ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR



Job Title:	Associate Professor or Assistant Professor in Medical Statistics / Data Science, Epidemiology or Health Services Research (x2)
Department:	Health Service Research and Policy
Faculty:	Public Health and Policy
Location:	London
FTE:	Full time - 1.0 FTE - 35 hours
Grade:	Assistant Professor (G7) or Associate Professor (G8)
Accountable to:	Head of Department through Professor David Cromwell
Job Summary:	This is a unique opportunity to take a key role in a new national centre of excellence, established to help strengthen NHS cancer services and support them in delivering high quality care to people with cancer. We are looking for statisticians / data scientists, epidemiologists and health services researchers who can work in partnership with clinicians, policy makers and other stakeholders, and use state-of-theart methods in the evaluation of cancer services in the UK. We look to produce impactful publications and identify potential solutions in areas where there is unwarranted variation in care.
	In the centre, multi-disciplinary teams plan and deliver large-scale epidemiological studies into the determinants of variation in treatments and outcomes, and produce outputs with insightful results that can stimulate quality improvement. We undertake research on how modern data science methods (eg, machine learning) can create innovative outputs and solve methodological challenges, such as: accurately identifying disease conditions, treatments and outcomes in linked health care datasets ("big data"); handling data records with missing or erroneous data; developing risk prediction models; and implementing outcome monitoring / data visualisation.
	The post holders will take leading roles in multidisciplinary teams of researchers and clinicians based at the Clinical Effectiveness Unit, the longstanding academic collaboration of the London School of Hygiene & Tropical Medicine and of the Royal College of Surgeons of England (RCS), established in 1998, where the new National Cancer Audit Collaborating Centre (NATCAN) is based.

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.

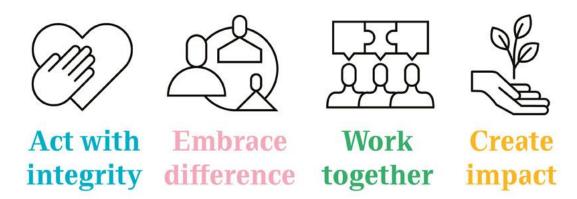
Staff and students are committed to helping create a more healthy, sustainable and equitable world for everyone, because we believe our shared future depends on our shared health.

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> <u>Values page</u> 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.

The faculty is fully committed to the Athena SWAN Charter and holds a silver award.

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.

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 <u>European Observatory on Health Systems and Policies</u>.

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>.

Clinical Effectiveness Unit / The Royal College of Surgeons of England

The <u>Clinical Effectiveness Unit</u> (CEU) is a leading centre for national clinical audit and epidemiological research. It is internationally recognised for its expertise on the methods, and logistics of undertaking large-scale evaluations into the quality of hospital care. It has undertaken national projects on vascular surgery, cancer, emergency bowel surgery, joint replacement, and the treatment of children with a cleft lip or palate. The findings from these projects have directly influenced medical practice as well as clinical policy in the UK.

The CEU was established in 1998 as a collaboration between the Royal College of Surgeons of England and the Department of Health Services Research & Policy of the London School of Hygiene and Tropical Medicine (LSHTM). Its strategic aims are

- to encourage and support rigorous research and surgical audit performed to a high scientific standard;
- to lead and enhance research and surgical audit in the UK, in cooperation with surgical specialist associations and in collaboration with sister Royal Colleges

A key feature of the CEU approach to evaluating health care is to consider projects as epidemiological studies into the quality of care. The CEU's strategy emphasizes joint clinical and methodological leadership. The CEU has established collaborative links with many Royal Colleges and medical associations as well as the Department of Health and Social Care and NHS bodies. It is a project-based organisation and has a multidisciplinary character, currently consisting of around 40 staff members of various backgrounds, ranging from health services research, medical statistics, epidemiology, public health to medicine and psychology, eight of whom have academic appointments at the LSHTM. The CEU is growing substantially in order to deliver the new National Cancer Audit Collaborating Centre. Professor David Cromwell, Professor of Health Services Research at the LSHTM, has been the CEU's Director since May 2011.

National Cancer Audit Collaborating Centre

The National Cancer Audit Collaborating Centre (NATCAN) is a new centre of excellence within the CEU being set up to help strengthen NHS cancer services and reduce variation in care. NATCAN is part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). The centre is commissioned by the Healthcare Quality Improvement Partnership on behalf of NHS England and the Welsh Government. It delivers five new national cancer audits in breast cancer (primary and metastatic), ovarian, pancreatic, non-Hodgkin lymphoma and kidney cancer as well as the four established audits in lung, bowel, prostate and oesophago-gastric cancer. It aims to:

- 1. Provide regular and timely evidence to cancer services about patterns of care in England and Wales.
- 2. Support NHS services to identify the reasons for unwarranted variation in care and help them formulate quality improvement initiatives.
- 3. Stimulate improvements in cancer detection, treatment and outcomes including survival.

Cancer treatment is complex – there are multiple treatment options for different types of cancer. A person's treatment plan needs to take into account their overall health, the stage of their cancer, and how they may respond to treatment. A key aim for each audit is to ensure the information produced for cancer services recognizes these differences and supports hospitals to focus on the most important parts of the care pathway.

NATCAN will collaborate closely with professional groups, clinicians and patient charities to ensure that all relevant stakeholders inform the quality improvement goals of each audit. The Centre has approximately 30 staff from a range of disciplines including statistics, data science, health services research, epidemiology, healthcare quality improvement and clinical audit management. The Centre's Clinical Director is Prof Ajay Aggarwal, and the Director of Operations is Dr Julie Nossiter. Leadership is also provided by Prof David Cromwell, Prof Kate Walker, and Prof Jan van der Meulen, who are public health academics at LSHTM.

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

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;
- 3. 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;
- 4. To support the development of early-career researchers;
- Deliver a work involving multiple strands and ensure deadlines are met
- Involve stakeholders, as appropriate, in the shaping and delivery of tasks, including clinicians, policy makers, patient and public representatives, and academics. Tasks might be informed by critical appraisal of relevant literature, evaluating data sources, and documenting processes in protocols;
- 7. Provide line management to CEU staff, as appropriate, helping members of the team with task management and providing expert advice on analytical methods, time management, task planning.

Associate Professor

- To deliver high quality research & scholarship in your field of study, individually and in collaboration with others, by developing and maintaining a research grant portfolio from good² research funders, publishing peerreviewed outputs and generating and securing (where relevant) intellectual property, and evaluating teaching practice;
- 2. To participate in doctoral student supervision and examination;
- To lead and manage research teams and promote and ensure compliance of self and others with good practice in relation to the conduct of research, the ethics policy, inclusivity and other relevant LSHTM policies;
- 4. To support the development of early-career researchers;
- 5. Lead on a programme of work involving multiple strands, and ensure deadlines are met.
- 6. Scope out projects, seeking input from a range of stakeholders, including clinicians, policy makers, patient and public representatives, and academics. Critically appraise the relevant literature, identifying suitable data sources, and writing protocols and other preparatory material.
- 7. Provide line management to CEU staff, as appropriate, helping members of the team with task management and providing expert advice on analytical methods, time management, task planning.

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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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Education

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 and inclusivity 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;
- 3. 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;
- 4. To participate in delivering occasional short courses on research / quality improvement methods offered by the CEU.

Associate Professor

- To deliver high quality, inclusive education 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 <u>and inclusivity</u> of LSHTM's education, by participating in the development and review 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 Faculty and Programme or curriculum leadership roles, as appropriate, and by collaborating with professional services staff both centrally and in the Faculty office in carrying out relevant administrative processes;
- To participate in delivering occasional short courses on research / quality improvement methods offered by the CEU

Internal Contribution

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:

Associate Professor

- To demonstrate good internal citizenship by undertaking PDRs and promoting staff development, and by participating in the recruitment, mentoring and support of more junior colleagues as appropriate;
- To participate in the activities of LSHTM committees and undertake a leadership or administrative role at LSHTM/Faculty/Department/MRC Unit level, as appropriate;
- 3. To proactively demonstrate LSHTM's EDI goals in your work and behaviour;
- 4. To contribute to CEU activities and initiatives, such as staff meetings, staff development / training.
- 4. To take initiative and contribute to CEU activities and initiatives, such as staff meetings, staff development / training.

External Contribution

Assistant Professor

- To demonstrate good external citizenship by contributing to the external academic community;
- To promote knowledge translation and enterprise by participating in networks and activities that disseminate research-based knowledge beyond academia;
- Build relationships with internal and external research partners, clinicians, academics, patients and the public, and analytical communities to inform our work and disseminate good practice.

Associate Professor

- To demonstrate good external citizenship by linking with and supporting appropriate external organisations;
- To promote knowledge translation and enterprise by exploiting academic knowledge beyond academia;
- Build relationships with internal and external research partners, clinicians, academics, patients and the public, and analytical communities to inform our work and disseminate good practice.

Professional Development and Training

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;

Associate 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's 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 the 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 <u>Academic Expectations page</u>.

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:

Assistant Professor

- 1. A doctoral degree in a relevant topic.
- Expertise in medical statistics, data science, clinical epidemiology, operational research, health services or public health research
- 3. 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 excellent³.
- Proven ability to work independently, as well as collaboratively as part of a research team, and to meet research deadlines.
- An understanding of the strategies for improving equity and inclusion in research and/or learning and teaching.
- 6. Evidence of excellent interpersonal skills, including ability to communicate effectively both orally and in writing.
- 7. Evidence of good organizational skills, including effective time management.

Associate Professor

- 1. A doctoral degree in in a relevant topic.
- 2. Expertise in medical statistics, data science, clinical epidemiology, operational research, health services or public health research
- A consistent and significant track record of attracting research grant income, including salary recovery, from major research funders (PI, co-PI or leadership within a large proposal such as workpackage lead).
- 4. A track record of contributions as lead and co-author to 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 that are at least internationally excellent⁴.
- Proven ability to work independently, as well as collaboratively as part of a research team, including experience of supervising and supporting junior researchers and non-academic staff and proven ability to meet research deadlines.
- An understanding of the strategies for improving equity and inclusion in research and/or learning and teaching.
- 7. Some experience of doctoral degree supervision.

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³ 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

⁴ 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

- Proven ability to build collaborative research relationships with external researchers and/or institutions, or industry (where relevant).
- 9. Evidence of ability to deliver high quality research-informed teaching.
- 10. Evidence of excellent interpersonal skills, including the ability to communicate effectively both orally and in writing.
- 8. Proven ability in carrying out statistical analyses of large complex datasets using techniques such as multiple linear / logistic regression and survival analysis.
- Proven ability to use data science methods creatively to produce impactful research.
- 11. Proven ability in carrying out and overseeing statistical analyses of large complex datasets using techniques such as multiple linear / logistic regression and survival analysis.
- 12. Expertise in advanced statistical techniques such as propensity score methods, missing data methods and multilevel modelling.
- 13. A track record of leading multiple projects that used data science methods creatively to produce impactful research.

Desirable Criteria

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.
- 6. Expertise in advanced statistical techniques such as propensity score

Associate Professor

- Teaching qualification (or Fellow/ Senior Fellow of HEA).
- 2. Experience of building and leading a research team.
- Experience of innovation in teaching delivery and assessment and/or senior teaching management such as Programme Director, Exam Board member, Periodic Review panel member.
- 4. Demonstrable evidence of improving equity and inclusion in research and/or learning and teaching.
- 5. Experience of engagement with national and/or international research and/or policy advisory bodies.
- 6. An understanding of health data governance requirements.

- methods, missing data methods and multilevel modelling.
- 7. An understanding of health data governance requirements.

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 full-time 35 hours per week, 1.0 FTE and fixed-term until 30 June 2026 with possibilities of further extension. The post is funded by the Royal College of Surgeons and is available immediately.

The salary will be on the Academic Pathway salary scale, Grade 8 (£62,028 to £71,192) for Associate Professor or Grade 7 (£51,299 - £58,723) for Assistant Professor 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 <u>jobs website</u>. 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 <u>jobs@lshtm.ac.uk</u>.

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