

Postdoctoral fellow in quantitative genetics to develop breeding goals for potato

Applications are invited for a postdoctoral fellowship position at the Center for Quantitative Genetics and Genomics, Aarhus University, Denmark. We are seeking applicants for a position in quantitative genetics aimed at developing breeding goals for potato.

Expected start date and duration of employment

It is a two-year position starting the 1st of July 2025 or as soon as possible thereafter. An extension of up to 1 year will be possible in case external funding is available.

Job description

The primary focus of this position is to develop breeding goals for multi-trait selection in potato. The successful candidate is expected to develop and derive economic values for the traits in the breeding goals, in collaboration with potato breeding company. This process may involve using various methodologies, such as accounting approaches, profit functions, or bio-economic models, to integrate biological and production parameters, market and non-market trait values, and industry feedback into both short- and long-term breeding strategies. The primary objective is to create a tool that plant breeders can use to calculate and apply breeding goals for various purposes. For instance, the tool may facilitate the development of selection indices for specific stages in the breeding cycle, or potato products for market segments and specific stakeholder requirements. Additionally, the candidate may analyze real-world data for genomic multi-trait selection, and use simulation models for breeding planning. The successful candidate is expected to publish high-quality peer-reviewed publications.

Your profile

We are looking for a highly motivated team member with a strong interest in plant breeding, able to plan and conduct research independently.

Qualifications:

1. A PhD in relevant disciplines such as plant/animal breeding, classical quantitative genetics, statistics, or related fields
2. Good understanding of mathematical, classical quantitative genetics regarding selection index theory, multi-trait selection, breeding goal, and selection responses
3. Programming experience in R, and some experience with high-performance computing
4. Good communication and writing skills in English
5. Experience with breeding planning simulation, and genomic selection is advantageous

Who we are

The Center for Quantitative Genetics and Genomics (QGG) is a vibrant and exciting interdisciplinary center for research and education in quantitative genetics and quantitative genomics (<http://www.qgg.au.dk/en>). QGG is an international organization with 70 employees and visiting researchers from more than 20 countries. We perform basic and applied research within plant, livestock and human quantitative genetics. Our focus areas include quantitative genetics, artificial intelligence applied to agriculture and precision medicine, population genetics, and integrative genomics. QGG is located at the central campus in Aarhus and at the AU Flakkebjerg campus in newly renovated offices with well-developed research infrastructure, laboratories, equipment, and high-performing computing clusters.

Place of work

The place of work is C.F. Møllers Allé 3, Bldg. 1130, 8000 Aarhus. The area of employment is Aarhus University with related departments.

Contact information

Application Deadline:
15 March 2025

Faculty:
Faculty of Technical
Sciences

Institute/Faculty:
Center for Quantitative
Genetics and
Genomics

**Academic contact
person:**
Thanh Tuan Chu
Adjunkt
chu.thinh@qgg.au.dk

Vacant positions:
1

Hours per week:
37

Number of months:
24

**Expected date of
accession:**
01/07/2025

For further information and scientific enquiries please contact Head of Plant Section Professor Torben Asp (torben.asp@qgg.au.dk), or Assistant Professor Thinh Tuan Chu (chu.thinh@qgg.au.dk).

Deadline

Applications must be received no later than March 15, 2025.

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 comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

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

Technical 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](#).

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 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 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/