

Postdoc in Peripheral Biomarker Studies of Depression

The Department of Clinical Medicine at Faculty of Health at Aarhus University invites applications for a position as Postdoc in the field of Translational Psychiatry as per May 1, 2025, or as soon as possible thereafter. The start date is flexible, and the position is a fixed-term full-time position for 1 year with a possibility for extension.

Department of Clinical Medicine

As a postdoc at the Department of Clinical Medicine, you will be part of what is probably the largest health science research department in Denmark. Our clinical research covers all the medical specialities and takes place in close collaboration with the university hospital and the regional hospitals in the Central Denmark Region. We have approx. 30,000 square metres of modern research facilities for experimental surgery and medicine, animal facilities and also advanced scanners at our disposal. The department has overall responsibility for the Master's degree programs in medicine and in molecular medicine. At the department we are approx. 670 academic employees, 500 PhD students and 160 technical/administrative employees who are cooperating across disciplines. As a postdoc, you will be working at Translational Neuropsychiatry Unit (TNU) in Forum located at Aarhus University Hospital in Skejby. You can read more about the department [here](#) and about the faculty [here](#).

Translational Neuropsychiatry Unit

TNU carries out translational neuropsychiatric research, particularly focusing on animal experimental studies with translation to human disease. The overall goal is to understand brain neurobiology, and to facilitate development of new therapeutics, particularly targeting mood and anxiety disorders. Read more [here](#). The candidate will be a part of the Experimental and Molecular Psychiatry group (a.k.a. the Elfving group). In the group, we focus on development of novel treatment strategies and identification of biomarkers in mental disorders.

About the research project

Within Major Depressive Disorder (MDD) sex differences in prevalence, symptoms, and responses to treatment exist and the treatment is often inadequate. As the diagnosis rely only on symptoms, biomarkers may serve as supporting diagnostic tools. Clinically, microRNAs (miRNAs) offer a great potential, as they are easy accessible. miRNAs can be transported from the brain to periphery in extracellular vesicles (EVs), as EVs have the ability to cross the blood-brain barrier. Actually, the content of the EVs may be influenced by the onset and progression of mental disorders. A few studies have investigated the EVs cargo of miRNAs in relation to MDD. In the project, we hypothesize that sex differences exist in the miRNA expression and that EVs constitute a novel source of transport. In matched plasma and saliva samples from healthy subjects and patients with MDD before/after treatment, miRNAs will be profiled using the Nanostring nCounter technology. The project is conducted in collaboration with Professor Gitte Moos Knudsen and Professor Vibe G Frøkjær, NRU, Rigshospitalet.

Your job responsibilities

As Postdoc in Peripheral Biomarker Studies of Depression your position is primarily research-based but may also involve teaching assignments. You will contribute to the development of the department through research of high international quality. In your daily work, you will work closely with colleagues on your project, where you will receive supervision and guidance.

You should be able to work independently and responsibly, to critically analyze data, prepare and communicate results, prepare manuscripts and publish research findings in high quality journals. You are expected to keep updated regarding literature on the field.

You will report to the Associate professor Betina Elfving.

Your competences

You have academic qualifications at PhD level, for example within the following areas: Molecular research focusing on non-coding RNAs and EVs. It will be beneficial if you possess bioinformatics/computational skills and strong scientific writing skills.

As a person, you have good interpersonal skills, are inclusive and team-oriented and able to contribute to a good work environment. We expect you to be fluent in oral and written English.

In order to be assessed as qualified for a Postdoc position, you must meet [these academic criteria](#).

Questions about the position

If you have any questions about the position, please contact Associate professor Betina Elfving tel.: (+45) 2896 6726.

Application Deadline:
17 March 2025

Faculty:
Faculty of Health

Institute/Faculty:
Department of Clinical
Medicine

Academic contact person:
Betina Elfving
Lektor
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dk
+4528966726

Vacant positions:
1

Hours per week:
37

Number of months:
12

Expected date of accession:
01/05/2025

Your place of work will be the Department of Clinical Medicine, TNU, Palle Juul-Jensens Boulevard 11, DK-8200 Aarhus, Denmark.

We expect to conduct interviews March/April 2025.

Terms of employment

- Appointment as a postdoc requires academic qualifications at PhD level.
- Further information on the appointment procedure can be found in the [Ministerial Order on the Appointment of Academic Staff at Universities](#).
- The appointment is in accordance with the [Danish Confederation of Professional Associations](#) (Akademikerne).
- Remuneration is in accordance with the above, and the [Salary agreement catalogue for staff at Health](#).
- The yearly base salary for a fulltime postdoc is between DKK 484.214,84 and DKK 538.720,20 depending on the years of working experience after achieved MSc degree. The base salary includes a position related supplement and pension (17.1 %). Additional supplement(s) for special qualifications can be negotiated. Authorisation supplement(s) will be granted, if relevant for the position. Your local eligible trade union representative at Aarhus University negotiates your salary on your behalf.
- Researchers recruited from abroad are offered a [special researcher tax scheme](#) with a lower tax rate.
- Further information on qualification requirements and job description can be found in the [Ministerial Order on Job Structure for Academic Staff](#)

Application

Your application must include the following:

- Motivated application
- Curriculum Vitae
- Diploma
- [Template for applicant - postdoc](#)
- A list of publications
- A teaching portfolio. We refer to [Guideline on the use of teaching portfolios](#)
- A maximum of five of the publications of greatest relevance to the job may be submitted (optional)
- Research plan can be uploaded (optional)
- Coauthor statement(s) can be uploaded (optional)

We refer to the faculty's [Guidelines for applicants](#).

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.

International applicant?

Aarhus University offers a broad variety of services for international researchers and accompanying families, including assistance with relocation and career counselling to expat partners. Please find more information about the International Staff Office and the range of services [here](#). Aarhus University also has a Junior Researcher Association and offers career development support. You can read more about these resources [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 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/