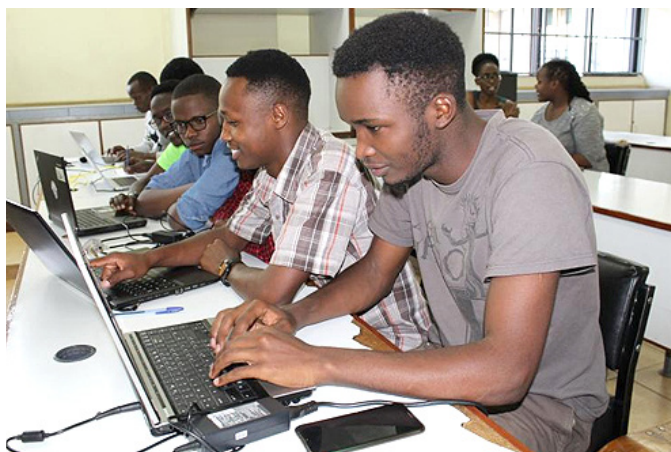
Azure is Microsoft's Cloud Computing Platform



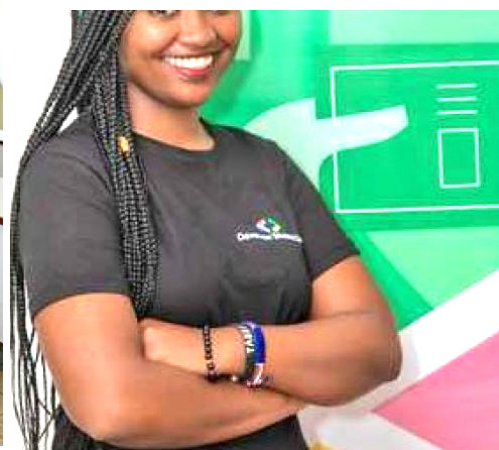
Microsoft student partner clubs are on-campus clubs around the world that seek to empower and help grow the local community through technology. On the afternoon of Wednesday February 19, 2020 from 2pm to 4 pm, the Microsoft student partners club at the University of Nairobi held an Azure fundamentals workshop.

Azure is Microsoft's cloud computing platform where one is able to deploy and build their applications. An introduction to azure and hosting of an application using azure app service was done during the workshop.

Students with their student emails were able to access the student azure student's account. An Azure for Students subscription includes \$100 in Azure credits to be used within the first 12 months plus select free services without requiring a credit card at sign-up.



SCI student selected as the University Developer Students Club lead



Thabitha Kavyu

Thabitha Kavyu, a third year student at the School of Computing and Informatics, was selected to be the Google Developer Students Club Lead of the University of Nairobi for the 2019 - 20 year. She is part of an amazing community of student leads who will be representing hundreds of colleges and universities across the globe. Her role is to help fellow students become competent software developers. She also trains them on the basics of coding by organizing events where students get to learn about emerging technologies such as Web, Android, Cloud and Artificial Intelligence. The position also entails bringing together women who are passionate about technology, and give them a platform to interact and learn from other successful women.

Programme	No. of Students
Bachelor of Science in Chemistry	115
Bachelor of Science (Industrial Chemistry)	71
Bachelor of Science (Analytical Chemistry)	44
Total	230

Postgraduate Program

Programme	No. of Students
MSc (Environmental Chem.)	10
MSc (Analytical Chemistry)	8
MSc (Chemistry)	9
Total	27

Doctor of Philosophy

Programs	No. of Students
PhD (Environmental Chem.)	1
PhD (Chemistry)	2
Total	3

BSc in Chemistry	BSc Industrial Chemistry	BSc Analytical Chemistry	MSc in Chemistry	MSc Industrial Chemistry	MSc Environmental Chemistry	MSc. Analytical Chemistry	PhD in Chemistry	Total
37	47	21	5	2	3	4	5	124

Title	Industry Partners	Details	Duration
University industry cooperation anchored on Science, Technology, Engineering and Mathematics.	Memorandum of cooperation between university of Nairobi & MCA group (Manuel Couto Alves group)	University - industry cooperation anchored on science, technology engineering and mathematics. The purpose of the cooperation is to enhance the capacity of both institutions' to fulfill their corporate objectives through educational and industrial engagements.	5 years

Author	Title	Journal	Date
Hilda Dinah Kyomuhimbo, Immaculate Nyambura Michira, Francis B. Mwaaura, Solomon Derese, Usisipho Feleni, Emmanuel I Iwuoha	Silver-zinc oxide nanocomposite antiseptic from the extract of <i>Bidenspilosa</i>	SN Applied Sciences Volume: 1 Issue: 7 Pages: 681 Publisher: Springer International Publishing	1 st July 2019
Rahab W Kamau, Jacob O Midiwo, Quintino A Mgani, Veronica M Masila, Leonidah K Omosa, Regina N Bwire, Melissa R Jacob, Frank T. Wiggers, Ilias Muhammad	Oleanolic Acid and other Compounds Isolated from <i>Cordia africana</i> Lam which Inhibit Vancomycin Resistant <i>Enterococcus</i> .	Pharmacognosy Communications Volume: 9 Issue: 3 DOI: 10.5530/pc.2019.3.19	1 st July 2019
Victor Kuete, Leonidah K Omosa, Jacob O Midiwo, Oğuzhan Karaosmanoğlu, Hülya Sivas	Cytotoxicity of naturally occurring phenolics and terpenoids from Kenyan flora towards human carcinoma cells	Journal of Ayurveda and Integrative Medicine Volume: 10 Issue: 3 Pages: 178-184 https://doi.org/10.1016/j.jaim.2018.04.001	1 st July 2019
R Mogwasi, DK Kariuki, MZ Getenga, V Nischwitz	Comparison of aqueous and enzymatic extraction combination with sequential filtration for the profiling of selected trace elements in medicinal plants from Kenya	Journal of Trace Elements in Medicine and Biology Volume: 54 Pages: 1-7 Publisher: Urban & Fischer https://doi.org/10.1016/j.jtemb.2019.03.003	1 st July 2019
P.K Tum	Spectral and Sorption Characteristics of Acid Orange II and Methylene Blue Dyes on TiO ₂ photocatalyst	International Journal of Science and Technology Volume: 7 Issue: 7 Pages: 27-34 DOI No.: 10.24940/theijst/2019/v7/i7/ST1907-023	July 2019
CM Gerrard, JM Wanjohi	Factors influencing the implementation of prisons health projects in Kenya: A case of prisons in Meru region	©2019 International Academic Journal of Information Sciences and Project Management (IAJISPM) ISSN 2519-7711 Volume: 3 Issue: 3 Pages: 185-209	5 th July 2019
Ruth Anyango Omole, Mainen Julius Moshi, Matthias Heydenreich, Hamisi Masanja Malebo, Jeremiah Waweru Gathirwa, Richard OworOriko, Leonida Kerubo Omosa, Jacob Ogweni Midiwo	Antiplasmodial Biflavonones from the Stem Bark of <i>Garcinia burchaniana</i> Engl.	Pharmacognosy Communications Volume: 9 Issue: 3 Pages: 96-99 Publisher: EManuscript Services DOI: 10.5530/pc.2019.3.20.	1 st July 2019
Kennedy Olale, Abiy Yenesew, Ramni Jamnadass, Andrew Sila, Keith Shepherd	A simple field based method for rapid wood density estimation for selected tree species in Western Kenya	Elsevier Vol. 5; Pages: e00149 https://doi.org/10.1016/j.sciaf.2019.e00149	27 th Aug 2019

Author	Title	Journal	Date
Hiram Kiriimi, John Wanjohi	Factors Influencing Use of Alternative Dispute Resolution in Construction Projects: Case of Imenti North Sub-County, Meru County	International Academic Journal of Information Sciences and Project Management Volume 3, Issue 4, pp. 572-602	9 th Aug 2019
Majau, D.K. & Wanjohi, J.	Factors Influencing Employee Job Performance in County Government Departmental Projects: A Case of Meru County Government, Kenya	International Academic Journal of Information Sciences and Project Management Volume 3, Issue 4, pp. 518-543 518	6 th Aug 2019
Mary Njenga, Nancy Karanja, Jacob Kithinji, Ramni Jamnadaa, Miyuki Iiyama, Aya Yonemitsu	Evaluating Fuel Briquette Technologies and their Implications on Greenhouse Gases and Livelihoods in Kenya	World Agroforestry-Research Data Repository https://doi.org/10.34725/DVN/HTPFRS , World Agroforestry - Research Data Repository, V1	6 th Aug 2019
Daniel Buyinza, Li Jun Yang, Solomon Derese, Albert Ndakala, Paolo Coghi, Matthias Heydenreich, Vincent Kam Wai Wong, Heiko M Möller, Abiy Yenesew	Cytotoxicity of isoflavones from Millettia dura	Natural Product Research Pages: 1-4 Taylor & Francis https://doi.org/10.1080/14786419.2019.1660335	5 th Sept 2019
Fozia A Adem, Victor Kuete, Armelle T Mbaveng, Matthias Heydenreich, Andreas Koch, Albert Ndakala, Beatrice Irungu, Abiy Yenesew, Thomas Efferth	Cytotoxic flavonoids from two Lonchocarpus species	Natural Product Research Volume: 33 Issue: 18 Pages: 2609-2617 Publisher: Taylor & Francis https://doi.org/10.1080/14786419.2018.1462179	17 th Sept 2019
R Mogwasi, DK Kariuki, ZM Getenga	Effect of Farm Additives on the Potential Bioavailability of Some Nutritional Elements from Kenyan Wild Plants	Biological Trace Element Research Pages: 1-11 Publisher: Springer US https://doi.org/10.1007/s12011-019-01855-8	10 th Sept 2019
Harry Amuguni Chanzu, John Mmari Onyari, Paul Mwanza Shiundu	Brewers' spent grain in adsorption of aqueous Congo Red and malachite Green dyes: Batch and continuous flow systems	Journal of Hazardous Materials Volume: 380; Pages: 120897 Publisher: Elsevier https://doi.org/10.1016/j.jhazmat.2019.120897	15 th Dec 2019
JM Mwaniki, JO Onyatta, AO Yusuf	Adsorption of Heavy Metal Ions from Aqueous Solutions and Wastewater using Water Hyacinth Powder	International Journal of Trend in Scientific Research and Development (IJTSRD) Volume: 4 Issue:1	Dec 2019
Veronica M Masila, Albert J Ndakala, Robert Byamukama, Jacob O Midiwo, Rahab W Kamau, Mei Wang, Mallika Kumarihamy, Jianping Zhao, Matthias Heydreich, Ilias Muhammad	Synthesis, structural assignments and anti-infective activities of 3-O-benzyl-carvotacetone and 3-hydroxy-2-isopropyl-5-methyl-p-benzoquinone	Natural Product Research Pages:1-9 https://doi.org/10.1080/14786419.2020.1716346	27 th Jan 2020

Author	Title	Journal	Date
Kiplangat Rop, Damaris Mbui, George N Karuku, Immaculate Michira, Njagi Njomo	Characterization of water hyacinth cellulose-g-poly (ammonium acrylate-co-acrylic acid)/nano-hydroxyapatite polymer hydrogel composite for potential agricultural application	Results in Chemistry Volume: 2 Pages: 100020 Publisher: Elsevier https://doi.org/10.1016/j.rechem.2019.100020	1 st Jan 2020
Ruth Anyango Omole, Mainen Julius Moshi, Muhammad Ilias, Walker Larry, Hamisi M Malebo, Leonida Kerubo Omosa, Jacob O Midiwo	In vitro Antiplasmodial and Cytotoxic activity of Three Medicinal Plants used Traditionally for Treatment of Malaria.	Pharmacognosy Communications Volume: 10 Issue: 1 DOI:10.5530/pc.2020.1.2	1 st Jan 2020
Moses Andima, Paolo Coghi, Li Jun Yang, Vincent Kam Wai Wong, Chrispus Mutuku Ngule, Matthias Heydenreich, Albert Jairo Ndakala, Abiy Yenesew, Solomon Derese	Antiproliferative Activity of Secondary Metabolites from <i>Zanthoxylum zanthoxyloides</i> Lam: In vitro and in silico Studies.	Pharmacognosy Communications Volume: 10 Issue: 1 DOI: 10.5530/pc.2020.1.8	1 st Jan 2020
Patrick Kimutai Tum, David K Kariuki	Photocatalytic Degradation of 4-Chlorophenol by Titanium Dioxide: Role of Annealing Temperature and Morphology	International Journal of Innovative Research and Development Volume: 8; Issue: 11 Pages: 235-244	14 th Feb 2020
Valerie Bauza, Vincent Madadi, Robinson Ocharo, Thanh H Nguyen, Jeremy S Guest	Enteric pathogens from water, hands, surface, soil, drainage ditch, and stream exposure points in a low-income neighborhood of Nairobi, Kenya	Science of The Total Environment Volume: 709 Pages: 135344 Publisher: Elsevier https://doi.org/10.1016/j.scitotenv.2019.135344	20 th March 2020
Richard Oriko Owor, Kibrom Gebreheiwot Bedane, Yolande Ikala Openda, Sebastian Zühlke, Solomon Derese, George Ong'amo, Albert Ndakala, Michael Spiteller	Synergistic anti-inflammatory activities of a new flavone and other flavonoids from <i>Tephrosia hildebrandtii</i> Vatke	Journal: Natural Product Research Pages: 1-8 Publisher: Taylor & Fran https://doi.org/10.1080/14786419.2020.1736065	31 st March 2020
Richard Oriko Owor, Kibrom Gebreheiwot Bedane, Sebastian Zühlke, Solomon Derese, George Otieno Ong'amo, Albert Ndakala, Michael Spiteller	Anti-inflammatory Flavanones and Flavones from <i>Tephrosia linearis</i>	Source: Journal of Natural Products Publisher: American Chemical Society and American Society of Pharmacognosy https://doi.org/10.1021/acs.jnatprod.9b00922	10 th March 2020
Vaderament-A Nchiozem-Ngnitedem, Leonidah Kerubo Omosa, Solomon Derese, Pierre Tane, Matthias Heydenreich, Michael Spiteller, Ean-JeongSeo, Thomas Efferth	Two new flavonoids from <i>Dracaena usambarensis</i> Engl.	Phytochemistry Letters Volume: 36 Pages:80-85 https://doi.org/10.1016/j.phytol.2020.01.001	1 st April 2020

Author	Title	Journal	Date
Emily B Chebet, Joshua K Kibet, Damaris Mbui	The assessment of water quality in river Molo water basin, Kenya	Applied Water Science Volume:10 Issue:4 Pages:1-10	April 2020
Olivia Osiro, Bernina Kisumbi, David Kariuki, Loice Gathece	Implications of the Minamata Convention on Mercury on Oral Health in Kenya	Kenya Policy Briefs Volume: 1 Issue: 1 Pages: 17-18	26 th April 2020
Chrispine M Oloo, John M Onyari, Wycliffe C Wanyonyi, John N Wabomba, Veronica M	Adsorptive removal of hazardous crystal violet dye from aqueous solution using Rhizophoramucronata stem-barks: Equilibrium and kinetics studies	Environmental Chemistry and Ecotoxicology Publisher: Elsevier https://doi.org/10.1016/j.enceco.2020.05.001	8 th May 2020

Conference	Theme	Paper Presented	Date
Expert consultative meeting for sustainable global monitoring of POPs under the Stockholm convention	Expert consultative meeting for sustainable global monitoring of POPs under the Stockholm convention	Cytotoxic flavonoids from two Lonchocarpus species by Fozia Ali Adem	12 th Feb 2019
Pan Africa Chemistry Network Congress 2019	Riches of the Natural world: sustainable use of Africa's natural products and materials	Cytotoxicity of plumbagin, rapanone and 12 other naturally occurring quiniones from Kenyan flora towards human carcinoma cells presented by Prof. Leonidah Omosa Kerubo	5 th -7 th Nov 2019, Addis Ababa
Pan Africa Chemistry Network Congress 2019	Riches of the Natural world: sustainable use of Africa's natural products and materials	The Kenyan higher plant diversity: a source of anti-parasitic compounds for neglected tropical diseases presented by Prof. Jacob Midiwo	5 th -7 th Nov 2019, Addis Ababa
Pan Africa Chemistry Network Congress 2019	Riches of the Natural world: sustainable use of Africa's natural products and materials	Red hot compounds from the Red hot poker plant, Kniphofia, and related taxa presented by Prof. Abiy Yenesew	5 th -7 th Nov 2019, Addis Ababa
Pan Africa Chemistry Network Congress 2019	Riches of the Natural world: sustainable use of Africa's natural products and materials	Anti-vancomycin-resistant Enterococcus faecum and E.Faecalis activities of (-)-Gossypol and Derivative from Thespeciagarckean	5 th -7 th Nov 2019, Addis Ababa
Pan Africa Chemistry Network Congress 2019	Riches of the Natural world: sustainable use of Africa's natural products and materials	Rotenoids from East African Plants- Structure, Stereochemistry and Biological Activity	5 th -7 th Nov 2019, Addis Ababa
Royal Society of Chemistry	14 th International Conference on Materials Chemistry (MC14)	Ruthenium (II) Oxathia Crown Ether Complexes: synthesis, Characterization and their Application in the Detection of Mercury (II) Ions'	8 th -11 th July 2019

Funder	Project	PI/Project Leader	Amount (currency)	Duration	Comments
Bill gates	Zeolite hydrogel nano-mop for contraception	Dr. Benson Wamalwa	US Dollars 100,000	01/05/2010 to 30/11/2021	Active
Grand Challenges Canada	Saving lives at birth a loyally program		USD 331383	01/01/2016 to 31/12/2018	Active
Grand Challenge Canada	Bar codes for improved child vaccination and famine nutrition		USD 113000	23/03/2012 to 01/04/2014	Active
IDRI	Infectious diseases research	Prof. Jacob Midiwo		10/05/2011	Active
Uppsala University	Ken02 chemistry		Sek 2,881,975	01/01/2011 to 31/12/2017	
National Research Fund (NRF)	Xploring Kenya Biodiversity Chemistry, Phamacology and Commercialization		Euro 44,000	01/04/17 to 31/05/2018	Active
GEF-NPIF (Kenya Wildlife Service)	Developing the microbial biotechnology industry from soda lakes in Kenya	Prof. L. Kerubo	USD 440,000	31/08/2017	Active
ICIPE	Promoting small holder access to fungal bio pesticides through public private partnership in East Africa		USD 54,758	01/03/2018 to 30/12/2021	Active
The Welcome Trust	Cement dust exposure and related effects in Kenya	Dr. Faridah Were	KES400,000	13/10/2017	Active
Uppsala University	Capacity building for PhD students	Prof. Lydia Njenga	SEK 101,760	9/02/2016 to 31/05/2016	Active

Staff Portfolio

Designation	No. of Staff
Professor	4
Associate Professor	8
Senior Lecturers	9
Lecturers	15
Tutorial Fellows	3
Principal Technologist	1
Chief Technologist	1
Assistant Chief Technologist	2

Designation	No. of Staff
Senior Technologist DEF	8
Technologist ABC	9
Technical Assistant II	1
Document list	1
Senior Administrative Assistant	1
Secretary	1
Total	41

Title	Amount (Ksh)	Coordinator
To Establish NMR Centre of Excellence	42,796,236	Prof. John Onyari
Strategic Partnership For Higher Education	2,669,437,652	Prof. John Onyari
Promoting Smallholder Access to Fungal Biopesticides	120,000	Prof Leonida Kerubo
PAN African Chemistry Network	509,986,500	Prof J. Midiwo
Kenya GMP2 POPS Project	1,645,045,490	

Guest Lecturer/ Speakers	Programme	Details	Date
Dr. Wanyonyi, Wycliffe	Project Management	Part-Time lecturer	11 th January 2019
Prof. H.C. Michael	Chemical Interactions of Plant-microbes	Chemical Interactions of Plant-microbes	1 st April 2019
Dr. Cecil Kingondu	Seminar	Specific Capacitance-pore Texture Relationship of Biogas Slurry Mesoporous Carbon/MnO ₂ composite Electrodes for supercapacitors.	10 th April 2019
Dr. Agnieszka Wegrzyn	Synthesis, characterization and application of new materials obtained from natural and synthetic layered minerals in environmentally friendly adsorption and catalytic processes	Synthesis, characterization and application of new materials obtained from natural and synthetic layered minerals in environmentally friendly adsorption and catalytic processes presented by Dr, Agnieszka Wegrzyn, Jagiellonian University in Krakow, Faculty of Chemistry	3 rd July 2019
Prof. Fulgentius Nelson Lugemwa	Organic Chemistry	Visiting Professor from Pennsylvania State University-York, US	1 st Sep 2019

Department of Earth and Climate Sciences



ICCA Students fieldwork in Kilifi County

A Brief Historical Background of ICCA

The Department of Earth and Climate Sciences traces its beginnings to December 2010 when a team of researchers from the University of Nairobi and Maseno University sought and received funding from the Open Society Institute to establish the Climate Change Adaptation Research Institute (CARI) at the University of Nairobi. The name was subsequently changed to what it is at present: Department of Earth and Climate Sciences, at the University of Nairobi.

The Department is unique in both its pedagogical approach and in its choice of concentration areas. Its institutional programmes are envisaged to:

1. Build the human capacity needed to address climate change and adaptation that meet African societies unique needs, by offering University-based curricula for conventional degrees and short training courses for a wide range of professionals from all sectors of society;
2. Encourage action-oriented research activities, including research into climate change adaptation technologies, that will help improve the climate adaptation capacity of Africa as a continent;
3. Provide a framework for national and regional policy assessments and advice to governments and other public and private sector actors, and include the grassroots and various communities within the African region in its programme execution and implementation of research findings.

Objectives of the ICCA

ICCA's programme objectives are summarised to include the following:

1. Provide formal training on Climate Change and Adaptation at postgraduate level (Masters and PhD levels initially), and later at the undergraduate level;
2. Conduct professional Short courses for various climate change and adaptation actors and stakeholders in the public and private sectors including for Non-Governmental Organisations (NGOs);
3. Undertake Climate Change and Adaptation research and participate in knowledge exchange with other global Climate Change actors and institutions;
4. Undertake action-oriented community outreach programmes for implementation of practical climate change and adaptation options; and
5. Provide research and evidence-based policy advice on Climate Change and Adaptation to governments and public sector institutions in Kenya and Africa.

Thematic Areas

The Department pursues its programmes on the basis of the following five thematic areas:

1. Water, Environment and Ecosystems
2. Climate Risk Management and Food Security
3. Human Dimensions and Health
4. Policy and Communications
5. Technologies

Programmes Offered

1. Master of Climate Change and Adaptation (MCCA)
2. PhD in Climate Change and Adaptation

Research and Community Projects

1. REACH Project - PI, Professor Daniel Olago.
2. BRECCIA Project - PI, Dr. Gilbert Ouma (<http://www.gcrf-breccia.com/>).
3. Development Corridors Partnership - PI, Professor Daniel Olago.
4. African Great Lakes Information Platform (AGLI) Project - PI, Professor Daniel Olago
5. TSITICA (ARUA) Project - Co-PI, Dr. George Outa.
6. Science and Policy Interface Programme: Dan Olago and George Outa

Achievements

The Department is meeting its core mission, supported by strong academic programs and founding academic staff who are committed to its mission of aiming to further improvements in organizational performance and student success.

The strongly embedded 'Trans-disciplinary Approach' to learning and education has ensured adoption and acceptability by students, researchers and community stakeholders. Students from many parts of the world have not only enrolled at the Department but are accessing world-class education through the early embrace of the ICT platforms by the Department staff to counter the challenges that are being experienced due to COVID 19

Department of Earth and Climate Sciences maintains a strong and rigorous academic culture that provides students with knowledge, skills, and competencies needed to further their career way beyond the academia. Our graduates are able to find employment in the National Government, County Governments, teaching and research institutions, Non-Governmental Organisations, business and in self-employment. Since inception a total of 143 Masters and 186 PhD students have enrolled a reflection of the popularity of the programs.

Our Sustainability Initiatives encompass economic, environmental and social equity principles, and a myriad of activities, projects and practices across the campus and in the community. Through this holistic approach ICCA has made sustainability a focused effort of its training;

Department of Earth and Climate Sciences is contributing immensely to the revenue kitty of the University of Nairobi in both fees and research grants. In 2020/2021 academic year, the Institute was able to raise Kshs 6,732,000 in fees and 36,000,000 in research grants. Since inception, the institute has attracted more than Kshs 100 million in terms of research grants.

Student Enrolment 2020-2021

The Department attracted 17 Masters and 15 PhD students.

Staff Portfolio

The Department was established with the positions of a Director, three Co-coordinators and Administrative Staff.

The Department has an academic staff establishment of six comprising Professor, Associate Professor, Senior Lecturer, Lecturer and two Tutorial Fellows.

Designation	No. of Positions
Director	1
Coordinators	5
Associates	5
Tutorial Fellows	2

Strategic Issues

Teaching and learning, the primary objective of the University is teaching and learning. So is also the first objective of the Department. The Department builds competently trained and enabled postgraduate students who are capable of competing at an international level. Above all, the graduates would be trained to work in any environment of the society; they will be society leaders in moulding and shaping a future where human activities have threatened the planet. A future that is experiencing resources quickly depleted through unsustainable lifestyles.

Any Other Pertinent Issues

In 2020, the Department bid farewell to the founding Director, Prof. Shem Wandiga, a commensurate academic and a pioneer in the nexus between environmental studies and chemistry. The Department is now in the capable hands of Prof Daniel Olago, a leading researcher in the field of Earth Sciences. We wish Prof. Wandiga the best in his future endeavours.

10. FACULTY OF VETERINARY MEDICINE

Department of Veterinary Anatomy and Physiology

Introduction

The Department of Veterinary Anatomy and Physiology is a preclinical department located in Chiromo Campus along Riverside Drive, off Chiromo Road, 2 kilometers west of the Main Campus. The Department is the product of the notable merger of the two of the oldest and well-known departments in the Faculty of Veterinary Medicine -Veterinary Anatomy and Animal Physiology that occurred in 2005. The two departmental units had their origin within the establishment of the Faculty of Veterinary Medicine and were transferred from Makerere University College to the Royal College Nairobi in 1962. Veterinary Medicine and Wildlife Management students are prepared for various fields in the Veterinary Anatomy and physiology in the Department.

The Department teaches preclinical veterinary students Animal Physiology and Veterinary Anatomy. It offers courses to **BSc Wildlife students** specifically Veterinary Anatomy, Ecophysiology, Ornithology, Ichthyology, Herpetology and Wildlife Behavior. The Department also offers undergraduate courses to the Faculty of Agriculture and College of Health Sciences (*BSc. Biochemistry*). Postgraduate service courses are offered to the Department of Animal Production and the School of Biological Sciences (**MSc. Biology of Conservation**).

The Department instructs in the biomedical sciences related to animal anatomy and physiology. It also trains students in basic anatomy and physiology in the degree programs leading to Bachelor of Veterinary Medicine (BVM), Bachelor of Science in Agriculture, Range Management and Food Science and Technology (BSc. Agric.), BSc. Range Management, BSc. Food Science and Technology, Bachelor of Science in Biomedical Technology (BSc. BT), Bachelor of Science in Wildlife Management, and Conservation, Tourism Management, Fisheries and Wetlands Management (BSc. Wildlife Management and Conservation, BSc. Wildlife Conservation and Tourism Management, BSc Wildlife Conservation and Wetlands Management and BSc Wildlife Conservation and Fisheries Management. The Department also teaches mammalian histology to students of the BSc Biochemistry degree program and also trains students at post-graduate level in Masters of Science (MSc.).

Programmes Offered

1. Bachelor of Veterinary Medicine
2. Bachelor of Science in Wildlife Management and Conservation
3. Bachelor of Science in Fisheries and Aquaculture Management
4. Bachelor of Science in Agriculture, Range Management and Food Science and Technology
5. Bachelor of Science in Biomedical Technology
6. Master of Science in Reproductive Biology
7. Master of Science in Veterinary Anatomy and Cell Biology
8. Master of Science in Comparative Physiology
9. Doctor of Philosophy (PhD) in the Faculty of Veterinary Medicine
10. Doctor of Philosophy (PhD) degrees in Anatomical and Physiological Sciences

Major Achievements in 2020

1. Graduated 3 Masters' Students.
2. Managed to dispose old obsolete and unusable equipment and furniture, for the first time in two decades
3. Managed to promote 3 technologists to Assistant Chief Technologists.
4. Managed two secure three toxicological analysis projects from the industry.

Staff Portfolio

As at 2021, the department had 38 academic staffs in the following grades

Designation	No. of Staff	Designation	No. of Staff
Assistant Chief Technologist	- 3	Senior Lecturer	- 4
Associate Professor	- 6	Senior Technologist	- 6
Chief Technologist	- 3	Technical Assistant	- 2
Cleaner	- 1	Technologist	- 1
Lecturer	- 9	Trainee Technologist	- 2
Principal Technologist	- 1		

Corporate and Community Outreach Activities

- Establishment of COVID-19 mitigation infrastructure and logistics
- Due to the pandemic, outreach programs were suspended.

Projections

1. Increase in consultancy activities (both specimen preparation and toxicological analysis).
2. Increase in postgraduate student enrolment.
3. Improved mentorship of undergraduate students.
4. Increase in student progression to the subsequent year of study.



University of Nairobi



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