Job title	Research Associate/Fellow	Job family and level	Research and Teaching Level 4
School/ Department	Biosciences/ Plant & Crop Sciences	Location	Sutton Bonington Campus

Purpose of role

To carry out research developing Arabidopsis mutant and transgenic reporter lines to reveal molecular mechanisms regulating the model water stress response, Xerobranching. The role involves working within a team, designing and conducting lab experiments using confocal imaging, performing molecular biology experiments (such as single-cell transcriptomics, protein-protein interactions), analysing and writing reports and publications.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	**Research** ▪ To independently design, plan, carry out and analyse cellular and molecular biology, confocal imaging, and root phenotyping research, as well as undertake other duties, such as administration where appropriate.	75%
2	**Dissemination of research results** ▪ To significantly contribute to the writing up of research papers, reports and presentation of research findings at high level national and international meetings to maintain Institute and University recognition.	10%
3	**Support junior members of the group** ▪ To assist in the supervision and training of undergraduate or postgraduate students, and technical staff as appropriate.	5%
4	**Engage in Professional Development activities** ▪ To continue developing professional research skills, keeping knowledge up to date through attendance at seminars and conferences, and initiate internal/external collaborations where appropriate.	5%
5	**Adhere to H&S regulations** ▪ To contribute to the safe and well-organised functioning of the laboratory.	5%

Person specification

	Essential	Desirable
Skills	▪ Demonstrate skills in single cell (10X genomics based) and spatial transcriptomics. ▪ Demonstrable laboratory skills including expertise in using Rice/Arabidopsis, confocal imaging, molecular biology techniques such as cloning, gene expression analysis, transcriptomics, protein-DNA interactions. ▪ Developing research skills, with the ability to creatively apply relevant research approaches, models, techniques and methods. ▪ Excellent oral and written communication skills. ▪ Good time management skills, ability to prioritise and meet deadlines	▪ Demonstrable ability to analyse and interpret data, evaluate and criticise texts, bring new insights. ▪ Data handling skills (CHIP-Seq and rice tissue culture). ▪ Demonstrate or develop root soil intercations at molecular and cell scale
Knowledge and experience	▪ Experience in scientific writing of reports and peer reviewed research publications. ▪ Evidence of sufficient breadth or depth of research methodologies and techniques to work in the required research area.	▪ Experience in growing Rice/Arabidopsis, and molecular biology techniques (gene expression analysis/gene editing). ▪ Experience in the generation of imaging data using confocal technologies. ▪ Experience in next generation sequencing (sample preparation and bioinformatics) ▪ A relevant publication record. ▪ Willingness to travel nationally to work and study for short periods at a time in collaborating laboratories ▪ Experience in supervising students
Qualifications, certification and training (relevant to role)	▪ PhD (or close to completion) in plant biology or related area of biological science	

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