



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Plant Hormonal Signalling, Faculty of Biological Sciences



Salary: Grade 7 (£32,548– £38,833 p.a.) Due to funding limitations an appointment cannot be made above £32,548 p.a.

Reference: FBSBY1075

Closing date: 2 October 2017

Fixed-term for 3 years (funding through an external grant)

Research Fellow in Plant Hormonal Signalling School of Biology

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

We are looking for an enthusiastic, ambitious and self-motivated scientist to join the laboratory of Dr. Tom Bennett on a 3-year fixed term [Biotechnology and Biological Sciences Research Council](#) (BBSRC)-funded project. The project is multidisciplinary and involves molecular biology, molecular genetics, protein biochemistry, structural biology, imaging (including super-resolution microscopy), developmental biology and evolutionary approaches.

In this project we aim to build upon our recent findings on the function and evolution of the signalling pathway for the key plant hormone strigolactone. In addition to defining the core upstream signalling mechanism for strigolactone perception, we have shown that strigolactone signalling has evolved relatively recently by duplication and neo-functionalization of the ancient 'KAI2' signalling pathway. The key aims of the project are (1) to identify the signalling pathway downstream of the core strigolactone perception machinery in the model plant *Arabidopsis* and (2) to understand how strigolactone signalling mediates specific effects on plant development, despite sharing molecular components and an evolutionary origin with the KAI2 signalling pathway.

As part of this role you will design and implement experiments using a range of biochemical techniques to understand how specificity arises in the interaction between strigolactone receptors and their direct proteolytic targets. You will also examine structure-function relationships in these target proteins to identify domains needed for downstream signalling. Finally, you will identify the downstream effectors of strigolactone signalling using a candidate-based approach in the well-defined context of *Arabidopsis* lateral root development.

You will have a PhD (or close to completion) in plant biology or a closely allied discipline, extensive experience in molecular biology, particularly cloning using classical, Gateway or Gibson methods, and the ability to work well both independently and as part of a team.



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/>

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 Dr. Tom Bennett;
- Generating independent and original research ideas and methods in plant hormonal signalling with an aim to extend the [Bennett Lab](#) 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 close to completion) in plant biology or a closely allied discipline;



- Extensive experience in working with model plant species, including molecular genetics, confocal microscopy, and sterile culture;
- Extensive experience in molecular biology, particularly cloning using classical, Gateway or Gibson methods;
- Experience in analysis of protein-protein interactions, including immunoprecipitation, yeast-2-hybrid, surface plasmon resonance, or similar;
- 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:

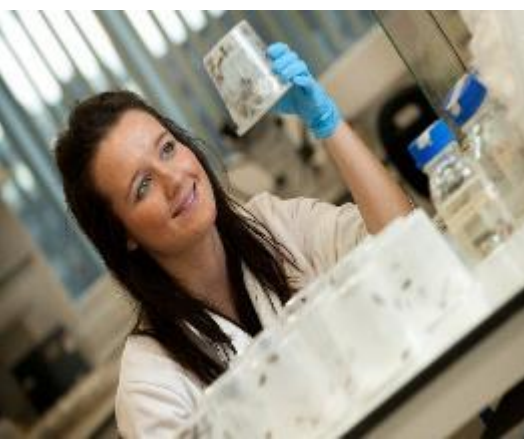
- Experience in plant developmental biology, particularly analysis of root development;
- A strong interest in plant evolutionary biology;
- Evidence of pursuing external funding to support research.

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 Tom Bennett](#), University Academic Fellow in Molecular Plant Science

Tel: +44 (0)113 343 8614

Email: t.a.bennett@leeds.ac.uk

Additional information

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

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.

