RESEARCH FELLOW

LONDON SCHOOL *of* HYGIENE &TROPICAL MEDICINE

Job Title:	**Research Fellow in Medical Statistics and Epidemiology**
Department:	Department of Population Health (DPH)
Faculty:	Faculty of Epidemiology and Population Health
Location:	Keppel Street, London, UK
FTE:	1.0
Grade:	G6
Accountable to:	Head of Department through Principal Investigators (PIs) Isolde Birthistle (DPH) and Sian Floyd (Department of Infectious Disease Epidemiology; IDE)
Job Summary:	We are seeking to appoint a highly motivated research fellow to work collaboratively with an inter-disciplinary research team at LSHTM and with key personnel in the four collaborating institutes, to contribute to impact and causal pathway analyses of data generated from the DREAMS impact evaluation studies.

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 £110 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 30,000 participants globally.

The School performs well in various global university league tables. In the US News Best Global Universities Ranking 2017, we are ranked sixth in the world (together with Oxford University) in the fields of social sciences and public health. In the 2016 CWTS Leiden Ranking, the School was ranked fifth in the world for research impact across all disciplines, based on the share of institutions' outputs within the top 1% of papers by citation in all areas of science and independent of size of output.

The School was named University of the Year 2016 by Times Higher Education, in recognition of our response to the Ebola epidemic. The School is a member of the M8 Alliance of Academic Health Centres, Universities and National Academies, the Association of Schools of Public Health in the European Region, and the Consortium of Universities for Global Health.

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 and Health. The Faculty also has approximately 120 research students studying for an MPhil, PhD or DrPH degree.

The Dean of Faculty is Professor John Edmunds.

DEPARTMENT INFORMATION

The Department of Population Health (DPH) aims to increase global access to effective treatments and public health interventions, and is a centre of excellence in the measurement and analysis of global consequences of population change. DPH is home to 5 major research groups: Nutrition Group: addressing major nutrition and food-related problems that affect human development, with expertise in under-nutrition, immunity & infection, nutritional genetics, nutrition-related chronic diseases, and agriculture & health; Global Mental Health: conducting research and capacity building in policy, prevention, treatment and care for people living with mental, neurological & substance use disorders; Maternal & Child Health Intervention Research: conducting intervention trials to improve maternal, new born & child survival, and child growth development; Clinical Trials Unit: a fully registered CTU under UK Clinical Research Collaboration, co-ordinating and conducting clinical trials in low, middle and high income countries; Population Studies Group (PSG): conducting research in reproductive & sexual health, the demographic impact of AIDS in Africa, family demography, health & ageing, and methodological work on measurement of health and technical demographic analysis.

The Head of DPH is Professor Rebecca Sear

THE GROUP

The Population Studies Group (PSG), led by Dr Rebecca Sear, is engaged in the measurement and explanation of population trends and the analysis of health and other consequences of population changes. With 21 academic and academic-related staff and 12 research students, PSG represents one of the largest UK research groups in demography, reproductive health research and related disciplines. Most staff work in London, but a few members of staff are based in Ethiopia, Tanzania and Malawi.

PSG has strong programmes of research in both rich and poor countries on topical issues in the fields of reproductive and sexual health, the demographic impact of the AIDS epidemic in Africa, family demography, evolutionary demography, as well as methodological work on demographic analysis techniques. It holds a substantial number of research grants awarded by the MRC, ESRC, Wellcome, and Bill and Melinda Gates Foundation.

PSG provides much of the teaching for the MSc in Demography and Health and the MSc in Reproductive and Sexual Health Research. These courses are long-established Economic and Social Research Council outlets for postgraduate training and the research group currently holds several ESRC DTC and MRC studentships.

THE PROJECT

LSHTM is funded by the Bill and Melinda Gates Foundation to conduct an impact evaluation of 'DREAMS' in four settings. Concerned by the high incidence of HIV among young women, **DREAMS** is an investment by PEPFAR to ensure that girls have an opportunity to live **D**etermined, **R**esilient, **E**mpowered, **A**IDS-free, **M**entored and **S**afe lives. The Principal Investigators for LSHTM's impact evaluation are Isolde Birdthistle (DPH) and Sian Floyd (IDE). LSHTM collaborates formally with the following research organisations to evaluate the impact of the DREAMS core package on the incidence of HIV and other health outcomes among adolescent girls and young women, and their male partners:

- The Africa Health Research Institute (AHRI; formerly Africa Centre for Population Health) in KwaZulu-Natal, South Africa
- The Africa Population Health Research Center (APHRC) in the informal settlements of Korogocho and Viwandani in Nairobi, Kenya
- Kenya Medical Research Institute (KEMRI) in Kisumu, Siaya County, western Kenya
- Liverpool School of Tropical Medicine (LSTM), working in collaboration with the Centre for Sexual Health and HIV/AIDS Research (CeSSHAR) in multiple districts across Zimbabwe and with KEMRI in Siaya, western Kenya

The post will be based in London and will involve visits to partner institutions to collaborate on impact evaluation analyses in Kenya, South Africa and Zimbabwe.

Using new cohort data collected for the DREAMS evaluation, the post holder will lead causal analyses, including causal mediation analyses, to estimate the impact of the DREAMS package of interventions on biological, behavioural, and social protection outcomes. Regression methods, including the use of propensity scores, will be used to control for confounding. The post holder will also provide training and statistical support to collaborators, for example, to design analysis plans and data specifications for causal pathway analyses based on the conceptual framework for the DREAMS evaluation.

As a co-organiser and facilitator of DREAMS analysis workshops, s/he will provide guidance on analyses and examples of how to implement them, working together with the PIs, data managers and statisticians and epidemiologists from the partner institutions.

S/he will lead and collaborate on analyses of DREAMS' impact on secondary (intermediate) outcomes, as well as causal mediation analyses, for publication and also for presentation to a variety of audiences including researchers, funders, PEPFAR, national/provincial/district governments, and agencies implementing DREAMS in the study sites. Results will be communicated at DREAMS workshops and meetings, international conferences, and dissemination meetings at local and national levels, and LSHTM seminars. S/he will also support researchers from each evaluation site in their data analyses and writing up of results. All work will be communicated to, and shared with, responsible people in the Bill & Melinda Gates Foundation and in-country stakeholders.

The post holder will also develop a data management plan and ensure that it adheres to the funder and LSHTM requirements with regard to archiving and making data and results available.

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
1. To lead causal analyses, including causal mediation analyses, of cohort data collected for the DREAMS impact evaluation.
2. To oversee the adaptation and implementation of causal analyses at each of the 4 evaluation settings.
3. To collaborate with research partners to support them to develop analysis plans and ensure they are implemented on time.
4. To develop a data management plan with regard to archiving and making data and results available, according to LSHTM and the funder's requirements.
5. To co-organise and lead sessions at DREAMS analysis workshops, including analysis planning, data preparation, data analysis and presentation with research teams from the study settings.
6. To contribute to the writing of peer-reviewed papers, including in a lead role.
7. To attend PEPFAR and BMGF's DREAMS meetings, where appropriate, and present work of the DREAMS evaluation.
8. To make a contribution to research degree student supervision, as appropriate to qualifications and experience.

EDUCATION
1. To contribute to the delivery of high quality, research-informed teaching and assessment in relation to your specific subject and within the broader area covered by your department and disciplinary field.
2. To contribute to the improvement of the quality of the School's education, by participating in the development of new and updated learning and teaching materials or approaches.

INTERNAL CONTRIBUTION
1. To undertake activities that support the Department, Faculty or the School.
2. To participate in the School's personal development review (PDR) process.

EXTERNAL CONTRIBUTION
1. To demonstrate good external citizenship 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
1. To keep up to date with the latest research/thinking in your academic field and with changes to pedagogic practice within the School and more generally.
2. Where the length and nature of the position permits, to register for and complete a doctoral degree (if not already acquired).
3. To undertake and successfully complete the mandatory training required by the School appropriate to the role.
4. To enrol in trainings or short courses on new methodologies for causal inference.

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);and
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.

[JAN 2017]

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:

1) MSc in Medical Statistics.
2) Experience of working as a medical statistician, including analysis of large, longitudinal datasets within epidemiological research projects.
3) Experience of working as a medical statistician on the design of observational epidemiological studies or randomised trials.
4) Expertise in data management for epidemiological studies.
5) Experience in causal inference analyses of observational (non-randomised-trial) data.
6) Comprehensive knowledge of a statistical software package such as Stata and R.
7) Excellent publication record, commensurate with experience.
8) Proven ability to deliver training on data management and analysis.
9) Willingness to undertake visits to sub-Saharan African countries where the research is being conducted, to work together with collaborators on data management and analysis, to deliver workshops, and to present findings to funders and stakeholders.
10) Excellent written and oral communication skills in English.

DESIRABLE CRITERIA:

1) A PhD in Medical Statistics or Epidemiology.
2) Experience as lead-author of research published in peer-reviewed journals.
3) Experience in causal mediation analyses
4) Experience working on the epidemiology of infectious diseases.
5) A good understanding of HIV surveillance systems and research cohort studies in developing countries.
6) Experience of working as a statistician in sub-Saharan Africa.
7) Proven ability to work effectively as a member of a multidisciplinary scientific team and in a multicultural environment, as well as independently.
8) Experience of working with governments, NGOs and/or researchers in one or more of the settings for this project.
9) Teaching experience at University level.

SALARY AND CONDITIONS OF APPOINTMENT

The post is available on a full-time basis commencing immediately for 12 months in the first instance with possibility to extend through November 2019. The salary will be on the Academic scale, Grade 6 scale in the range £38,533-£43,759 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. In addition, there are discretionary "Director's Days". Membership of the USS 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-DPH-2018-06.

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.

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 bring their passport (and visa if applicable) to interview so that it can be copied and verified.

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.

Date compiled: March 2017

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.

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 (eg specialist skills training; ad hoc advice; advisory committees). RFs without a Doctorate may also advise in areas of specialist knowledge[1]   *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 register for and complete 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   *School leadership and management roles*   • None expected

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[1] Such RFs are expected to be registered for a doctorate

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