
POST:	Vector Biology and Malaria Laboratory Manager
DIVISION/DEPT/UNIT:	MRCG at LSHTM
GRADE:	7 (Professional Services Scale)
LOCATION:	The Gambia
TYPE	Full-time and fixed-term until 31 March 2025

GENERAL INFORMATION

The London School of Hygiene & Tropical Medicine

The London School of Hygiene & Tropical Medicine (LSHTM) is renowned for its research, postgraduate studies and continuing education in public and global health.

[Our mission](#) is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice.

We embrace and value the diversity of our staff and student population and seek to promote equity, diversity and inclusion as essential elements in contribution to improving health worldwide. We believe that when people feel respected and included, they can be more creative, successful, and happier at work. While we have more work to do, we are committed to building an inclusive workplace, a community that everyone feels a part of, which is safe, respectful, supportive and enables all to reach their full potential.

History

Founded in 1899 at the London Docks, LSHTM is now based in Bloomsbury, where it has two main sites at Keppel Street and Tavistock Place, and additional sites in The Gambia and Uganda. Today, our staff, students and alumni work in government, academia, international agencies and health services across the world. [Learn more about the history of LSHTM.](#)

Research

Research income has grown to more than £180 million per year from national and international funding sources including UK government and research councils, the European Union, the Wellcome Trust, Gates Foundation and other philanthropic sources.

Our diverse research talents, skills and experience underpin our position as a leader in public and global health. These range from the molecular to the global, the theoretical to the applied, the analytical to the political. Our staff are conducting research in more than 100 countries.

Staff community

We have 3,300 staff based all around the world with core hubs in London and at the MRC Units in The Gambia and Uganda, which joined LSHTM in February 2018. Our outstanding,



diverse and committed staff make an impact where it is most needed - deploying research in real time in response to crises, developing innovative programmes for major health threats, or training the next generations of public and global health leaders and researchers.

Partnerships

Working in partnership is central to achieving our mission. Our [strategic collaborations](#) in the UK and across high-, middle- and low-income countries deliver health and socioeconomic benefits across the world, especially in the most disadvantaged communities.

LSHTM is also a member of the M8 Alliance of Academic Health Centers, Universities and National Academies, the Association of Schools of Public Health in the European Region, and the Consortium of Universities for Global Health.

Education

We deliver research-led educational programmes to future health leaders, managers and researchers across the world. We have more than 1,200 face-to-face Master's and Doctoral students, 3,000 studying by distance learning, and 1,000 each year on short courses and continuous professional development. Our free online courses are studied by more than 270,000 participants globally.

Excellence in research and education

We perform strongly in various global university league tables. In the Shanghai Ranking's Global Ranking of Academic Subjects 2020 we placed 3rd in [public health](#) (1st in the UK). In the [2020 CWTS Leiden Ranking](#) LSHTM is ranked the UK's top university for the proportion of academic research with women listed as authors, and third in Europe for publishing open access research.

In the US News Best Global Universities Ranking 2021, we ranked [3rd in the world for public, environmental & occupational health](#), [4th in the world for infectious diseases](#), [11th in the world for social sciences & public health](#), and [12th best University in the UK overall](#). We [ranked 27th for medicine](#) in the 2019 QS World University Rankings.

In 2017, the inaugural Center for World University Rankings by Subject placed LSHTM [first in the world for tropical medicine](#) research, [second for parasitology](#) and seventh for [infectious diseases](#), [public, environment and occupational health](#), and [social sciences and biomedical](#).

LSHTM was named [University of the Year 2016](#) by Times Higher Education and awarded a [Queen's Anniversary Prize for Higher and Further Education](#) in 2017 in recognition of our response to the 2014 Ebola epidemic in West Africa. LSHTM does not appear in the Times Higher Education World University Rankings as universities are excluded if they do not teach undergraduates.

LSHTM is one of around 20 specialist institutions that receive institution specific funding from the [Office for Students](#) (OfS). This funding recognises the additional costs that LSHTM incurs because of its unique range of teaching, specialist facilities, and the scale of its contributions to national and international agencies.



ABOUT MRC The Gambia at LSHTM (MRCG)

MRC Unit The Gambia (MRCG) at the London School of Hygiene and Tropical Medicine is a leading research centre in sub-Saharan Africa. Research is carried out by three major Research Themes (Disease Control & Elimination; Vaccines & Immunity; and Nutrition & Planetary Health) that benefit from the core-supported strategic platforms and of the research services. Disease Control & Elimination investigates the interactions between hosts, pathogens and vectors; and evaluates interventions aimed at interrupting transmission and/or reducing the burden of diseases. Research is multidisciplinary and include a large epidemiological component complemented by social sciences and combined with strong laboratory and genomics support. Vaccines & Immunity studies the ontogeny of immunity as a baseline to inform the design of vaccines and maximise their impact. It hosts a portfolio of Phase 1-4 clinical trials of existing and novel vaccines and employs cutting-edge system biology methods to understand host responses to infection and vaccination. The Theme is also working on tuberculosis by examining host/pathogen interactions in adults and children. Nutrition & Planetary Health aims to understand the pathophysiology of diet-disease interactions in order to accelerate the development of more effective next-generation community and clinical interventions, and to build a major new program in planetary health. Two Cross-Cutting Programs, i.e. Maternal & Neonatal Health and West Africa, involve all Themes, often in synergy, and underpin the Unit's commitment to carry out research to decrease the current high burden of maternal and neonatal mortality in sub-Saharan Africa and the Unit's vocation as a Regional Centre of Excellence for Research and Training. A third cross-cutting Program, Planetary Health, is currently being developed.

Besides the main campus in Fajara, the MRCG has 2 field stations, Keneba and Basse.

The Unit, led by Professor Umberto D'Alessandro, receives an MRC core investment grant every 5 years, following the review of past activities and future plans. In addition, all research activities are supported by external grants from a variety of sources. The Unit has a turnover of in excess of £22m per annum and employs about 1500 staff.

THE ROLE

The Unit is seeking a highly skilled and experienced post-doctoral Vector Biology and Malaria Laboratory Manager to provide professional, effective, and efficient management, technical and administrative service for the Vector Biology and Malaria laboratories ensuring high quality support to Unit scientific research on malaria and entomology. The post holder will provide the technical support and expertise for research on vector-borne infectious diseases such as malaria, dengue and yellow fever, with significant synergies with the surveillance and epidemic preparedness platform.

JOB PURPOSE

The Unit runs a Laboratory Services Platform comprising Clinical and Research Laboratories equipped with modern cutting-edge technologies operating under Good Clinical Laboratory Practice (GCLP) principles, to support research activities across the three themes. There are research platform laboratory services including: Molecular Diagnostics, Genomics and Immunology.



The post-holder will manage the vector biology and malaria laboratories, providing scientific expertise to support externally funded projects as well as conducting research to strengthen core capabilities in vector-borne diseases. S/he will function as the Unit Vector Biologist and ensure that the platform exploits cutting edge technologies to strengthen the Unit's research portfolio in close collaboration with principal investigators and external funders. The post holder will ensure that all users of the laboratories receive appropriate training, advice, and guidance in vector-borne transmission studies.

IDEAL CANDIDATE

In addition to meeting the minimum qualifications, the ideal candidate will have demonstrated the following critical attributes:

- Extensive research and operational experience in public health entomology.
- Experience working in a vector control services program or environment and/or education or training in biology, zoology, entomology, or other related fields.
- Strong ability to gather, analyse and compile information and use logic to address work-related issues and problems.
- Outstanding organizational skills, including the ability to independently prioritize tasks and work on multiple projects simultaneously; assumes responsibility and accountability for successfully completing assignments or tasks.
- Excellent customer service skills, principles and processes for providing customer and personal services. This includes customer needs assessment and meeting quality service standards.
- Ability to develop and maintain liaisons and effective working relations with groups and individuals, agencies, and the public to encourage cooperative management strategies or to develop information and interpret findings.
- Adaptability to surroundings, comfortable working outdoors and in different types of environmental terrain.
- Ability to identify safety issues and problems; detects hazardous working conditions and safety problems; checks equipment and/or work area regularly.
- Experience using various technological resources including electronic devices, software and data systems.
- Exceptional communication skills, both oral and written, and the ability to communicate effectively with diverse populations.

KEY RESPONSIBILITIES

The post-holder will perform the following duties:

Technical:

- Establish and implement a system to handle a complex mix of laboratory investigations and work streams for individual research projects towards meeting the key objectives of studies supported by the laboratory. This will involve supervising a team of up to 30 or more laboratory scientists and technicians in cooperation with their individual line management.
- Provide up-to-date technical expertise, advice, and support to a very high standard in Malaria and other Vector Borne diseases.



- Be willing to investigate and learn about novel applications and keep up to date with developments in the field of vector biology and malaria through conferences and workshops and interaction with other experts.
- Develop and optimise novel procedures including new technology platforms to address emerging research project needs and advise scientific staff on experimental procedures and protocols as required.
- Provide oversight on malaria assays and support to the clinical laboratory when required and conduct all work following the relevant sections of the MRC's Safety Manual.
- Contribute to the preparation of budgets for grant applications, grant reports and scientific publications – this will involve acting as a resource to advise scientists on the setup, design and interpretation of experiments.
- Assist with data acquisition and analysis, data management, interpretation of results and preparing data for publications.

Managerial:

- Manage a team of core laboratory and research scientific staff to provide laboratory support for research projects with Entomology and Malaria components undertaken in the Unit.
- Develop and establish high throughput laboratory systems for malaria and other vector investigations focusing upon the interactions of arthropods, pathogens and the environment to support multiple research projects integrating field collection, sample processing, laboratory analysis, data acquisition and report generation for platform users.
- Have management responsibility for all aspects of the malaria and entomology laboratories and have day-to-day responsibilities for the co-ordination and supervision of the laboratories.
- Responsible for the future planning and development of the facility in line with Unit scientific strategy.
- Ensure that all equipment in the laboratories are maintained in optimum working order through regular calibration and testing in collaboration with the biomedical services department.
- Be responsible for supporting the breeding and maintenance of infection free mosquito colonies and the wider management of entomology laboratory facilities at Basse, Walikunda and Fajara.
- Maintain, streamline and manage laboratory procedures and services in the Entomology Laboratories, working collaboratively with other Laboratory Managers to develop sustainable accreditation policies, procedures and protocols to meet or exceed published international standards (e.g., ISO 15189, GCLP).
- Create and document procedures related to sample, reagent, and chemical handling, storage, and reporting which includes developing a logging and tracking system for samples and laboratory reports.
- Ensure that all equipment in the laboratories are maintained in optimum working order through regular calibration and testing in collaboration with the biomedical services department.
- Be responsible for SOP development, prioritising laboratory work and staffing, as appropriate, and documenting platform support to external projects operating in the vector biology and malaria laboratories.



- Conduct staff appraisals, probation reviews and leave schedules of the laboratory staff.

Research:

- Developing an area of personal scientific research interest in line with the Unit's research agenda and portfolio.
- Contributing between 25% - 30% time to supporting external research projects evidenced by recovering of notional charges on the projects.

Training:

- Train and supervise other scientific and technical staff in field and laboratory methods when appropriate.
- Develop and deliver training to keep users aware of new developments in the field.
- Conduct training, proficiency testing and induction of laboratory staff.
- Oversee the updating and accuracy of training files of laboratory staff. Supporting a robust laboratory internship programme that provides training at both undergraduate and post-graduate levels.
- Providing mentorship to interns.

Health and safety:

- Ensure appropriate health and safety policies, including COVID-19 procedures and standards applied within the facility are in line with applicable regulations, including providing PPE and appropriate waste management.

Communication:

- Contributing to the Units agenda to disseminate research findings both locally and internationally through participation in Unit seminars, regional and international scientific conferences and publication of research in peer-reviewed Journals.

Finance:

- Implementing, with support from Laboratory administration, a robust recharging system for cost recovery for services to external projects with support from relevant departments (Finance, Research Support).

Other:

- Performing out-of-hours duties when required based on work demands.
- Travelling within and outside the country based on work demands.

GENERIC DUTIES AND RESPONSIBILITIES OF ALL MRC/UVRI & LSHTM EMPLOYEES

This job description reflects the present requirements of the post but may be altered at any time in the future, as duties and responsibilities change and/or develop providing there is full consultation with the post-holder.

The post-holder will carry out any other duties, tasks or responsibilities as reasonably requested by the Head of Laboratory Management or Unit Director. The post holder will be responsible and accountable for ensuring all School policies, procedures, regulations and employment legislative requirements are adhered to including equality and diversity and health and safety.



This job description is not a definitive or exhaustive list of responsibilities but identifies the key responsibilities and tasks of the post holder. The specific objectives of the post-holder will be subject to review as part of the individual performance review (appraisal) process.

CANDIDATE REQUIREMENTS

The post holder will be expected to work within the laboratory management team to provide professional and technical expertise to manage Unit investment in Vector Biology and Malaria research and to ensure high quality support research with vector-biology components undertaken in the Unit. The post holder will oversee administrative support for the day-to-day running of the laboratories.

The position is based at the research facility in Fajara but with wider management of entomology laboratory facilities at Basse and Wali Kunda.



PERSON SPECIFICATION

Qualifications

The successful candidate should have:	Essential/ Desirable	Tested by*
A PhD qualification in a relevant subject	Essential	A

Background, Experience & Knowledge

The successful candidate should have:		
Significant experience working in a medical research laboratory environment.	Essential	A,I
Experience in a senior laboratory management role.	Essential	A,I
Experience running entomology laboratory facilities.	Essential	A,I
Significant experience in vector biology with expertise in arthropods that transmit human and/or zoonotic pathogens.	Essential	A,I
Experience in using immunological techniques including ELISA .	Essential	A,I
Knowledge of vector borne diseases and working with infectious human samples.	Essential	A,I
Experience in training, teaching and demonstrating skills and techniques in entomology.	Essential	A,I
Ability to communicate effectively with researchers at all levels in an interdisciplinary environment.	Essential	A,I
Proven organisational skills and ability to plan ahead, set priorities and work to deadlines.	Essential	A,I
Ability to use own initiative and work independently and as part of an active research team as required.	Essential	A,I
Ability and willingness to adapt to changing timetables or work patterns as dictated by changing circumstances	Essential	A,I
Experience in the compliant and effective use of biological samples including pathogens and human tissue.	Essential	A,I
Sound up-to-date understanding of Health and Safety regulations and its application in a modern laboratory.	Essential	A,I
Previous experience of working in capacity development in a low or middle income country.	Desirable	A,I
Record of relevant scientific publications	Desirable	A,I



SALARY AND CONDITIONS OF APPOINTMENT

This post is fixed term until 31 March 2025 and full-time, 35 hours per week (1.0 FTE). The salary will be on the professional salary scale, Grade 7 range for the post is from £47,405 to £54,267 per annum. The post will be subject to the LSHTM terms and conditions of service. Annual leave entitlement is 30 working days per year, pro rata for part time staff. In addition to this there are discretionary "Wellbeing Days". Membership of the Pension Scheme is available.

Applications should be made on-line via our website at <http://jobs.lshtm.ac.uk>. Applications should also include the names and email contacts of 2 referees who can be contacted immediately if shortlisted. Online applications will be accepted by the automated system until 10pm of the closing date. Any queries regarding the application process may be addressed to jobs@lshtm.ac.uk.

The supporting statement section should set out how your qualifications, experience and training meet **each** of the selection criteria. Please provide one or more paragraphs addressing each criterion. The supporting statement is an essential part of the selection process and thus a failure to provide this information will mean that the application will not be considered. An answer to any of the criteria such as "Please see attached CV" will not be considered acceptable.

Please note that if you are shortlisted and are unable to attend on the interview date it may not be possible to offer you an alternative date.

ASYLUM AND IMMIGRATION STATEMENT

This post is based overseas and candidates will be required to email a copy of their passport (and visa if applicable) to HR prior to their interview and if appointed will be asked to send a notarised copy of their passport prior to their start date.

Applicants will be required to have the right to work in the country in which the post is based (or be eligible to apply for a suitable work visa).