

Postdoctoral researcher in quantitative genetics applied to organic oat breeding

The Center of Quantitative Genetics and Genomics at Aarhus University has an exciting position for a one-year postdoctoral research, with possibility for a one-year extension, in quantitative genetics applied to organic oat breeding, expected to start on November 1st, 2026. The postdoc will contribute to deciphering the adaptation of oat varieties to organic farming. If you're interested in applying the latest bioinformatic and statistical tools for advancing organic breeding in oat, feel free to reach out to Guillaume Ramstein.

Job description

As part of the AVENUE project funded by the Novo Nordisk Foundation, you will predict and interpret the adaptation of oat varieties to organic production. In this project, we will focus on understanding the response of genes to various environmental conditions in organic agriculture. We will analyze traits related to robust production and grain nutritional quality, especially beta-glucan content, an important breeding goal in organic oat.

In this project, you will be involved in analysis of sequence data in diverse samples of oat accessions and modelling of interactions among genes, climates, and management practices. Your research will take advantage of an innovative experimental design combining two sets of field trials: trials on many varieties in few environments and trials on few varieties in many environments. This experimental design and your computational analyses will shed new light on crop adaptation to organic farming and the genetic causes for healthier oat.

Expected start date and duration of employment

This is a 1-year position from 1 November 2026, or as soon possible, with possibility for a 1-year extension.

Your profile

Applicants should hold a PhD in Quantitative Genetics, Plant Breeding, Bioinformatics, or a related field.

Applicants are expected to have published in international peer-reviewed journals, especially on topics related to plant breeding and plant genetics. Experience in genomic prediction and genotype-by-environment interactions is especially relevant to this position.

Additionally, experience in translational research is highly desirable. For example, this may include the implementation of simple decision tools for pre-breeding in organic agriculture based on the outcomes of genomic prediction models.

Good communication skills in English and the ability to work in an interdisciplinary team—consisting of quantitative geneticists, agronomists, and bioinformaticians—are particularly appreciated for this position.

Who we are

The Center for Quantitative Genetics and Genomics (QGG) is a major center for research and education in quantitative genetics and genomics at Aarhus University (<http://www.qgg.au.dk/en>). We conduct basic and applied research in animal, plant, and human genetics. Our focus areas include quantitative genetics, artificial intelligence applied to agriculture and medicine, population genetics, and integrative genomics. Research within QGG is characterized by a very close synergy between method development and application on practical problems across species, in collaboration with industry partners. QGG is an international research center with about 70 employees and visiting researchers from over 15 nations. QGG works in teams and strives for an excellent working environment, in which we value self-leadership, open communication, and commitment to diversity and inclusion.

What we offer

The successful candidate will be offered:

- computational resources, including the Genetics/Genomics High-Performance Cluster and GenomeDK, with growing capabilities (e.g., additional nodes, GPUs).

Application Deadline:
21 June 2026

Institute/Faculty:
Center for Quantitative
Genetics and
Genomics

Faculty:
Faculty of Technical
Sciences

**Academic contact
person:**
Guillaume Ramstein
Tenure Track adjunkt
ramstein@qgg.au.dk

Vacant positions:
1

Number of months:
12

Hours per week:
37

**Expected date of
accession:**
01/11/2026

- a collaborative environment, in which the candidate will be able to share across research fields (quantitative genetics, machine learning, bioinformatics, and population genetics) and applications (in biology, agriculture, and biomedicine).
- a research environment characterized by collaboration, commitment to diversity and inclusion, and success in mentoring and supervision.
- an excellent working environment, characterized by professionalism, diversity and healthy work-life balance.

Place of work and area of employment

The place of work is C. F. Møllers Allé 3, 8000, Aarhus (Denmark), and the area of employment is Aarhus University with related departments.

Contact information

For further information, please contact: Tenure-Track Assistant Professor Guillaume Ramstein, +45 42 52 12 66, ramstein@qgg.au.dk

Deadline

Applications must be received no later than 21 June 2026.

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.

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

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/