

CANDIDATE BRIEF

Research Fellow in Orthopaedic Retrievals and Experimental Simulation, Faculty of Engineering & Physical Sciences



Salary: Grade 7 (£33,797 - £40,322 p.a.) Reference: EPSME1003 Closing date: 06 October 2019

Fixed-term for 28 months We will consider flexible working arrangements

Research Fellow in Orthopaedic Retrievals and Experimental Simulation, School of Mechanical Engineering,

Do you have experience in bioengineering or biomechanics? Are you highly motivated, interested in orthopaedic research and looking for your next challenge?

The Institute of Medical and Biological Engineering at the University of Leeds is an international centre of excellence for joint replacement research. We work collaboratively in multi-disciplinary teams, and with clinical colleagues and industry. This position supports an on-going programme of work that is focussed on orthopaedic retrievals, in terms of their collection and analysis and also the development of preclinical in vitro methodologies that generate similar mechanical failure mechanisms as those observed in vivo. As part of a wider team, you will be responsible for orthopaedic retrievals, their processing, assessment and related research. Additionally you may develop methodologies in experimental hip simulation to better mimic in vivo mechanical damage mechanisms.

You will have a first or upper second class degree in engineering or physical sciences, and a PhD (or close to completion) in bioengineering or biomechanics, or similar industry research and development experience at a post-graduate level. A good understanding of research in joint tribology is essential, as is a positive, motivated approach to research in a collaborative team.

What does the role entail?

As a Research Fellow your main duties will include:

- Day to day operation of the retrieval laboratory, this includes liaison with clinical collaborating teams, arranging collection, receipt and processing of retrievals, maintenance of associated records;
- Supporting students and colleagues in undertaking research projects associated with orthopaedic retrievals as appropriate;
- Carrying out experimental work using a range analysis techniques, including the development of new pre-clinical testing methodologies;
- Generating and pursuing independent and original research ideas in the appropriate subject area;



- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Participating in the iMBE public engagement activities;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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 1st or upper second class degree in an Engineering or Physical Science discipline;
- A PhD (or close to completion) in bioengineering or biomechanics, or equivalent relevant industry research and development experience at post graduate level;
- Experience or understanding of research in orthopaedic engineering;
- An understanding of the requirements and obligations of working with human tissue and personal data;
- Excellent record keeping and evidence of attention to detail;
- Good time management and planning skills, with the ability to work on several projects concurrently;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;



- A proven ability to manage competing demands effectively, responsibly and without close support;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

• Experience of pursuing external funding to support research.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised <u>closing date</u>.

Contact information

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

Sophie Williams, Professor in Medical Engineering

Tel: +44 (0)113 343 2214 Email: <u>s.d.williams@leeds.ac.uk</u>

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the <u>Faculty</u> of <u>Engineering</u> and the <u>School of Mechanical Engineering</u>.

A diverse workforce

The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN <u>Bronze</u> or <u>Silver</u> Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality</u> and inclusion webpage provides more information.

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 <u>Working at Leeds</u> information page.



Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

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 <u>Criminal Records</u> information page.

