



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellows in Insect Flight Biomechanics, Faculty of Biological Sciences



Salary: Grade 7 (£32,548– £38,833 p.a.) Due to funding limitations it is unlikely an appointment will be made above £34,520 p.a.

Reference: FBSBM1079

Closing date: 15 January 2018

Fixed term for 36 months

Research Fellows in Insect Flight Biomechanics

School of Biomedical Sciences

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

Applications are invited for two Research Fellows to work on a BBSRC funded study on insect flight mechanics and energetics. The overall aim of this project is to produce a comprehensive overview of how the insect flight motor functions efficiently and has led this highly diverse group of all animals to achieve their incredible aerial manoeuvrability and control. This project is a collaboration between two PIs from University of Leeds, [Dr Simon Walker](#) and [Dr Graham Askew](#).

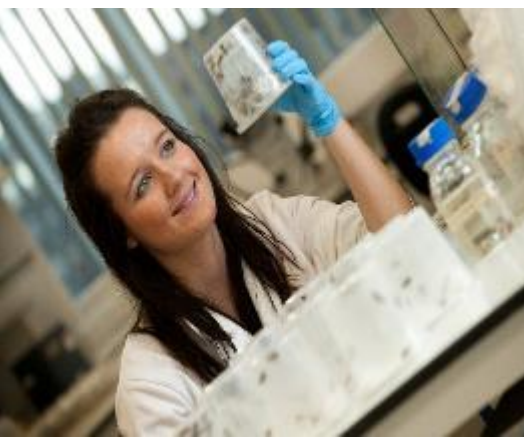
We are seeking to employ two researchers to work in parallel and run a series of physiological and biomechanical measurements on insects in order to gain the most detailed understanding of the mechanics, function and energetics of insect flight muscle to date. You will use a range of experimental approaches including high-speed imaging, fine-wire electromyography, muscle physiology, and behavioural experiments to determine how the movements, neural stimulation, force production and efficiency of different insect flight muscles change according to their role in the flight.

You should have a PhD (or be close to completion) in a relevant area of biomechanics or physiology. A strong background of working with small animals and using in vivo and/or in vitro physiological and biomechanical techniques is essential. You should have the ability to work independently and also as part of a multidisciplinary team.

What does the role entail?

As a Research Fellow your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Drs Simon Walker and Graham Askew at University of Leeds to ensure that the project objectives are achieved;
- Running a range of physiological and biomechanical experiments on insects;
- Analysing and interpreting data in relation to current theoretical and empirical work on flight biomechanics and energetics;



- Making a significant contribution to the dissemination of research results by publication in leading, international journals, and by presentation at meetings with collaborators and 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;
- 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 a relevant area of physiology or biomechanics;
- Experience of using a range of in vivo and/or in vitro physiological and biomechanical research techniques on small animals relevant to the programme of research;
- 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;
- Good time management and planning skills, a strong attention to detail with the ability to meet deadlines;
- 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:

- Experience in muscle physiology, fine-wire electromyography, respirometry, motion analysis;
- Experience of insect handling and experimentation, insect dissection;
- Proficiency in coding operations in Matlab or equivalent program;
- Proficiency in statistical approaches for Biological Sciences;
- 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 [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 Simon Walker](#), University Academic Fellow

Tel: +44 (0)113 343 3821

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

[Dr Graham Askew](#), Associate Professor

Tel: +44 (0)113 343 2897

Email: g.n.askew@leeds.ac.uk



Additional information

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

Find out more about [Sport and Exercise 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.

A diverse workforce

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 gained a Bronze award in 2014 and submitted an application for a Silver award in April 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. <http://www.fbs.leeds.ac.uk/equality-and-diversity/athena-swan/>

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.

