Research Associate – Statistician – Grade 7 – Salary from £32,816 to £40,322

This is an exciting opportunity for an ambitious post-doctoral research associate to join the MRC Biostatistics Unit to carry out research within the Unit’s Precision Medicine theme.

The post-holder will focus on developing statistical methodology for analysis of data extracted from detailed hospital Electronic Health Records (EHR). These record real-time clinical information that is recorded at the patient’s bedside including observations, laboratory tests, procedures and medications. Methodological challenges that the post-holder could seek to address include, for example: (1) causal inference for complex interventions, such as continuously-infused drugs; (2) accounting for and/or modelling uncertainty due to inaccuracy/incompleteness of EHR data via Bayesian methods; (3) dynamic prediction with frequently-measured biomarkers.

Methodological development will be motivated and primarily illustrated using data from Addenbrooke’s hospital, an internationally-renowned teaching hospital in Cambridge. We have several on-going collaborations with clinicians at Addenbrooke’s hospital, particularly relating to COVID-19 and Intensive Care Unit delirium.

You will have, or be close to completing, a PhD in Statistics or a closely related discipline. Prior experience of developing statistical methodology is highly desirable, particularly relevant aspects including causal inference methods, dynamic treatment regime methods, Bayesian methodology, or dynamic prediction methods. You will have strong statistical computing skills, particularly using R.

You will also require good communication skills to explain and discuss your work with clinicians and other healthcare professionals, as well as the ability to write scientific papers. You will have the opportunity to play an active role in the development of the research group, by undertaking and supporting research through introduction of new ideas, publication in leading journals, presentation of research at international workshops/conferences and by training of others. The successful applicant will be supported in their career development with a range of formal courses and on-the-job training.

The MRC Biostatistics Unit undertakes research on statistical methods and their application to the design, analysis and interpretation of biomedical studies, to advance understanding of the cause, natural history and treatment of disease, and to evaluate public health strategies. It is one of Europe’s leading biostatistics research institutions and includes many internationally renowned statisticians. The Unit is situated on the Cambridge Biomedical Campus, one of the world’s most vibrant centres of biomedical research, which includes the University of Cambridge’s Clinical School, two major hospitals, the MRC Laboratory of Molecular Biology, and the world headquarters of AstraZeneca. The Unit provides a privileged environment for conducting research within the Cambridge biomedical environment.

Please contact robert.goudie@mrc-bsu.cam.ac.uk with any informal enquiries.

The Unit is actively seeking to increase diversity among its staff, including promoting an equitable representation of men and women. The Unit therefore especially encourages applications from women, from minority ethnic groups and from those with non-standard career paths. Appointment will be made on merit.

We welcome applications from those wishing to work part-time.