

RESEARCH ASSISTANT OR RESEARCH FELLOW



Job Title:	Research Assistant or Research Fellow
Department:	Infectious Disease Epidemiology & Dynamics
Faculty:	Epidemiology & population health
Location:	Keppel Street, London
FTE:	1.0
Grade:	Research Assistant Grade 5 or Research Fellow Grade 6
Accountable to:	Head of Department through Principal Investigator
Job Summary:	<p>Applications are invited for a data science and modelling researcher to join an international team working to develop a better evidence base to intervene in the control of tuberculosis (TB). The post will be based within the Centre for the Mathematical Modelling of Infectious Diseases, the AMR Centre and the TB Modelling Group at the London School of Hygiene and Tropical Medicine. The post holder's primary role will be to focus on drug-resistant (DR-)TB, using data science and mathematical modelling methods to understand burden and trends, inform optimization of new regimens and the intersection of TB with other antimicrobial resistant (AMR) bacteria. The postholder will work with expert researchers in India, Indonesia, Brazil and South Africa to develop statistical and mathematical models to explore the key drivers for the differences in patterns of DR-TB by sub-population and geography.</p> <p>The post is funded by the Wellcome Trust and would form part of the Work Package led by co-PI Dr Gwen Knight within a wider exciting grant also looking at vaccines and intervention comparison modelling. Research undertaken by the postholder will aim to fulfil the analysis research outlined in the DR-TB work package. The postholder will be based at LSHTM and be responsible to Dr Knight, but will work closely with researchers in India, Indonesia, Brazil and South Africa.</p> <p>The successful applicant will have a good quantitative background with qualifications and experience in data science, statistics, mathematical modelling, epidemiology, bioinformatics or another relevant discipline with a strong quantitative component. Candidates should also have experience or knowledge of global public health research, ideally related to tuberculosis or AMR. This is a great opportunity for those seeking to contribute to a growing public health problem using a range of international data sets as well to gain skills in mathematical modelling. Ongoing career development and support within Dr Knight's group and the TB Modelling group will generate opportunities for future fellowship applications.</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

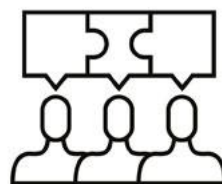
Our values establish how we aspire to achieve our mission both now and in the future - demonstrating what it means to work and study at LSHTM. Please visit our [LSHTM Values page](#) for further information.



**Act with
integrity**



**Embrace
difference**



**Work
together**



**Create
impact**

Faculty Information

The Faculty of Epidemiology & Population Health (EPH) houses a large group of epidemiologists, demographers, statisticians and nutritionists working on issues of major public health importance in the UK and globally. EPH has approximately 400 staff members organised into four research departments.

- Department of Infectious Disease Epidemiology
- Department of Medical Statistics
- Department of Non-communicable Disease Epidemiology
- Department of Population Health

The Faculty has a teaching programme consisting of ten MSc courses: Epidemiology, Demography and Health, Medical Statistics, Public Health for Development (run jointly with the Faculties of Infectious & Tropical Diseases and Public Health & Policy), Nutrition for Global Health, Reproductive & Sexual Health Research, Veterinary Epidemiology (run jointly with the Royal Veterinary College), Global Mental Health (run jointly with Kings College London - Institute of Psychiatry) and the Distance Learning courses in Epidemiology, Clinical Trials and Demography in Health. The Faculty also has approximately 120 research students studying for an MPhil, PhD or DrPH degree.

The Dean of Faculty is Professor Elizabeth Allen.

Department Information

Department of Infectious Disease Epidemiology & Dynamics (IDED)

The Department of Infectious Disease Epidemiology & Dynamics conducts research on the epidemiology and control of infectious diseases of public health importance. Work is carried out in low-, middle- and high-income countries, including the United Kingdom, in close collaboration with partners in each country. The Department has three groups:

- The infectious disease modelling group, which is linked to the [Centre for Mathematical Modelling of Infectious Diseases \(CMMID\)](#).
- The [UK Public Health Rapid Support Team](#), a specialist multidisciplinary team across LSHTM and the UK Health Security Agency (UKHSA) that offers low and middle income countries around the world support to prepare for and respond to disease outbreaks, through field collaboration, research and capacity-strengthening activities.
- The [Vaccine Confidence Project](#), which conducts global research, investigating the roots, trends over time and impacts of vaccine confidence at regional, national and sub-national levels.

The Department works closely with the Department of Infectious Disease Epidemiology & International Health.

The Department Heads are Professor Gwenda Hughes and Associate Professor Oli Brady.

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

Research Assistant

1. To undertake high quality research as directed by your line manager, including contributing to drafting grant proposals and peer-reviewed and other outputs and evaluating teaching practice;
2. To support the administration of projects linked to your employment, helping ensure compliance with good practice in relation to the conduct of research, the ethics policy, and other relevant LSHTM policies;
3. To develop statistical models to enhance international drug-resistant TB (DR-TB) data to quantify the burden and drivers of resistance in different sub-populations
4. To construct mathematical models to explore the impact of new regimens for DR-TB and quantify future intervention options.
5. To collaborate internationally with project partners to support country-specific analysis and modelling applications
6. To work with international partners and stakeholders to include DR-TB within wider AMR discussions
7. To generate efficient and shareable model code in R

Research Fellow

1. To undertake high quality research & scholarship, including contributing to drafting major grant proposals and/or leading on drafting small grant proposals and evaluating teaching practice;
2. To contribute to peer-reviewed publications and other outputs, including as lead author;
3. To make a contribution to doctoral student supervision, as appropriate to qualifications and experience;
4. To manage small grants or elements of larger grants, ensuring compliance with good practice in relation to the conduct of research, the ethics policy and other relevant LSHTM policies;
5. To develop statistical models to enhance international drug-resistant TB (DR-TB) data to quantify the burden and drivers of resistance in different sub-populations
6. To construct mathematical models to explore the impact of new regimens for DR-TB and quantify future intervention options.
7. To collaborate internationally with project partners to support country-specific analysis and modelling applications
8. To work with international partners and stakeholders to include DR-TB within wider AMR discussions
9. To generate efficient and shareable model code in R

Education

Research Assistant

1. To participate in some aspects of LSHTM's Education Programme or educational outreach activities;

Research Fellow

1. To contribute to the delivery of high quality, inclusive, research-informed teaching and assessment in relation to your specific subject and within the broader area covered by your department and disciplinary field;
2. To contribute to the improvement of the quality of LSHTM's education, by participating in the development of new and updated learning and teaching materials or approaches;

Internal Contribution

Research Assistant

1. To undertake activities that support the Department, Faculty, MRC Unit or LSHTM;
2. To reflect LSHTM's EDI goals in your work and behaviour;
3. To participate in LSHTM's PDR process;

Research Fellow

1. To undertake activities that support the Department, Faculty, MRC Unit or LSHTM;
2. To reflect LSHTM's EDI goals in your work and behaviour;
3. To participate in LSHTM's PDR process
4. To contribute to the activities of the Centre for the Mathematical Modelling of Infectious diseases and the AMR Centre.

External Contribution

Research Assistant

1. To demonstrate good external citizenship by supporting the external academic and practice communities;

Research Fellow

1. To demonstrate good external citizenship by contributing to learned society/conference events, journal and grant reviews etc...

Professional Development and Training

Research Assistant

Research Fellow

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| <ol style="list-style-type: none"> 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. For lab-based disciplines: where the length and nature of the position permits, to apply for and, if accepted, undertake a doctoral degree (if not already acquired); 3. To undertake and successfully complete the mandatory training required by LSHTM as appropriate to the role; | <ol style="list-style-type: none"> 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. Where the length and nature of the position permits, to apply for and, if accepted, undertake a doctoral degree (if not already acquired); 3. To undertake and successfully complete the mandatory training required by LSHTM appropriate to the role; |
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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:

Research Assistant

1. A relevant first degree in a quantitative discipline such as mathematics, epidemiology or statistics
2. Relevant quantitative public health skills
3. Evidence of good organisational skills, including effective time management.
4. Proven ability to work independently, as well as collaboratively, as part of a research team.
5. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.
6. Knowledge of statistical methods, preferably Bayesian data analysis
7. Knowledge of developing infectious disease transmission models
8. Working knowledge of the programming language R
9. Demonstratable interest in tuberculosis

Research Fellow

1. A postgraduate degree, ideally a doctoral degree, in a relevant topic
2. Relevant experience of quantitative public health research, preferably in the context of infectious diseases or antibiotic resistance
3. Contributions to written output, preferably peer-reviewed, as expected by the subject area/discipline in terms of types and volume of outputs.
4. Proven ability to work independently, as well as collaboratively as part of a research team, and proven ability to meet research deadlines.
5. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing
6. Evidence of good organizational skills, including effective time management
7. Experience of applying statistical methods and preferably, Bayesian data analysis
8. Experience of developing and fitting infectious disease transmission models
9. Proficiency in computational skills for data processing and statistical analysis and fluency in the programming language R
10. Relevant experience of working in an (international) team, coordinating analysis and model sharing and results between

institutions and with policymakers or external stakeholders

11. Demonstratable interest in tuberculosis

Desirable Criteria

Research Assistant

1. Some experience of teaching
2. Some experience of working on questions around antimicrobial resistance
3. A commitment to open science and code

Research Fellow

1. Some experience of contributing to research grant applications.
2. Some experience of teaching and assessment.
3. Some experience of supervising and supporting junior researchers and/or research degree students, and non-academic staff
4. Some experience of working on questions around antimicrobial resistance
5. A commitment to open science and code

E-Essential: Requirement without which the job could not be done

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

Salary and Conditions of Appointment

The post is fixed term for 2 years with the possibility of extension to 4 years and full-time 35 hours per week, 1.0 FTE. The post is funded by the Wellcome Trust and is available immediately. The salary will be on the Academic scale, Grade 5 scale in the range £39,128 - £44,847 per annum pro rata for Research Assistant and Grade 6 scale in the range £44,847 - £50,808 per annum pro rata for Research Fellow (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: September 2024