RESEARCH ASSISTANT OR RESEARCH FELLOW

Job Title:	**Research Assistant or Research Fellow**
Department:	Department of Infection Biology
Faculty:	Infectious & Tropical Diseases
Location:	London
FTE:	1.0
Grade:	Research Assistant Grade 5 or Research Fellow Grade 6
Accountable to:	Martin Hibberd through Andria Mousa
Job Summary:	We are recruiting a Research Assistant or a Research Fellow to carry out mathematical modelling of the impact of Perennial Malaria Chemoprevention with Sulphadoxine Pyrimethamine (PMC-SP), an antimalarial intervention for chemoprevention of malaria in infants. This is an exciting opportunity to contribute to an area of major public health importance. The post-holder will be based at LSHTM, and work between LSHTM and Imperial College.

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.

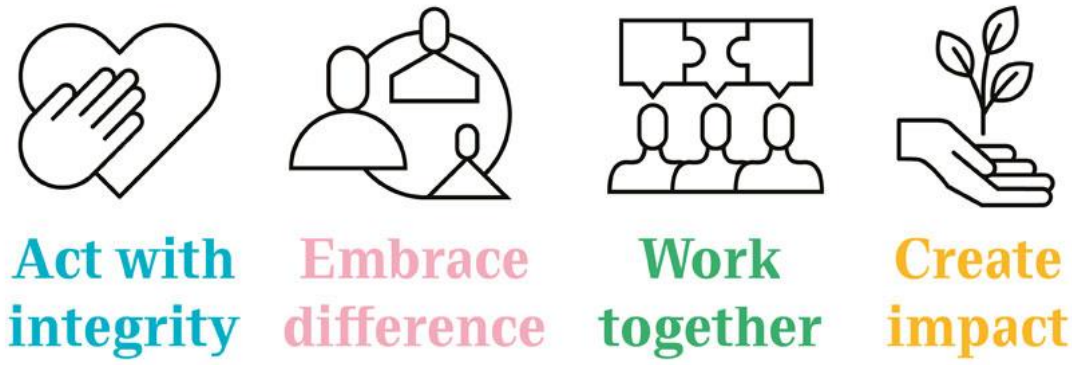
Our mission is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice.

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.



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 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 Shunmay Yeung)

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 Jayne Webster)

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.

Project information

Chemoprevention of malaria with SP plays a key role in averting malaria. SP is recommended by World Health Organization (WHO) for intermittent preventive treatment in pregnancy (IPTp) and for chemoprevention in infants (PMC), formerly known as intermittent preventative treatment in infants (IPTi). The initial IPTi WHO recommendation (2010) included three SP doses in the first year of life, delivered under the Expanded Programme on Immunization (EPI), in areas with moderate/high transmission and low levels of resistance to SP. In 2022, the WHO updated these guidelines, allowing countries to adopt a more flexible approach to the number and timing of doses, tailoring implementation based on local contextual factors.

The Plus Project, funded by UNITAID, is a newly formed programme of malaria intervention research led by Population Services International (PSI), in partnership with the London School of Hygiene & Tropical Medicine (LSHTM) and an international collaboration of researchers across several countries in Africa and Europe. The aim of The Plus Project is to co-design, implement, evaluate, and bring to scale proof-of-concept models of PMC-SP, extending the number of doses to the second-year life through delivery of SP at all vaccination contacts, as well as additional facility-based and community-based contacts (e.g., Vit A supplementation visits). The Plus Project covers four focus countries (Cote d'Ivoire, Benin, Cameroon, and Mozambique), where implementation has started, and three "plus three" countries (DRC, Ghana and Zambia), where data is being collected to inform potential value of adding PMC. This post is part of the initiative designed to explore obstacles to adoption of PMC-SP as policy.

The postholder will contribute to modelling the impact of PMC-SP for the current delivery strategies chosen by the four focus countries and link with other malaria modelling groups that support malaria programs across Africa to sub nationally tailor malaria interventions. The project is a collaboration between the Imperial College malaria modelling team working on malaria transmission and preventive treatment and a malaria genetics team at the London School of Hygiene and Tropical Medicine.

SP drug resistance appeared in Eastern and Southern Africa in the late 1990s, there are also novel forms of SP resistance emerging in the sub-Sahel. Resistance to SP is acquired by 5-6 key sequential mutations in the parasite. The post holder will incorporate estimates of SP protective efficacy against different parasite genotypes with a malaria transmission model developed by Imperial College to model the impact of PMC-SP, accounting for area-level characteristics.

The postholder is expected to contribute to toward the development of a decision tool in collaboration with the wider multi-disciplinary team. Additionally, the postholder is expected to and attend key stakeholder meetings to address modelling requests from national malaria control programme (NMPC) partners of the countries covered by the project. This role will therefore assist in answering important questions that will directly impact policy.

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	**Research Fellow**
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;	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 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;	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;
3. To conduct statistical, epidemiological and mathematical model-based analysis of data from studies on antimalarials; 4. To pursue research on infectious disease modelling and inference from malaria transmission and drug efficacy data.	5. To conduct statistical, epidemiological and mathematical model-based analysis of data from studies on antimalarials; 6. To pursue research on infectious disease modelling and inference from malaria transmission and drug efficacy data.

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;

3. To contribute to MSc project supervision where appropriate.

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 behavior;
3. To participate in LSHTM's PDR process;

4. To undertake appropriate administration tasks.
5. To attend relevant meetings.

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 undertake appropriate administration tasks.
5. To attend relevant meetings.

External Contribution

Research Assistant

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

2. To interact with other members of the research group and with our national and international partners;
3. To attend relevant workshops and conferences and present findings at scientific meetings;

Research Fellow

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

2. To interact with other members of the research group and with our national and international partners;
3. To attend relevant workshops and conferences and present findings at scientific meetings;

4. To develop contacts within LSHTM and Imperial College and the wider community;
5. To prepare work for publication and assist with the writing of reports to research sponsors;
6. To attend key stakeholder meetings and assist in writing summaries and reports to National Malaria Control Programs of the 7 countries covered by the project.

4. To develop contacts within LSHTM and Imperial College and the wider community;
5. To prepare work for publication and assist with the writing of reports to research sponsors;
6. To attend key stakeholder meetings and assist in writing summaries and reports to National Malaria Control Programs of the 7 countries covered by the project.

Professional Development and Training

Research Assistant

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;
4. To undertake any necessary training and/or development.

Research Fellow

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;
4. To undertake any necessary training and/or development

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:

Research Assistant	**Research Fellow**
	1. A doctoral degree in in epidemiology, mathematical modelling or related quantitative discipline.
1. A relevant MSc degree in the field of epidemiology, mathematical modelling or related quantitative discipline.	
2. Relevant experience in applying mathematical models of malaria transmission, or other infectious disease dynamics.	2. Relevant experience in applying mathematical models of malaria transmission, or other infectious disease dynamics.
3. Relevant analytical and computer skills, including ability to implement statistical methods in R or C++.	
4. Evidence of good organisational skills, including effective time management.	3. Contributions to written output, preferably peer-reviewed, as expected by the subject area/discipline in terms of types and volume of outputs.
5. Proven ability to work independently, as well as collaboratively, as part of a research team.	4. Proven ability to work independently, as well as collaboratively as part of a research team, and proven ability to meet research deadlines.
6. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.	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. A keen interest in infectious disease epidemiology and malaria research and interest in spatial analysis of surveillance data. 8. Willingness to undertake any necessary training for the role. 9. A meticulous approach and attention to detail and flexible attitude towards work.	7. Relevant analytical and computer skills, including ability to implement statistical methods in R or C++. 8. A keen interest in infectious disease epidemiology and malaria research and interest in spatial analysis of surveillance data. 9. Willingness to undertake any necessary

10. Discipline and regard for confidentiality and security at all times.

training for the role.

10. A meticulous approach and attention to detail and flexible attitude towards work.
11. Discipline and regard for confidentiality and security at all times.

Desirable Criteria

Research Assistant

1. Some experience of teaching
2. Ability to code mathematical models in R, C/C++ or similar programming language.
3. Ability to interpret, analyse and plot spatial data in R, ArcGIS or similar.
4. Willingness to travel both within the United Kingdom and abroad to attend conferences.
5. Be able to communicate in French.

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. Ability to code mathematical models in R, C/C++ or similar programming language.
5. Ability to interpret, analyse and plot spatial data in R, ArcGIS or similar.
6. Willingness to travel both within the United Kingdom and abroad to attend conferences.
7. Be able to communicate in French.

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 up to 12 months from the start date and full-time 35 hours per week, 1.0 FTE. The post is funded by Unitaid and is available immediately. The salary for a Research Assistant role will be on the Academic scale, Grade 5 scale in the range £37,531 - £42,875 per annum (inclusive of London Weighting). The salary for a Research Fellow role will be on the Academic scale, Grade 6 scale in the range £42,875 - £48,691 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 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