

Academic Staff Profile

Personal Profile

Name: Dr. Onesmus Muia Mutuku Title/Qualification: Ph.D Clinical Histocytology, M.Sc. MLS and B.SC. MLS Department: Medical Laboratory Science Designation/Position: Lecturer Email: muia.onesmus@ku.ac.ke Area of Specialization: Histopathology and Cytopathology Research Interests: Cancer diagnostics with major interest in Cervical and Breast Cancers Google Scholar: https://scholar.google.com/citations?user=0TsjAdgAAAAJ&hl=en ORCID ID: https://orcid.org/0000-0003-2195-9969	
--	---

Academic & Professional Qualifications

Date	Institution	Course
January 2019 – July 2022	Kenyatta University	Doctor of Philosophy (Clinical Histocytology)
Sep 2015 – June 2018	Jomo Kenyatta University of Agriculture and Technology	M.Sc. in Medical Laboratory Sciences (Clinical Histopathology & Diagnostic Cytology)
Sep 2010 – August 2014	Kenyatta University	Bachelor of Science in Medical Laboratory Sciences
Jan 2004 – Nov 2008	Kathiani High School	Kenya Certificate of Secondary Education Mean Grade A minus (79/84 points)
Jan 2003 – Dec 2003	Kithito Primary School	Kenya Certificate of Primary Education (388/500 Marks)
1995 – 2002	Kithiiani Primary School	Attended up to Class 7, then transferred to Kithito Primary for Class 8

Employment History

October 2022 – To date	Kenyatta University, Department of Medical Laboratory (Lecturer) ➤ Lecturing and examining both undergraduate and Post-graduate students ➤ Supervision of Post-graduate students in their research ➤ Carry out research
Dec 2018 – October 2022	Kenyatta University, Department of Medical Laboratory (Tutorial Fellow) ➤ Teaching and examining students doing B.Sc. in Medical Laboratory Science (Basic Human Pathology, Histopathology, Cytopathology, Human anatomy, Molecular biology and Cell biology) ➤ Coordinating practical sessions in the teaching laboratories.
January 2018 – November 2018	Kenyatta University, Department of Medical Laboratory (Teaching Assistant) ➤ Writing proposals for grants application ➤ Preparing Manuscripts for publication ➤ Formulating and revising relevant academic policies ➤ Invigilation and Marking of Exams ➤ Supervision of Practical Sessions
April 2017 – Dec 2018	Penda Health (Laboratory Technologist) ➤ Clinical diagnosis in all sections of the hospital laboratory. ➤ Coordination of QA in all Medical Centres. ➤ Machine maintenance, troubleshooting and quality control checks ➤ Preparation, Reviewing and approving SOPs
June 2016 – December 2016	Nyanza Reproductive Health Society (Research Assistant) ➤ Receiving and processing samples in the Research Laboratory ➤ Packaging of samples for referrals and Shipment ➤ Preparing Standard Operating Procedures for new research Projects ➤ Storage of samples for long term retrieval ➤ Keeping all data and records for various research projects ➤ Laboratory diagnosis in all sections of the laboratory ➤ Machine maintenance, troubleshooting and quality control checks
August 2015 – May 2016	Kenya School of Medical Sciences and Technology (Lecturer) ➤ Head of Medical Laboratory Department ➤ Teaching and examining students ➤ Supervising students on their research projects ➤ Preparing for practical sessions in the teaching laboratory

April 2015 – August 2015	CLINICAL ROTATIONS DURING TRAINING Kenyatta National Hospital (M.Sc. MLS Clinical Rotation in the Human Pathology Department) ➤ Receiving histological specimens ➤ Assisting pathologists in grossing of histology biopsies ➤ Processing and staining histology specimens ➤ Participating in FNA collection ➤ Processing cytology smears; both pap smears and FNAs ➤ Screening pap smears, FNAs and signing out the reports with pathologists
May 2014 – August 2014	MP. Shah Hospital (B.Sc. MLS Hospital Attachment) ➤ Clinical diagnosis in all sections of the hospital laboratory. ➤ Ward rotations and phlebotomy. ➤ Machine maintenance, troubleshooting and quality control checks. ➤ Media preparation, specimen culturing and reporting. ➤ Machine maintenance, troubleshooting and quality control checks. ➤ Referring samples to external laboratories. ➤ Maintaining the hospital's blood bank, performing compatibility tests and release of compatible blood to the wards for transfusion.
May 2013 – August 2013	Machakos Level 5 Hospital (B.Sc. MLS Laboratory Skills level III) ➤ Clinical diagnosis in all sections of the hospital laboratory. ➤ Performing CD4 count for samples from Comprehensive Care Clinic ➤ Preparing samples for viral load from Comprehensive Care Clinic ➤ Machine maintenance, troubleshooting and quality control checks. ➤ Referring samples to external laboratories. ➤ Testing of new diagnostic kits in Biochemistry and serology departments. ➤ Ward rotations and phlebotomy. ➤ Preparation of culture media, culturing of specimen and reporting. ➤ Grossing of histological specimen and staining. ➤ Keeping records of the released results at department levels.
May 2012 – August 2012	Bishop Kioko Catholic Mission Hospital (B.Sc. MLS Laboratory Skills level II) ➤ Phlebotomy and specimen reception. ➤ Routine diagnosis in all sections of the laboratory ➤ Machine maintenance, troubleshooting and quality control checks. ➤ Keeping records of released results at department levels. ➤ Referring samples to external laboratories ➤ Testing of new diagnostic kits in Biochemistry and serology departments

May 2011 – August 2011	Machakos Level 5 Hospital (B.Sc. MLS Laboratory Skills Level I) ➤ Clinical diagnosis in all sections of the hospital laboratory. ➤ Machine maintenance, troubleshooting and quality control checks. ➤ Performing CD4 count for samples from Comprehensive Care Clinic ➤ Preparing samples for viral load from Comprehensive Care Clinic ➤ Referring samples to external laboratories. ➤ Testing of new diagnostic kits in Biochemistry and serology departments. ➤ Ward rotations and phlebotomy. ➤ Preparation of culture media, culturing of specimen and reporting. ➤ Grossing of histological specimen and staining. ➤ Keeping records of the released results at department levels
------------------------	---

Publications

1. Nthuku, M. B., **Mutuku, O. M.**, Arodi, W. O., & Karuga, T. K. (2025). Prevalence of Bacterial Vaginosis and High Risk HPV Co-Infection among HIV-Positive Women at Machakos Level-5 Hospital, Machakos County, Kenya. *International Journal of Research and Reports in Gynaecology*, 8(1), 68-75.
2. Onyango, Willbrod Ochieng', Esther Muiitta, and **Onesmus Muia Mutuku**. 2024. "Prevalence of High-Risk HPV Infection in Women Presenting With Chronic Leucorrhoea at Kenyatta National Hospital, Nairobi City County, Kenya". *International Journal of Research and Reports in Gynaecology* 7 (1):21-30. <https://journalijrrgy.com/index.php/IJRRGY/article/view/97>.
3. Omwono, S. A. O., Washingtone, A., Maundu, M., Rioki, J. N., & **Mutuku, O. M.** (2023). Bacterial Vaginosis Prevalence and Its Associated Risk Factors among Women at Kiambu Level-5 Hospital, Kenya. *Asian Research Journal of Gynaecology and Obstetrics*, 6(1), 245-252.

4. **Muia, M. O.**, Mathenge, S. G., Njoroge, W. G., Karuga, T. K., & Mutinda, K. C. (2021). Prevalence and Patterns of Cervical Cytological Lesions among HIV-Positive Women in Machakos County Hospital Kenya. *International Research Journal of Oncology*, 4(1), 28-35.
5. **Muia, M. O.**, Mathenge, S. G., Njoroge, W. G., Karuga, T. K., & Mutinda, K. C. (2021). Prevalence of Bacterial Vaginosis among HIV-Positive Women in Machakos County Hospital, Kenya. *Asian Research Journal of Gynaecology and Obstetrics*, 5(1), 28-34.
6. **O.M. Mutuku**, Kavoi B.M, Kahato. M and C.M. Kyama (2018). The utility of a manual liquid based cytology in screening for pre-cancerous lesion and cervical cancer. *Journal of Medical Science and Clinical Research*. Vol 06, Issue 02; Page 600-605
7. Scholastica Gatwiri Mathenge, Wachuka Gathigia Njoroge and **Onesmus Muia Mutuku** (2018). Assessment of Selected Antibiotics in Untreated Wastewater and Vegetables in Eastern Nairobi, Kenya. *European Journal of Pharmaceutical and Medical Research*. Vol 05, Issue 08; Page 01-14
8. Scholastica Gatwiri Mathenge, Wachuka Gathigia Njoroge and **Onesmus Muia Mutuku** (2018). Assessment of Selected Heavy Metals in Soil and Untreated Wastewater Used For Irrigation in Urban and Peri-Urban Farms in Eastern Nairobi City County, Kenya. *Journal of Medical Science and Clinical Research*. Vol 06, Issue 08; Page 743-749
9. **O.M. Mutuku**, Kavoi B.M, Kahato. M, R. Chibvongodze and C.M. Kyama (2017). Prevalence of abnormal cervical cytology among women infected with HIV in Machakos County Hospital, Kenya. *East Africa Medical Journal*. 94(8), 607-614
10. R. Chibvongodze, C. Nyirakanani, J.A Ojwang, **O.M. Mutuku**, J.R. Ndung'u and C.M. Kyama (2017). HPV DNA testing and Pap smear cytology co-testing as a 'Test of Cure' in patients previously treated for cervical lesions by LEEP at Kenyatta national hospital. *East Africa Medical Journal*. 94(10), 818-823.

Supervision of Post-graduate students

Successful Supervision

Susan Akinyi Omwono, P154/21824/2020. (M.Sc.) Comparison of Pap smear and Modified Amsel's-criteria in screening for Bacterial vaginosis among women at Kiambu Level-5 Hospital, Kiambu County, Kenya.

Graduated in July, 2025.

Willbrod Ochieng' Onyango, P154/20504/2021 (M.Sc.) Pap Smear findings and HPV infection among women presenting with chronic leucorrhoea at Kenyatta National Hospital, Nairobi City County, Kenya. **Graduated in July, 2025.**

Ongoing Supervision

S/No	Name of student	Thesis title	Status
1.	Murugi Brenda Nthuku (M.Sc.)	Association of Bacterial vaginosis and HPV coinfection with cervical lesions among HIV-positive women at Kiambu level-5 hospital, Kiambu county, Kenya	Writing thesis
2.	Vane Biyaki Amos (M.Sc.)	Sputum cytological findings among HIV-positive patients on antiretroviral therapy at Kiambu level 5 hospital, Kiambu County, Kenya	Data collection
3.	Cornelius Musemi Gichana (M.Sc.)	Cytological analysis among women presenting with palpable breast lesions at Kiambu level 5 hospital, Kiambu county, Kenya	Writing thesis
4.	Felix Kinyua (M.Sc.)	Analysis of artificial intelligence, human expertise and HPV testing in cervical cancer screening at Kinondo-Kwetu hospital, Kwale county, Kenya.	Writing thesis
5.	Ndolo Elizabeth Mune (M.Sc.)	Human papilloma virus/ Human immunodeficiency virus co- infections and anogenital cancer among men who have sex with men in Machakos county, Kenya	Data collection
6.	Maina Paul Thuo (M.Sc.)	Comparative Analysis of Fluid Clot Examination and Conventional Smear for diagnosis of Malignant Ascites Among Patients Attending Gastro-clinic At Aga-khan University Hospital, Nairobi, Kenya	Data collection
7.	Micah Alushula Omoto (M.Sc.)	Comparative analysis of combined periodic acid schiff-alcian blue stain versus hematoxylin and eosin in demonstration of gastric intestinal metaplasia	Data collection

8.	Baraka John Ogongo (M.Sc.)	Association between antiretroviral therapy Adherence, cervical cytological lesions, and Human Papilloma Virus infection among HIV-positive women in marginalized Tana-river county, Kenya	Proposal writing
9.	Leonard Larbi (Ph.D)	Establishment of comprehensive metabolic panel reference intervals and critical values for Accra, Ghana population	Data Collection
10.	Judy Njoki Mbugua (M.Sc.)	Comparative analysis of rehydrated air-dried versus wet Fixation methods on effusion cytology samples	Data Collection
11.	Gwahala Almasi Immuculate (M.Sc.)	Comparison of running tap water versus ammonia water for bluing of non-gynecological cytology conventional smears at St. Mary Mission hospital Mumias	Data Collection

Affiliation of Professional Bodies

Registered by the Kenya Medical Laboratory Technicians & Technologists Board (K.M.L.T.T.B) at Degree level with a valid working License

National and International awards and Recognitions

2014; Won a competitive scholarship from Katholischer Akademischer Ausländer Dienst (KAAD) For Master of Science Degree.

Research Grants

20th May 2016 – March 2017: 1 year research grant (KSh. 200,000) from AFRICA – ai – JAPAN Project Research Funding to evaluate the utility of Low cost manual liquid based cytology in screening for pre-cancerous lesion and cervical cancer

January 2020 – December 2021: 2 years research grant (KSh. 200,000) from Kenyatta University Dean's Grant to do a research on analysis of manual liquid based cytology, histopathology and HPV DNA testing among HIV-positive women at Machakos Level 5 hospital, Machakos County, Kenya

Administrative Positions Held

April 2023 – To date: Appointed Examination Coordinator Department of Medical Laboratory Science

November 2021 - December 2022: Appointed Chairman Board of postgraduate studies school of medicine

October 2020 - April 2023: Appointed Chairman Board of postgraduate studies department of Medical laboratory Science.

January 2021 - April 2023: Appointed departmental coordinator on students' attachment

Feb 2019 - April 2023: Appointed departmental administrator on website matters, department of medical laboratory science

January 2019 – September 2020: Departmental time tabler, department of medical laboratory science