JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: Research Associate

Centre: Cambridge Crop Research, Pre-Breeding Department
Job Group: Specialist
Location: NIAB Cambridge
Reports to: Dr Stéphanie Swarbreck (Group Leader – Crop Molecular Physiology)
Line Manages: N/A

2. Main purpose of role:

The main purpose of the role is to conduct research on a project that aims to uncover regulatory elements of nitrogen response in wheat. We will make use of the resources available for wheat such as a fully sequenced genome (and pangenome), mutant lines and high genetic diversity to ask fundamental questions and ensure that the work has an impact on food security. The postholder will design and conduct experiments, acquire and analyse the data, and contribute significantly to the preparation of manuscripts for peer-reviewed publications.

The Crop Molecular Physiology Group is based in the Pre-Breeding Department, where there is a strong expertise in developing and interrogating wheat genetic diversity using quantitative genetics. We aim to create a collaborative environment within the Department that aim to achieve scientific excellence in our publications while ensuring impact.

3. Financial authority/responsibility (e.g. delegated budget, authorisation level, approx value of contracts etc**):**

N/A

4. Key relationships (external and internal)**:**

Internally: with members of the Crop Molecular Physiology group and more broadly with research scientists within the Pre-Breeding department at NIAB, and glasshouse staff.

Externally: NIAB is in a partnership with the University of Cambridge through the Crop Science Centre. The postholder will also be expected to interact with collaborators in industry, plant breeding companies and stakeholder organisations nationally and internationally.

5. Tasks/responsibilities (in order of priority)	Approx % of time
Research activities (designing and carrying out lab-based and glasshouse experiments, analysing data)	70
Prepare data for communication (internally and externally) including data analysis and interpretation, and manuscripts writing	20
Outreach/translational activities/supervision of students	5
Other duties	5

6. Working conditions:
Laboratory (NIAB HQ), glasshouses (NIAB Park Farm site), field (Cambridge area), and office (NIAB, HQ, Cambridge). Possibility of national and international travel.

7. PERSON SPECIFICATION
Education/Qualifications:

Essential:	Desirable:
PhD in a relevant discipline	

Specialist skills:

Essential:	Desirable:
Molecular biology techniques in particular measurements of transcripts abundance Problem solving skills Data analysis skills Strong organisational skills	General knowledge of plant nutrition General knowledge of genetics Familiarity with the R statistical package Basic bioinformatic skills

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
Excellent oral and written communication skills Ability to communicate effectively with colleagues and collaborators from diverse specialisms and levels as well as the general public. Curious, committed, diligent, and with good attention to detail. Capable of working independently and as part of a team.	The ability to think across scale from the gene to the whole plant. Some experience in managing workload and interacting with others to ensure the project is delivered.

Experience:

Essential:	Desirable:
Experience working with plants Developing publication record	Background in plant nutrition Experience of working with wheat (e.g. crossing)

Date of description: 27.10.2022	**Compiled by: S. Swarbreck and HR**