

CANDIDATE BRIEF

Research Fellow in Mechanosensing, Faculty of Biological Sciences



Salary: Grade 7 (£39,105 - £46,485p.a.)

Reference: FBSBM1220

Available on a fixed-term basis for 3 years

This role will be based on the university campus with scope for it to be undertaken in a hybrid manner. We are also open to discussing flexible working arrangements.

Research Fellow in Mechanosensing School of Biomedical Sciences

Are you an ambitious researcher looking for your next challenge? Do you have an established background in mechanosensing, engineering, or biomechanics? Do you want to further your career in one of the UKs leading research intensive Universities?

We are inviting applications for a Research Fellow to join a BBSRC-funded project exploring mechanosensing and flight in insects. This exciting role is based in the Comparative Biomechanics Group at the University of Leeds, with close collaboration with partners at the Royal Veterinary College and Imperial College London,

Animals rely on sensory input to guide their movements, but sensing and processing information is energetically costly. Rather than collecting vast amounts of data, evolution has favoured efficient, smart sensing—measuring only what's necessary, when it's necessary. This project aims to uncover the principles behind this efficiency by developing a general model of wing mechanosensing, revealing how sensor distribution and morphology have co-evolved with flight dynamics.

The successful applicant will:

- Measure multi-scale body and wing kinematics across different fly species.
- Test hypotheses about species-specific sensor placement.
- Investigate how sensor locations align with aeroelastic strain patterns during flight.

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 has attained a Silver award. 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.



Main duties and responsibilities

- Designing, planning and conducting a programme of investigation, in consultation with Dr Simon Walker;
- Generating independent and original research ideas and methods in insect mechanosensing with an aim to extend the Comparative Biomechanics 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.

Qualifications and skills

Essential

- A PhD (or close to completion) in biology, physiology, neuroscience, engineering, or a closely allied discipline or a closely allied discipline;
- Experience in in using a range of research techniques relevant to the programme of research;
- A background of working with small animals and / or experience in the analysis of kinematic data;
- The ability to design, execute and write 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;



- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and as part of a team;
- Ability to work accurately and carefully;
- A strong commitment to your own continuous professional development

Desirable

- Experience in recording and analysing animal locomotion;
- Experience working with invertebrates;
- Experience in coding operations in Matlab, Python or equivalent programming language;
- Evidence 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 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:

Simon Walker, Walker, Associate Professor in Comparative Biomechanics

Tel: +44 (0)113 343 3821

Email: s.m.walker@leeds.ac.uk



Additional information

Find out more about the <u>Faculty of Biological Sciences</u> and the <u>School of Biomedical</u> Sciences

At the University of Leeds, we are committed to providing a culture of inclusion, respect and equity of opportunity that attracts, supports, and retains the best students and staff from all backgrounds and from across the world. Whatever role we recruit for we are always striving to increase the diversity of our community, which each individual helps enrich and cultivate. We particularly encourage applications from, but not limited to Black, Asian, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

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

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.

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 subject to the University being satisfied with the outcome of these checks, 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.



Salary Requirements of the Skilled Worker Visa Route

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information please visit: www.gov.uk/skilled-worker-visa.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: https://www.gov.uk/global-talent

Please note: If you are not a British or Irish citizen, you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen, this may be your status under the EU Settlement Scheme.

