Postdoctoral position in Legume crop trait development

Applications are invited for a postdoctoral position in the group of Dr Aleksandr Gavrin (https://mbg.au.dk/a-gavrin/) at the Department of Molecular Biology and Genetics, Aarhus University.

Expected start date and duration of employment

This is a 20-month position with a mid-term progress assessment, at which a 'go/no-go' decision will be made regarding the continuation of it.

Job description

Our group investigates legume biology with a focus on molecular mechanisms underlying plant development, symbiotic nitrogen fixation, and plant–microbe interactions. This position is part of the collaborative project (CicerNord), which aims to develop chickpea cultivars adapted to the Northern European climate by uncovering genetic determinants of early maturation, productivity, nutritional quality, and symbiotic efficiency.

As a key contributor to the project, the successful candidate will design, conduct, and analyse experiments focused on chickpea phenology, genomic variation, and symbiotic nitrogen fixation. The work will involve integrating field and laboratory data, performing genome-wide association studies (GWAS), and applying transcriptomic approaches to identify genes associated with key agronomic and nutritional traits. The postdoc will collaborate with an interdisciplinary team spanning genomics, agronomy, and food science, and will be expected to communicate scientific results through publications and presentations.

Your profile

We are looking for a highly motivated candidate with:

- Strong background in quantitative genetics and statistics: deep understanding of polygenic traits, heritability, population structure, linkage disequilibrium, and genotype–phenotype associations. Experience interpreting complex trait variation in plants.
- Proficiency in GWAS tools and pipelines: hands on experience with GWAS software (e.g., GEMMA, EMMAX, GAPIT, FarmCPU, BLINK). Ability to run mixed linear models, handle covariates, correct for population structure/kinship, and perform quality filtering of SNP data.
- Genomics and transcriptomics experience: ability to integrate GWAS with transcriptomic data (TWAS) to prioritize candidate genes.

Desirable criteria:
Experience designing, conducting, or evaluating phenotyping experiments in field or controlled environments.

Who we are and what we offer

The Department of Molecular Biology and Genetics at Aarhus University is a vibrant and exciting interdisciplinary research environment. The department is located in a newly renovated laboratory complex with well-developed research infrastructure, laboratories and access to shared equipment. The section of plant molecular biology has state-of-the-art facilities for plant cultivation, extensive genetic resources and established plant systems for comparative studies of different plant-microbe interactions. The department provides a welcoming and collaborative atmosphere with close working relationships, professionalism, equality and a healthy work-life balance.

Place of work and area of employment

The place of work is Universitetsbyen 81, 8000 Aarhus C, and the area of employment is Aarhus University with related departments.

Contact information

For further information and scientific enquiries please contact Dr Aleksandr Gavrin (agav@mbg.au.dk).

Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the appointment committee if necessary, – the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to

Application Deadline:
15 April 2026

Institute/Faculty:
Department of Molecular Biology and Genetics

Faculty:
Faculty of Natural Sciences

Academic contact person:
Aleksandr Gavrin
Adjunkt
agav@mbg.au.dk

Vacant positions:
1

Number of months:
20

Hours per week:
37

Expected date of accession:
01/06/2026

comment on the part of the assessment that concerns him/her self.

Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline. Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

If you wish to add a referee **after** you have submitted your application, you must send this person's details (name, job title, place of work, and email address) as well as the name of the position you have applied for to: HR.Nattech@au.dk

Formalities and salary range

Natural Sciences refers to the Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation.

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found here.

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Taxation and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the Memorandum on Job Structure for Academic Staff at Danish Universities.

Salary depends on seniority as agreed between the Danish Ministry of Taxation and the Confederation of Professional Associations.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

Aarhus University offers a broad variety of services for international researchers and accompanying families, including relocation service and career counselling to expat partners. Read more here. Please find more information about entering and working in Denmark here.

Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU. You can read more about it here.

At the Faculty of Natural Science at Aarhus University, we strive to support our scientific staff in their career development. We focus on competency development and career clarification and want to make your opportunities transparent. On our website, you can find information on all types of scientific positions, as well as the entry criteria we use when assessing candidates. You can also read more about how we can assist you in your career planning and development.

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 37,000 students (FTEs) and 8.700 employees and has an annual revenue of EUR 1.106 billion. Learn more at www.international.au.dk/