

ASSISTANT PROFESSOR

Job Title:	Assistant Professor
Department:	Infection Biology
Faculty:	Infectious and Tropical Diseases
Location:	Keppel Street, London
FTE:	1.0
Grade:	G7
Accountable to:	Dean of Faculty through the Head of Department Line Manager: Professor José Bengoechea
Job Summary:	<p>Antibiotic resistant infections are one of the global health challenges. Despite significant advancements in understanding the population structure, resistance mechanisms and transmission patterns of these pathogens, a critical gap remains in how they persist and evade host immune responses. These pathogens are fascinating because they have evolved to flourish in our tissues despite the attack of the immune system. Of particular concern are the infections caused by <i>Klebsiella pneumoniae</i> (KP). Nosocomial KP infections are associated with high morbidity and mortality, and there is an increase in the number of community acquired infections worldwide. The post-holder will be a senior member of the team led by Prof Jose Bengoechea to support him to deliver the externally funded research program focusing on dissecting the infection biology of antibiotic-resistant infections, particularly those caused by KP. The post-holder will contribute to establish which host responses are protective and which ones may benefit the microbe, while uncovering the molecular strategies deployed by these pathogens, with a major focus on KP, to avoid our defenses. Additionally, it is expected that the post-holder will develop an original multidisciplinary research program interfacing molecular and cellular microbiology, biochemistry, and immunology and leveraging in vitro and in vivo models of research to deep our understanding of the infection biology of Gran negative respiratory infections.</p>

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 to improve 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

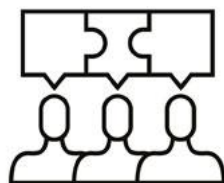
Our values establish how we aspire to achieve our mission both now and in the future - demonstrating what it means to work and study at LSHTM. Please visit our [LSHTM Values page](#) for further information.



**Act with
integrity**



**Embrace
difference**



**Work
together**



**Create
impact**

Faculty 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 José Bengoechea, who is Professor in Microbiology and Infectious Diseases. 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 Dave 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.

The portfolio of duties outlined below will vary in accordance with the academic expectations of the role, which may be varied from time to time, and agreed at your annual Performance and Development Review (PDR).

Job Description

Main Activities and Responsibilities

Knowledge Generation

1. To deliver high quality research & scholarship in your field of study, individually and in collaboration with others, by applying for external grants/fellowships from good¹ research funders, publishing peer-reviewed outputs as lead and co-author; and evaluating teaching practice;
2. To contribute to doctoral student supervision;
3. To manage research grants and promote and ensure compliance with good practice in relation to the conduct of research, the ethics policy, and other relevant LSHTM policies;
4. To support the development of early-career researchers;
5. Contribute to the generation of preliminary data for major grant proposals, and to address comments raised by reviewers of the team's publications.
6. Contribute to develop and maintain new infection models of translational relevance to dissect the interface between pathogens and the immune system.
7. Explore other opportunities for research that may arise during the period of employment, if appropriate leading or supporting funding applications and resulting projects

Education

1. To deliver high quality, inclusive, research-informed teaching and assessment in relation to your specific subject and within the broader area covered by your department/disciplinary field;
2. To contribute to the improvement of the quality and inclusivity of LSHTM's education, by participating in the development of new and updated learning and, teaching materials or approaches, and/or improving assessment practices, and/or improving aspects of the student experience;
3. To support educational leadership and management by active participation in selected aspects of the curriculum, as appropriate, and by collaborating with professional services staff, centrally and in the Faculty, in carrying out relevant administrative processes;
4. To contribute to the research degree student supervision of the team.

¹ Good research funders are: Research Councils; Government Departments; NIHR; National and overseas charities recognised by HEFCE for QR; Overseas research councils or equivalent including NIH; EU; other agencies (eg NGOs, commercial companies) supporting commissioned research that is consistent with LSHTM's mission and meets LSHTM's cost recovery targets

Internal Contribution

1. To undertake activities that support the Department, Faculty or MRC Unit or LSHTM, including Committee membership;
2. To reflect LSHTM's EDI goals in your work and behaviour;
3. To participate in own PDR and undertake those of others;
4. To support and participate in outreach activities of the team as well as those of the Department, Faculty or LSHTM.

External Contribution

1. To demonstrate good external citizenship by contributing to the external academic community;
2. To promote knowledge translation and enterprise by participating in networks and activities that disseminate research-based knowledge beyond academia;
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Professional Development and Training

1. To keep up-to-date with the latest research/thinking in your academic field and with changes to pedagogic practice within LSHTM and more generally;
2. To undertake and successfully complete the mandatory training required by LSHTM appropriate to the role;
3. To undertake specific training (e.g. single-cell analysis) as required by the research program.

General

All academic staff are free within the law to question and test received wisdom, and put forward new ideas and controversial or unpopular opinions, to enable LSHTM to engage in research and promote learning to the highest possible standards.

All staff at LSHTM are also expected to:

1. Act at all times in LSHTM's best interests;
2. Treat staff, students and visitors with courtesy and respect at all times;
3. Comply fully with LSHTM policies, procedures and administrative processes relevant to the role including when acting as Principal Investigator, accepting academic, managerial, financing and ethical responsibility for a project;
4. Uphold and support LSHTM's values (as set out in the LSHTM Strategy);
5. Act as ambassadors for LSHTM when hosting visitors or attending external events;

Academic Expectations

All academic roles have a statement of academic expectations attached to each level. Please ensure that these have been read and understood. For further information please

refer to the [Academic Expectations page](#).

The above list of duties is not exclusive or exhaustive and the role holder will be required to undertake such tasks as may reasonably be expected within the scope and grading of the role.

Role descriptions should be regularly reviewed to ensure they are an accurate representation of the role.

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.

Essential criteria:

1. A doctoral degree in a relevant topic
2. Expertise in the infection biology of Gram-negative bacteria causing respiratory infections.
3. Contributions as lead and co-author in peer-reviewed outputs, as expected by the subject area/discipline in terms of types and volume of output; significant contributions to at least four outputs within the most recent 5 years which are at least internationally excellent²
4. Proven ability to work independently, as well as collaboratively as part of a research team, and to meet research deadlines
5. An understanding of the strategies for improving equity and inclusion in research and or learning and teaching
6. Evidence of excellent interpersonal skills, including ability to communicate effectively both orally and in writing
7. Evidence of good organizational skills, including effective time management
8. Extensive tissue culture experience (epithelial cells, human and mouse macrophages) within the most recent 3 years accredited by publications.
9. Experience in cellular microbiology focusing on innate signaling and inflammation.
10. Experience in developing and using high-throughput assays to investigate the host-pathogen interface.
11. Experience on knocking-down genes by siRNA/shRNA and knocking-out genes by CRISPR/Cas9 in epithelial cells, and macrophages

Desirable criteria:

1. Experience of generating research income such as fellowships, and/or small project grants, and/or supporting grant applications of others
2. Some experience of supervising and supporting junior researchers and/or research degree students, and non-academic staff
3. Some experience of undertaking teaching and assessment
4. Demonstrable evidence of promoting inclusion in research and or learning and teaching
5. A teaching qualification
6. Personal animal license.

² i.e. of a quality that would be rated highly in assessments of research quality such as those done by UK government, and in peer review processes used by funders

7. Experience working with yeast and fungi to investigate bacterial proteins.
8. Demonstrable experience on engagement with users in order to accelerate the translation of research outputs into impacts.

Salary and Conditions of Appointment

The post is fixed term up to 31 January 2030 and full-time 1 FTE. The salary will be on the Academic Grade 7 scale in the range £52,199 to £59,623 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](#).

Date amended: Jan 2024