Research Fellow in Medical Statistics

FURTHER PARTICULARS

THE SCHOOL

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 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 by Sir Patrick Manson, the School has expanded in recent years at its two main sites on Keppel Street and Tavistock Place. 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.

Research income has grown to over £85 million per year from national and international funding sources including the UK government, the European Commission, the Wellcome Trust and philanthropic sources.

Education programmes have grown to more than 1,000 London-based Master’s and Research students, 2,900 studying Master’s by distance learning and 1,000 on short courses and continuous professional development. We have also launched a series of free online courses, and more than 15,000 people registered on the first of these, Ebola in context. Our staff, students and alumni work in more than 150 countries in government, academia, international agencies and health services.

The School is highly ranked in various university league tables. It was named the world’s leading research-focused graduate school in the Times Higher Education World Rankings in 2013. In 2014, it was ranked in the top 10 universities in the world for citation rate by the new EU-supported U-Multirank database, fourth in the world for impact in medical sciences by the Leiden Ranking and third in the world for social science and public health in the US News Best Global Universities Ranking. According to the results of the UK government’s Research Excellence Framework, published in
December 2014, the School was ranked second overall (after the Institute for Cancer Research) on the key measure of impact.

THE FACULTY

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 in Developing Countries (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 and Clinical Trials. The Faculty also has approximately 120 research students studying for an MPhil, PhD or DrPH degree.

The Dean of Faculty is Professor John Edmunds.

THE DEPARTMENT

The Department of Medical Statistics (MSD)

MSD specializes in applied and methodological research in medical statistics, especially in relation to clinical trials, observational epidemiology and disease prevention. 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 Department Head is Professor Neil Pearce. The Department’s other professors are James Carpenter, Bianca DeStavola, Diana Elbourne, Stephen Evans, Chris Frost, Mike Kenward, and Stuart Pocock.
THE POST

Background:

In many regions, child mortality and maternal deaths remain high. In previous trials in partnership with Effective Intervention in Andhra Pradesh, India\(^1,2\) and Guinea-Bissau\(^3,4\), we evaluated a package of health interventions (including training village health workers, managing community outreach with mobile clinics to assist pregnant mothers, and encouraging pregnant mothers to seek appropriate clinical care at delivery based on their health outcomes, as well as monitoring and supporting non-public health clinics to ensure quality care for high risk pregnancies in locations where state facilities are weak). Whereas the results of the trial in Andhra Pradesh were very encouraging, they were much less so in Guinea-Bissau. In addition, in many regions, children’s educational outcomes in simple numeracy and literacy tests can be very poor. In a trial in Andhra Pradesh, India\(^5,6\), we evaluated education interventions (training village-based community activists to provide after-school numeracy and literacy programmes to children). The results of this trial were very encouraging. The goal of the new trials (in rural regions of Madhya Pradesh, India and in Gambia) is to learn whether substantial reductions in child deaths, and improvements in education, could be achieved in different geographical and cultural settings and through cost effective measures which attempt to deal with the main problems causing poor outcomes.

References


**JOB DESCRIPTION**

**Post:** Research Fellow in Medical Statistics

**Responsible to:** Professor Chris Frost

**Grade:** Research Fellow 6

**Duties and Responsibilities**

The role-holder will be involved in all aspects of trial design and data monitoring, liaising with our colleagues at Effective Intervention (the trial sponsor) and the local collaborating groups in India and Gambia. They will carry out statistical analysis of all the new trials. There will also be the opportunity to analyse data and collaborate on publications from the trials that have already been completed. Some travel to India and Gambia will be expected. Teaching of postgraduate students will also be involved as appropriate, particularly on the MScs in Medical Statistics and Clinical Trials at the London School of Hygiene and Tropical Medicine.

The role-holder is responsible to Professor Frost but will also work closely with the co-Investigator, Professor Diana Elbourne.

1. **General**
   I. To undertake a programme of applied and methodological statistical research, with a particular emphasis on clinical trials in the developing world.
   II. To participate in the day-to-day activities of the Department of Medical Statistics at the LSHTM, as appropriate.
   III. Any other work considered appropriate by the Department Head.

2. **Research**
   I. To be involved in the design of a number of major clinical trials aiming to reduce neonatal and maternal mortality, and to improve educational outcomes, in India and Gambia.
   II. To produce regular, blinded, reports on progress in these trials.
   III. To perform unblinded interim and final analysis for these trials.
   IV. To carry out statistical analysis of previously completed randomised controlled trials in India and Guinea-Bissau.
   V. To travel to India and the Gambia as required.
3. Teaching
   I. To provide teaching on MSc modules and short courses within LSHTM – e.g. running practical classes and tutoring MSc students where appropriate.
   II. To provide statistical and technical feedback to students, e.g. by marking assignments and projects.
   III. To contribute to the design and organisation of MSc modules and short courses.

4. Scholarship
   I. To make a contribution to scientific meetings in medical statistics and related areas.
   II. To continue to develop scientific and teaching skills.

5. Citizenship
   I. To contribute to the life of the Department by participating in other academic and administrative duties.
   II. To act at all times in accordance with the highest professional standards, and to ensure that these are maintained in the delivery of all aspects of research and teaching.

PERSON SPECIFICATION

Person Specification

Essential Criteria

- MSc in Medical Statistics or equivalent experience.
- Experience in applied statistical research.
- A track record of peer-reviewed publications commensurate with years spent in research.
- Excellent working knowledge of Stata.
- Good working knowledge of MS Office including Word, PowerPoint and Excel.
- Excellent written and oral communication skills.
- An ability to manage multiple tasks and prioritise across them to meet deadlines.
• A track record of effective research within a team.

• A willingness to travel to India and Gambia.

Desirable Criteria

• Other relevant post-graduate qualifications such as a PhD.

• Experience of applied statistical research in clinical trials.

• Experience of applied statistical research in cluster randomised trials.

• Experience of giving oral presentations.

• Excellent presentation and teaching skills.

SALARY AND CONDITIONS OF APPOINTMENT

The appointment is for three years in the first instance and is available immediately. The appointment will be made on LSHTM’s Research Fellow/Lecturer scale (£37,106-£49,582) commensurate with qualifications and experience and is available immediately. The post will be subject to the LSHTM terms and conditions of service. Membership of the University Superannuation Scheme (USS) is available.

ASYLUM AND IMMIGRATION

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

APPLICATIONS

Applicants are invited to contact Chris Frost (email: chris.frost@lshtm.ac.uk, telephone: +44 (0)20 7927 2242) for an informal discussion about the post.

Applications should be made on-line at our website at jobs.lshtm.ac.uk. The reference for this post is CF15. Online applications will be accepted by the automated system until
midnight on of the closing date. 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" 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.

The London School of Hygiene & Tropical Medicine is committed to being an equal opportunities employer.