



Jobbnorge ID: 260836
Deadline: 5/2/2024
Website: <http://www.uio.no/>
Scope: Fulltime
Duration: Fixed Term

Department of Microbiology, Division of Laboratory Medicine, Institute of Clinical Medicine,

Postdoctoral Fellowship to study DNA repair and treatment-induced tumor evolution

Job description

A funded 2 year postdoctoral position is available at the Department of Microbiology, Division of Laboratory Medicine, Faculty of Medicine, The University of Oslo.

A postdoctoral position is available to study DNA repair and treatment-induced tumor evolution in mammalian cells and tissues in Hilde Loge Nilsen research group at the Department of Microbiology.

The group works with DNA repair, specifically with the repair of uracil, resulting from cytosine deamination, initiated by uracil-DNA glycosylase. We are particularly interested in the interaction between uracil repair and APOBEC cytosine deaminases. APOBEC enzymes accelerate tumor evolution by generating uracil in DNA and footprints of APOBEC activity can be seen in cancer cells as specific mutational signatures. We have recently shown that APOBEC activity can drive tumor development in mice.

More about the position

In this project, which is funded by the Norwegian Cancer Society, we want to find out whether we can utilize the balance between APOBEC and uracil-DNA glycosylase activity to inhibit development of therapy resistance in chronic lymphocytic leukaemia.

The work includes using gene editing tools to create cell lines with altered balance between APOBEC activity and uracil-DNA glycosylase and use these to analyze the molecular mechanisms that contribute to the development of treatment resistance.

The work will primarily be carried out in cell lines but will also be validated in organotypic cultures established from patients with chronic lymphocytic leukaemia. It is also expected that the postdoc contributes to ongoing work to characterize a new mouse model for B-cell lymphoma.

Specific tasks:

- Study DNA repair and cancer development in mammalian cells and tissues
- Study mechanisms of treatment resistance in vitro
- Characterize new mouse models

Qualification requirements

PhD in relevant discipline (cell biology, molecular biology) Doctoral dissertation must be submitted for evaluation by the closing date. Appointment is dependent on the public defence of the doctoral thesis being approved.

- Interest and experience in DNA repair
- Practical experience with cell biological techniques (cell lines, primary cells, organotypic cultures)
- Hands on experience with flow cytometry and advanced light microscopy is required
- Experience with immunohistochemical techniques and gene editing tools is desirable
- Experience with handling mice is desirable

Personal characteristics

- Ability and willingness to support and perform hypothesis-driven research
- Good formulation skills
- Systematic and scientifically ambitious
- Ability to work independently and in teams
- Efficient and responsible

We offer

- Salary NOK 575 400 - 657 300 per annum depending on qualifications in position as Postdoctoral Research Fellow (position code 1352)
- Favourable pension arrangements (Statens Pensjonskasse)
- Advantageous welfare conditions
- An individual career development programme designed for researchers at the beginning of their career.
- Family-friendly environment near Oslo with its rich opportunities for culture and outdoor activities

How to apply

The application must include

- Cover letter statement of motivation, scientific background, and research interests
- CV (summarizing education, positions and academic work)
- Copies of educational certificates and relevant diplomas (academic transcripts only)
- A complete list of publications and academic works
- List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link: "Apply for this job". Foreign applicants are advised to attach an explanation of their University's grading system. Please note that all documents should be in English (or a Scandinavian language).

In assessing the applications, special emphasis will be placed on the documented, academic qualifications, as well as the candidates motivation and personal suitability. Interviews with the best qualified candidates will be arranged.

Formal regulations

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.

According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

Inclusion and diversity are a strength. 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.

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

Researcher Hilde Loge Nilsen: h.l.nilsen@medisin.uio.no

Senior HR adviser Mija Nikolaisen, (questions regarding the online application form), e-mail: mija.nikolaisen@medisin.uio.no

About the 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 800 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

Contact person:

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Place of service:

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