

**Job Title:** Research Associate

**Grade:** 7

**Salary:** £32,958 to £38,183 per annum

**Department:** Genetics and Genome Biology

**Contract:** Full-time fixed term post for 18 months

**Job Reference:** MBP01960

### Role Purpose:

The project “Modelling and genomics resources to enhance exploitation of the sustainable and diverse Ethiopian starch crop *Enset*” is funded by the Global Challenges Research Fund under a Foundation Award for Global Agricultural and Food Systems Research from the Biotechnology and Biological Sciences Research Council (BBSRC).

Our exciting interdisciplinary project seeks to provide the foundation knowledge to help enable the exploitation of the sustainable and diverse Ethiopian starch crop *Enset* (*Musaceae*) to support livelihoods in Africa. To this end, we will integrate genomic sequence, molecular diversity, pathology, tissue culture and cytogenetic data, with field and farmer interview data from Ethiopia.

You will be responsible for carrying out and publishing the genomic and laboratory components of the project. You will lead, conduct, and manage a significant laboratory and informatics project in Leicester, UK, integrating your research with field work, working with the lead Ethiopian partner (Addis Ababa University) and modelling at the Royal Botanic Gardens, Kew, under the guidance of the project team.

Educated to doctoral level, you will have proven experience in plant molecular biology, markers, cytogenetics and genomics or bioinformatics. Ideally this would involve species (crops) with little background data.

Principal Responsibilities	% Time
<ul style="list-style-type: none"> <li>To take a leading role in performance of specific experiments, in experimental design and in contributions to attaining project milestones. This includes genomic analysis of DNA sequence information to develop markers for measuring diversity in collections, and identifying and measuring molecular diversity in pathogens.</li> </ul>	25
<ul style="list-style-type: none"> <li>Quantify genetic diversity in <i>Enset</i>, carry out in situ hybridization and cytogenetic analysis, and develop propagation methods for <i>Enset</i>.</li> </ul>	20
<ul style="list-style-type: none"> <li>Train visiting research scientists and develop protocols for use throughout the world. Together with research partners, seek to understand and forecast present and future suitability of <i>Enset</i> diversity for cultivation. To also assist with the training of new members of the lab, including undergraduate students, PhD students and work experience trainees.</li> </ul>	10





## Job Summary

<ul style="list-style-type: none"> <li>• Be responsible for the acquisition, maintenance and version control of the data collected, including inputting of data and its safe storage using the agreed protocols as defined by the research team and relevant University IT policies. To perform the analysis of data and contribute to the development of new themes/strands of research.</li> </ul>	15
<ul style="list-style-type: none"> <li>• To contribute to writing up research findings for dissemination amongst the research team and broader international community.</li> </ul>	10
<ul style="list-style-type: none"> <li>• To take a lead in presenting results at scientific meetings in the UK and overseas.</li> </ul>	5
<ul style="list-style-type: none"> <li>• To participate in general laboratory activities to ensure the efficient functioning of the lab.</li> </ul>	5
<ul style="list-style-type: none"> <li>• To adhere to health and safety procedures affecting self and others at all times and to help the lab safety officer enforcing good safety practice in the lab.</li> </ul>	5
<ul style="list-style-type: none"> <li>• To undertake such duties consistent with the grade of the post as may be reasonably required.</li> </ul>	5
<b>Internal and External Relationships</b>	
<p>With PI regarding progress of the project, weekly.</p> <p>Postdocs, postgrads and technicians within the laboratory to liaise on a daily basis regarding availability of equipment and materials, exchange of techniques and information.</p> <p>Close links with partner institutions in Kew and Ethiopia; working with members of Molecular Cytogenetics group (Heslop-Harrison and Schwarzacher) and Dr Mark Godwin.</p>	
<b>Planning and Organising</b>	
<p>Planning of research meetings</p> <p>Planning of research programme and laboratory experiments; definition of short-term and longer-term milestones</p> <p>To ensure health and safety procedures are fully implemented; to help the lab safety officer enforcing good safety practice in the lab</p>	
<b>Qualifications, Knowledge and Experience</b>	



### Essential

- PhD in plant sciences\*
- Ability to deliver research outcomes relevant to the position
- Extensive experience of plant molecular cytogenetics including microscopy and image analysis\*
- Experience of genomic analysis of DNA sequences\*
- Knowledge of literature related to crop genomics, evolution, biodiversity and cytogenetics\*
- High level of experience of molecular biology, cytogenetics, microscopy and data analysis\*
- Experience in training researchers\*
- Writing of manuscripts for publication, and presenting talks to scientific audiences\*

### Desirable

- Research on development and use of molecular markers in crops\*
- Experience with bioinformatics\*
- Experience of independently managing a discrete area of research\*
- Publications in relevant areas of plant and crop genomics\*
- Experience in grant applications\*
- Writing and presenting project reports\*
- Use of bioinformatics and genomics programs and databases\*
- Work with developing countries and orphan crops\*

### Skills, Abilities and Competencies

#### Essential

- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with overseas collaborators, visitors, staff and students\*

#### Desirable

- Good communication skills, including the ability to write for publication, present research proposals and results, represent the research group at meetings, teach, and prepare timely reports

***\*Criteria to be used in shortlisting candidates for interview***



### Equality and Diversity

The University of Leicester is committed to positively advancing equality of opportunity. We participate in a number of equalities initiatives which celebrate good employment practice for the advancement of diversity and equality. These include the Stonewall Workplace Equality Index, the Race Equality Charter and [Athena Swan](#).

We are proud to be selected as one of only ten Universities internationally to be an impact champion for [HeForShe](#), a global solidarity movement for gender equality. We also have a number of staff equality fora who champion the advancement of equalities for diverse groups. To find out more please visit the [Equalities](#) webpage.

### Staff Benefits

- 24 days annual leave plus 6 closure days plus bank holidays
- Pension
- Discounted gym membership
- Childcare voucher schemes

