Postdoctoral Research Fellow in Molecular Bioenergetics and Signalling

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Postdoctoral Research Fellow in Molecular Bioenergetics and Signalling

At the Faculty of Medicine, Department of Biomedicine, a full-time (100 %) position as Postdoctoral Research Fellow in Molecular Bioenergetics and Signalling is available for a period of three (3) years. The position is allocated to the project “Signaling and metabolism mediated by B-vitamin-derived cofactors”, financed by the University of Bergen.

About the project/work tasks:

- A major aim of the project is to identify regulatory mechanisms that govern the interplay between key metabolic pathways and specific signaling events (such as protein modifications) in human cells. We will initially focus on the dynamics of protein acetylation and NAD-dependent deacetylation and their subcellular specifics. Advanced analytical methods such as high-resolution mass spectrometry using stable isotope labeling and computational approaches will be used to establish the dynamics of these processes. Given the requirement for the same cofactors (e.g., CoA, NAD, SAM) in both metabolism and protein modifications, modulation of their intracellular concentration could be exploited to tune these processes.


- Relevant preprints: 10.21203/rs.3.rs-116850/v1, 10.26434/chemrxiv.13726843.v1

- Our research group at UiB (https://www.uib.no/g/nd-group) identified and characterized various mechanisms of NAD-dependent signaling events (poly-ADP-ribosylation, mono-ADP-ribosylation, sirtuin-mediated protein deacetylation) and has established the pathways and subcellular distribution of NAD biosynthesis in mammalian cells. Given the functional interplay of NAD with other cofactors in both signaling and metabolic pathways, we now wish to extend our investigations into the molecular mechanisms regulating these interactions.

- The main tasks of the postdoctoral research fellow will be planning, execution and analysis of cell-biological experiments. Experience in both standard and advanced methods in biochemistry and cell biology are needed to carry out this project. Practical knowledge in LC-MS-based metabolomics or proteomics will be an advantage. Moreover, practical experience in the use of bioinformatics tools such as analysis of large-scale datasets will be an advantage. Thus, the post-doctoral fellow is expected to act as self-driven scientist with the responsibility for key parts of the project from idea to publication. At the same time, the researcher will collaborate with other members of the lab and local as well as international collaborators.

- The fellow is also expected to supervise students from Bachelor-level to PhD-level.

Qualifications and personal qualities:

- The applicant must have a Norwegian PhD or an equivalent degree within biochemistry/molecular/cell biology or have the doctoral thesis submitted prior to the application deadline. It is a condition of employment that the PhD has been awarded and at the latest within June 2021

- Documented practical experience from work with tissue culture and genetic engineering of cells is required.

- The applicant must have profound practical experience and competence in one or more of the following areas: cell metabolism and its experimental analysis, advanced microscopy, bioinformatics and analyses of omics data, expression/purification/characterization of recombinant proteins.

- Working knowledge in management of large datasets and their bioinformatics analyses will be an advantage

- The applicant must have produced original peer-reviewed publications as a first author in highly recognized international journals within at least two of the above-mentioned fields, preferably on i) cofactor metabolism or cofactor-mediated protein modifications and/or ii) metabolomics or proteomics analysis iii) subcellular compartmentation.

- The successful candidate is expected to work independently and in a structured manner and must have the ability to cooperate with others.

- The applicant must be motivated and responsible and should have a great work capacity and enthusiasm for research.
Excellent skills in both written and oral English are required.

About the position of postdoctoral research fellow:
The position of postdoctoral research fellow is a fixed-term appointment with the primary objective of qualifying the appointee for work in top academic positions. You cannot be employed as a postdoctoral fellow for more than one fixed term period at the same institution. Also, you cannot be employed in a postdoctoral position if you have previously held this type of position at a different institution in the region.

Upon appointment, applicants must submit a project proposal for the qualifying work including a work schedule. It is a requirement that the project is completed in the course of the period of employment.

The employee may be assigned required duties in the form of teaching and similar work at the department.

We can offer:
- Exciting development opportunities as part of your role in a strong professional environment
- Salary level 62 (code 1352/pay framework 24.4) at present NOK 555 800 gross p.a., with a degree in Medicine or Dentistry level 63 (code 1352/pay framework 24.7) at present NOK 566 700, with a medical specialization level 65 (code 1352/pay framework 24.9) at present NOK 586 500, gross p.a. on the government salary scale. Further promotion will be after service seniority in the position
- Enrolment in the Norwegian Public Service Pension Fund
- Good welfare benefits

Your application must include:
- a brief account of the applicant’s research interests and specific motivation for applying for this position
- transcripts and diplomas (applicants with education from other countries than Norway must enclose witnessed diplomas in both the original language and authorized translations) and documentation of approved doctoral thesis
- complete list of publications
- publications (pdf) it is important that each of the scholarly works on which the committee should place special emphasis, is attached in its entirety
- two referees (name and contact information)

General information:
Detailed information about the position can be obtained by contacting: Mathias Ziegler, e-mail: mathias.ziegler@uib.no

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

Further information about our employment process can be found here.

About The University of Bergen (UiB)
The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdsheøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are five departments and seven centres at Faculty of Medicine.

Jobnorge-ID: 201790, Søknadsfrist: 15. mai 2021