

CANDIDATE BRIEF

Research Fellow in Plant Developmental Biology, Faculty of Biological Sciences



Salary: Grade 7 (£33,797 – £40,322 p.a.)

Please note due to funding restrictions it is unlikely that any appointment will be made above £33,797.

Reference: FBSBY1116

Available from July 2020 on a Fixed-term basis for 3 years.

Research Fellow in Plant Developmental Biology, School of Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in how the environment influences plant development? 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 <u>Dr. Laura Dixon</u> on a 3-year fixed term UKRI-funded project. The project is multidisciplinary and involves molecular biology, molecular genetics, protein biochemistry and understanding wheat development in both controlled and field environments.

The project will develop on our recent findings that a wide range of temperatures regulate the low temperature response, that is involved in timing the vegetative to reproductive apex transition (vernalization) in wheat (*Triticum aestivum*). In addition, this project will investigate how photoperiod and ambient temperature signalling connect regarding floral development and the key regulatory genes and protein interactors. The work will aim to identify particular regulatory genes that are key to providing robustness to environmental fluctuations.

As part of this role you will design and implement experiments using a range of molecular biology and biochemical techniques to identify candidate genes within the ambient temperature/photoperiod pathway along with their molecular partners. In addition, you will also investigate how these genes function under environmental conditions via field trials at Spen Farm, University of Leeds. Finally, you will need to be confident with handling big-data sets including wheat genomic sequencing and RNA-sequencing data.

To apply for this role you will have a PhD (or be close to completion) in plant biology or a closely allied discipline, and have extensive experience in molecular biology, plant genetics – including working with hexaploid genomes, as well as the ability to work well both independently and as part of a 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 <u>Dr. Laura Dixon;</u>
- Generating independent and original research ideas and methods in linking plant developmental biology with environmental signalling with an aim to extend the Dixon 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 be close to completion) in plant biology or a closely allied discipline;
- Experience in working with *Triticum aestivum*, including molecular genetics, identification of developmental stages and crossing;
- Extensive experience in molecular biology, particularly in cloning and protein expression in bacteria;
- Experience in analysis of RNA-seq data and basic command language for bioinformatics analysis;
- 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 conducting and analysing field trials;
- 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:

Dr Laura Dixon, Lecturer in Crop Genetics and Physiology, UKRI Future Leader Fellow

Tel: +44 (0)113 343 2745 Email: I.dixon2@leeds.ac.uk



Additional information

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 was reawarded a Bronze award in 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.

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 <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.

