



CURRICULUM VITAE FOR PAUL MBOYA KOSIYO BSc., MMLS., Ph.D.

Personal Information

Paul Mboya Kosiyo	Phone No +254720459582 or 0736387481
Email	paulkosiyo@gmail.com or kpaul@maseno.ac.ke
Sex:	Male
Nationality:	Kenyan
ID. Number	23586774
Languages:	English/Swahili (Native)
Profession:	Medical Laboratory Officer
Specialty:	Haematology and Blood transfusion

Important Links

Google Scholar: <https://scholar.google.com/citations?user=so6KJ-AAAAAJ&hl=en>

Orchid ID: <https://orcid.org/0000-0003-2258-9568?lang=en>

LinkedIn: <https://ke.linkedin.com/in/paul-kosiyo-08903841>

Research Gate: <https://www.researchgate.net/scientific-contributions/Paul-Kosiyo-2178542513>

Career objective: *To train in all aspects of Laboratory Medicine for effective diagnosis using conventional and molecular biology techniques for proper management of patients.*

Pertinent information: *A well-done diagnosis is a half the treatment.*

PERSONAL SUMMARY

- Strong scientific writing and verbal skills with ability to articulate ideas clearly
- Excellent communication and presentation skills
- Very active team player ability to learn new skills faster

EDUCATIONAL BACKGROUND

2016-2021	Doctor of Philosophy, (Ph.D.) - Medical Haematology Maseno University <i>Thesis title: Sick cell genotypes and their association with haematological parameters in children infected with plasmodium falciparum resident in Kisumu County western- Kenya.</i>
2012-2016	Master of Medical Laboratory Sciences, (MMLS) - Clinical Haematology and Blood Transfusion). Jomo Kenyatta University of Agriculture and Technology (JKUAT),

	Nairobi, Kenya. <i>Thesis title:</i> <i>Correlation between thrombocytopenia and anaemia in children infected with Plasmodium falciparum malaria.</i>
2022-Present	Master of Science, (MSc) -Epidemiology and Biostatistics. Jaramogi Oginga Odinga University of Science and Technology, (JOUST) <i>Thesis title:</i> <i>Age- and sex-specific haematological disorders in patients infected with Plasmodium falciparum with carriage of different sickle cell genotypes in Jaramogi Oginga Odinga Teaching and Referral Hospital, Kisumu-Kenya</i>
2004-2008	Bachelor of Science (BSc) - Medical Laboratory Sciences Kenyatta University, Nairobi, Kenya
1998-2002	Kenya Certificate of Secondary Education (K.C.S.E)
1991-1998	Kenya Certificate of Primary Education (K.C.P.E)

TEACHING PERIENCE

2021-Date: Lecturer at Maseno University, School of Medicine, Department of Medical Laboratory Sciences.

Examination and Time tabling coordinator- Department of Medical Laboratory Sciences.

2017-Date: Classroom teaching as part-time lecturer at Masinde Muliro University of Science and Technology (MMUST), Department of Medical Laboratory Sciences. Teaching both undergraduate and postgraduate units: Haematology, Blood Transfusion

2015- to date: Professional Examiner and a curriculum reviewer at the Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB) on Haematology and Blood Transfusion. Responsibilities: Setting and marking of Board registration exam for the BSc graduates, moderation of exams and review of the BSc-MLS curriculum.

2015-2018: Classroom teaching as part-time Lecturer at Kisii University-School of Health Sciences, Department of Medical Laboratory Sciences and Maseno University- School of Public Health and Community Development, Department of Biomedical Sciences and Technology. Teaching undergraduate units: Haematology, Blood Transfusion and Clinical Chemistry.

PROFESSIONAL EXPERIENCE

2011-2018: Senior Medical Laboratory officer –Maseno University, Department of Health Services. Performing both routine and specialised Laboratory Tests

2010-2011: Research Officer/ Deputy Laboratory Manager- Impact Research and Development Organisation

Clinical sample analysis and molecular (PCR: real-time and conventional) and immunological-based (ELISA and cell culture) laboratory assays for the project. Training/guiding students on internship on basic molecular/immunological laboratory assays. Training of new employees Procurement of Laboratory reagents, drafting and reviewing SOPs among other roles.

2009-2010: Laboratory Technologist 1, ICAP/Ministry of Medical Services, Kisumu, Kenya

Performing routine diagnostic procedures. Developing SOPs and training students on attachment.

October 2010- December 2010: Student Attaché at Homa-Bay District Hospital, Kenya

Excelled in Hematology, Medical Biochemistry, Medical Microbiology, Immuno- Haematology /Serology, Parasitology and Reception. CD4 count by manual method using Dynal bead and by using Facs Count machine / RNA measurements, Viral Load-Qualitative determination of Reverse Transcriptase activity using Kavid Method

Jan 2007- December 2007: Hospital attachment trainee, Jaramogi Oginga Odinga Teaching and Referral Hospital and Regional Blood Transfusion Center Kisumu, Kenya

Excelled in Serological techniques of HIV, HBV, HCV and Syphilis detection including ELISA. Blood Banking and Donor Phlebotomy during several blood donation campaigns

CONSULTANCY WORK AT KMLTTB

2011-2015: Laboratory Inspector /Assessor Duties included assessment of teaching labs, research labs and diagnostic labs which handle human specimens.

2015-Present: Professional examiner for BSc qualifying graduates as a prerequisite for registration in haematological sciences and Blood transfusion.

2019-Present: Consultant blood transfusion specialist. Roles include investigation of blood transfusion reactions

Drafting of Kenya National Blood Transfusion Service (KNBTS) bill 2019-already presented in Parliament.

KMLTTB representative at the World Federation of Haemophilia (WFH) and Kenya Association of Haemophilia (KAH).

PROFFESIONAL SOCIETIES AND ASSOCIATION MEMBERSHIP

- Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB)- Registration number: **AO4842**
- Association of Kenya Medical Laboratory Scientific Officers (AKMLSO)

- Kenya –Sickle Cell Foundation
- American Society of Tropical Medicine and Hygiene (ASTMH)

COMMUNITY WORK AND SOCIAL RESPONSIBILITIES

- Member of the Board of Management (BOM)-Nyasanja Primary School in Homa-Bay County.

RESEARCH INEREST

- Correlation between Malaria and Sickle cell disease
- Complement 1 Receptor levels in Sickle Cell Disease
- Haemostasis
- Leukemia and Minimal Residual Disease (MDR)
- Biostatistics

SCIENTIFIC/MEDICAL TRAININGS/WORKSHOPS/SEMINERS ATTENDED

Jan 2021: Laboratory Investigations of Hemostatic Mechanisms and Disorder, World Federation of Hemophilia (WFH).

3rd-7th Sep 2018: The Kenya Immunobiology of Parasites, Pathogens and Pathogenesis Course and Symposium. Kemri-Wellcome Trust Kilifi.

9th-11th Sep 2018: Flow cytometry Workshop. Kemri-Wellcome Trust Kilifi

6th-11th Aug 2018: Diagnostic stewardship in Low Resource settings during the workshop and symposium on Capacity Building for National Sustainable Development-JKUAT, NAIROBI-KENYA.

12th-13th Sep 2017: POC (Point of Care) Diagnostics in Resource limited settings at the AIBBC (African International Biotechnology and Biomedical Conference).

22nd July-2nd August 2013: Malaria Microscopy at Center of Excellence -Kenya Medical Research Institute –Kisumu-Kenya.

6th -8th May 2013: Malaria Case Management in Kisumu

May 2011: Trained as Laboratory Inspector/Assessor by Kenya Medical Laboratory Technicians and Technologist Board (KMLTTB)/ University of Maryland.

Jan 2011: Under took a Research Ethics Training Curriculum at Impact Research and Development

Organization conducted by FHI 360.

July 2010: Attended a Safer Phlebotomy Initiative Resources In servicing and Training at Kisumu East District Hospital.

Feb 2010: Attended a PITCT-Provider Initiative Testing and Counseling at Hill Side Hotel Kisumu.

Aug-2009: Attended a refresher course on TB Diagnosis organized by ICAP/MOH Nyanza.

June 2010: Attended Training on Early Infant Diagnosis of HIV organized Organized by ICAP and OGRA Foundation

BOOK

1. Haemoglobin and Thrombogram in *Plasmodium Falciparum* Malaria Patients. **Publishing house : LAP LAMBERT Academic Publishing** (2016-05-31), Authors, **Paul Kosiyo** and Elly Munde **ISBN-13: 978-3-659-89663-7**, **ISBN-10:3659896632**, **EAN:978365989663**. **Book language:** English.

PUBLICATIONS

In press

1. **P Kosiyo**, W Otieno, J Gitaka, EO Munde, C Ouma. **Haematological abnormalities in children with sickle cell disease and non-severe malaria infection in western Kenya** *BMC Infectious Diseases* 2021 (1), 1-11
2. **P Kosiyo**, Walter Otieno, Jesse Gitaka and Collins Ouma. **Association between haematological parameters and sickle cell genotypes in children with *Plasmodium falciparum* malaria residents in Kisumu County-Western Kenya.** *BMC Infectious Diseases* 2020: 05 (01): 32076-32088
3. **Mboya PK**, Sumba PO, Oluoch JN, Abdallah F K and Mala A.O. **Correlation between Thrombocytopenia and Anaemia in *Plasmodium falciparum* malaria among patients in Kisumu County-Western Kenya.** *Afr J Health Sci.* 2016; 29(2) :76-88.
4. Musumba Cleophas Obonyo, **Paul M Kosiyo**, Kyama Mutinda and Evance Raballa. **Evaluation of vaginal cytology through clue cell detection and Nugent's score in the laboratory diagnosis of Bacterial Vaginosis in women of reproductive age.** *JMSCR* 2018: 06 (01):32068-32076

5. Van Damme L 1, Corneli A , Ahmed K , Agot K , Lombaard J , Kapiga S , Malahleha M , Owino F , Manongi R, **Paul K**, Onyango J , Temu L , Monedi MC , Mak'Oketch P , Makanda M , Reblin I , Makatu SE , Saylor L , Kiernan H , Kirkendale S , Wong C , Grant R , Kashuba A , Nanda K , Mandala J , Fransen K , Deese J , Crucitti T , Mastro TD , Taylor D , **FEM-PrEP Study Group: Preexposure prophylaxis for HIV infection among African women.** (PMID: 22784040 PMCID:PMC3687217)
6. Oyale Warren Ayonga, Willis Oyieko, **Paul Kosiyo**, Domnic Marera and Omuga Phillip Charles. **Variation in Branching Pattern and Length of Brachial Artery among Black African Population.** *International Journal of Innovative Science and Research Technology*, 2023: 8 (6): 2456-2165
7. **P Kosiyo. Plasmodium falciparum Infection Modulates Platelet Count than Leucocyte Parameters in Carriage of Different Haemoglobin Beta Subunit (HBB) Genotypes.** *Journal of Natural Sciences Research*, 2023:14 (10): 46-53.
8. Ayonga Oyale Warren, **Paul Kosiyo**, Willis Oyieko,. **Variation in Termination of Brachial Artery Among Black African Population.** *Journal of Natural Sciences Research*, 2023:14 (12): 11-15.

WORK AWAITING PUBLICATION/ UNDER REVIEW

1. Elly O. Munde and **Paul Kosiyo** Bacterial vaginosis; current understanding of predisposing factors, pathogenesis and immunological mechanisms involved. *BMC Infectious Diseases* -Accepted

POSTERS/ABSTRACT PRESENTATION

1. P Kosiyo, W Otieno, J Gitaka, EO Munde, C Ouma. **Haematological abnormalities in children with sickle cell disease and non-severe malaria infection in western Kenya.** 4th Africa International Biotechnology & Biomedical Conference (AIBBC) held on September 14-15, 2021 at the sino-Africa Joint Research Center, Jomo Kenyatta University of Agriculture and Technology. **Presenting author.**
2. **Kosiyo P. Mboya and Oluoch Nyamuni. Haemogram (Red cell indices) versus Thrombogram (platelet indices) in Plasmodium falciparum malaria infection:** 3rd Africa International Biotechnology & Biomedical Conference (AIBBC) held on September 14-15, 2017 at the sino-Africa Joint Research Center, Jomo Kenyatta University of Agriculture and Technology. **Presenting author**
3. **Kosiyo Paul Mboya, Peter Odada Sumba, Nyamuni John Oluoch, Abdallah Fatmah and Albert Onyango Mala. Correlation between thrombocytopenia and anaemia in Plasmodium falciparum malaria among patients in Kisumu County-Western Kenya.** 23rd AKMLSO Conference, October 2015. Abstract No:P/M0016 in Kakamega. **Presenting author**
4. **Kosiyo P. Mboya, Odada Sumba, Oluoch Nyamuni, Mala O. Onyango: Impact of Plasmodium falciparum on platelet parameters among patients attending Jaramogi Oginga Odinga**

Teaching and Referral Hospital, Kisumu County-Western Kenya: KMTC Nairobi May 2014.
Presenting author

Supervision of Postgraduate students

S No.	Name of student	Thesis Title	Current status
1.	Oyale Warren Ayonga MSC/SM/00018/020 MSc Human Anatomy	Anatomical variation in morphology of brachial artery and its branching pattern among black African population: a cadaveric study in western kenya	Graduated in 2023
2.	Malaba Joseph Sifuna MSC/PH/00032/019 MSc Haematology	HbA1c interference and its relation with Haematological parameters, Haemoglobin types in Diabetes melitus in Bungoma county	Reviewing thesis. To graduate in 2024
3.	Catherine Adul MMED/SM/OOOO4/021 MMED (OBS & GYN)	Pregnancy outcomes in adolescent and adult mothers at Jaramogi Oginga Odinga Teaching and Referral Hospital in Kisumu, Kenya	Data collection
4.	Spencer Oyugi MSC/SM/00015/020 MSc Human Anatomy	Histomorphological effects of <i>Warburgia ugandensis</i> methanolic extract on atherosclerotic lesions in aortic tunica intima of Newzealand rabbits upon induction of atherosclerosis	Awaiting thesis defence. To graduate in 2024
5.	Elkana modi MSC/00040/020 MSc Human Anatomy	Assessment of the effect of <i>Benincasa hispida</i> on paracetamol induced hepatotoxicity in Wister Albino rats	Thesis under review. To graduate in 2024
6.	Elina Moige MSC/PH/00144/021 MSc Haematology	Inflammatory markers and coagulation factors among HIV patients resistant to highly active antiretroviral therapy in Kisii Teaching and Referral Hospital	Seeking Ethical approval
7.	Fredrick Otieno Ogollah MSC/PH/00006/2021 MSc Clinical Chemistry	Thyroid hormone profile in controlled and uncontrolled diabetic patients attending Kisumu County Referral Hospital, Kenya.	Seeking Ethical approval

Theses examined

Candidate/ Thesis number	Thesis title	University
Collins Ogolla MHS12/00002/20	Evaluating coagulation factors and bacterial contamination in different types of plasma preparations at Kisii Teaching and Referral Hospital	MSc Kisii University
MSU/SGS/023/078	Effects of aqueous garlic extract intervention on plasma glucose, lipid profile and alkaline phosphatase concentrations in atazanavir treated <i>Rattus norvegicus</i> albinus	MSc Maseno University
MSU/SGS/023/0114	Evaluation of Ethical and Legal Determinants of cadaver acquisition for teaching in medical schools in Kenya	MSc Maseno University
MSU/SGS/023/0116	Protective effects of <i>Rosmarinus officinalis</i> of gentamycin-induced acute kidney injury in adult albino rats (<i>Rattus norvegicus</i>)	MSc Maseno University
MSU/SGS/023/0151	Effects of garlic extract (<i>allium sativa</i>) on atazanavir induced nephrotoxicity in male winster rats	MSc Maseno University

AWARDS

German Academic Exchange Service (DAAD) -MMLS Scholarship & Research award for the year 2012/2013

Travel Awards: The Kenya Immunobiology of Parasites, Pathogens and Pathogenesis Course and Symposium. Flow cytometry course, Kemri-Wellcome Trust Kilifi.

REFEREES

Dr. Walter Otieno (PhD)	Prof. Collin Ouma (PhD)	Dr. Stanslaus Musyoki (PhD)
Chairman Department of Paediatrics and Child Health Maseno University Maseno-Kenya. Cell: +254714481488 Email: walter66@gmail.com	Director Research, Publication & Innovation Maseno University-Kenya. Cell: +254722381214 Email: collinouma@yahoo.com	Lecturer Department of Medical Science-South Eastern Kenya University (SEKU). Cell: +254721559430 Email: stanstylo@gmail.com