RESEARCH FELLOW OR ASSISTANT PROFESSOR



Job Title:	Research Fellow or Assistant Professor in Medical Statistics /
	Data science / Epidemiology
Department:	Department of Health Services Research & Policy
Faculty:	Faculty of Public Health & Policy
Location:	London, 15-17 Tavistock Place, London WC1H 9SH
FTE:	Full time – 35 hours
Grade:	Assistant Professor Grade 7 or Research Fellow Grade 6
Accountable to:	Head of Department through Principal Investigator (Prof Kate Walker)
Job Summary:	An exciting opportunity is available for an ambitious statistician / epidemiologist to undertake research using linked national electronic health data that will contribute to the improvement of care for patients with severe liver disease.
	Liver disease is a serious and increasing health problem in the UK. People with liver disease admitted to hospital as an emergency are often very ill and many have complex health problems. A quarter of them will die within two months. The care they receive varies greatly across the country.
	The research aims to develop a detailed characterisation of liver service provision and practice across England and to study the 'full patient pathway' and its outcomes for more than 100,000 patients, using administrative hospital data linked to clinical datasets.
	There are critical evidence gaps and the project will produce publications in high-impact journals. The data infrastructure is 'research ready' so the projects' mile stones all relate to analysis and reporting.
	 The research is positioned on the interface between data science and statistics. Key challenges are: to develop and validate phenotyping algorithms that capture the complexity of the relevant conditions, treatments and outcomes in patients with liver disease. to study determinants of practice and outcomes, using appropriate methods for risk adjustment (e.g. regression, propensity score methods, instrumental variable approaches).
	This innovative NIHR-funded project is being carried out by a multidisciplinary team of clinicians, statisticians, epidemiologists, and social scientists (based in Kings College Hospital, LSHTM, King's College London, and University of Exeter), who play a leading role, both nationally and internationally, in shaping and guiding large-scale evaluations of healthcare performance.
	The interpretation of the results of the quantitative analyses is informed by the qualitative research carried out by the social scientists. This mixed-method research project will guide the

development of recommendations about how care for patients with severe liver disease can be made safer, more effective, and more patient-centred.

The role requires skills and expertise in data science and statistical analysis. Experience of working on large observational health care studies is helpful but the job could also suit someone with experience of analysing clinical trials or someone with a background in quantitative clinical epidemiology.

The position is based within a research group at the London School of Hygiene & Tropical Medicine who have extensive experience in developing methods to use national electronic health data for health services research for the purpose of clinical epidemiology and health service evaluation led by Prof Kate Walker and Prof Jan van der Meulen.

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 <u>Introducing LSHTM page</u>.

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 <u>LSHTM</u> Values page for further information.











Faculty Information

Faculty of Public Health and Policy

The Faculty of Public Health and Policy (PHP) aims to improve health in the UK and worldwide. We do this through research, teaching and consultancy in the areas of health policy, health systems and services, and public health. We run a range of popular and respected MSc courses, research degrees, short courses and CPD.

The faculty has around 250 academic staff, 50 Professional Services staff, and 250 doctoral students. We are the largest multi-disciplinary public health group in Europe, and one of the largest groups world-wide of social scientists working on health. We use multidisciplinary and multi-method approaches to generate new knowledge to improve health in specific contexts and inform transferability of approaches across contexts. We engage with people, policymakers and service providers to ensure our research is inclusive, relevant, and informs policy and practice.

Our research, teaching and consultancy are inter-disciplinary, encompassing anthropology, economics, epidemiology, geography, history, international relations, mathematics political science, psychology, public health medicine, sociology and statistics.

We actively work to embed the principles of equity, diversity and inclusion (EDI) within Faculty practice, policies and processes.

PHP is made up of three departments:

- Department of Global Health and Development which focuses on health policy and systems research, economic evaluation, gender violence and violence in childhood, and medical humanitarianism, all primarily in low and middle income settings.
- Department of Health Services, Research and Policy which focuses on improving the quality, organisation and management of health services and systems.
- Department of Public Health, Environments and Society which focuses on the social and environmental influences on health and how these are addressed.

Department of Health Services Research and Policy (HSRP)

The aim of the Department is to carry out research that helps to improve the quality, organisation and management of health services and systems. This work covers the three essential stages required to improve health care at the service, organisational and national level:

- studies to establish the most effective practices and policies, including how care can be best organised and delivered
- research assessing the quality of existing services and policies
- establishing how services and policies can be improved to achieve more resilient systems.

We conduct research aiming to understand how health services and systems behave, alongside applied research to support clinicians, managers, and policymakers. Our work brings together a wide range of methods, including quantitative evaluation, policy analysis and qualitative studies, and teams from a wide range of disciplines.

In addition to running a large number of research projects, we also run the <u>Clinical</u> <u>Effectiveness Unit</u> at the Royal College of Surgeons of England and support a similar unit at the Royal College of Obstetricians & Gynaecology.

HSRP is home to the National Institute of Health Research (NIHR) <u>Policy Innovation and Evaluation Research Unit (PIRU)</u> and the <u>Policy Research Unit in Health and Social Care Systems and Commissioning (PRUComm)</u>; we are also partner in the <u>Quality Safety and Outcomes Policy Research Unit (QSO PRU)</u> and host one of the two UK offices of the European Observatory on Health Systems and Policies.

While most of our research focuses on high-income countries, the UK in particular, an increasing portfolio of work addresses health system challenges in low resource settings, with a focus on mental health and non-communicable diseases, with close links to the LSHTM's Centre for Global Chronic Conditions. We also

We host the <u>Journal of Health Services Research & Policy</u>. The journal presents the latest scientific research, insightful overviews and reflections on underlying issues, and innovative, thought-provoking contributions from leading academics and policymakers. Publications by department staff can be found in the School's <u>online publications</u> <u>repository</u>.

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 Fellow

- 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;
- 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 and validate phenotyping algorithms that capture the complexity of the relevant conditions, treatments and outcomes in patients with liver disease;
- 6. To apply, as appropriate, advanced statistical techniques such as multivariable logistic regression, generalised linear modelling, survival analysis, multilevel modeling, and multiple imputation of missing data.

Assistant Professor

- 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;
- 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;
- To support the development of early-career researchers;
- 5. To work independently on developing and validating phenotyping algorithms that captures the complexity of the relevant conditions, treatments and outcomes in patients with liver disease;
- 6. To lead on the development of analysis plans that include advanced statistical techniques such as multivariable logistic regression, generalised linear modelling, survival analysis, multilevel modeling, and multiple imputation of missing data.

Education

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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

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Research Fellow

- 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;
- 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;

Assistant Professor

- To deliver high quality, inclusive, researchinformed teaching and assessment in relation to your specific subject and within the broader area covered by your department/disciplinary field;
- To contribute to the improvement of the quality <u>and inclusivity</u> 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;
- 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;

Internal Contribution Research Fellow

- 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;

Assistant Professor

- To undertake activities that support the Department, Faculty, 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;

External Contribution Research Fellow

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

Assistant Professor

- 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;

Professional Development and Training

Research Fellow

- 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;
- Where the length and nature of the position permits, to apply for and, if accepted, undertake a doctoral degree (if not already acquired);
- To undertake and successfully complete the mandatory training required by LSHTM appropriate to the role;

Assistant Professor

- 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;
- To undertake and successfully complete the mandatory training required by LSHTM 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. 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 Fellow

- 1. A postgraduate degree, ideally a doctoral degree, in a relevant topic.
- Some experience in carrying out data science approaches developing and validating phenotyping algorithms in routine healthcare datasets that capture the relevant characteristics, treatments and outcomes in patients with complex conditions:
- 3. Experience in carrying out statistical analyses of complex health care datasets using statistical techniques such as multivariable generalised linear / logistic regression, survival analysis, imputation of missing data, multilevel modelling.
- 4. 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, and proven ability to meet research deadlines.
- 6. Evidence of excellent interpersonal skills,

Assistant Professor

- 1. A doctoral degree in a relevant topic.
- Experience in carrying out data science approaches developing and validating phenotyping algorithms in routine healthcare datasets that capture relevant characteristics, treatments and outcomes in patients with complex conditions;
- 3. A track record in carrying out statistical analyses of complex health care datasets using statistical techniques such as multivariable generalised linear / logistic regression, survival analysis, imputation of missing data, multilevel modelling.
- 4. 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.
- 5. Proven ability to work independently, as well as collaboratively as part of a

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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

- including the ability to communicate effectively both orally and in writing.
- 7. Evidence of good organizational skills, including effective time management.
- research team, and to meet research deadlines.
- 6. An understanding of the strategies for improving equity and inclusion in research and or learning and teaching.
- 7. Evidence of excellent interpersonal skills, including ability to communicate effectively both orally and in writing.
- 8. Evidence of good organizational skills, including effective time management.

Desirable Criteria Research Fellow

- 1. Some experience of contributing to research grant applications.
- 2. Some experience of teaching and assessment.
- Some experience of supervising and supporting junior researchers and/or research degree students, and nonacademic staff.

Assistant Professor

- Experience of generating research income such as fellowships, and/or small project grants, and/or supporting grant applications of others.
- Some experience of supervising and supporting junior researchers and/or research degree students, and nonacademic 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.

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 until 31 August 2025 and full-time. The post is funded by the NIHR and is available from 1 June 2024. The salary will be on the Academic scale, Grade 6 scale in the range £44,842 - £49,908 per annum for the Research Fellow post and Grade 7 in the range £51,299 - £58,723 per annum for the Assistant Professor post (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