## **Research Associate in Statistics, Grade F**

## **Closing Date: Friday 8th December 2017**

The postdoctoral research associate is responsible for carrying out statistical methodology research for the MRC Methodology Research Panel funded project "handling missing data and time-varying confounding in causal inference for observational event history data". The aim of the MRC project is to develop a programme of methodological research to address: missing data in measured confounders; sensitivity analysis for unmeasured confounding; time-varying confounding; and multistate treatment and outcome processes, for obtaining causal effects from observational studies with a particular focus on event history data. The appointee will conduct research with three main components.

- Contribute to the development of a research program for handling missing data and time-varying confounding in causal inference for observational event history data
- Develop software and algorithms relevant to the project and apply statistical methodology to real data
- Work in collaboration with others in the research project team

The post is available immediately for 32 months ( $1^{st}$  Jan 2018 to  $5^{th}$  August 2020) with starting salary on the scale of Grade F28 (£30,688) up to F30 (£32,548, depending on experience).

Skills & qualities required for this job:

- PhD in Statistics or a closely related discipline (awarded or in submission); expertise in statistical analysis and computational inferential methodology; track record of research in statistical analysis and applications and developing efficient programs for statistical inference.
- Excellent statistical computing skills, including familiarity with modern statistical tools and libraries; strong programming skills in R; excellent written and oral communication skills; effective time management skills.

The postholder will be supervised by Dr Jian Qing Shi and other co-investigators (Profs Fu, Farewell and Dunn, Drs Su, Tom and Lunt), and will be based in the School of Mathematics, Statistics and Physics, Newcastle University. Links to personal webpage and the School's webpage can be found below.

- Dr. Jian Qing Shi: <u>http://www.staff.ncl.ac.uk/j.q.shi</u>
- School of Mathematics, Statistics and Physics: <u>http://www.ncl.ac.uk/maths-physics/</u>

Other working relationships and collaboration:

- Prof. Bo Fu, Fudan University, China
- Dr Li Su, Dr Brian Tom, Professor Vern Farewell, MRC Biostatistics Unit, Cambridge.
- Dr Mark Lunt, Professor Graham Dunn, Centre for Biostatistics and Arthritis Research UK Centre for Epidemiology, The University of Manchester

Contact: Dr. Jian Qing Shi (j.q.shi@ncl.ac.uk)