



Job Title: Research Associate
Grade: 7
Salary: £34,804 to £40,322
Department: Health Sciences
Hours: Full-time, part-time (0.8FTE 30 hours per week minimum) or job share
Contract: Fixed term until 31 March 2023
Reference: 1991

Role Purpose

To develop and carry out independent research, contributing as a team member to the MRC-funded project on ‘Novel approaches of multi-parameter evidence synthesis and decision modelling for efficient evaluation of diagnostic health technologies’, led at the University of Leicester by Dr Sylwia Bujkiewicz.

The post holder will undertake independent research on the development and application of statistical methods for evaluation of diagnostic tests and biomarkers in a Health Technology Assessment (HTA) context. The post holder will work within three work packages, using real-world case studies (in Alzheimer’s isease and cancer) to illustrate methodological developments.

Resources Managed

The post holder will not be responsible for the supervision of other staff.

Main Duties and Responsibilities

The post holder will carry out research within the three work packages (WPs):

- In WP1, they will focus on developing methods for evaluation of (multiple) diagnostic tests.
- In WP2, they will develop methods for synthesis of evidence on prognostic biomarkers and related targeted therapies

In the two above WPs, the post holder will focus on methods development using data from a variety of sources including observational studies, randomised controlled trials and electronic health records.

- In WP3, the post holder will develop efficient approaches for decision modelling for assessment of diagnostic health technologies, incorporating such diverse evidence including surrogate endpoints.

The post holder will apply the methods, developed in the three WPs, to case studies which 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.

The post holder will disseminate the research outputs by publishing their work in high quality journals and presenting the work at national and international meetings or conferences.

Specific activities will include:

- Planning several months ahead to meet project deadlines and to prepare abstracts and presentations for conferences;





- Writing 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;

The post-holder will also be expected to engage in relevant professional activities (which may include contribution to teaching and supervision) and continuous professional development.

Internal and External Relationships

Liaison with collaborators within and outside the University of Leicester

- Under guidance from supervisors and other experienced team members, the postholder will develop expertise in the methodological areas required to successfully conduct the required research
- They will clearly document their work and be 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 Sheffield and University of Glasgow) 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);

Planning and Organising

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

Prioritise tasks within agreed work schedules;

Plan for specific aspects of research incorporating issues such as resource availability, deadlines, project milestones and overall research aims.

Adapt daily and weekly plans to accommodate new developments (recognising that research is not always predictable);

Be flexible to the changing priorities of the research project, and adapt daily and weekly plans to accommodate new developments;

Take responsibility for organisation of research resources;

Attend project meetings (in Leicester and elsewhere in the UK) and other relevant meetings;

Qualifications, Knowledge and Experience

Essential

- PhD (or relevant MSc plus equivalent extensive research experience) in Biostatistics/Medical Statistics, Applied Statistics/Statistics or Health Economics*
- 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 using WinBUGS (or other MCMC-based) software*
- Experience of using simulation-based methods*

Desirable

- Experience of programming in a high-level statistical environment (such as R or Stata)*
- Experience of decision modelling in a healthcare context
- Knowledge of methods for meta-analysis of diagnostic tests accuracy studies
- Knowledge of health technology assessment methodology
- Expertise with relevant MS Office and other software packages
- Familiarity with Linux and high performance computing
- Well-developed understanding of Health and Safety regulations and procedures

**Criteria to be used in shortlisting 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

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

Reason for Fixed Term Contract

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

Teaching Requirements

You may have an opportunity to develop your teaching skills, for example by contributing to teaching within the MSc in Medical Statistics course.

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.

