UNIVERSITETET
I OSLO

Jobbnorge ID: 275058
Deadline: 3/12/2025
Website: http://www.uio.no/
Scope: Fulltime
Duration: Fixed Term

Postdoctoral position working on Alzheimer's disease, fasting, and AI-based drug development

Job description

Applicants are invited to apply for a 3-year full time postdoctoral research position at the Faculty of Medicine, The University of Oslo, Norway.

The candidate will devote to carrying out a project on the mechanism of altered mitophagy/autophagy in AD initiation and progression funded by The Research Council of Norway (NFR). In this project, we will combine novel artificial intelligence techniques with classical cross-species research models including C. elegans, mice, and human cell culture, and postmortem human brain tissues to screen drug candidates in an efficient and effective way. The main aims of the project are 1) to assess small compounds with CNS-like drug properties with a likely high success rate; and 2) to explore novel mechanisms on how calorie restriction maintains brain health.

The candidate will be having a unique opportunity to work in the leading autophagy/mitophagy and AD laboratory, the Fang Laboratory, which consists around 15 trainees from over 8 countries, and physically located at EpiGen, Akershus University Hospital, Lørenskog, Norway (https://evandrofanglab.com). The department and institution provide state-of-the-art equipment to enable the performance of broad scientific studies in the highest quality. In addition, the Fang group collaborates with many national and international research group in Europe, Asia and the US, with emphasis on ageing and AD mechanism studies and drug developments.

Duties and responsibilities

The project capitalizes on multiple wet lab research models and novel artificial intelligence techniques counter-validation for CNS-like drug development. In collaboration with our research team and collaborators, the postdoctoral candidate's main responsibility will be to screening drug candidates with following tasks:

- design and carry out mechanistic studies in C. elegans, mice, human cells, and human postmortem tissue as well as to collect and analyze the data in high quality and diligence;
- collaborate with AI teams to screen novel mitophagy inducers;
- assist the PI in training and mentoring students in the laboratory; and
- write research papers and take care other tasks related to this project

Qualification requirements
The following qualifications are mandatory in the assessment of the applicants:

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in clinical biochemistry, molecular biology, molecular medicine, neuroscience or similar fields. Doctoral dissertation must be submitted for evaluation by the closing date. Only applicants with an approved doctoral thesis and public defence at the employment date are eligible for appointment.
- Strong research background in molecular biology with robust practical skills in cellular and animal models including methods relevant for neuronal mitophagy detection.
- Good written and oral proficiency in English and Norwegian (or another Scandinavian language). If the employee cannot document skills in Norwegian, Swedish, or Danish at level A2 upon employment, UiO will offer Norwegian language training. The employee must complete training equivalent to at least 15 credits by the end of the employment period.
- Previous experiences in working with C. elegans, for at least one year, is essential as C. elegans is the major model system for this project.
- Knowledge and experimental experiences in working on calorie restriction.
- At least two first-authored papers in English in mainstream scientific journals.

Preferred skills

- Prior knowledge on ageing and neuroscience is an advantage, but not necessary.

Personal skills

- strong motivation with multi-task working capacity;
- ability to take initiatives and work independently, as well as in collaborative research efforts

We offer

- Salary NOK 575 400-657 300 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352).
- A high-impact research project in a professionally stimulating working environment.
- Good opportunities for career and personal development.
- Attractive welfare benefits and a generous pension agreement, in addition to Oslo's family-friendly environment with its rich opportunities for culture and outdoor activities.

How to apply

Your application must include:

- a cover letter (statement of motivation, summarizing scientific work and research interest)
- possible project plan, including progress plan (max. 5 pages)
- a CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- copies of educational certificates (academic transcripts only)
- a complete list of publications
- list of reference persons: 2-3 references (please provide their names, relation to candidate, e-mails, and phone numbers)

The application with attachments must be delivered in our electronic recruiting system. Foreign applicants are advised to attach an explanation of their University's grading system. Please note that all documents must be in English (or a Scandinavian language).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, the project description (whenever this is required in the call for applicants), and the quality of the project as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

It is expected that the successful candidate will be able to complete the project in the course of the period of employment.

More about the position

The appointment is a fulltime position and is made for a period of up to three years (10% of which is devoted to required duties, usually in the form of teaching activities and laboratory management duties).

General information

Please see the guidelines and regulations for appointments to Postdoctoral fellowships at the University of Oslo.

No one can be appointed for more than one Postdoctoral Fellow period at the University of Oslo.

Applicant lists can be published in accordance with Norwegian Freedom of Information Act § 25. When you apply for a position with us, your name will appear on the public applicant list. It is possible to request to be excluded from this list. You must justify why you want an exemption from publication and we will then decide whether we can grant your request. If we can't, you will hear from us.

The University of Oslo has a transfer agreement with all employees that is intended to secure the rights to all research results etc.

The University of Oslo has a personnel policy objective of achieving a balanced gender composition. Furthermore, we want employees with diverse professional expertise, life experience and perspectives.

More information about gender equality initiatives at UiO can be found here.

If there are qualified applicants with disabilities, employment gaps or immigrant background, we will invite at least one applicant from each of these categories to an interview.

Contact information

Evandro Fei Fang, Ph.D (PI), phone number: +47 92230968, e-mail: e.f.fang@medisin.uio.no

Maren Retterstøl Olaisen (HR adviser), phone number: +47 22850545, e-mail: marenol@medisin.uio.no

University of Oslo

The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

The Institute of Clinical Medicine (Klinmed) is one of three institutes under the Faculty. Klinmed is responsible for the Faculty's educational and research activities at Oslo University Hospital and Akershus University Hospital. With about 900 employees spread over approximately 425 man-labour years, Klinmed is the university's largest institute. Our activities follow the clinical activity at the hospitals and are spread across a number of geographical areas.

Additional information

Place of service:
Akershus University Hospital: Sykehusveien 25 1478 Lørenskog (Lørenskog Municipality)