UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Tropical Forest Water Relations, School of Geography, Faculty of Environment

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

Reference: ENVGE1109

Closing date: 19 December 2019

Fixed-term for 10 months (due to external funding)

We will consider job share / flexible working arrangements

Research Fellow in Tropical Forest Water Relations, School of Geography, Faculty of Environment

Are you an ambitious researcher looking for your next challenge? Do you have skills in analysing ecological and ecophysiological datasets and a particular interest in the sensitivity of Amazon forests to drought? Do you want to further your career in one of the UK's leading research intensive Universities?

The Ecology and Global Change research cluster at Leeds conducts world-leading research in tropical ecosystem ecology and change. We are looking to recruit a highly skilled and ambitious Postdoctoral Research Fellow to lead analysis of a novel dataset of hydraulic traits sampled across Amazonian forests, as part of the NERC-funded ARBOLES ("A trait-based Understanding of LATAM Forest Biodiversity and Resilience") Project. The central aim of ARBOLES is to better understand the functional trait basis of forest climate sensitivity and resilience. The post will also contribute to the FORAMA project ("For a Climate Resilient Amazon") funded by the Royal Society.

You will be responsible for leading the analysis of plant water status and hydraulic trait data collected by the PI's team across Amazonian forests and publishing results in leading journals. The dataset encompasses over 100 Amazonian species and includes data on resistance to embolism, hydraulic conductivity, leaf turgor loss point, *in situ* leaf water potential measurements and the response of stomatal conductance to water stress. Through these analyses, you will greatly advance our understanding of the sensitivity of different Amazon forests and species to water stress. Specific lines of investigation will include the quantification of the xylem safety vs. efficiency trade-off and characterization of stomatal control strategies across Amazonian tree taxa. You may also go on to explore the power of these traits in explaining species life history attributes, biogeographical distributions and their response to drought events.

In ARBOLES, you will be expected to work closely with students and visitors from Latin America who also study plant functional traits and may also train Latin American students in how to make hydraulic trait measurements. You will be based in Leeds throughout, but will work interactively with colleagues elsewhere in the U.K. and in South America. You will have previous experience measuring hydraulic traits (e.g. xylem vulnerability curves, leaf water potential in the field, leaf pressure-volume curves), have excellent existing skills in statistical analysis using R, a willingness to



collaborate widely with colleagues in Latin America, as well as the ability to publish in leading physiological and ecological journals.

What does the role entail?

As a Research Fellow, your main duties will include:

- Leading and contributing to research papers for publication;
- Analysing data on plant water status and hydraulic traits collected in Amazonian forests;
- Contributing to advising Brazilian students on functional trait analysis;
- Training Latin American students to make plant hydraulics measurements;
- Participating in and contributing to project meetings;
- Applying knowledge acquired from ARBOLES by presenting research papers at conferences and scientific meetings;
- Developing collaborations with colleagues at the University of Leeds and with external organisations/other Institutions to develop new external research links;
- Contributing to the development of further research funding applications;
- Integration of hydraulic trait data into the forestplots.net demographic plot database.

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 near completion - i.e. the initial thesis needs to have been handed in at the point of application in ecophysiology, ecology, or a closely allied discipline;
- Strong quantitative data analysis skills in general;
- Specific expertise in plant water relations in a tropical context;
- Previous experience measuring plant hydraulic traits, including xylem vulnerability curves, leaf pressure volume curves and hydraulic conductivity;
- Excellent written and verbal communication skills including presentation skills;



- Initiative to explore new ideas and contribute to the development of the research, both conceptually and in practice;
- An ability and willingness to participate for a few weeks each year at project meetings, stakeholder events, and student training activities, in the UK and/or South America;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- 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:

- Specific, advanced knowledge of Latin American forest ecology and biodiversity;
- Communication skills in Portuguese and/or Spanish;
- Experience of working independently in one or more tropical countries.

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:

Dr David Galbraith, Associate Professor
Tel: +44 (0)113 34 32730
Email: D.R.Galbraith@leeds.ac.uk

Additional information

Find out more about the School of Geography.

Find out more about our 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.