



<b>Job title</b>	Research Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	<b>Job family and level</b>	Research & Teaching Level 4 (Appointment will be Level 4 Career Training Grade where an appointment is made before PhD has been completed)
<b>School/ Department</b>	Biosciences/ Plant and Crop Sciences	<b>Location</b>	Sutton Bonington Campus

## Purpose of role

To conduct specialised research aimed at uncovering the intricate molecular mechanisms that control root growth angle in barley. As part of a collaborative team consisting of both UK and international partners, responsibilities will encompass designing and executing experiments employing genetic, molecular, and physiological methodologies. Additionally, the role holder will utilise cutting-edge omics techniques to generate and analyse the obtained data. The role holder will be involved in preparing comprehensive reports and contributing to the creation of scientific publications based on the research findings.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	<b>Research</b> <ul style="list-style-type: none"> <li>To independently design, plan, carry out and analyse plant physiology and molecular biology-based research, as well as undertake other duties, such as administration where appropriate.</li> </ul>	75%
2	<b>Dissemination of research results</b> <ul style="list-style-type: none"> <li>To significantly contribute to the writing up of research papers, reports and presentation of research findings in group/project meetings and at high level national and international meetings to maintain Institute and University recognition.</li> </ul>	10%
3	<b>Support junior members of the group</b> <ul style="list-style-type: none"> <li>To assist in the supervision and training of undergraduate or postgraduate students, and technical staff as appropriate.</li> </ul>	5%
4	<b>Engage in Professional Development activities</b> <ul style="list-style-type: none"> <li>To continue developing professional research skills, keeping knowledge up to date through attendance at seminars and conferences, and initiate internal/external collaborations where appropriate.</li> </ul>	5%
5	<b>Adhere to H&amp;S regulations</b> <ul style="list-style-type: none"> <li>To contribute to the safe and well organised functioning of the laboratory.</li> </ul>	5%

## Person specification

	<b>Essential</b>	<b>Desirable</b>
<b>Skills</b>	<ul style="list-style-type: none"> <li>▪ Demonstrable laboratory skills including plant physiology, genetics, molecular biology and biochemistry.</li> <li>▪ Demonstrable laboratory skills in transformation, tissue culture and raising transgenics.</li> <li>▪ Demonstrable skills in confocal microscopy and image processing.</li> <li>▪ Developing research skills, with the ability to creatively apply relevant research approaches, models, techniques and methods.</li> <li>▪ Excellent oral and written communication skills.</li> <li>▪ Ability to build relationships and collaborate with others, internally and externally.</li> <li>▪ Good time management skills, ability to prioritise and meet deadlines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Demonstrable ability to work with barley or other cereal crops in laboratory and glasshouse conditions.</li> <li>▪ Demonstrable ability to analyse and interpret data, evaluate and criticise texts, bring new insights.</li> <li>▪ Omics data handling skills (RNA seq. and proteomics data, gene expression analysis, genomic data analysis).</li> </ul>
<b>Knowledge and experience</b>	<ul style="list-style-type: none"> <li>▪ Evidence of sufficient breadth or depth of research methodologies and techniques to work in root biology.</li> <li>▪ Experience in phenotyping and genotyping mutants and raising them to homozygosity.</li> <li>▪ Knowledge about plant physiology and experience working with them.</li> <li>▪ A relevant publication record in the area of root biology.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Experience in sampling root tissues for DNA and RNA extraction and gene expression and proteomics analysis.</li> <li>▪ Knowledge about reactive oxygen species and cell wall related processes.</li> <li>▪ Experience of identification and analysis of downstream targets from omics data.</li> <li>▪ Experience in supervising technical staff and laboratory work of students.</li> <li>▪ Experience in scientific writing of reports and peer reviewed publications.</li> </ul>
<b>Qualifications, certification and training (relevant to role)</b>	<ul style="list-style-type: none"> <li>▪ PhD in Plant biology/Molecular Biology/Biochemistry/Genetics or related biological science (or near completion).</li> </ul>	



The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

## Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

## Key relationships with others

