

# **CANDIDATE BRIEF**

Research Fellow in Plant Sciences, Faculty of Biological Sciences



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

**Reference: FBSBY1115** 

**Available from 1st February 2020** 

Fixed-term for 1 year

# Research Fellow in Plant Sciences School of Biology, Faculty of Biological Sciences

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

You will work on the project 'Epigenetics and Temperature Responses in Plants' to understand how an environmental factor, ambient temperature, influences flowering time in Arabidopsis, using a novel epigenetic mechanism. This project stems from our unpublished background work, which revealed the involvement of new factors in the activation or repression of flowering.

Our changing climate is having a dramatic effect on the growth and development of plants that support our civilisation. It is therefore essential, to understand how plants respond to threats like increased temperature, to secure the sustainability of the global food supply. Flowering, directly or indirectly, produces almost all our food and is strongly impacted by temperature.

Using a forward genetic screen, we have discovered two genes involved in both the perception of temperature and flowering time. Gene 1 provides a direct link between temperature and epigenetic control of gene expression. Gene 2 has yet to be characterised. The identity of Gene 1 has revealed an elegant, mechanism to enable ambient temperature to control gene expression. Although Gene 2 is currently unknown, none of the candidates have previously been associated with temperature responses or flowering. You will characterise the mechanism controlled by Gene 1 and use that to engineer plants that respond differently to temperature as well as investigating the wider ramifications of this regulatory mechanism, beyond flowering time and temperature. You will also continue our efforts to characterise Gene 2. The project builds on unpublished results and has the potential to open up a new field of study.

You will hold a PhD or be close to competition in Biological Sciences, or a closely allied discipline and have experience in Molecular Biology. You will work with a high level of personal initiative and autonomy, utilising your strong analytical skills and expertise in Molecular Biology to achieve the aims of the project. You will work closely, interactively and collaboratively with project team in an interdisciplinary setting, so you



will need excellent communication skills and the ability to build strong working relationships. You will also need to communicate your research through reports, publications and presentations. The nature of the work requires you to have a meticulous attention to detail and a conscientious approach to checking the accuracy of information. You will also need the flexibility and adaptability to respond quickly to priorities and meet deadlines/demands.

## 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 <a href="Professor Brendan Davies">Professor Brendan Davies</a>;
- Generating independent and original research ideas and methods;
- Making a significant contribution to the dissemination of research results, by publication in leading peer-reviewed journals and presentations 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;
- Evaluating methods and techniques used, and results obtained, by other researchers and relating such evaluations to your own research;
- Supporting group research activities, such as inputting on other projects, leading undergraduate and masters projects and helping ensure the smooth running of the laboratory;
- Contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;
- 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 competition in Biological Sciences or a closely allied discipline;
- Experience in Molecular Biology;
- 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 of working with Arabidopsis, including transformation, genotyping, phenotypic analysis and molecular genetic approaches.

# 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.

# **Contact information**

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

# <u>Professor Brendan Davies, Professor of Plant Development</u>

Tel: +44 (0)113 343 3123 Email: <u>b.h.davies@leeds.ac.uk</u>



# **Additional information**

Find out more about the School of Biology and the Faculty of Biological Sciences.

Find out more about our Research and associated facilities.

#### 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 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.

#### **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.

