

Shaviya Nathan, PhD

Personal Information

☒ **Contact Address:** P.O. Box 190-50100, Kakamega.
☒ **Phone No:** +254 723 700008
☒ **Email:** shavianathan@gmail.com, nshaviya@mmust.ac.ke
☒ **Nationality:** Kenyan
☒ **Date of Birth** 10th January 1984

Profile

☒ *Qualified with Doctor of Philosophy degree (Biomedical Sciences-Medical Biotechnology).*
☒ *Qualified with Masters of Science degree (Molecular Medicine).*
☒ *Qualified with Bachelors of Science degree (Biomedical Science and Technology).*
☒ *Over Seven years' experience in University Teaching.*
☒ *Over Ten years' working experience in a clinical/diagnostic setting.*
☒ *Skilled in designing experiments, data analysis, interpretation of results and reporting.*
☒ *Skilled in designing research tools for data collection and management.*
☒ *Managed research protocols.*
☒ *Excellent interpersonal skills and a team player.*

Professional Objective

To make a positive impact in health research as a professional, within an environment where healthy competition, teamwork practicality and cutting-edge innovation are geared towards new discoveries that will eliminate mankind sufferings.

ACHIEVEMENTS

- 1. Published in peer reviewed journals.*
- 2. Played a key role in the development of a number of curricula for the Medical Laboratory Department MMUST including Diploma Medical Laboratory Technology, Diploma Medical Biotechnology, BSc Medical Biotechnology, MSc Biomedical Sciences, MSc Medical Laboratory Technology, PhD Biomedical Sciences and PhD Medical Laboratory Technology.*
- 3. Developed Standard Operating Procedures for Cell Biology, Medical Biochemistry, Medical Biotechnology and Immunology as part of the Laboratory Manuals for MMUST MLS.*
- 4. Instrumental in starting up the laboratory component of the department.*
- 5. Key player in the review and restructuring of the BSc Medical Laboratory Curriculum.*
- 6. Played a key role in developing the MBChB curriculum for the School of Medicine MMUST.*

Other Responsibilities

☒ *Departmental Examinations officer.*
☒ *Departmental Coordinator of BSc. Medical Biotechnology.*
☒ *Departmental point person for E. learning.*
☒ *Member of post-graduate committee*
☒ *Member of the curriculum committee.*

☒ *Member of the quality assurance committee.*

CAREER SUMMARY

2020 – Present Masinde Muliro University of Science and Technology (MMUST) -Lecturer

☒ *Teaching for all health sciences students.*

☒ *Coordination of practical medical assessment of students in all health sciences.*

☒ *Conducting diagnostic/research lab investigations.*

2013 – 2019 Masinde Muliro University of Science and Technology (MMUST) -Senior Medical Lab Technologist

☒ *Coordination of clinical diagnostic lab teaching for all health sciences students.*

☒ *Coordination of practical medical assessment of students in all health sciences.*

☒ *Conducting lab practical's for health sciences students.*

☒ *Conducting diagnostic/research lab investigations.*

☒ *Providing diagnostic lab instruction to health sciences students in the clinical setting.*

☒ *Preparation, validation and implementation of protocols in accordance with Standard Operating Procedures.*

2009- 2012 Kenya Medical Research Institute (CBRD)-Nairobi (Research Assistant).

☒ *Involvement in field work where follow up studies are done on malaria positive patients in malaria endemic sites especially in Western Kenya and Coast.*

☒ *Collecting blood samples from malaria positive patients, processing the samples, packaging them for transportation to the malaria unit for further analysis.*

☒ *Undertaking molecular and immunological analysis on malaria positive samples including, checking antibody levels, extracting parasite deoxyribonucleic acid, amplification of specific genes being studied by both conventional and real time polymerase chain reaction, identifying single nucleotide polymorphisms using various techniques such as ELISA, Southern Blotting, Random Length Fragment Polymorphism, Fluorescence analysis and sequencing.*

☒ *Interpretation of the information and passing it to principal investigators and project managers for presentation of the information in scientific conferences as well as channeling the information to the Division of Malaria Control for policy formulation and implementation.*

☒ *preparing weekly progress reports to the section head.*

September-November 2006. Kenya Agriculture and Livestock Research Organization (KALRO)-Njoro (Research Assistant).

Working experience on various Molecular techniques, including: ELISA, DNA extractions, Quantification, Visualization analysis and Polymerase Chain Reaction optimization.

Publications

1. Barasa E, **Shaviya N**, Budambula V, Were T. rs1445776009 Variants in the human ALB gene: Association with serum albumin and clinical outcomes in HIV-infected Kenyan injection substance users. *International journal of health sciences* 1. 2021 Apr 29; 15 (3):3–11.

2. Collins Abonyo, **Nathan Shaviya**, Valentine Budambula and Tom Were. anemia Burden, Types and Associated Risk Factors among Kenyan Human Immunodeficiency Virus-1 and Mycobacterium Tuberculosis Co-infected Injection Substance Users Anemia Burden, Types and Associated Risk Factors among Kenyan Human Immunodeficiency Virus-1. *Ethiopian Journal of Health Sciences*, 30(5). <https://doi.org/10.4314/ejhs.v30i5.4>

3. **Nathan Shaviya**, Valentine Budambula, Tom Were. *Functional Haplotypes in the ADIPOQ Gene are Associated with Underweight, Immunosuppression and Viral Suppression in Kenyan HIV-1 Infected Injection Substance Users*. *Ethiopian journal of health sciences*. 2020 July 30(4): 489-500. <https://doi.org/10.4314/ejhs.v30i4.4>
4. Webale MK, Wanjala C, Guyah B, **Shaviya N**, Munyekenye G, Nyanga PL, Marwa, I. N., Kagoiya, S., Wangai, L. N., Webale, S. K., Kimani, K., & Kitungulu, N. *Epidemiological Patterns and Antimicrobial Resistance of Bacterial Diarrhea among Children in Nairobi City, Kenya*. *Gastroenterology and Hepatology from Bed to Bench*. 2020 June 13(3).
5. Rodgers Norman Demba, **Nathan Shaviya**, Sylviah Mweyeli Aradi, Walter Mwanda. *Selected genes of Human herpesvirus-8 associated Kaposi's sarcoma among patients with Human Immunodeficiency Virus-1 and Acquired Immunodeficiency Disease Syndrome*. *Pan-African Medical Journal* 2019(32). <https://doi.org/10.11604/PAMJ.2019.32.215.17322>
6. Rodgers N. Demba, **Nathan Shaviya**, Matilu Mwau, Walter Mwanda. *Detection and Characterization of Kaposi's sarcoma Herpes Virus (KSHV) from Archival Tissues fixed in Formalin and Paraffin Wax-Embedded at Kenyatta National Hospital, Kenya*. *Journal of Medical Science and Clinical Research* 2018(6).
7. **Nathan Shaviya**, Valentine Budambula, Mark K. Webale, Tom Were. *Circulating Interferon-Gamma Levels are Associated with Low Body Weight in Newly Diagnosed Kenyan Non-Substance Using Tuberculosis Individuals*. *Interdisciplinary Perspectives on Infectious Diseases* 2016(8). <https://doi.org/10.1155/2016/9415364>
8. Faiza Mwatumu Barasa, Wanjala Christine, **Shaviya Nathan**, Barasa Mustafa, Sowayi Alubokho George, Vincent Aden Odini, Johnston Wakhisi and Josphat Otwele Abwajo. *State of Sanitation and Hygiene of Public Primary Schools in Kakamega Municipality, Western Kenya*. *International Journal of Public and Environmental Health* 2015 2(12): 215–224.
9. Barasa Mustafa, **Shaviya Nathan**, Wamalwa Ronald, Mambo Fidelis, Okoth Patrick, Omedo Asaba Robin, Reuben Rutto, Kagasi Ambogo Esther, Mutai Charles, Sowayi Alubokho George, Ozwara Suba Hastings, Ng'ang'a Waithera Zipporah and Anjili Omukhango Christopher. *Expression of Physiologic Biomolecules following Anti-Malarial Cytokine Cytokine-CpG Motif Oligodeoxynucleotide Gene Therapy*. *Merit Research Journal of Medicine and Medical Sciences* Vol. 3(9) pp. 432-452, September, 2015.
10. Makokha W. Francis, Peter C. Bull, Hungu Charity, **Shaviya M. Nathan** and Magoma Gabriel. *Mapping of DBL α Sequence Tags of Field Isolates from Two Malaria Endemic Sites in Kenya*. *Journal of Natural Sciences Research*, 2015 6(1), 89–94.
11. Makokha W. Francis, Sabah A. Omar, Kimani T. Francis, Gabriel Magoma, Rahma Udu, Edwin Too, **Nathan Shaviya**, Charity Hungu. *PfEMP1 DBL α Sequence Tags in Genomic DNA of P. falciparum field isolates from Two Malaria Endemic Sites in Kenya*. *Journal of Natural Sciences Research*, 2015 5(7), 145–150.
12. Oyugi O. Ben, Yongo E. Arthy, Ogony O. Jack, Ochola O. Jew , Hongo Steven, Wamalwa W. Ronald , Sowayi A. George, Chungu E. Gladys Shaviya M. Nathan. *Association between thrombocytes count and Plasmodium falciparum infection among children under five years attending Kombewa Sub-County Hospital*. *Journal of Biology, Agriculture and Healthcare* 2014 4(25), 272–279.
13. Shaviya N. M., Zablou J.O., Mang'era C. M., Makokha F.W., Wamalwa R. W., & Sowayi G. A .*Genotyping for point mutations in selected codons of pfcr1 and pfmdr-1 genes of Plasmodium falciparum among patients with uncomplicated malaria in Mbita district Kenya*. *Journal of Natural Sciences Research*, 2014 4(21), 114–123.
14. Shaviya N., Mang'era M.C., Makokha W.F., Kimani F.T. , Ongus J.R. *Expansion of the wild-type pfcr1 76K allele in Plasmodium falciparum populations in Mbita, Kenya*. *Afri J Health Sci* 2012; 22: 176-187.

Conference Presentations

1. Shaviya NM, Budambula V and Were T (2019). *Functional Haplotypes in the ADIPOQ Gene are Associated with Underweight, Immunosuppression and Viral Suppression in Kenyan HIV-1 Infected Injection Substance Users*. *African Society of Human Genetics (AfSGH)*. Conference Presentation 18th -21st September 2019, Bamako, Mali. Abstract# 65.

2. Shaviya NM, Kilongosi MW and Were T (2018). *Circulating Interferon-Gamma Levels are Associated with Low Body Weight in Newly Diagnosed Kenyan Non-Substance Using Tuberculosis Individuals. European Federation of Immunological Societies- European Journal of Immunology (EFIS-EJI). 12th -15th October 2018, Naples, Italy Abstract# 33.*
3. Shaviya NM, Budambula V and Were T (2018). *Functional Haplotypes in the ADIPOQ Gene are Associated with Underweight, Immunosuppression and Viral Suppression in Kenyan HIV-1 Infected Injection Substance Users. African Society of Human Genetics (AfSHG). Conference Presentation 19th -21st September 2018, Kigali, Rwanda. Abstract# 14.*
4. Shaviya NM, Budambula V, Kilongosi MW and Were T (2017). *Circulating Interferon-Gamma Levels are Associated with Low Body Weight in Newly Diagnosed Kenyan Non-Substance Using Tuberculosis Individuals. European Federation of Immunological Societies- European Journal of Immunology (EFIS-EJI). 15th -19th October 2017, Naples, Italy Abstract# 46.*
5. Shaviya NM and Were T (2015). *B –cell subsets in children with severe anemia. International Union of Immunological Societies-Federation of African Immunological Societies (IUIS-FAIS). 20th -30th October 2015, Cape Town, South Africa.*
6. Shaviya NM, Mang'era CM, Kimani FT and Omar S (2013). *Prevalence of drug resistance SNPs in pfmdr and pfprt genes in Mbita. Association of Kenya Medical Laboratory Officers conference. The Panari Hotel, Nairobi. 8th -11th October, 2013.*
7. Musumba FO, Budambula V; Shaviya NM, Mark W. Kilongosi MW, Ouma C, Ahmed AA, Lihana R and Were T (2014). *HIV-1 Major and Minor Protease Inhibitor Drug Resistance Mutations in Antiretroviral Treatment-Naive and -Exposed Injection Drug Users from Mombasa County, Kenya. 9th Federation of African Immunological Societies (FAIS) Conference Papers. Nairobi, Kenya. 30th Nov.-4th Dec., 2014. Abstract# 51.*
8. Kilongosi WM, Shaviya NM, Budambula V, Musumba FO, Ouma C, Ahmed AA, Mibei E, Lihana R, and Were T (2014). *Hepatitis B Sero-Markers, Clinical Stages and Genotypes in HIV-1 Infected and Uninfected Injection Drug Users from Mombasa, Kenya. 9th Federation of African Immunological Societies (FAIS) Conference Papers. Nairobi, Kenya. 30th Nov.- 4th Dec., 2014. Abstract# 60.*
9. Budambula V; Shaviya NM, Ahmed AA, Otieno M and Were T (2013). *Factors Influencing Drug Abuse among HIV-Infected Youths in Mombasa. NACADA 2nd National Conference on Alcohol and Drug Abuse. "The Youth and Drugs: A Call for Action", Nairobi, Kenya. 10th-13th June, 2013. Abstract# B13.*

Community Service

1. *World Laboratory day 15th April 2015 Shikoti Girls secondary school, Kakamega County.*
2. *World Laboratory day 17th April 2016 Matioli Secondary school, Kakamega County.*
3. *Medical Camp and Community Outreach 15th April Shinyalu Sub-County Hospital.*

Training and Travel Grants

1. *African Society of Human Genetics (AfSHG). 1st Malian Human Genetics conference. 18th -21st September 2019 Bamako, Mali.*
2. *European Federation of Immunological Societies- European Journal of Immunology (EFIS-EJI) Travel Grant: Advanced course in T- cell Immunology. 12th to 15th October 2018 Naples, Italy.*
3. *East Africa Centre for Vaccines and Immunization (ECAVI). ECAVI Vaccinology course 25th -29th June 2018 Kampala, Uganda.*
4. *European Federation of Immunological Societies- European Journal of Immunology (EFIS-EJI) Travel Grant: Advanced course in Tumor Immunology. 15th to 19th October 2017 Naples, Italy.*
5. *International Union of Immunological Societies- American Association of Immunologists (IUIS-AAI) Travel Grant: Introductory course in Immunology. 9th to 14th July 2016 Long Beach, California, USA.*

6. *The Faraday Institute of Science and Religion and Christian and Scientific Association of Kenya, Course "Science and Christian Faith: The Quest for Synergetic Co-Existence"; Masada Hotel, Naivasha, Kenya. 10th -12th May 2016.*

7. *AuthorAID course in Research Writing. Online course AUTHORAID and inasp. 1st April – May 12th 2016.*

8. *International Union of Immunological Societies- Federation of African Immunological Societies (IUIS-FAIS) Travel Grant: The 1st IUIS-FAIS Southern African regional immunology workshop and 6th Infectious Disease in Africa symposium: Biomarkers and correlates of immune control in HIV, TB and Malaria. Cape Town, South Africa, 20th -30th October 2015.*

9. *Association of Kenya Medical Laboratory Officers conference. The Panari Hotel, Nairobi. 8th -11th October, 2013.*

10. *Epidemiology and Biostatistics online course. University of Washington and University of Nairobi. November 2012.*

Post-graduate supervision and Examination

COMPLETED

1. *Erick Juma Barasa, Registration Number SBM/G/01-54525/2017: Intronic polymorphism in Albumin gene among HIV-1 ART naïve and experienced injection drug users. MSc Biomedical Sciences (Medical Biotechnology). Masinde Muliro University of Science and Technology.*

On going

Masters

1. *Fauzia Musa, Registration Number HML/G/01/2016: Cytokine profiles in HIV-1 non-adherent ART experienced attending Siaya County Referral Hospital. MSc Medical Laboratory Sciences (Medical Immunology).....Thesis writing.*

2. *Nahashon Ouko, Registration Number HML/G/21/2016: Incidence of high HIV viral load and associated factors among patients on ART at Serem CCC.....Data Collection*

3. *Ochanda Apiyo Maureen, Registration Number HML/G/01-56214/2017: Utility of total IgE in the diagnosis of allergic rhinitis in children at Bungoma County Referral Hospital.....Data Collection*

4. *Stephen Tavasi Ndombi, Registration Number SBF/G/01-53171/2018: In silico determination of potential vaccine and drug targets for SARS-CoV-2.....Thesis writing*

PhD

1. *Abonyo Collins Odiwuor, Registration Number HML/H/01-56573/2019: HAMP, HEPH and FAM132B Gene Polymorphism and Iron Homeostasis in HIV Antiretroviral Therapy non-adherent Patients at Kakamega County Referral Hospital, Kenya.....Data Collection.*

2. *Bernard Ngoitsi Jumba, Registration Number SBM/H/09/2015: Immunological and hematological derangements in children with uncomplicated and complicated *P. falciparum* malaria in an unstable transmission area of Vihiga County, Kenya.....Thesis writing*

THESIS EXAMINATION

1. *In silico mapping of Biofilm Gene clusters of Pseudomonas aeruginosa in Deciphering Novel Therapeutic Targets for clinical intervention. Michael John Ambutsi. Master of Science in Bioinformatics. MMUST.*

2. *Field Evaluation of Diagnostic Performance and Factors Affecting Malaria Rapid Diagnostic Test in Seme, Kisumu County. Celine Atieno Okuta. Master of Science in Medical Laboratory Sciences. MMUST*

Consultancy

Training and preparing staff of Sigalagala National Polytechnique in readiness for their 1st International Research Conference the year 2018.

Education Background

2015-2018 – Doctor of Philosophy Biomedical Sciences (Medical Biotechnology). Masinde Muliro University of Science and Technology. P.O. Box 190, Kakamega-Kenya. 50100

2009-2013- Master of Science (Molecular Medicine) .Jomo Kenyatta University of Agriculture and Technology. P.O. Box 60200, Nairobi-Kenya. 00200

2003-2007. Bachelor of Science (Biomedical Science and Technology). (2.1 Honors Upper Division) - Egerton University. P.O. BOX 536, Njoro-Kenya

1997-2001- Kenya Certificate of Secondary Education (K.C.S.E) passed A-(Minus). Chesamisi High School. P.O. BOX Private Bag, Kimilili, Kenya.

Professional Affiliation

- 1. African Society of Human Genetics (AfSHG).*
- 2. International Society for Infectious Diseases (ISID).*
- 3. Christian and Scientific Association of Kenya (CSAK).*

Page last updated on 30th June 2021