



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

**Research Assistant in Translational Hip Mechanics,  
Faculty of Engineering and Physical Sciences**



**Salary: Grade 6 (£32,296 – £37,999 p.a.)**

**Reference: EPSME1186**

**Closing date: Sunday 23 February 2025**

**Fixed-term until 30 September 2026**

**We are open to discussing flexible working arrangements**

## **Research Assistant in Translational Hip Mechanics, Institute of Medical and Biological Engineering, School of Mechanical Engineering.**

**Do you have a strong technical background in programming with an interest in medical device development? Would you like to work across a multidisciplinary research institute and a medical device company to address a device verification challenge?**

We are looking for a proactive individual to join our team of researchers at [the Institute of Medical and Biological Engineering](#), conducting applied, industrially embedded research, aimed at the verification of a sensor-based medical device.

This role is part of a Proof-of-Concept project funded through the EPSRC Place Based Impact Acceleration Account: Innovating Medical Technologies Across the Yorkshire Region. This account is based on the medical technologies (MedTech) cluster in the Yorkshire region and supports the translation of university research into new clinical products and services. It is one of ten PBIAAs awarded in the first round of the scheme and is led by the Universities of Leeds and Sheffield.

This Proof-of-Concept project will develop a computational modelling platform aimed at the verification of a new hip motion tracking device under development at Eventum Orthopaedics Ltd. You will have a strong background in programming and applied computational model development and have a proactive approach to working across an academic research space and a commercial product development environment. You will join an institute that includes a range of expertise and substantial experience in supporting early-stage researchers in a key phase of their career. We encourage an environment of collaboration, trust and wellbeing, which values difference of ideas and embraces diversity.



## What does the role entail?

As a Research Assistant, your main duties will include:

- Implementing computational models representing the relationship between sensor readings and hip joint motion;
- Assessing patient variation from a database of medical images;
- Working flexibly and pro-actively with a commercial partner to inform the direction and progression of the project, with consideration of intellectual property;
- Documenting the methods developed and the results obtained, and working towards the objective of high-quality code and documentation for dissemination or commercial exploitation;
- Supporting research activities, including contributing to research results and outputs and to the generation of original ideas, ensuring a successful proof-of-concept project;
- Writing reports, undertaking literature reviews and preparing papers for publication, with guidance as necessary;
- Collating and analysing data to inform the direction and progression of the proof-of-concept project;
- Participating in the research group and presenting research outputs where appropriate;
- Working both independently and as part of a larger team of researchers, and stakeholders;
- Contributing to the research culture of the School, where appropriate;
- Continually updating your knowledge, understanding and skills in the research field.

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 Assistant, you will have:

- An undergraduate or masters degree in mechanical engineering, bioengineering or a closely allied discipline;
- A background in programming and computational model development, preferably with application in biomechanics;
- Experience of image processing or methods of extracting anatomical variation from medical image data;
- A willingness to work across multiple locations in the Leeds area, travelling to in person meetings with the commercial partner as needed;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Well-developed analytical skills;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and in a team;
- The ability to work accurately, unsupervised and use your own initiative.

You may also have:

- A PhD (or close to completion) in medical engineering or a closely allied discipline;
- Experience of contributing to the writing of papers for publication;
- Experience in the analysis or use of sensors for human motion tracking;
- Experience in hip biomechanics.

## 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](#).



## Contact information

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

**[Dr Alison Jones](#)**, Associate Professor

Email: [A.C.Jones@leeds.ac.uk](mailto:A.C.Jones@leeds.ac.uk)

## Additional information

### Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Mechanical Engineering](#) and the [Institute of Medical & Biological Engineering](#).

### Working at Leeds

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

### A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN [Silver](#) Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.



### **Information for disabled candidates**

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by emailing HR via [hr@leeds.ac.uk](mailto:hr@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.

### **Salary Requirements of the Skilled Worker Visa Route**

Please note that due to Home Office visa requirements, this role may only be suitable for first-time Skilled Worker visa applicants if they are eligible for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit [the Government's page, Apply for the Global Talent visa](#).

