RESEARCH FELLOW OR ASSISTANT PROFESSOR



Job Title:	Research Fellow or Assistant Professor in Medical Statistics
Department:	Medical Statistics
Faculty:	Epidemiology and Population Health
Location:	Keppel Street
FTE:	100%
Grade:	Research Fellow Grade 6 or Assistant Professor Grade 7
Accountable to:	Dr Jennifer Nicholas
Job Summary:	The Department of Medical Statistics wishes to appoint a statistician to work on the statistical aspects of major clinical trials and epidemiological studies, with a focus on projects in neurology, cardiovascular diseases and child health.
	A major component of the post involves working on projects in neurology: they will join a team of three statisticians based at LSHTM, who provide statistical input within a long-standing research collaboration with the Dementia Research Centre (DRC) at the Institute of Neurology, UCL. Another major component of the post holder's work involves close collaboration with LSHTM clinical trials unit (CTU), who run a portfolio of clinical trials, both in the UK and internationally. There will be the opportunity for methodological research related to both these roles. The post also includes teaching of postgraduate students at LSHTM.

GENERAL INFORMATION

The London School of Hygiene & Tropical Medicine

The London School of Hygiene & Tropical Medicine is a world-leading centre for research and postgraduate education in public and global health. Our mission is to 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.

Founded in 1899, the School has expanded in recent years at its two main sites on Keppel Street and Tavistock Place. Our staff, students and alumni work in more than 150 countries in government, academia, international agencies and health services. Research income has grown to more than £140 million per year from national and international funding sources including UK government and research councils, the European Union, the Wellcome Trust, Gates Foundation and other philanthropic sources. The School's multidisciplinary expertise includes clinicians, epidemiologists, statisticians, social scientists, molecular biologists and immunologists, and we work with partners worldwide to support the development of teaching and research capacity.

Our education provision has expanded to more than 1,000 London-based Master's and Research students, 3,000 studying postgraduate courses by distance learning, and 1,000 each year on short courses and continuous professional development. Our free online courses (Moocs) are studied by more than 55,000 participants globally.

The School performs strongly in various global university league tables. In the 2018 Shanghai World Ranking we placed 151-200 overall, and ranked 3rd in public health, 40th in clinical medicine, and 76th in human biology. In the US News Best Global Universities Ranking 2019, we ranked ninth in the UK overall and 13th in the world in the fields of social sciences and public health. We ranked 21st for medicine in the 2018 QS World University Rankings.

In 2017, the inaugural Center for World University Rankings by Subject placed LSHTM first in the world for tropical medicine research, second for parasitology and seventh for infectious diseases, public, environment and occupational health, and social sciences and biomedical. LSHTM ranked first in Europe for research impact in sciences, based on its proportion of publications that belong to the top 1% most frequently cited publications, in the 2018 CWT Leiden Ranking.

LSHTM was named University of the Year 2016 by Times Higher Education and awarded a Queen's Anniversary Prize for Higher and Further Education in 2017 in recognition of our response to the 2014 Ebola epidemic in West Africa. (LSHTM does not appear in the Times Higher Education World University Rankings as universities are excluded if they do not teach undergraduates).

We seek to foster and sustain a creative and supportive working environment based upon an ethos of respect and rigorous scientific enquiry. We embrace and value the diversity of our staff and student population and seek to promote equality as an essential element in contribution to improving health worldwide.

FACULTY INFORMATION

The Faculty of Epidemiology & Population Health (EPH) houses a large group of epidemiologists, demographers, statisticians and nutritionists working on issues of major public health importance in the UK and globally. EPH has approximately 400 staff members organised into four research departments.

- Department of Infectious Disease Epidemiology
- Department of Medical Statistics
- Department of Non-communicable Disease Epidemiology
- Department of Population Health

The Faculty has a teaching programme consisting of ten MSc courses: Epidemiology, Demography and Health, Medical Statistics, Public Health for Development (run jointly with the Faculties of Infectious & Tropical Diseases and Public Health & Policy), Nutrition for Global Health, Reproductive & Sexual Health Research, Veterinary Epidemiology (run jointly with the Royal Veterinary College), Global Mental Health (run jointly with Kings College London - Institute of Psychiatry) and the Distance Learning courses in Epidemiology, Clinical Trials and Demography in Health. The Faculty also has approximately 120 research students studying for an MPhil, PhD or DrPH degree.

The Dean of Faculty is Professor Liam Smeeth.

DEPARTMENT INFORMATION

The Department of Medical Statistics (MSD) specializes in methodological research in medical statistics, especially in relation to clinical trials, observational epidemiology and disease prevention. A recent development concerns pharmaco-epidemiologic research, both methodological and applied. The Department incorporates a Clinical Trials Research Group (concerned with planning, co-ordination, statistical analysis and reporting of clinical trials), and has a special interest in cardiovascular disease, asthma, HIV and perinatal studies. MSD has established a reputation for being one of the leading innovative centres in Europe for biostatistical methodology relevant to the planning and reporting of medical research.

The Head of MSD is Professor Elizabeth Allen, and MSD's professors are Neil Pearce, James Carpenter, Linda Sharples, Stephen Evans, Diana Elbourne, Chris Frost, Nicholas Jewell, Stijn Vansteelandt and Stuart Pocock.

THE CLINICAL TRIALS UNIT

The LSHTM Clinical Trials Unit is a world renowned centre of excellence in the design, conduct, analysis and reporting of clinical trials and a fully registered unit with the UK Clinical Research Collaboration (UKCRC).

The CTU is based across both the Department of Nutrition and Public Health Intervention Research (DNPHIR) and the Department of Medical Statistics (MSD).

It also has a strong focus on clinical trial methodology, including methods for data monitoring, trial reporting, adaptive designs, non-inferiority trials, surrogate endpoints, multiplicity of data (e.g. subgroup analyses, composite endpoints, repeated measures) and methods for systematic reviews, as well, conducts qualitative research into the views of trial participants. We bring to these processes extensive knowledge and practical experience of trial co-ordination, gained from holding a respected position within the clinical scientific community. To date this has led to successful collaborations in many clinical fields, including cardiology, emergency care, adult and neonatal respiratory failure, liver disease and reproductive health.

The CTU works closely with clinical collaborators at every stage of a trial's design and implementation. This includes the development of the clinical question and trial protocol, preparation of applications for funding and research ethics committee approval, all aspects of data collection and statistical analysis, and submission of results for publication.

The CTU team housed within MSD is strongly established in the field of cardiovascular and renal disease, and in UK-based surgical trials. The CTU has established collaborations with investigators at King's College London, University College London and Barts Health. It has extensive experience in designing and delivering trials looking at the role of pre conditioning in various conditions including renal transplantation (REPAIR), patients undergoing cardiac surgery (ERICCA) and patients suffering heart attacks (ERIC-PPCI).

There is also a strong research focus on increasing participation in clinical trials, and an extensive programme of randomised trials of public health interventions for example the TXT2STOP smoking cessation trial and the safetxt trial in safer sex behaviour in young adults.

The CTU team housed in DNPHIR is a specialist in the conduct of large international multi-centre trials. Examples include the MRC CRASH trial (10,000 patients with traumatic brain injury), the CRASH-2 trial (20,000 patients with traumatic bleeding) and the WOMAN trial (20,000 women with post-partum haemorrhage).

Overall, LSHTM currently manages 90+ trials around the world, in a range of interventions such as investigational medicinal products (IMPs), nutritional and macronutrient studies, public health and behavioural interventions, surgery and medical devices.

COLLABORATOR INFORMATION

The **Institute of Neurology** (ION; http://www.ucl.ac.uk/ion) in Queen Square was established in 1950, merged with UCL in 1997, and is a key component of the Faculty of Brain Sciences (FBS), School of Life and Medical Sciences (SLMS), at UCL. The Institute has nine academic research Departments, which encompass clinical and basic research within each theme. In parallel, there are currently six Divisions representing clinical professional affiliations. The mission is to translate neuroscience discovery research into treatments for patients with neurological diseases.

The UCL Institute of Neurology has a significant postgraduate <u>teaching and training portfolio</u>, with nearly 500 graduate students at Queen Square. The Institute employs just over 725 staff, and hosts just under 300 honorary & visiting staff, occupies some 12,000 sqm of laboratory, lecture room and office space, and has a current annual turnover of approximately £78m.

The Institute is closely associated in its work with the National Hospital for Neurology & Neurosurgery (NHNN), University College London Hospitals' NHS Foundation Trust, and in combination they form a national and international centre at Queen Square for teaching, training and research in neurology and allied clinical and basic neurosciences. The Institute also has active collaborative research programmes with other centres of excellence and works in close partnership with them: http://www.ucl.ac.uk/ion/about/related

The UCL Dementia Research Centre, led by Professor Nick Fox and part of the Department of Neurodegenerative Disease, is a hub for clinical research into various forms of dementia. Our work focuses on identifying and understanding the disease processes that cause dementia, the factors that influence these disease processes, and how best to support people with dementia and their families. In addition to our research, we also provide a cognitive disorders clinic within the National Hospital for Neurology and Neurosurgery. The Centre has a multidisciplinary team of over eighty staff and students, and ten Principal Investigators. Research grant income is currently over £20 million.

The portfolio of duties outlined below will vary in accordance with the detailed expectations of the role (attached), 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 in medical statistics, individually and in collaboration with others, including contributing to drafting major grant proposals and/or leading on drafting small grant proposals;
- 2. To contribute to peer-reviewed publications and presentation of research at scientific meetings, including as lead author;
- To make a contribution to research degree 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 School policies.

Assistant Professor

- To deliver high quality research & scholarship in medical statistics, individually and in collaboration with others, including applying for external grants/fellowships from good¹ research funders,
- To publish peer-reviewed outputs and present research at scientific meetings as lead and coauthor;
- 3. To contribute to research degree student supervision;
- 4. 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 School policies;
- 5. To support the development of early-career researchers.

EDUCATION

Research Fellow

- To contribute to the delivery of high quality, research-informed teaching and assessment in medical statistics, clinical trials and/or epidemiology;
- To contribute to the improvement of the quality of the School's education, by participating in the development of new and updated learning and teaching materials or approaches.

Assistant Professor

- 1. To deliver high quality, research-informed teaching and assessment in medical statistics, clinical trials and/or epidemiology:
- To contribute to the improvement of the quality of the School'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.

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 School's mission and meets School's cost recovery targets

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INTERNAL CONTRIBUTION

Research Fellow

- 1. To undertake activities that support the Department, Faculty or the School;
- 2. To participate in the School's Professional Development Review process.

Assistant Professor

- To undertake activities that support the Department, Faculty or School, including Committee membership;
- 2. To participate in the Schools Professional Development Review process.

EXTERNAL CONTRIBUTION

Research Fellow

1. To demonstrate good external citizenship, such as by contributing to learned society/conference events, journal and grant review.

Assistant Professor

- To demonstrate good external citizenship, such as by contributing to learned society/conference events, journal and grant reviews;
- 2. To promote knowledge translation and enterprise by participating in networks and activities that disseminate research-based knowledge beyond academia.

PROFESSIONAL DEVELOPMENT & TRAINING

Research Fellow

- To keep up to date with the latest research/thinking in medical statistics and with changes to teaching practice within the School 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);
- 3. To undertake and successfully complete the mandatory training required by the School appropriate to the role.

Assistant Professor

- To keep up-to-date with the latest research/thinking in medical statistics and with changes to teaching practice within the School and more generally;
- 2. To undertake and successfully complete the mandatory training required by the School 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 the School 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 the School's best interests:
- 2. Treat School staff, students and visitors with courtesy and respect at all times;
- 3. Comply fully with School 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 School's values (as set out in the School Strategy document);
- 5. Act as ambassadors for the School when hosting visitors or attending external events;

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.

ESSENTIAL CRITERIA

Research Fellow

- 1. MSc in Medical Statistics or equivalent
- 2. A demonstrated aptitude for applied research in medical statistics
- 3. Knowledge, and experience of use of, statistical packages such as Stata
- 4. An ability to manage multiple tasks and to prioritise across them to meet deadlines
- Good interpersonal skills with the ability to communicate effectively in a multidisciplinary setting
- 6. A commitment to delivering high quality research
- High quality publications in peer-reviewed journals commensurate with duration of research activity

Assistant Professor

- 1. A PhD in Medical Statistics or equivalent
- Experience of contributing to design, conduct, statistical analysis and/or reporting of clinical trials
- 3. A demonstrated aptitude for applied research in medical statistics
- 4. An aptitude for methodological research in medical statistics
- 5. Experience of participation as a statistician in collaborative medical research projects with non-statisticians, with a proven ability to provide constructive intellectual guidance
- 6. Knowledge, and experience of use of, statistical packages such as Stata
- 7. An ability to manage multiple tasks and to prioritise across them to meet deadlines
- 8. Good interpersonal skills with the ability to communicate effectively in a multidisciplinary setting
- A track-record in research, with high quality publications in peer-reviewed journals commensurate with duration of research activity

DESIRABLE CRITERIA

Research Fellow

- Experience of participation as a statistician in collaborative medical research projects with non-statisticians
- 2. An aptitude for methodological research in medical statistics
- 3. Experience of teaching at post-graduate level
- 4. Interest in clinical trials
- 5. Interest in dementia research

Assistant Professor

- 1. Experience of research in dementia
- 2. Evidence of participation in successful grant applications to good² research funders
- 3. Experience of teaching at post-graduate level
- 4. Experience of research degree supervision

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 funded for one year and is available immediately. The salary will be on the School's Research Fellow/Assistant Professor scales, £39-304-£52,520 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 "Director's Days". Membership of the Pension Scheme is available.

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 shortlisted. Online applications will be accepted by the automated system until 10pm of the closing date. Any queries regarding the application process may be addressed to jobs@lshtm.ac.uk. Please quote reference EPH-MS-2019-02.

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" will not be considered acceptable. 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.

² 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 School's mission and meets School's cost recovery targets

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ASYLUM AND IMMIGRATION STATEMENT

The School will comply with the Immigration, Asylum and Nationality Act 2006, 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 Certificate of Sponsorship and eligibility to work in the UK, can be found at: www.ukba.homeoffice.gov.uk/employers/points

Academic Expectations: Research Fellow

Examples of expected types of activities are listed; the selection of activities will vary from year to year and not all activities in each category would necessarily be done in any one year. The statement in each shaded heading summarises the general expectations for contributions in each category. Given the nature of employment as a Research Fellow, it is expected that most activity will focus on knowledge generation, but some activity in other areas is required and will support career progression.

Knowledge generation: Independent contributions and a clear trajectory towards excellence as an academic researcher

Research and scholarship

- Undertaking research
- Working with PIs to draft grant proposals and/or leading writing of small grants, work packages or sections of larger proposals or personal fellowship applications
- Contributing to peer-reviewed outputs, including as first author, as expected by the subject area/discipline in terms of types of output
- Poster/oral presentations at relevant conferences, translation of research findings into educational materials
- Social media contributions such as twitter, blogs, web-based media or webinars Doctoral degree supervision
- For RFs with Doctorate, some contribution to doctoral degree supervision is encouraged (e.g. specialist skills training; ad hoc advice; advisory committees). RFs without a Doctorate may also advise in areas of specialist knowledge³

Research management, leadership and support

- Effective management of own time and activities
- Management of small research grants or elements of larger grants, including management of data collection and relationships with research collaborators, support to grants management Professional development
- Courses and other professional development activities, referenced to RDF
- To apply for and undertake a doctoral degree (if not already acquired), if contract and funding source permit;

Education: Basic competence in teaching and assessment

Teaching and assessment

Research-informed teaching and assessment contributions (e.g. contributions to modules, MSc project supervision)

Educational development and innovation

Contributing to the development of new educational materials, learning opportunities or assessments approaches

Education leadership and management

None expected

Professional development

Participation in professional development activities referenced to UKPSF (e.g. HEA, PGCILT, preparation for doctoral degree supervision, shadowing more experienced colleagues)

Internal contribution: Contributions to School functioning and development

Internal citizenship

- Contributing to at least one Department, Faculty, School, or Centre event or special interest group in any one year;
- Supporting external School collaborations/partnerships (beyond own research or education role) where relevant

³ Such RFs are expected where the length and nature of the position permits, to apply for and, if accepted, undertake a doctoral degree (if not already acquired)

School leadership and management roles

None expected

External contribution: Contribution beyond the School

External citizenship

- Contributing to learned society/conference events, journal and grant reviews etc Knowledge translation and enterprise: not expected but options include:
- Collecting evidence of research impact for impact case studies (e.g. policy records, correspondence with policy makers, media highlights)
- Engaging with policy/practice/industry/NGO communities and the general public
- Supporting MOOCs/OERs or other (e.g. educational) outreach

Academic Expectations: Assistant Professor

Examples of expected types of activities are listed; the selection of activities will vary from year to year and not all activities in each category would necessarily be done in any one year. The statement in each shaded heading summarises the general expectations for contributions in each category.

Knowledge generation: Independent researcher with excellent contributions, supporting less experienced researchers and with growing leadership skills

Research and scholarship

- Undertaking research individually and as part of a team
- Applying for external grants and/or fellowships primarily from 'good'⁴ research funders; contributing to work packages or elements within a large proposal
- Contributing to financial sustainability of research group including exploring opportunities for industry funding for laboratory research
- Contributing 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 3 years which are at least internationally excellent⁵
- Engaging in other research dissemination including competitively selected oral and poster presentations at leading conferences, invited seminars and talks, and social media contributions such as twitter, blogs, webinars

Doctoral degree supervision

- Contributing to doctoral degree supervision⁶ of at least one student, working within supervision team(s), supporting timely completions and peer-reviewed outputs
- Contributing to summative assessment processes (e.g. upgrade assessments, preand post-viva support for students)

Research management, leadership and support

- Management of entire research process or significant parts of it, including line and team management, grants management, management of research partner relationships
- Supporting career development of research team members (eg informal mentoring, reviewing draft papers, advising on specific issues e.g. statistical issues, methodology)

Professional development referenced to RDF

 Courses and other development activities, including mid-level management and leadership development

Education: Undertaking teaching and assessment, and developing as a research-informed educator within higher education

Teaching and assessment

· Research-informed teaching, supervision and assessment

- Contributions to personal tutoring and/or development of less experienced educators (e.g. as peer-observer for PGCILT; as mentor; through leading staff development activities)
- Participation in programme committees and/or exam boards

⁴ 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 School's mission and meets School's cost recovery targets

⁵ 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

⁶ Students registered external to the School can be included (subject to agreement of DDDC/FDDD) where these fulfil capacity-building aims, support important research collaborations, or are a result of a recent move to the School.

Educational development and innovation

- Contributions to research-informed educational developments and innovations
- Activities aimed at improving some aspect(s) of the student experience, or quality of education programme(s).

Education leadership and management

- Leadership and/or management of selected aspects of the curriculum (e.g. as module organiser/deputy, or responsibility for another aspect of the student experience)
- Supporting others to provide an excellent student experience and solve significant problems
- Contributions to Education Task & Finish Group or similar

Professional development referenced to UKPSF

- Activities which lead to PGCILT or equivalent and Fellow of HEA or equivalent; thereafter continuing professional development.
 - Activities that support professional development as an educator (e.g. training/educational studies, work-shadowing, use of feedback from students/colleagues)

Internal contribution: Contributions to School functioning and development

Internal citizenship

 Engagement in any one year of at least one of: Senate or Senate subcommittee, Ethics Committees, MRC Unit, Faculty and Departmental committees; MRC Unit Department, Faculty, School, Centre events or special interest groups; support to external collaborations/partnerships (beyond own research or education role); involvement in mentoring scheme

School leadership and management roles

Not expected

External contribution: Contribution beyond the School

External citizenship

- Membership of society/conference committees
- Journal, book and/or grant reviews
- Invited presentations

Knowledge translation and enterprise: options include:

- Exploiting research-based knowledge beyond academia, e.g. through IP exploitation, consultancies
- Participation in and development of external networks for the School's benefit, such as identifying sources of funding, contributing to student recruitment, securing student placements, marketing the institution, facilitating outreach work, or building relationships for future activities
- Collecting evidence of research impact for impact case studies
- Supporting public engagement including MOOCs/OERs or other educational outreach