

JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: Senior Research Scientist **Centre:** Genetics & Breeding **Grade:** E **Location:** Bingham Building

Reports to (Job title): Programme Leader

Line Manages (Job titles): None

2. Main purpose of role: To research the genetic basis of large-embryo mutants of barley affected at the *Lys3* locus. The post-holder will be responsible for exploring the nature of a candidate gene (a transcription factor) for the *Lys3* locus. This will involve candidate validation by use of mutation populations (Tilling) and genetic manipulation and functional exploration by analysis of expression of the candidate and its targets. The post-holder will also investigate the effect of *lys3* on embryos in tissue culture and transfer the *lys3* mutant gene to elite barley cultivars by backcrossing.

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

This job is funded by BBSRC grant BB/L023156/1, identifying the genetic basis of large-embryo mutants of barley affected at the *Lys3* locus. It is a three year project (2015-2018) with a total BBSRC contribution of £395,693. The postholder will be responsible for the bulk of the research work with guidance from the NIAB line manager (Kay Trafford), and collaborators at The John Innes Centre. The project will be technically demanding, requiring an experienced individual capable of accepting responsibility for producing accurate, high-quality data.

4. Key relationships (external and internal): The post-holder will work at NIAB in the Genetics and Breeding team with the Principle Investigator (Kay Trafford) and with collaborators (Cristobal Uauy and Wendy Harwood) at John Innes Centre, Norwich UK.

Tasks/responsibilities (in order of priority)	Approx % of time
Characterizing and validating the candidate gene	60%
Transferring the <i>lys3</i> mutant gene to elite barley varieties	35%
Preparing reports, attending internal and external meetings, general admin, departmental duties (Health and Safety, lab steward etc)	5%

6. Working conditions : Mainly laboratory work with some office work, field and glasshouse work.

7. PERSON SPECIFICATION

Education/Qualifications:

Essential:	Desirable:
PhD in biological sciences, preferably plant sciences.	

Experience:

Essential:	Desirable:
Post-doctoral research experience in plant sciences, preferably in molecular biology and/or plant genetics.	Experience of plant research, preferably with cereals.

Specialist Training:

Essential:	Desirable:

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
Ability to work independently. Presentation skills (both written and verbal). Social skills including experience of working collaboratively.	

Date of description: 03.11.17

Compiled by: Kay Trafford