



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Cardiovascular Science, Faculty of Biological Sciences



Salary: Grade 7 (£33,797– £40,322 p.a.) Please note that due to funding restrictions it is unlikely that any appointment would be made above £35,845 p.a.

Reference: FBSBM1134

Closing date: 15 November 2019

Fixed term for 4 months

Research Fellow in Cardiovascular Science

School of Biomedical Sciences

Are you an ambitious researcher looking for your next challenge? Do you have a background in computational modelling of cardiac electrophysiology? Do you want to further your career in one of the UK's leading research intensive Universities?

This project is looking into the effects of exercise, on structural and electrical remodelling, in right heart failure.

We will determine whether exercise training in right heart failure can reduce arrhythmias. We have already made measurements of the function of the heart in an experimental model of right heart failure, with and without an exercise intervention. You will use this data to develop computer models of the heart. These models will be used to identify whether (and how) changes to the heart brought about by exercise training are beneficial for reducing arrhythmias.

This research will allow us to determine whether exercise is an effective therapy for those with right heart failure, in terms of reducing arrhythmias and sudden deaths, and may also help us to identify whether exercise is beneficial for those with other forms of heart failure.

To apply you must have experience of computational finite-difference modelling of excitation in the rat heart, with a particular emphasis on biophysical modelling of (patho)physiological subcellular calcium handling. You should also have some experience of analysing data, obtained from optical mapping and diffusion tensor magnetic resonance imaging experiments, as well as having a PhD (or be close to completion) in computational modelling of the heart, or a closely allied discipline.

The University of Leeds and the Faculty of Biological Sciences are committed to providing equal opportunities for all and offer a range of family friendly policies. The University is a charter member of Athena SWAN (the national body that promotes gender equality in higher education), and the Faculty of Biological Sciences was reawarded a Bronze award in 2017. We are proud to be an inclusive Faculty that values all staff, and are happy to consider job share applications and requests for flexible working arrangements from our employees. Our Athena SWAN [webpage](#) provides more information.



What does the role entail?

As Research Fellow your main duties will include:

- Designing, planning and conducting a programme of computational investigation, in consultation with [Dr Al Benson](#) and [Professor Ed White](#);
- Generating independent and original research ideas and methods in cellular cardiology with an aim to extend the Cardiovascular, Sports and Exercise Sciences research portfolio;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals, and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- To contribute to, and to encourage, a safe working environment.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or be close to completion) in computational modelling of the heart or a closely allied discipline;
- Experience in computational finite-difference modelling of excitation in the rat heart, with a particular emphasis on biophysical modelling of (patho)physiological subcellular calcium handling;
- Experience of analysing data obtained from optical mapping and diffusion tensor magnetic resonance imaging experiments;
- Strong analytical skills, with the ability to work accurately and carefully, designing, executing and writing up research independently;
- A developing track record of peer reviewed publications in international journals;



- Excellent communication skills, both written and verbal and the ability to communicate your research at national and international conferences;
- The ability to work well both independently and as part of a team;
- Strong initiative and a pro-active approach, with excellent organisational, planning and self-management skills, including the ability to prioritise workloads to meet deadlines/demand and deliver high quality under pressure;
- A strong commitment to your own continuous professional development.

You may also have:

- Evidence of perusing external funding to support research.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23:59** (UK time) on the advertised closing date.

Your application should include:

- A supporting statement providing evidence to support each requirement listed on the 'What will you bring to the role' section of the Candidate Brief (no more than two sides of A4, minimum font size 11);
- An academic curriculum vitae, including a list of your publications.

Contact information

To explore the post further or for any queries you may have, please contact:

[Dr Al Benson, Lecturer in Cardiovascular Science](#)

Tel: +44 (0)113 343 2557

Email: a.p.benson@leeds.ac.uk



Additional information

Find out more about the [Faculty of Biological Sciences](#) and the [School of Biomedical Sciences](#)

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

