

JOB DESCRIPTION



Job Title: Advanced Biomedical Scientist
Department: Infectious & Tropical Disease Central/Teaching and Diagnostic Unit
Faculty/Professional Service: Infectious and Tropical Diseases (ITD)
Location: LSHTM, Keppel Street London
Reports to: Claire Rogers, Head of Teaching and Diagnostic Unit
Responsible for: Medical Laboratory Assistant/Associate Practitioner
Full Time/Part Time/Casual: Full Time
Hours (<i>if less than full time</i>):
Grade: Grade 6
Overall Purpose of the job: This post is directly responsible to the Head of Teaching and Diagnostic Unit (PSP8/Principal BMS), and duties relate to the diagnostic laboratory (UKHSA Malaria Reference Laboratory and LSHTM Diagnostic Parasitology Laboratory) and teaching

General Information

The London School of Hygiene & Tropical Medicine (LSHTM) is one of the world's leading public health universities.

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.

Staff and students are committed to helping create a more healthy, sustainable and equitable world for everyone, because we believe our shared future depends on our shared health.

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.

To find out more please visit our [Introducing LSHTM page](#).

Our Values

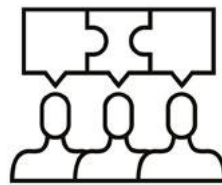
Our values establish how we aspire to achieve our mission both now and in the future - demonstrating what it means to work and study at LSHTM. Please visit our [LSHTM Values page](#) for further information.



**Act with
integrity**



**Embrace
difference**



**Work
together**



**Create
impact**

FACULTY/DEPARTMENT INFORMATION

Faculty of Infectious and Tropical Diseases

The vision of the Faculty of Infectious and Tropical Diseases is to deliver outstanding contributions to reduce the evolving disease burden related to infections and global health inequity. The range of disciplines represented is broad, including all laboratory-based research at LSHTM's London campus, and encompassing a "bench to boardroom" portfolio with research approaches from fundamental biology through clinical research to impact on policy and practice. It is headed by Alison Grant, who is **Professor of International Health**. The spectrum of diseases studied is wide; our main research interests include vector-borne diseases especially malaria; respiratory diseases including tuberculosis and bacterial pneumonia; enteric infections; HIV and other sexually transmitted infections; neglected tropical diseases including trachoma, leishmaniasis, schistosomiasis and trypanosomiasis; vaccine development and evaluation; and the prevention of blindness. The Faculty is organised into three research departments comprising: Clinical Research, Disease Control, and Infection Biology. Interdisciplinary research is a major strength, and we encourage collaboration between scientists in different research areas. The Faculty has close links with colleagues and collaborators in more than 100 countries. Our teaching programme includes MSc courses which are module in structure, both intensive taught in London and by distance learning; a variety of short courses and an [active doctoral programme](#) (PhD and DrPH). For further information on the Faculty see [here](#).

Department of Clinical Research (Head: Professor David Moore)

The Department of Clinical Research addresses infectious diseases of major public health importance in developing countries. Activities include trials of new therapies, vaccines and educational interventions; the development of new diagnostic tests; studies to elucidate the immunological and molecular correlates of pathogenesis and protective immunity, and to identify genetic polymorphisms conferring protection or susceptibility to infectious diseases; health services research which aims to identify the most efficient and cost-effective way to deliver health care; and health policy analysis. In addition to our many overseas collaborations, we have close links with the Hospital for Tropical Diseases, in purpose-built accommodation on the main UCL Hospital campus, five minutes walk from the School. The Wellcome Trust Bloomsbury Centre for Global Health Research is based in the Department, and supports Clinical Fellows at all levels, most of whom are based overseas.

The Department's main research interests include HIV and related infections; in particular, the interaction between HIV infection and tuberculosis, and other sexually

transmitted diseases; malaria; trachoma; leprosy; diagnostic tests for resource limited settings; eye health; disability; and travel medicine.

Department of Disease Control (Head: Professor Mary Cameron)

The Department of Disease Control is a multidisciplinary, cross-cutting department, operating in a global context and committed to excellence in research, innovation, learning and engagement. We have an outstanding reputation for internationally competitive research and teaching excellence, with demonstrable impact in the control of diseases, worldwide. Our diverse scientific staff comprises entomologists, epidemiologists, mathematical modellers, geographers, public health engineers, hygiene specialists, social scientists, engineers, statisticians and clinical scientists. We also have a strong team of project administrators, coordinators, managers, and communication specialists, who provide expert support to our research programmes in the UK and overseas. We are a highly collaborative Department, with extensive partnerships and collaborations with researchers from many countries and organisations around the world, as well as internally, with multiple School Departments. Our work cuts across several School Centres such as the Vaccine Centre, the Malaria Centre, Centre for Evaluation and the MARCH Centre.

Our staff play influential roles as consultants and key advisors to organisations including the WHO, CDC, Malaria Consortium, Public Health England, Department of Health, DFID, Bill and Melinda Gates Foundation, the Royal Society, Research Councils, Academy of Medical Sciences, the World Bank, Governments and private sector manufacturers and innovators, amongst many others. Our range of expertise provides us with an impressive set of tools for addressing the control of diseases that are insect-borne, water-borne or associated with poor hygiene – mostly in low- and middle-income countries. Much of our research is directed at current health policy issues and addressing gaps between policy and practice.

Department of Infection Biology (Head: Professor Martin Hibberd)

The Department of Infection Biology brings together pathogen molecular biology and immunology and infection research across the School. The Department benefits from state of the art facilities and strong collaborations, many of which are with partners in disease endemic countries.

We study the molecular biology and genetics of pathogens and interaction with their hosts, to improve understanding and control of infectious diseases and to understand the complex and dynamic ways by which pathogens modulate virulence and interact with the human host. Such a holistic approach will vastly increase the scope for the rationale of design of long-term intervention strategies to reduce the burden of infectious disease. In recent years such a mission has been significantly enhanced by the availability of whole genome sequences. The Department is involved in several pathogen genome projects, and post genome studies which facilitate understanding of complex parasites. The interpretation and exploitation of this basic information is the platform for numerous new avenues of research on pathogenesis, epidemiology and the evolution of virulence.

Our research in immunology and infection centres on analysis of the host response to infection at the molecular, cellular and population levels. The goals are to develop a greater understanding of basic mechanisms of immunological protection versus pathology, and to apply this knowledge to the development of immunological interventions and the identification of correlates of immune status. Our work involves application of state of the art cellular and molecular approaches to the in vitro

analysis of pathogen-host cell interactions, to in vivo studies in models, and to the study of immunity at the population level in disease endemic areas. We also conduct translational research for the development and evaluation of diagnostic approaches to identify disease foci and monitor drug resistance

Teaching

LSHTM offers 20 one year full-time taught programmes leading to the Master of Science (MSc) degree of the University of London and the Diploma of the London School of Hygiene and Tropical Medicine (DLSHTM). The Faculty of Infectious and Tropical Diseases runs or contributes substantially to nine of these MSc programmes. In addition, the Faculty is responsible for the three-month Professional Diploma in Tropical Medicine and Hygiene and the Professional Diploma in Tropical Nursing. The Faculty also offers a range of specialist short courses lasting usually one or two weeks. LSHTM offers a further six MSc programmes by Distance Learning, with the Faculty responsible for the MSc Infectious Diseases.

Research Training

The School offers two doctoral training programmes. The MPhil/PhD degrees are designed for those who wish to go on to a full time research career. The DrPH is directed towards those who expect their careers to be more in the practice of public health.

Teaching and Diagnostic Unit

The Teaching and Diagnostic Unit (TDU) offers a referral service for the identification of parasites from human and primate clinical specimens and provides teaching and practical training in Diagnostic Parasitology.

In addition to the diagnostic work, the TDU is responsible for the provision of parasitology, microbiology and entomology practical teaching for the Faculty's Masters and short courses.

Diagnostic Service

The TDU comprises the LSHTM Diagnostic Parasitology Laboratory (DPL) and UK Health Security Agency (UKHSA) Malaria Reference Laboratory (MRL). The laboratories are accredited to ISO 15189 and provide both a reference and a primary diagnostic service to hospitals, private laboratories and clinics in the UK. They also receive specimens and requests for advice from a number of overseas hospitals and clinics, often from LSHTM alumni. The DPL additionally offers a diagnostic service for zoos and primate sanctuaries.

Both diagnostic laboratories perform a wide range of tests ranging from morphological diagnosis by microscopy to molecular diagnosis.

The MRL performs approximately 2000 confirmations and diagnoses annually using microscopical and molecular diagnostic methods and, in addition, carries out molecular identification and drug resistance surveillance on blood samples submitted for malaria diagnosis.

The DPL performs approximately 3000 diagnoses on a wide range of specimens and parasites annually. Alongside the routine diagnosis of faecal, blood and tissue parasites, the DPL provides an Acanthamoeba Keratitis Reference service, using microscopy, culture and PCR for the investigation of Acanthamoeba keratitis.

The Entomology Reference Service performs approximately 150 identifications of medically important insects, ticks and mites annually. We also provide information on the diseases associated with each specimen and other impacts on human health.

Staff are also involved in research and developmental work on new and improved diagnostic methods.

Teaching and Training

The TDU is responsible for the provision of parasitology, microbiology and entomology practical teaching for the Faculty's Masters and Diploma courses including both the Professional Diploma in Tropical Medicine and Hygiene and the Professional Diploma in Tropical Nursing.

Senior staff give lectures in areas of expertise to hospital pathology laboratories and at national and international meetings as well as to in-house students.

The Unit runs two successful diagnostic short courses each year. The Laboratory Diagnosis of Parasites and Laboratory Diagnosis of Malaria courses attract clinical and biomedical staff from both UK and overseas pathology laboratories.

Staff in the TDU also give advice and training on a one-to-one basis to Biomedical Scientists, Clinical Scientists and clinical staff and to LSHTM research staff and MSc students undertaking research projects.

Main Duties and Responsibilities

1. LABORATORY DIAGNOSTIC SERVICES

- 1.1 To take responsibility for the day to day running of the non-molecular diagnostic laboratory including stock control, maintenance and servicing of equipment
- 1.2 To carry out appropriate testing and processing of specimens submitted to the laboratory for the diagnosis of enteric, ocular and blood parasites.
- 1.3 To carry out appropriate identification and interpretation of specimens submitted to the laboratory for the diagnosis of enteric, ocular and blood parasites.
- 1.4 To prepare, verify and sign all reports on behalf of the Director and the Head of Teaching and Diagnostic Unit (TDU), to interpret reports issued and to provide non-contentious advice on their clinical significance, as required
- 1.5 To have day to day responsibility for the practical training of new and junior staff in the laboratory, ensuring training complies with UKAS standards as administered and implemented by the TDU Training Officer.
- 1.6 Line management of junior Diagnostic Laboratory team members as required.
- 1.7 To assist the Training Officer with competency testing of staff as required by UKAS standards and as implemented by the Training Officer
- 1.8 Supervision of all staff working in the Reference Laboratory to ensure safe laboratory working and compliance with all relevant risk assessments and codes of practice
- 1.9 To facilitate the UKAS accreditation of the laboratory and ensure its correct implementation and maintenance for the future.
- 1.10 To assist the Quality Manager in audit of the Quality Management System.
- 1.11 Take responsibility for IQA testing within the diagnostic laboratories
- 1.12 To take responsibility for invoicing for charged diagnoses and production of clinical reports.
- 1.13 To assist in the training of outside NHS/UKHSA laboratory staff and clinicians who attend the laboratory for update/special training in diagnostic methods and identification of parasites.
- 1.14 To assist in the development of new and novel diagnostic techniques for blood and enteric parasites and in the evaluation of new commercial diagnostic kits.
- 1.15 To assist with research projects related to the diagnostic work of the department when appropriate.
- 1.16 To have day to day responsibility for overseeing the disposal of discard pots, clinical and other waste, and sterilization of laboratory equipment and media from the diagnostic parasitology and 3rd floor teaching laboratories.

1.17 To take on an additional responsibility to specifically support one of the following functions:

- Health and Safety
- Quality Management
- Training and Development

2. OTHER RESPONSIBILITIES

2.1 To act as technical demonstrator in practical classes as required by the Head of Teaching and Diagnostic Unit

2.2 To show evidence of Continuing Professional Development (CPD).

2.3 To participate in annual Performance Development Review (PDR)

2.4 Any other responsibilities or duties which may be appropriately allocated by the Head of Teaching and Diagnostic Unit

Additional Information

N/A

Generic duties and responsibilities of all 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 consultation with the post-holder.

The post-holder will carry out any other duties, tasks or responsibilities as reasonably requested by the line manager, Dean of Faculty, Head of Department or Head of Professional Service.

The post holder will be responsible and accountable for ensuring all LSHTM 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 and Development Review (PDR).

PERSON SPECIFICATION

This form lists the essential and desirable requirements needed by the post holder to be able to perform the job effectively.

Applicants will be shortlisted solely on the extent to which they meet these requirements.

Competency	Evidence	E / D
Education, Qualifications and Training	<ul style="list-style-type: none"> • MSc in a related discipline or Fellowship of the IBMS or demonstrable extensive relevant experience • Registration with the Health and Care Professions Council (HCPC) 	<p style="text-align: center;">E</p> <p style="text-align: center;">E</p>
Experience	<ul style="list-style-type: none"> • Significant post registration experience of working in a UKAS Accredited clinical laboratory • Considerable proven experience in Diagnostic Parasitology • Experience of line management • Experience of a role in Training, Quality Management or Health and Safety in a clinical diagnostic laboratory 	<p style="text-align: center;">E</p> <p style="text-align: center;">E</p> <p style="text-align: center;">D</p> <p style="text-align: center;">D</p>
Knowledge	<ul style="list-style-type: none"> • Advanced specialist knowledge of Diagnostic Parasitology 	<p style="text-align: center;">E</p>
General	<ul style="list-style-type: none"> • Effective communication skills and ability to work both independently and in a team • Proven ability to effectively manage workload of self and team members when the workload is unpredictable and there are competing demands • Good leadership and supervisory skills • Demonstrable evidence of continuing professional development 	<p style="text-align: center;">E</p> <p style="text-align: center;">E</p> <p style="text-align: center;">E</p> <p style="text-align: center;">E</p>

	<ul style="list-style-type: none">• Commitment to LSHTM equity, diversity and inclusion policy and the ability to work harmoniously with colleagues and students of all cultures and background	E
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E-Essential: Requirement without which the job could not be done

D-Desirable: Requirements that would enable the candidate to perform the job well

Date compiled: June 2024

Salary and Conditions of Appointment

This is a permanent post and full-time 35 hours per week, 1.0 FTE. The post is funded by the Faculty of Infectious and Tropical Diseases and is available from 09 September 2024. The salary will be on the Professional Services salary scale, Grade 6 scale in the range £43,947 - £49,908 per annum (inclusive of London Weighting).

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.

LSHTM has a Hybrid Working Framework, which alongside agreed service requirements, enables teams to work more flexibly (if the role allows), promoting a greater wellbeing and work/life balance.

Application Process

Applications should be made on-line via our [jobs website](#). Applications should also include the names and email contacts of 2 referees who can be contacted immediately if appointed. Online applications will be accepted by the automated system until 10pm of the closing date. We regret that late applications cannot be accepted. 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", "Yes" or "No" will not be considered acceptable and will not be scored.

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

LSHTM will comply with current UKVI legislation, which requires all employees to provide documentary evidence of their legal right to work in this country prior to commencing employment. 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 bring the original documents in to be copied and verified before their start date.

Applications from candidates who require sponsorship to work in the UK will be considered alongside other applications. Applicants who do not currently have the right to work in the UK will have to satisfy UK Visas & Immigration regulations before they can be appointed.

Further information about Sponsorship and eligibility to work in the UK, can be found on the [government immigration rules page](#).