

Jobbnorge ID: 279366 Deadline: 5/22/2025 Website: http://www.uio.no/

Scope: Fulltime Duration: Project

Write a headline that will attract the applicant.

Postdoctoral Research Fellow in Molecular Biology and Epigenetics

About the position / About the job

Position as Postdoctoral Research Fellow available at Department of Biosciences (IBV), University of Oslo.

The position is for three years. Starting date as soon as possible.

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

No one can be appointed for more than one Postdoctoral Research Fellowship at the University of Oslo.

Project description

The Department of Biosciences (IBV), University of Oslo (UiO), invites applications for a Postdoctoral Research Fellow in molecular biology and epigenetics. This position is associated with the recently funded project "Unraveling the molecular mechanisms that imprint epigenetic fate during adipogenesis," supported by the Norwegian Research Council. This project is a collaborative effort, and the position will be supervised Pierre Chymkowitch (IBV, UiO).

Abstract:

The pandemic of obesity and related complications—diabetes and cancer—underscore the need for in-depth research into adipose tissue development and function. Discerning the origins of individual variability in fat accumulation is particularly important to understand why many patients do not respond to anti-obese strategies.

Previous works, including ours, indicate a critical dependency of adipogenesis on the posttranslational modification by the small ubiquitin-like modifier SUMO. At a systems level, we found that SUMOylation of chromatin-bound proteins ensures the precision of gene expression and transcription factor dynamics during adipogenesis. However, the molecular mechanisms by which SUMOylation orchestrates the rewiring of transcriptional programs during initiation of adipogenesis is to be established.

This project will utilize adipogenesis as a paradigm to uncover new molecular pathways by which SUMOylation sustains epigenetic and transcriptional identity during cell differentiation. We expect to contribute to a broader understanding of how transitory disruptions in epigenetic regulation induce stable homeostatic shifts and lead to disease, like obesity and cancer.

The main purpose of a postdoctoral fellowship is to provide the candidates with enhanced skills to pursue a scientific top position within or beyond academia. To promote a strategic career path, all postdoctoral research fellows are required to submit a <u>professional development plan</u> no later than one month after commencement of the postdoctoral period.

What skills are important in this role?/ Qualifications / Competence / Selection criteria Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition to be among Europe's leading communities for research, education and innovation. Candidates for these fellowships will be selected in accordance with this and expected to be in the upper segment of their class with respect to academic credentials.

- Applicants must hold a degree equivalent to a Norwegian doctoral degree in Molecular Biology, Biochemistry, Cell biology or related field. Doctoral dissertation must be submitted for evaluation by the closing date. Only applicants with an approved doctoral thesis and public defence are eligible for appointment.
- · Fluent oral and written communication skills in English
- Familiarity with epigenetics, gene regulation or chromatin biology
- Experience with cell culture and cell biology technics (applied to adipogenesis would be a plus)
- Molecular biology (RT-qPCR, cloning, purification of nucleic acids, etc)
- Biochemistry (Protein purification / extraction, chromatography, Immuno-precipitation, etc)
- Experience with either RNA-sequencing, ChIP-sequencing, HiC, ATAC-seq, Bisulphate-sequencing
- Knowledge of transcription, chromatin and epigenetic regulation

- · Good presentation and communication skills
- At least one 1st author publication in an international peer-reviewed journal (or available as a preprint) within the last 2 years
- Demonstrated ability to work independently and collaboratively in multidisciplinary teams

Desired qualifications

- Crispr
- · Crispr / siRNA screens
- Proficiency in programming (e.g., Python, R)
- Experience with high-throughput sequencing data analysis (e.g., CAGE, ATAC-seq, ChIP-seq, or Hi-C)
- · Familiarity with SUMOylation, transcription factors, or chromatin dynamics
- · Expertise in statistical modeling for biological data.
- Knowledge of enhancer-promoter interactions and 3D genome organization

What are we looking for in you?

- · Ability to communicate science
- · Ability to collaborate with researchers from different fields and at different career stages
- · Willingness to be part of a team to share knowledge and skills
- · Enthusiasm for interdisciplinary collaboration
- · Enthusiasm for answering important biological question
- Self-driven
- · Strong organizational skills

Employment in the position is based on a comprehensive assessment of all qualification requirements applicable to the position, including personal qualifications.

We can offer you

- Exciting and meaningful tasks in an organization with an important societal mission, contributing to knowledge development, education, and enlightenment that promote sustainable, fair, and knowledge-based societal development
- · Professionally stimulating working environment
- · Vibrant international academic environment
- · Good welfare schemes.
- Postdoctoral development programmes
- Membership in the <u>Statens Pensjonskasse</u>, which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes.
- Salary in position as Postdoctoral Fellow, position code 1352 in salary range NOK from 579 700 to 657 300, depending on competence and experience. From the salary, 2 percent is deducted in statutory contributions to the State Pension Fund.

Read more about the benefits of working in the public sector at Employer Portal.

Inclusive worklife and diversity at UiO

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.

We hope that you will apply for the position.

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

Application

Your application should include:

- Cover letter (statement of motivation, summarizing career goals, scientific work and research interest)
- CV (summarizing education, positions, pedagogical experience, administrative experience and other qualifying activity)
- Copies of educational certificates, academic transcript of records
- A complete list of publications and up to 5 academic works that the applicant wishes to be considered by the evaluation committee
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

Application with attachments must be submitted via our recruitment system Jobbnorge, click "Apply for the position".

When applying for the position, we ask you to retrieve your education results from <u>Vitnemålsportalen.no</u>. If your education results are not available through Vitnemålsportalen, we ask you to upload copies of your transcripts or grades. Please note that **all** documentation must be in English or a Scandinavian language.

General information

The best qualified candidates will invited for interviews.

If an applicant has applied for and been granted funding for a fulltime research stay abroad while being employed as a Postdoctoral Research Fellow, the employment will be prolonged with the equivalent time as the research stay, but for no longer than of twelve months (thus extending

the employment to a maximum of four years)

No one can be appointed twice as a Postdoctoral fellow financed with funds from The Research Council of Norway (NFR).

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.

Please refer to Regulations for the Act on universities and colleges chapter 3 (Norwegian) and Guidelines concerning appointment to post doctoral and research posts at UiO (Norwegian).

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

University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 26 500 students and 7 200 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

Department of Biosciences (IBV) is one of nine departments at the Faculty of Mathematics and Natural Sciences. Research in the department is organised in five sections covering topics within biochemistry, molecular biology, physiology, cell biology, genetics, aquatic biology, toxicology, ecology, and evolutionary biology. The Department also operates Finse research station, the Biological research station in Drøbak and UiO's research vessel. Education across these topics is offered for around 300 bachelor, 170 master, and 75 PhD students. With 48 permanent professors/associate professors, post-docs, researchers, technical, and administrative personnel, the Department has a total staff of 260 from more than 30 different countries. The Department aims to maintain high international standards within both research and teaching. The new bachelor program in bioscience is the first of its kind to include programming and computational modelling as core elements.

Additional information

Contact persons:

• For further information please contact: Pierre Chymkowitch,

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• For questions regarding Jobbnorge, please contact HR Adviser Nina Holtan,

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Place of service:

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