

Two-year Postdoc position in Bioinformatics and Genomic Epidemiology

The Department of Animal and Veterinary Sciences (ANIVET), Aarhus University seeks applications from outstanding and interested candidates for a postdoctoral position in Multiomics, Bioinformatics and Genomic Epidemiology (MBE). The position is full-time, fixed term academic position with an expected start date of 1 October 2026 or shortly thereafter.

We are seeking a highly skilled and experienced postdoc at ANIVET who will support the further development of research and educational activities in MBE-related areas applied to farm and companion animals.

The successful candidate will work in two related projects funded by the EU Partnership (EUP) Animal Health & Welfare (EUPAHW). Within the EUPAHW projects (SOA23 and SOA28 - See: [EUPAHW - Projects](#)), the candidate will integrate and analyze epidemiological, clinical and molecular data as well as genomic / metagenome sequence data including WGS datasets from mastitis bacteria and other select pathogens, using advanced bioinformatics pipelines.

Key Responsibilities

- In JIP2-SOA23, standardize the use of analysis tools for the mapping, annotation and analysis of whole genome sequences of hosts (e.g. cattle, pig) and pathogens (e.g. viral or bacterial or parasitic) as well as their metagenomic sequence datasets available within the EUPAHW- JIP2 - SOA23 consortium and/or in public databases with an overall aim of predicting and preventing infectious diseases outbreaks and for population-level surveillance.
- In JIP2-SOA28, identify key antimicrobial resistance (AMR) genes in mastitis pathogens and environmental samples in dairy systems, including their association with mobile genetic elements with the aim of devising a preliminary framework for risk factor analysis related to persistence of AMR, horizontal gene transfer, and dissemination between bacterial populations.
- Apply Artificial Intelligence (AI) methods including deep learning (DL) models and supervised and unsupervised machine learning (ML) methods for integration and for Genome-2-Phenome (G2P) and risk factor analysis.
- Develop robust, shareable bioinformatics pipelines for epidemio-genomic and phylogenomic analyses using genomic & metagenomic datasets and implement them in high performance computing (HPC) or cloud infrastructure.
- In both projects, actively participate in EU level network meetings, collaborate with other projects within the consortia and be responsible for writing, submitting and presenting reports.
- Contribute to project management, conference presentations and journal publications and assist with preparing grant applications to establish new projects in these areas for the team.
- Contribute to BSc and Master's courses.
- Contribute to the supervision of MSc and PhD students, as requested and appropriate.

Qualifications

- Applicants must have a PhD in bioinformatics, genomic epidemiology, data science (AI/ML) or similar with a focus on animal health, microbiology and disease control and/or production traits.

Application Deadline:
28 June 2026

Institute/Faculty:
Department of Animal Science

Faculty:
Faculty of Technical Sciences

Academic contact person:
Haja Kadarmideen
Professor
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Vacant positions:
1

Number of months:
24

Hours per week:
37

Expected date of accession:
01/10/2026

- Proven experience in biostatistical and bioinformatic analysis of multiomics datasets with expertise in genomic (SNP genotype or WES/WGS), and metagenomic (16s rRNA and WGS) sequence data and relating them to animal health & disease and/or pathogens transmission / virulence / risk factors.
- Knowledge and prior use of Machine Learning and AI/deep learning for G2P or genomic epidemiology analyses will be considered an asset.
- Experienced user of various QA/QC tools and bioinformatics pipelines for 16s rRNA and WGS sequence data from pathogens.
- Advanced computer programming skills in R and Python and preferably also other languages and demonstrated proficiency in UNIX, shell scripting (Bash) for automation and workflow optimization.
- Contribute to project management, meeting/conference presentations and journal publications and assist with preparing grant applications to establish new projects in these areas for the team.
- Contribute to BSc and Masters' courses.
- Contribute to MSc and PhD students' supervision, as requested and appropriate.

The chosen candidate is expected to join and develop ongoing MBE – related research within the research group [Management and Modelling \(MAMO\)](#).

What we offer

- A well-developed research infrastructure, laboratories and access to shared Equipment, HPC and animal-experimental facilities
- An informal and multicultural research environment with high professionalism and close collaboration and networking activities
- A workplace characterized by equality and a good work-life balance, and an open dialogue across different fields of research.

Who we are

Department of Animal and Veterinary Sciences is well-known for its skilled and very innovative interdisciplinary research environments with high international impact. We perform world-class research, which contributes with solutions to solve essential societal challenges within the green transition: food production and veterinary medicine – nationally and globally.

The department generates novel research at the highest international level within sustainable food production, environment, climate, and health and welfare for animals and humans. The activities form the basis for the research-based public sector consultancy and degree programs covering bachelor's, master's and PhD degree programs within animal science and veterinary medicine. We offer a lively, engaged and innovative learning and study environment, which is closely integrated in the research environment.

ANIVET has unique and advanced animal experimental research facilities and technologies, situated in close connection to the research environment, and a comprehensive national and international research network and good industrial and professional collaboration.

Please refer to Department of Animal and Veterinary Sciences (au.dk) for further information about the department; <https://anivet.au.dk/en>

Contact

Further information on the position may be obtained from: Professor Haja Kadarmideen, phone: +4593521066, email: haja.k@anivet.au.dk, Professor Karl Pedersen, phone +4522618534, email: karl.pedersen@anivet.au.dk

Living in Denmark

Please visit the international staff website: <https://internationalstaff.au.dk/prearrival/> for information about arriving to and living in Denmark for both the applicants and their

potential family.

Place of employment and place of work

The place of work is the Department of Animal and Veterinary Sciences, AU Viborg, Blichers Allé 20, DK-8830 Tjele, and the area of employment is Aarhus University (AU) with related departments.

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/