Postdoc in Influence of environmental toxins in Parkinson's Disease pathology

Application Deadline:
07 May 2026

Institute/Faculty:
Department of Biomedicine

Faculty:
Faculty of Heatlh

Academic contact person:
Marina Romero-Ramos
Professor
+4560202749
mrr@biomed.au.dk
+4560202749

Vacant positions:
2

Number of months:
12

Hours per week:
37

Expected date of accession:
01/08/2026

The Department of Biomedicine at Faculty of Health at Aarhus University invites applications for one or more Postdoc positions in the field of Environmental toxicants in Parkinson's disease as per 1 August 2026 or as soon as possible thereafter. The position is a fixed-term full-time position for 1 year with the possibility of extension up to 3 years.

The department of Biomedicine prioritises diversity and a good work environment, as this is a prerequisite for groundbreaking research. In a diverse and international research environment, dedicated employees are looking to generate new knowledge within biomedical research areas such as infection and inflammation, membranes, neuroscience and personalised medicine. The Department of Biomedicine provides research-based teaching of the highest quality and is responsible for a large part of the medical degree programme. Academic staff contribute to the teaching. English is the preferred language in the laboratory, at meetings and at seminars. The department employs approx. 500 people from all over the world, and they make use of the department's modern laboratory-, core- and animal facilities. The Department of Biomedicine focuses on innovation, entrepreneurship and collaboration with business and industry, and numerous researchers from the department have established companies to develop new medicinal treatments founded in professional scientific basic research. You can read more about the department here and about the faculty here.

PACE - Lundbeck Foundation Parkinson's Disease Research Center

You will be also part of PACE, the newly established Lundbeck Foundation Parkinson's Disease Research Center, which is a translational research center focused on studies of Lewy body diseases. PACE consists of a close-knit community of world-leading research groups in basic and clinical Parkinson's disease research, wherein a number of novel group leaders will be embedded. The center comprises research programs in clinical research and trials, longitudinal cohort building, multi-modal imaging, biobanks, epidemiology, neuropathology, wearables and biotech, experimental disease models including animal and cell models, and basic science programs in alpha-synuclein patho-mechanisms, neuroimmunology, and biomarker discovery. In two years, we expect to comprise 7-9 group leaders totaling 70+ researchers, students, and support staff. PACE is part of and collaborate closely with both Aarhus University, which is consistently ranked as one of the world's top 100 universities, and Aarhus University Hospital, which in 2024 was elected Denmark's best hospital for the 15th time.

PACE's mission is to take research in Parkinson's disease to the highest level possible and to improve life for people with Parkinson's disease or other neurodegenerative disorders. We focus on discovering and validating novel innovative tools, biomarkers and disease-modifying mechanisms, which within a 10-year time frame will be applied in clinical trials. You can read more about PACE here.

About the research project

Candidates will be part of a research group investigating the *in-vivo* interaction of selected environmental toxicants with Parkinson's disease pathology and risk in pre-clinical rodent models of the disease. The candidate will use different disease-modelling approaches and assess causative association of different environmental toxins with brain pathology in WT and/or rodent models of LRRK2 and GBA variants.

You will be employed in the project Connecting the environmental exposome to PD risk and disease pathology. This project is funded through an externally financed research grant. The project is part of the Health Faculty at AU and PACE – Lundbeck Foundation Parkinson's disease Research Center at AUH. Close interaction and constant scientific exchange with the teams and the collaborators (both academics and clinicians) will be essential for the advancement of the project.

Your job responsibilities

As Postdoc in Biomedicine 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.
The postdoctoral fellow will be responsible for all the in-vivo modeling by performing stereotaxic surgery in rats, behavioral analysis, postmortem brain histology for advanced microscopy analysis of neurons and glia and peripheral organ collection for cell isolation and immune profiling through Spectral/Flow Cytometry and/or RNAseq.

You will be responsible for all data analysis.

You will report to the Head of Department of Biomedicine.

Your competences

Successful candidates will have an excellent track record and will be highly motivated, self-driven candidate, with a PhD in neurodegenerative disorders using rodent models, and proven experience on analysis of the neurodegenerative and/or inflammatory processes occurring in these types of diseases. Priority will be given to those with experience in the field of Parkinson's disease and the role of alpha-synuclein, GBA/LRRK2 mutations, and/or the field of neurodegeneration associated with environmental toxicants.
The postdoctoral fellow will work in close collaboration with other fellows and students in the lab, and collaborative skills will be highly important for the success in carrying out the planned research.
Therefore, you are a highly motivated and independent researcher with proven experience on:

- A) *in-vivo* pre-clinical models of neurodegeneration (ideally alpha-synuclein, GBA and/or LRRK2) OR/AND B) environmental toxicants and their association with neurodegeneration
- I*n-vivo* methods focused on brain stereotaxic surgery and rodent behavioural testing
- Postmortem neuroanatomical methods: brain tissue processing and histology
- Different advanced imaging and microscopy techniques, including image analysis
- Experience with peripheral tissue handling (ex: spleen, blood, gut) is a plus
- Experience in flow cytometry and/or transcriptomic techniques are not necessary but will be an advantage
- You have excellent organizational and problem-solving skills

The successful candidate is expected to have strong skills in English, show mobility in his/her CV, and to have a demonstrated scientific track record, including two publications in a peer-reviewed scientific journal within a relevant field with at least one first authorship. Prior teaching experience will be also considered a plus.

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.

Shortlisting will be used.

Questions about the position

If you have any questions about the position, please contact Marina Romero-Ramos e-mail: mrr@biomed.au.dk or phone (+45 6020 2749).

Your place of work will be the Department of Biomedicine, Skou Building, DK-8000 Aarhus C, Denmark.

We expect to conduct interviews mid June.

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 supplemement(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)
- References/recommendations can be uploaded separately in the e-recruitment system (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 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/