

DR. LWIDIKO MHAMILAWA- MD, PHD.

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Work History

Principal Investigator 08/2020 to Current

Muhimbili University of Health and Allied Sciences - Dar es Salaam, Tanzania.

- Leading an “implementation research” project commissioned by UNICEF, on improving data collection of access and coverage of immunization services in Tanzania, in the context of varying socio-economic status of clients.
- Liaison between the university, UNICEF, Ministry of Health and local government.
- Coordinate teams in 3 different regions, resulting in data collection from 6 health care facilities.
- Prepare and conduct stakeholders validation meetings of the research output.

Member- Biorepository and Laboratory Services Database Committee 02/2020 to Current

Muhimbili University of Health and Allied Sciences - Dar es Salaam, Tanzania.

- Participated in formulation of the institutional biorepository policy that guide the storage, retrieval and sharing of biological material that result from institutional research of collaborations.
- Conducted a university wide survey of scientific research equipment and available biological material for proper indexing and storage.
- Mobilizing resources for the establishment of physical institutional biorepository infrastructure.

Assistant Lecturer – Department of Parasitology and Medical Entomology 06/2015 to Current

Muhimbili University of Health and Allied Sciences - Dar es Salaam, Tanzania.

- Use a variety of learning modalities and support materials to facilitate the learning process and accentuate presentations, including visual, aural and social learning modalities.
- Develop easy and open rapport with students to encourage engagement and academic progress.
- Provide letters of recommendation and other referrals to students pursuing further programs or employment.
- Participate in weekly faculty meetings and contribute to curriculum review.
- Advise on department hiring actions to help build a cohesive and successful lecturing team.
- Utilize instructional technologies in course delivery for both in-class and online instruction to engage and educate students especially during the COVID-19 pandemic.

Intern Medical Doctor 08/2014 to 2015

Mwananyamala District Hospital - Dar es Salaam, Tanzania

- Organized capacity building training in 3 regions to frontline healthcare workers and community during the cholera outbreak on patient care, infection prevention and control.
- Implemented therapeutic regimens involving medications and other interventions to mitigate symptoms and prevent reoccurrence.
- Practiced infectious diseases medicine in cholera outbreak facility, providing diagnosis and treatment for Cholera patients.
- Teamed with other physicians, specialists and health care providers to provide well-rounded care for complex cases.

Clinical Research Coordinator

02/2015 to 06/2020

Muhimbili University of Health and Allied Sciences – Bagamoyo, Tanzania.

- Screened patient records, databases and physician referrals to identify prospective candidates for research studies.
- Developed and implemented data collection tools, research protocols, operations manuals and case report forms.
- Monitored unit budget to meet financial objectives for spend rate and funding.
- Coordinated clinical trials focused on assessing malaria diagnostic tools sensitivity and specificity and therapeutic efficacy of experimental drugs.
- Followed informed consent processes and maintained records.
- Worked with principal investigator and sponsors to facilitate daily trial activities and comply with research protocols.

National Chairperson

12/2011 to 04/2014

Youth of United Nations Association Tanzania -, Dar es salaam, Tanzania.

- The spokesperson of the organization and carries the vision of the association.
- Wrote project proposals and conducted leadership training for subordinates and members.
- Established and maintained collaborations with UN- agencies and other partners for resource mobilization.
- Supervised baseline research on livelihoods of rural Tanzanian youth funded by the Swiss Development Corporation
- Managing the organization website and all social media accounts.
- Convening and chairing annual general meetings and executive committee meeting of the association.

Education

Ph.D: Medical Sciences

06/2020

Uppsala University – Uppsala, Sweden

Thesis title: *New strategies and tools for Plasmodium falciparum case management in an era of imminent resistance to artemisinin-based combination therapy in Tanzania.*

- Received Scholarship from Swedish International Development Cooperation Agency.
- Course works in Introduction to Scientific Research, Clinical trials management, Molecular techniques for the study and diagnosis of diseases and Introduction to Global Health.

- Designed and implemented clinical trial for therapeutic efficacy of extended treatment of malaria
- Conducted various molecular analyses (LAMP, PCR and Sequencing) of malaria parasites, to assess parasite clearance and drug resistance markers
- Presented at international scientific conferences, and prepared seminars and workshops for dissemination of research findings.
- Collaborated with scientists from three universities from three continents (Brown university - USA, Karolinska Institutet- Sweden, University of Western Australia -UWA) to successfully complete research projects that resulted in 5 publications.

M.D. Medical Doctor

10/2013

Muhimbili University of Health and Allied Sciences - Dar es Salaam, Tanzania

Affiliations

Associate Fellow, Royal Commonwealth Society Member; Young East African Health Research Scientists Forum (YEARS Forum); Vice President - Community of Scientists; Next Einstein Forum Ambassador; Member, American Society of Tropical Medicine and Hygiene

Publications

1. Detection of Plasmodium falciparum by Light Microscopy, Loop-Mediated Isothermal Amplification, and Polymerase Chain Reaction on Day 3 after Initiation of Artemether- Lumefantrine Treatment for Uncomplicated Malaria in Bagamoyo District, Tanzania: A Comparative Trial. **Mhamilawa LE**, Aydin-Schmidt B, Mmbando BP, Ngasala B, Morris U. Am J Trop Med Hyg. 2019 Nov;101(5):1144-1147. doi: 10.4269/ajtmh.19-0298. PMID: 31549618 Free PMC article.
2. Parasite clearance, cure rate, post-treatment prophylaxis and safety of standard 3- day versus an extended 6-day treatment of artemether-lumefantrine and a single low-dose primaquine for uncomplicated Plasmodium falciparum malaria in Bagamoyo district, Tanzania: a randomized controlled trial. **Mhamilawa LE**, Ngasala B, Morris U, Kitabi EN, Barnes R, Soe AP, Mmbando BP, Björkman A, Mårtensson A. Malar J. 2020 Jun 23;19(1):216. doi: 10.1186/s12936-020- 03287-5. PMID: 32576258 Free PMC article.
3. Electrocardiographic safety evaluation of extended artemether-lumefantrine treatment in patients with uncomplicated Plasmodium falciparum malaria in Bagamoyo District, Tanzania. **Mhamilawa LE**, Wikström S, Mmbando BP, Ngasala B, Mårtensson A. Malar J. 2020 Jul 14;19(1):250. doi: 10.1186/s12936-020-03309-2. PMID: 32664948 Free PMC article.

4. *Falciparum* malaria from coastal Tanzania and Zanzibar remains highly connected despite effective control efforts on the archipelago. Morgan AP, Brazeau NF, Ngasala B, **Mhamilawa LE**, Denton M, Msellem M, Morris U, Filer DL, Aydemir O, Bailey JA, Parr JB, Mårtensson A, Bjorkman A, Juliano JJ. *Malar J.* 2020 Jan 28;19(1):47. doi: 10.1186/s12936-020-3137-8. PMID: 31992305 Free PMC article.

5. A novel deep learning-based point-of-care diagnostic method for detecting *Plasmodium falciparum* with fluorescence digital microscopy. Oscar Holmstrom, Sebastian Stenman, Antti Suutala, Hannu Moilanen, Hakan Kucukel, Billy Ngasala, Andreas Martensson, **Lwidiko Mhamilawa**, Berit Aydin-Schmidt, Mikael Lundin, Vinod Diwan, Nina Linder, Johan Lundin doi: <https://doi.org/10.1101/2020.08.10.20170936>