



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Crop-Climature Modelling, Faculty of Environment



Salary: Grade 7 (£33,797 – £40,322 p.a.) Due to funding limitations it is unlikely that an appointment will be made above £34,804 p.a.

Reference: ENVEE1369

Closing date: 15 December 2019

Fixed term until 31 March 2021 due to external funding

We will consider job share / flexible working arrangements

Research Fellow in Crop-Climate Modelling

School of Earth and Environment, Faculty of Environment

Are you an ambitious researcher looking to make a positive difference? Do you have a background in crop modelling? Do you want to further your career in one of the UK's leading research intensive Universities?

This position forms part of the Climate Science and Impacts research group and of the Newton-Caldas funded project "Bean Breeding for Adaptation to a Changing Climate and Post-Conflict Colombia (BBACO)." BBACO will develop a suite of novel methods for the breeding, screening and adoption of heat-tolerant beans so as to create a more effective and efficient heat-tolerance breeding, delivery and adoption pipeline that will deliver poverty reduction, enhanced resilience and better nutritional outcomes via the efficient, targeted delivery and adoption of heat-tolerant bean genotypes. Crop modelling work in support of BBACO will develop and use the General Large Area Model (GLAM) using data from project partners, namely the University of Reading, and the International Centre for Tropical Agriculture (CIAT) in Cali, Colombia.

You will be part of the Climate Impacts Group in the School of Earth and Environment, which is led by Professor Andy Challinor. Working with this lively and able group will provide mutual support for the range of projects undertaken by the group.

You will have first degree in a quantitative science such as physics, maths, engineering, environment, ecology or computer science and a PhD (or be close to completing a PhD) in crop and/or climate modelling. You will also have some experience with the GLAM crop model, as well as the other experience, skills and qualifications listed below.

What does the role entail?

As Research Fellow, your main duties will include:

- Acting as the Crop Modelling contact point for the Climate Impacts Group, liaising as needed with partners in Reading and Cali;
- Developing the GLAM crop model in order to better represent fundamental processes and new crops and locations;
- Collaborating with project partners to parameterise GLAM in support of targeted head tolerance breeding;



- Taking a lead on GLAM input and output data management for BBACO;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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 Research Fellow you will have:

- Significant experience with crop models, including some experience with the GLAM crop model, application of models and data to breeding-oriented outcomes;
- A first degree in a quantitative science such as physics, maths, engineering, environment, ecology or computer science;
- A PhD (or be close to completing a PhD) in crop and/or climate modelling;
- The ability to analyse and manipulate data using software packages;
- Excellent written and verbal communication skills, including presentation skills;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;



- A proven track record of peer-reviewed publications in high impact factor journals;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Knowledge of Fortran, R, GIS and Python;
- A proven ability to be able to adapt research plans and timings in light of new information and/or wider project changes;
- A proven ability to lead and contribute to collaborations between partners in separate institutions.

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.

Contact information

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

[Professor Andy Challinor](#)

Tel: +44 (0)113 343 3194

Email: A.J.Challinor@leeds.ac.uk

Additional information

Find out more about the [Faculty of Environment](#)

Find out more about the [School of Earth and Environment](#).

Find out more about [Athena Swan](#) in the Faculty.

Find out more about our [Research and associated facilities](#).

A diverse workforce



The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

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.

