

JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: Group Leader / Senior Research Scientist

Centre: NIAB Cambridge

Job Group: Management/Specialist T1/T2 / Senior Specialist

Location: NIAB Cambridge and other NIAB sites as required by the role (e.g. NIAB EMR)

Reports to Director of Business Unit / Head of Department

Line Manages : TBC

2. Main purpose of role:

We are seeking experienced research leaders to provide outstanding scientific leadership, delivering innovative and internationally competitive research programmes to underpin NIAB's leading position in translational crop research. NIAB strives to deliver the crop science solutions required for highly productive, but sustainable agriculture and horticulture.

NIAB offers unique opportunities to carry out excellent research, field and farm-scale experiments and to innovate in the shaping and delivery of services at the interface with industry. NIAB has an ambitious five year plan for growth; in delivering this we are seeking to appoint established research leaders in the following areas:

- 1. Integrated pest and disease management.** Expertise in biocontrol, plant-insect interactions and microbiome engineering of arable and combinable crops are all key areas of interest, as are candidates with expertise in potato pathology (Cambridge).
- 2. Quantitative and statistical genetics** is of key importance at NIAB Cambridge, with our unique pre-breeding genetic resources in cereals and legumes (e.g. synthetic wheat and MAGIC populations), as well as our wealth of field derived data. We wish to work to integrate resilience traits into crops, to aid in the deployment of sustainable cropping systems. Candidates with expertise in statistical genetics (e.g. genomic prediction) and genotype x environment interactions are especially welcome.
- 3. Crop Modelling,** developing capacity to simulate crop development, biotic/abiotic interactions, properties of cropping systems and linkage to wider model frameworks (e.g. weather/climate, carbon cycling, soil nutrition, water use). Applications from those with expertise in FSPM plant modelling and linkage to genetic variation would be especially welcome at both our Cambridge and East Malling sites
- 4. Informatics and data science** are integral to crop science and we wish to grow capability in these areas in Cambridge, ensuring the correct analysis tools and approaches to ensure interoperable data in research (e.g. pangenome, modelling, phenotyping) and statutory systems (e.g. distributed ledgers).
- 5. Crop Biotechnology** NIAB is renowned for its crop transformation capabilities and wish to further its research capability in this and aligned areas, using biotechnology to accelerate crop improvement in Cambridge and the aligned use of plants for high-value products.

6. **Climate and sustainability-** linking genetic innovation to farming system innovation is critical. We welcome applications from researchers in the areas of climate modelling and lifecycle assessment to understand food production and food security, the treatment of uncertainty and managing risk, and the development of climate-resilient pathways and adaptation (Cambridge)
7. **Crop resource use-** identifying areas for improvements in crop canopy architecture and radiation use efficiency, nutrient and water uptake. Again, candidates with expertise in potato would be of particular interest (Cambridge).

Responsibilities:

- Be involved at a senior level in positioning and strategically developing NIAB's research capacity and capability for the next 10-20 years, consolidating NIAB's position as one of the premier translational institutions in agriculture worldwide.
- Plan, resource, and deliver internationally competitive research, alone and in collaboration with others, as Principal Investigator
- Lead a group or research area and secure funding from appropriate sources (e.g. BBSRC, Innovate UK, NERC, EU Horizon 2020, Global Challenges Research Fund. AHDB and commercial sources).
- Regularly publish impactful science in peer reviewed papers
- Encourage innovation and application of science across NIAB
- Identify and encourage outstanding researchers to join NIAB and to train and mentor promising young scientists through our tenure track programme

Group Leaders and Senior Group leaders are expected to secure and manage portfolios of research funding (the value of which is dependent upon grade) and be highly visible members of their research fields. In addition to this, Heads of Department are key members of NIAB senior management. They are expected to be a highly visible, trusted and approachable member of the senior management team, making linkages across the organisation in order to exploit research and funding opportunities. The Head of Department contributes to the achievement of the Business Unit Strategic Plan by providing effective management and leadership supporting the unit director, and the NIAB executive and CEO.

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

Senior Scientist:

Responsible for securing contracts delivering annual income of >£250K

T1/Senior Group Leader:

Responsible for securing annual income (>450k) and ensuring delivery of contracts valued at £>1.2m

T2/Head of Department:

Responsible for securing annual departmental income (>£1.5m) and ensuring delivery of contracts valued at £>4m

4. Key relationships (external and internal): Senior scientists, group leaders and HoD's across NIAB.

Relevant personnel in UKRI and other funding bodies. The wider scientific community in which they are expected to demonstrate leadership.

Tasks/responsibilities (in order of priority)	Approx % of time Senior Scientist/Group Leader/Head of Department	Level of responsibility
Own Research activities, including securing funding	85/75/55	High
Management of the named research group.	0/5/20	High
Developing Research strategy and funding mechanisms	5-10% (role dependent)	High
External communication, influencing and dissemination	5-10% (role dependent)	High
Cross-NIAB strategic and operational targets, project development, and other internal engagement	5-10% (role dependent)	High

6. Working conditions :

Roles will include working in the office, lab and field. Flexible, agile working is required. Travelling where necessary to represent NIAB nationally and internationally is of great importance as is the requirement to work to short deadlines and with variable workloads.

7. PERSON SPECIFICATION

Education/Qualifications:

Essential:	Desirable:
PhD with 2 + years' relevant experience	

Experience:

Essential:	Desirable:
<ul style="list-style-type: none"> Strong track record of high-quality research in one of the listed areas HoD candidates should have a world-class level of research achievements and international prestige in one of the listed Research Areas Senior Group Leaders candidates should have obtained (or be at the level of) tenured faculty positions with a strong research background, internationally-recognized research quality and reputation, and the capability of leading innovation research Group Leader candidates should have several years of postdoctoral training in the life 	<ul style="list-style-type: none"> Experience on grant awarding committees Experience of representation/leadership on national and international research community bodies Evidence of interaction with industry, charities etc

<p>sciences, a strong publication record with influential academic papers in international academic journals, and the ability to carry out independent and innovative research</p> <ul style="list-style-type: none"> • Established plant/crop science networks in the UK and internationally in one of the listed Research Areas • Management of research staff and/or projects (Group Leader/Senior Group Leader roles) • Strong publication record, commensurate with level of the position (Group Leader/Senior Group Leader/HoD), or industry equivalent • Track record in gaining research funding • Significant management and leadership experience (HoD roles) 	
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Specialist Training:

Essential:	Desirable:
As listed for role	Management training

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
<ul style="list-style-type: none"> • Self-starting, entrepreneurial, motivational, strong communicator, commercial acumen, concern for impact, excellent interpersonal skills • Demonstrable willingness and ability to set aside personal interest for common goals • The ability to think logically and deal with complex issues • Ability to focus without dropping the ball. • Ability to communicate well at all levels • Committed and diligent • Strong personal motivation • Hard working • Strong interpersonal skills, tact, diplomacy (HoD) • A desire to realise impact for stakeholder benefits and wider society • Full driving licence 	

Date of description: 1.7.20

Compiled by: R Harrison, S Knight