

RESEARCH FELLOW



Job Title:	Research Fellow
Department:	Department of Infectious Disease Epidemiology
Faculty:	Epidemiology and Population Health
Location:	London
FTE:	1.0 FTE
Grade:	G6
Accountable to:	Head of Department through Principal Investigator (PI)
Job Summary:	<p>The POLYMOD project was groundbreaking in that, for the first time, it measured epidemiologically relevant contact patterns in the community. The data collected has underpinned mathematical models of close-contact disease transmission in the UK and abroad for many years. However, the data were collected over 15 years ago and contact patterns may well have changed as a consequence of the pandemic. It is therefore imperative that these estimates are updated to ensure that projections generated by mathematical models are accurate.</p> <p>The post-holder will be expected to work with colleagues to set up and run the POLYMOD2 study. They would be expected to aid with the questionnaire and study design, co-ordinate field work, analyse the data and write-up the results. The post involves survey design and statistical analysis. A knowledge of mathematical modelling would be an advantage.</p> <p>The post-holder will be supervised by Professor John Edmunds as part of the NIHR-funded Health Protection Research Unit in Modelling and Health Economics, in collaboration with UK Health Security Agency (UKHSA) and Imperial College London. They will join a successful and supportive modelling centre at LSHTM working on a range of infections, including influenza, TB and SARS-CoV-2, with scope to develop their own research within the field, in collaboration with colleagues at LSHTM and external partners. It is expected that the project will involve a range of complex and original scientific research that requires a high degree of personal motivation.</p>

General Information

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.

To discover more about LSHTM please click [here](#).

Our Values

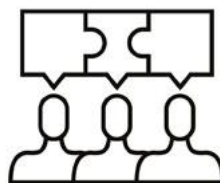
Our values establish how we aspire to achieve our mission both now and in the future - demonstrating what it means to work and study at LSHTM. To find out more please click [here](#).



**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 major issues of importance to public health provision in the UK and globally. EPH employs approximately 560 people in five research departments.

- Department of Infectious Disease Epidemiology & Dynamics
- Department of Infectious Disease Epidemiology & International Health
- Department of Medical Statistics, which includes the Clinical Trials Unit
- Department of Non-communicable Disease Epidemiology
- Department of Population Health

The Faculty has a postgraduate teaching programme including eleven intensive MSc courses: Epidemiology, Demography and Health, Medical Statistics, Health Data Science, Public Health for Development (jointly with Faculties of Infectious & Tropical Diseases and Public Health & Policy), Nutrition for Global Health, Global Mental Health (jointly with Kings College London, Institute of Psychiatry), Reproductive & Sexual Health Research, Sexual & Reproductive Health Policy and Practice (online), Veterinary Epidemiology (run jointly with the Royal Veterinary College) and Climate Change and Planetary Health. There are also three distance Learning MSc courses: 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.

THE DEPARTMENT

Department of Infectious Disease Epidemiology (IDE) conducts research on the epidemiology and control of infectious diseases of public health importance. It also conducts research on maternal and neonatal health. Work is carried out in low-, middle- and high-income countries, including the United Kingdom. Research ranges from ecological studies of variations in disease frequency in different populations, through observational case-control and cohort studies to define risk factors for disease, to randomized controlled trials to test the impact of specific preventive and curative interventions.

IDE is the largest department within LSHTM and for organisational purposes has been split into two departments Department of Infectious Disease Epidemiology & Dynamics and Department of Infectious Disease Epidemiology & International Health. This post will be based in IDE & Dynamics, the Head of Department is Professor Mark Jit.

THE CENTRE

The **Centre for the Mathematical Modelling of Infectious Diseases (CMMID)** is a multidisciplinary grouping of epidemiologists, mathematicians, economists, statisticians and clinicians from across all three faculties of the LSHTM. Research focuses on understanding and predicting the epidemiology of infectious diseases so that more effective control programmes can be devised. Researchers are developing and applying mathematical models to a range of infections including HIV and other sexually transmitted infections, HPV, tuberculosis, hepatitis C, influenza, rotavirus, measles, pneumococcal

disease and COVID-19. More fundamental research includes developing methods to measure underlying contact patterns, efficiently fitting complex mathematical models to data, and the integration of epidemiological models with economic analyses. CMMID is actively engaged in developing links with other modelling groups, including through the NIHR-funded HPRU in Modelling and Economics, which is jointly run with Imperial College, London and the UK Health Security Agency.

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 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 help design social contact studies that will inform mathematical models of disease spread
6. To ensure that the study has appropriate permission and approvals (including ethical approvals)
7. To work with commercial and other partners to ensure that data collection is conducted as planned
8. To clean and analyse the resulting data and write up results
9. Generate efficient and shareable model code
10. Take responsibility for maintaining appropriate scientific collaborations within the School and with partners.

Education

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

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



11. Contribute to the activities of the Centre for Mathematical Modelling of Infectious Diseases.

External Contribution

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

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. 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.

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. The academic expectations can be found [here](#).

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 postgraduate degree, ideally a doctoral degree, in a relevant topic.
2. Relevant experience in epidemiology, statistics, mathematical modelling or another relevant discipline with a strong quantitative component.
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 in analysing data from field studies and/or surveillance, preferably of infectious diseases.

Desirable Criteria

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. A record of relevant publications in good journals.
5. Experience of survey design
6. Experience of running surveys
7. Experience of statistical analysis of large datasets
8. Experience in constructing mathematical models of infectious diseases.
9. Experience in the epidemiology of infectious diseases
10. Experience of developing collaborative and reproducible code, e.g. with GitHub
11. Commitment to open science

Salary and Conditions of Appointment

The post is fixed term until 31 March 2025 and full-time 35 hours per week, 1.0 FTE. The post is funded by the National Institute for Health and Care Research (NIHR) and is available immediately. The salary will be on the Academic scale, Grade 6 scale in the range £43,947- £49,908 per annum pro rata (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 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 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 at: <https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-skilled-worker>

Date amended: May 2023