



JOB DESCRIPTION AND PERSON SPECIFICATION

POST:	Flow Cytometry & Immunology Facility Manager
DIVISION/DEPT/UNIT:	MRCG at LSHTM
GRADE:	Grade 7 (Professional Services Scale)
LOCATION:	The Gambia
TYPE	Full-time, 3 years fixed term

GENERAL INFORMATION

ABOUT THE SCHOOL

The London School of Hygiene & Tropical Medicine is a world-leading centre for research and postgraduate 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.

Founded in 1899, the School has expanded in recent years at its two main sites on Keppel Street and Tavistock Place. Our staff, students and alumni work in more than 150 countries in government, academia, international agencies and health services.

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.

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.

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 Centres, Universities and National Academies, the Association of Schools of Public Health in the European Region, and the Consortium of Universities for Global Health.

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 Masters 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 70,000 participants globally.

LSHTM performs strongly in various global university league tables. In the 2019 CWTS Leiden Ranking LSHTM is ranked the UK's top university for the proportion of academic research with women listed as authors, first in Europe for publishing open access research, and first in Europe and eighth in the world for research impact in sciences (for the proportion of its total publications ranking in the top 10% of most cited research).

In the US News Best Global Universities Ranking 2019, we ranked ninth in the UK overall and 13th in the world in the fields of social sciences and public health. We ranked 27th for medicine in the 2019 QS World University Rankings.

In 2017, the inaugural Centre 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.

We seek to foster and sustain a creative and supportive working environment based upon an ethos of respect and rigorous scientific enquiry. We embrace and value the diversity of our staff and student population and seek to promote equality as an essential element in contribution to improving health worldwide.

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 1400 staff.

THE ROLE

The Unit is seeking a highly skilled and enthusiastic Flow Cytometry and Immunology Facility manager:

To provide professional, effective, and efficient management, technical and administrative service for the Flow Cytometry and Immunology facility ensuring high quality support to Unit scientific research. The post holder will have direct responsibility for the day-to-day running and maintenance of complex equipment to ensure a comprehensive, high quality service to users and would be expected to provide specialist technical expertise in the field of flow cytometry and in other aspects of immunological analysis including ELISA, ELISpot and luminex.

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 flow cytometry facility is central to the Immunology Platform and the postholder is expected apply scientific knowledge, skill, and expertise at the highest professional level to train, oversee and advise users on the analysis and interpretation of results of flow cytometry assays. Our current flow cytometry suite includes three analyzers: a LSRFortessa, FACSCelesta and a FACSymphony together with a FACS sorter (FACS Melody) and two Accuris (all from Becton-Dickinson).

The post holder will ensure that all users of the facility receive appropriate training, advice, and guidance in the use of flow cytometry equipment and applications and be responsible for the development of training courses for users. The role will also provide long-term strategic development for the facility and represent the Immunology facility at local, national, and international meetings, as required.

KEY RESPONSIBILITIES

The post-holder will perform the following duties:

Technical:

- Provide up-to-date technical expertise, advice, and support to a very high standard in flow cytometry human antibody panels and techniques.
- Deliver a high-quality cell sorting service, which may require flexible working.
- Be willing to investigate and learn about novel applications and keep up to date with developments in the field of flow cytometry through conferences and workshops and interaction with other experts.
- Contribute to the preparation of budgets for grant applications, grant reports and scientific publications – this will involve acting as a resource to advice scientists on the set up, 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 scientific staff to provide laboratory support for immunology and serology research and service undertaken in the Unit
- Have management responsibility for all aspects of the Flow Cytometry and Immunology facility and have day-to-day responsibilities for the co-ordination and supervision of the facility.
- Responsible for the future planning and development of the facility in line with Unit scientific strategy.

- Ensure that flow cytometry machines are maintained in optimum working order through regular calibration and testing in collaboration with the biomedical services department.
- Ensure that the users of the facility are kept up to date with changes, including developing and maintaining the facility's website and booking system.

Training:

- Train users in flow cytometry panel design, sample preparation, acquisition, and analytical software (FACSDiva and FlowJo).
- Develop and deliver training to keep users aware of new developments in the field.
- Be responsible for updating software packages and upgrades, informing, and instructing users of changes.
- Train and assess new users through a practical competence test and evaluation.

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 flow cytometry 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 Flow Cytometry and other cutting-edge Immunological research technologies and to ensure high quality support to Unit Immunology research. Whilst the primary focus would be the provision of technical expertise and service for the conduct of Unit research, the post holder will oversee administrative support for the day-to-day running of the facility with support from the laboratory manager. Experience of conducting training in flow cytometry and overseeing an active flow cytometry facility would be required.

The position is based at the research facility in Fajara and the successful candidate will be employed by LSHTM on UK Contract terms and conditions with accommodation provision, annual flights home and relocation support and other benefits including excellent holiday entitlement.

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:		
	Experience running a flow cytometry facility.	Essential	A,I
	Experience in flow cytometry acquisition (Becton Dickinson instruments preferred), cell sorting, methods development, analysis, software upgrades, instrument troubleshooting and development.	Essential	A,I
	Experience in training, teaching and demonstrating skills and techniques in flow cytometry.	Essential	A,I
	Experience in cell sorting	Desirable	A,I
	Experience of working in an LMIC setting	Desirable	A,I
	Experience of managing a flow cytometry facility	Desirable	A,I
	Experience in using other immunological techniques including ELISA, ELISpot and Luminex	Desirable	A,I
	Knowledge of immunology and working with infectious human samples.	Essential	A,I
	Knowledge in designing and optimizing flow cytometry antibody panels.	Essential	A,I
	Knowledge of handling and analyzing multi-parameter analysis (up to 30 colours) with FACSDiva, FlowJo and SPICE/PESTLE software.	Essential	A,I
	Ability to communicate effectively with researchers at all levels in an interdisciplinary environment.	Essential	A,I
	Proven problem-solving skills, particularly in relation to operating cytometry machines and in interpreting flow cytometry data.	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
	Sound up-to-date understanding of Health and Safety regulations and its application in a modern laboratory.	Essential	A,I
	Record of relevant scientific publications	Desirable	A,I

SALARY AND CONDITIONS OF APPOINTMENT

The post is a 3-year fixed term full-time role. The salary range for the post is from £46,704 to £53,465 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 "Director's 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. Please quote reference **MRC-MRC-2021-04**.

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).