

RESEARCH ASSISTANT



Job Title:	Research Assistant in Neonatal Clinical Care
Department:	Infectious Disease Epidemiology & International Health
Faculty:	Epidemiology and Population Health
Location:	Keppel Street (London, United Kingdom)
FTE:	1.0
Grade:	5
Accountable to:	Head of Department through Principal Investigators (Co-PIs) Dr James Cross and Professor Eric Ohuma
Job Summary:	Applicants are invited to join the NeoShield team, a multi-country, multi-disciplinary study led by the London School of Hygiene & Tropical Medicine (LSHTM) in collaboration with the Malawi-Liverpool-Wellcome Trust, the Zambia National Public Health Institute, and other national and international partners. NeoShield aims to reduce healthcare-associated infections, halt outbreaks and improve outcomes for hospitalised newborns in Malawi and Zambia through an integrated approach that includes: A. Strengthening microbiology laboratory systems to improve diagnostic capacity. B. Developing and validating an AI- and machine learning-based Clinical Decision Support Algorithm (CDSA) to improve the diagnosis and management of neonatal sepsis. C. Establishing a real-time outbreak detection system to identify and respond to infection clusters at ward level. D. Co-developing an antibiotic stewardship and sepsis care intervention bundle to optimise clinical practice and infection prevention. E. Undertake genomic characterisation of bacterial pathogens to inform surveillance and guide infection control strategies. The study integrates clinical, microbiological, and data science approaches to generate evidence and tools for safer, more targeted infection management in hospitalised newborns. The post-holder will be a Research Assistant, based at LSHTM in London, and will work closely with Dr James Cross, and the broader NeoShield research team (predominately based in Zambia and Malawi). The post-holder will support the clinical implementation, laboratory infrastructure setup and data coordination activities of the NeoShield study. A key output will be to contribute to the design, rollout, and evaluation of interventions that strengthen neonatal infection diagnosis, antibiotic stewardship, and outbreak detection in hospitals in Malawi and Zambia. This will include supporting the development and delivery of new clinical and laboratory training packages and workflow documents, co-designing neonatal sepsis protocols, and helping facilitate workshops with hospital teams. The post-holder will also assist in analysing clinical and microbiological quantitative datasets, qualitative data from healthcare worker interviews and focus groups, and contribute to reports, presentations,

	and scientific manuscripts. The role requires clinical insight, analytical ability, and excellent organisational skills to ensure effective coordination and timely delivery across multiple workstreams. Ongoing career development and support from the wider NeoShield study team could generate opportunities for future PhD studentship applications.
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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

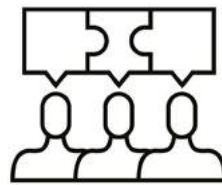
Our values establish how we aspire to achieve our mission both now and in the future - demonstrating what it means to work and study at LSHTM. Please visit our [LSHTM Values page](#) for further information.



**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 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 two Distance Learning MSc courses: Epidemiology and Clinical Trials. The Faculty also has approximately 220 research students studying for an MPhil, PhD or DrPH degree.

The Dean of Faculty is Professor Elizabeth Allen.

Department Information

The Department of Infectious Disease Epidemiology and International Health conducts research on the epidemiology and control of infectious diseases, and other topics relevant for global public health. Work is carried out in low-, middle- and high-income countries, including in the United Kingdom, in close collaboration with country partners and global stakeholders.

The Department has research groups working on maternal, perinatal and child health; adolescent health; infectious diseases including HIV, tuberculosis, malaria and Neglected Tropical Diseases; vaccines; and humanitarian crises. Most staff have a disciplinary training in epidemiology or medical statistics, and a background in one or more of biology, medicine, mathematics, or social science.

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

The Department Heads are Professor Oona Campbell and Professor Sian Floyd.

LSHTM Centres

The postholder will work closely with the Antimicrobial Resistance Centre (AMR). The AMR Centre works to address the threat of AMR to life and healthcare globally through high quality research and evidence to guide action. The Centre's breadth of disciplines - ranging from microbiology and clinical medicine to social studies and economics - is being used to meet this complex challenge, fostering connections between scientific approaches and generating innovative approaches to science and policy.

The postholder will also be affiliated with the MARCH Centre (Centre for Maternal, Adolescent, Reproductive and Child Health) at LSHTM. The Centre's vision is to improve the health of women, children, and adolescents worldwide through research excellence, relevance to policy and programmes, and by nurturing the next generation of research leaders. MARCH brings together more than 500 researchers across disciplines - from anthropology and epidemiology to clinical care and laboratory science - united by a shared focus on advancing evidence and innovation in high-burden settings. The Centre's work spans the full research pipeline, from description and discovery to development and delivery, generating insights that shape global policy and improve health outcomes across the life course.

NeoShield Study

NeoShield is an applied global health research study in Malawi and Zambia that aims to strengthen the diagnosis, management, and prevention of neonatal sepsis in sub-Saharan Africa. The study brings together clinicians, microbiologists, data scientists, and public health experts to improve how hospitals detect and respond to healthcare-associated infections in newborns. It will generate new epidemiological, microbiological, and implementation evidence to inform national infection prevention and antibiotic stewardship policies.

Funded by the Wellcome Trust, NeoShield is led by the London School of Hygiene & Tropical Medicine (LSHTM) in partnership with the Malawi-Liverpool-Wellcome Trust (MLW) and the Zambia National Public Health Institute (ZNPHI). The Principal Investigators are Dr James H. Cross and Professor Eric O. Ohuma. The project will evaluate integrated digital and clinical tools that link laboratory systems, decision-support algorithms, and outbreak detection to help neonatal teams make faster, data-driven clinical decisions and strengthen infection control practices.

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 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 support the clinical design, testing, refinement and implementation of several NeoShield workstreams, including the Clinical Decision Support Algorithm, Ward-Level Outbreak Detection, and Sepsis & Stewardship Intervention Bundle (ensuring tools and protocols are grounded in neonatal clinical practice and user experience);
4. To assist in process mapping of clinical workflows and data flows within neonatal units to inform CDSA and outbreak detection design;
5. To engage in various aspects of mixed-methods research, including qualitative interviews and focus groups with healthcare workers to explore clinical usability, acceptability, and barriers to tool uptake;
6. To assist with data cleaning, analysis and interpretation of routine clinical and laboratory datasets, producing descriptive summaries of infection trends, antibiotic use and quality-of-care indicators for the purposes of care quality improvement and implementation monitoring;
7. To contribute to the preparation of study protocols, ethics submissions, implementation learning reports, peer-reviewed publications, internal and external presentations, and clinical and laboratory standard operating procedures relating to the NeoShield Study;

Education

1. To participate in some aspects of LSHTM's Education Programme or educational outreach activities;
2. To contribute to MSc or short course teaching, tutoring and supporting students doing summer projects with the NeoShield Team.

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;
4. To play an active role in participating in activities by the AMR Centre, MARCH Centre and the Maternal and Newborn Group;
5. To support dissemination of events, outputs and information on the NeoShield website and SharePoint.

External Contribution

1. To demonstrate good external citizenship by supporting the external academic and practice communities;
2. To liaise effectively and work with others, notably the NeoShield partner institutions, relevant ministries, funding organisations, and affiliated technical experts to maintain and expand NeoShield partnerships;
3. To contribute to and co-facilitate on-site and virtual training and mentorship of data, clinical, and laboratory staff on study procedures and the integration of NeoShield processes within routine hospital systems;
4. To assist in developing and refining training materials, job aids, and implementation resources to ensure the sustainability of study activities in routine care environments;
5. To contribute to joint workshops, dissemination events, and preparation of policy briefs and learning outputs for external audiences.

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. 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;

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;
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 first or higher degree in the field of public health, epidemiology, medicine, nursing, medical sciences, medical statistics or other relevant quantitative science.
2. Clinical experience in paediatric medicine/newborn care, preferably in low- and middle-income settings.
3. Knowledge and experience in antibiotic stewardship, infection care, and infection prevention and control practises.
4. Evidence of excellent organisational skills, with the ability manage concurrent tasks, prioritise effectively, and deliver to deadlines.
5. Proven ability to work independently, as well as collaboratively in a multidisciplinary and multi-country team, demonstrating initiative, flexibility, and attention to detail.
6. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing (including presentations).
7. Experience in handling and interpreting large clinical datasets, with understanding of data quality and data security measures.
8. Relevant analytical skills in descriptive quantitative research and data management using STATA, R, or similar software.
9. Some experience in scientific writing, editing and referencing, working on thesis, papers or reports with data visualisations.

Desirable Criteria

10. Some experience of teaching
11. Experience contributing to the design or delivery of implementation or operational research within hospital or health-system settings.
12. Understanding of clinical microbiology data and processes, particularly blood cultures.
13. Experience working with or alongside Ministries of Health, hospitals, or government stakeholders.
14. Some experience supporting or delivering training, teaching, mentoring or supervision activities for healthcare or laboratory staff.
15. Experience in qualitative research methods, including the design, conduct, and thematic analysis of interviews or focus group discussions.
16. Previous involvement in development of clinical or study protocols, ethics applications, or open-access training materials.
17. Familiarity with digital health platforms or clinical algorithms or decision support tools.

18. Prior academic outputs or publications relevant to paediatric, neonatal or infection-related research.

Salary and Conditions of Appointment

The post is fixed term for 24 months with potential for extension subject to funding. The job is 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 LSHTM scale, Grade 5 scale in the range £39,984 - £45,728 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 [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 but due to the salary range for this role not meeting the UKVI requirements, only applicants under certain circumstances may qualify for sponsorship for this role. Please refer to the details on the Skilled Worker visa pages to check if you are able to be paid below the [general threshold](#). Please indicate this in your application and proceed if you are able to meet the requirements.

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: Sept 2025