2-Year Postdoctoral Position in Neuroinflammation and Alzheimer's Disease Models

DANDRITE and the Department of Biomedicine, Health, invites applications for a position as Postdoc in the field of Neuroinflammation and Alzheimer's Disease as of 1 August 2025 or as soon as possible thereafter. The position is a fixed-term 2-year position.

About DANDRITE

<u>DANDRITE</u> - the Danish Research Institute of Translational Neuroscience and the Danish node of the Nordic EMBL Partnership for Molecular Medicine - performs basic and translational research in neuroscience and brain disorders. We aim at unravelling the mechanisms that explain cellular communication and computation networks in brain circuitries, and how these are affected in neurodevelopment and neurological and psychiatric disorders.

DANDRITE was established in 2013 with financial support from the Lundbeck Foundation and is hosted by Aarhus University, an international, top-ranking university.

You will join the lab of Associate Professor Thomas Kim at DANDRITE, the Danish node of the Nordic EMBL Partnership for Molecular Medicine, hosted at the Department of Biomedicine, Aarhus University.

Our group focuses on the transcriptional and functional diversity of hypothalamic and thalamic cell types across development and disease. We use single-cell sequencing, genetic perturbation, and advanced spatial methods (including smFISH, light-sheet imaging, and whole-brain clearing). This project builds on our expertise in gene regulatory networks and selective cellular vulnerability in Alzheimer's Disease models.

DANDRITE and the Department of Biomedicine offer access to world-class core facilities, including advanced microscopy, genomics, animal housing, and histology.

About the research project

You will work on a funded project investigating the role of microglia in neurodegeneration using APP/PS1;Tau mice crossed with Microglia-CreER;Reporter lines. Your focus will be on characterising microglial responses across disease progression using a combination of:

- Stereotaxic injections (e.g., for viral vectors or drug delivery)
- Tamoxifen induction and Cre/lox systems
- Tissue processing and immunostaining (including brain perfusion, cryosectioning, immunohistochemistry)
- Microscopy-based analysis (confocal; light-sheet if interested)

Optional involvement in behavioural phenotyping or in vivo imaging.

Your job responsibilities

You will be part of a supportive and collaborative environment and are expected to:

- Design and execute in vivo experiments
- Work closely with our team on data analysis and interpretation
- Collaborate with the PI and team on publications, presentations, and potential grant applications
- · Contribute to lab routines and mentorship of junior researchers

You will report to Group Leader Thomas Kim.

Your competences

You have academic qualifications at PhD level, for example, within the following areas:

Required:

- PhD in neuroscience, molecular biology, or a related biomedical field
- Proven experience in **mouse models**, including handling, genotyping, and tissue collection
- Stereotaxic surgery experience (small animal neurosurgery)
- Knowledge of Cre/loxP systems, including tamoxifen induction

Application Deadline: 12 June 2025

Faculty: Faculty of Heatlh

Institute/Faculty: Department of Biomedicine

Academic contact

person: Dong Won Thomas Kim Lektor tkim@dandrite.au.dk

Vacant positions:

Hours per week: 37

Number of months: 24

Expected date of accession: 01/08/2025

- Experience with immunostaining and fluorescence/confocal imaging
- FELASA certification (EU Function A or equivalent) for animal work
- · Strong teamwork and communication skills
- Excellent spoken and written English

Preferred / advantageous:

- Background in neuroinflammation or neurodegeneration (e.g., Alzheimer's Disease)
- Experience with in vivo imaging or behaviour testing
- · Familiarity with microglial biology
- Prior work with transgenic reporter mice or AD mouse models
- Familiarity with omics data (e.g., transcriptomics, single-cell, spatial) is a plus but not required.

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.

To be assessed as qualified for a Postdoc position, you must meet <u>these academic</u> <u>criteria</u>.

Shortlisting will be used.

Questions about the position

If you have any questions about the position, please contact Group Leader Thomas Kim, tkim@dandrite.au.dk, tel.: (+45) 93 50 89 87.

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

We expect to conduct interviews in 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 <u>Ministerial</u> <u>Order on the Appointment of Academic Staff at Universities</u>.
- The appointment is in accordance with the <u>Danish Confederation of Professional</u> <u>Associations</u> (Akademikerne).
- Remuneration is in accordance with the above, and the <u>Salary agreement</u> <u>catalogue for staff at Health</u>.
- 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 <u>special researcher tax scheme</u> with a lower tax rate.
- Further information on qualification requirements and job description can be found in the <u>Ministerial Order on Job Structure for Academic Staff</u>

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 (entional)

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 <u>here</u>. Aarhus University also has a Junior Researcher Association and offers career development support. You can read more about these resources <u>here</u>.

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 <u>www.international.au.dk/</u>