



Job Title: Research Associate
Grade: 7
Salary: £34,804 to £40,322 per annum pro rata
Department: Health Sciences
Hours: Full-time or part-time (minimum 0.5FTE, 18.75 hours per week) or job share
Contract: Fixed term until 31 December 2021.
Reference: 2191

Role Purpose

To develop and carry out independent research, contributing as a team member to the MRC-funded project on “Inferring relative treatment effects from combined randomised and observational data”, led at the University of Leicester by Prof Keith R Abrams.

The post will involve the development and application of statistical methods as well as guidance on different ways in which observational evidence can be used in decision making in a Health Technology Assessment (HTA) context. This methodological development will be carried out within several work-packages using a series of real-world case studies to illustrate these.

The post will require high-level expertise in biostatistics/medical statistics/applied statistics/epidemiology/Health Technology Assessment/ Health Economics, analysis of RCT and observational patient level data, simulation-based methods (including Markov Chain Monte Carlo), and meta-analysis/evidence synthesis methods (including network meta-analysis).

This is a great opportunity to work with teams of experienced researchers in Leicester, Bristol and York and provides an opportunity to learn and develop skills in some of the areas listed above that you do not currently have.

Main Duties and Responsibilities

Undertake independent research, contributing as a team member to the MRC-funded project, on the development and application of statistical methods in a Health Technology Assessment (HTA) context within five work packages, using a series of real-world case studies to illustrate these.

The work packages are focussed on developing methods for population-adjustment for disconnected networks based on randomised clinical trial (RCT) evidence, inclusion of comparative observational data in (network) meta-analyses based on aggregate data, deriving relative treatment effects from comparative observational data, estimating relative effects by combining registry and RCT evidence and exploring the impact of biased evidence on decision making.

The case studies will typically involve synthesising evidence from a variety of sources (making due allowance for the nature and heterogeneity of these sources), and using simulation-based methods to explore decision making uncertainty.

Specific research activities:

- Under guidance from supervisors and other experienced team members, develop expertise in the methodological areas required to successfully conduct the required research
- Clearly document their work and being willing to communicate the work to other members of the team and other interested parties





- Work in collaboration with other researchers, including liaising with collaborators at the University of Leicester and at other institutional partners of the MRC project (University of Bristol and University of York) to ensure the smooth progression of methodological research and case studies (including taking a lead role in liaising with one or more collaborators where agreed with line manager)
- Prioritise tasks within agreed work schedules
- Plan for specific aspects of research incorporating issues such as deadlines, project milestones and overall research aims
- Be flexible to the changing priorities of the research project, and adapt daily and weekly plans to accommodate new developments
- Plan several months ahead to meet project deadlines and to prepare abstracts and presentations for conferences
- Write up research findings for publication and dissemination: this will include taking primary responsibility for drafting some research papers, and contributing as a junior partner to the authorship of other research papers
- Attend project meetings (in Leicester and elsewhere in the UK) and other relevant meetings

The post-holder will also be expected to engage in relevant professional activities and in continuous professional development.

Internal and External Relationships

Liaison with collaborators within and outside the University of Leicester.

Attendance at project meetings both in Leicester and elsewhere in the UK, conferences to disseminate work and enhance the profile of the group.

Planning and Organising

The post holder will be required to effectively manage their time to deliver on the priorities of the project.





Qualifications, Knowledge and Experience

Essential

- PhD (or relevant MSc plus research experience) in Biostatistics/Medical Statistics, Applied Statistics/Statistics, Epidemiology, Health Technology Assessment, Health Economics or an area closely related to these*
- Evidence of research productivity (including high-quality research publications, presentations)*
- Experience of involvement in innovative, high-level research
- Experience of applying statistical modelling techniques to patient level data*
- Experience of Meta-Analysis/Evidence Synthesis (including network meta-analysis) techniques;*
- Experience of programming in a high-level statistical environment (such as R or Stata)*
- Knowledge of the strengths and weaknesses of different study designs for evaluating clinical interventions

Desirable

- Experience of using WinBUGS (or other MCMC-based) software*
- Experience of using simulation-based methods*
- Experience of decision modelling in a healthcare context
- Knowledge of health technology assessment methodology

(*Criteria to be used to shortlist candidates for interview)

Skills, Abilities and Competencies

Essential

- Good IT skills*
- Excellent time management skills in order to meet deadlines*
- Excellent written and oral communication skills*
- Effective planning and organisational skills
- Ability to work independently and also as part of a research team

Desirable

- Expertise with relevant MS Office and other software packages
- Well-developed understanding of Health and Safety regulations and procedures

***Criteria to be used in shortlisting candidates for interview**

Criminal Declaration





If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

VITAL

The University encourages all staff to live our [VITAL values](#) which are:
Valuing People, Innovators, Together, Accountable, Leaders.

Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

