

One or more postdocs in Stem Cells and Parkinson's Disease

The Department of Biomedicine at the Faculty of Health at Aarhus University invites applications for a position as a Postdoc in the field of stem cell biology as per 1 May 2025 or as soon as possible thereafter. The position is a fixed-term full-time position for 2 years, with the possibility of extension.

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](#).

About the research project

Two funded two-year postdoctoral positions are available from April 2025 in Mark Denham's research group. The Denham group is focused on developing stem cell therapies for Parkinson's disease. Specifically, the group works with human pluripotent stem cells, and they use genetic engineering methods to generate lineage-restricted stem cell lines, which generate dopaminergic neurons more efficiently. The group investigates how these cultures containing midbrain progenitors function in vitro and after transplantation in vivo. The purpose of the postdoc is to advance our current research towards a GMP-ready state and transplant cultures containing midbrain progenitor into a rodent model of Parkinson's disease and evaluate behavioural recovery using standard behavioural tests and characterise the cellular phenotype and survival of the transplant using histochemical techniques and advanced microscopy. The in vivo aspects of the project are in close collaboration with the lab of Associate Prof. Marina Romero-Ramos, and thus, the candidate is expected to interact with her team.

Your job responsibilities

As a Postdoc 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.

Your main tasks will consist of:

- Independent research of high international quality, including publication
- Pluripotent stem cell culture and differentiation
- Gene editing of stem cell lines
- Stereotaxic surgery for disease modelling in rodents and in vivo behavioural analysis
- In vivo transplantation of neural progenitors into rodents
- Brain processing for histological techniques
- Analysis of cultures and grafts including imaging and various quantification methods

You will report to Associate Professor Mark Denham.

Your competences

You have academic qualifications at the PhD level, preferably within one or more of the following areas: biology, neurobiology, biomedical sciences or similar areas, preferably with one or more publications. Practical experience working with rats and performing stereotactic surgery is an advantage. Additionally, the candidate should be proficient in immuno-histological techniques, including confocal imaging. Experience in stereological analysis is a plus but not necessary. Ideally, the candidate should have expertise in pluripotent stem cell culture and gene editing. Furthermore, preference will be given to candidates with a strong background in Parkinson's disease.

Application Deadline:
28 February 2025

Faculty:
Faculty of Health

Institute/Faculty:
Department of
Biomedicine

Academic contact person:
Mark Denham
Gruppeleder, lektor
mden@dandrite.au.dk
+4523982078

Vacant positions:
2

Hours per week:
37

Number of months:
24

Expected date of accession:
01/05/2025

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 Associate Professor Mark Denham, PhD, Phone: +45 2398 2078. E-mail: mden@dandrite.au.dk

Your place of work will be the Department of Biomedicine, Høegh-Guldbergs Gade 10, Building 1116, DK-8000 Aarhus C, Denmark.

We expect to conduct interviews in late February.

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