



# Postdoctoral Fellow at the Department of Biomedicine

## Postdoctoral Fellow position

At the Faculty of Medicine, Department of Biomedicine, a full-time (100 %) temporary position as Postdoctoral Fellow is available for a period of three (3) years. The position may be prolonged for up to 6 months, if further financing will be available. The position is part of the network project "Systems Medicine of Metabolic-Signaling Networks: A New Concept for Breast Cancer Patient Stratification (MESI-STRAT)", funded by the EU framework program Horizon 2020. For further information on the overall project, please, see <https://mesi-strat.eu/>.

## About the project/work tasks:

The main focus of the project in Bergen is to study energy metabolism, NAD biosynthetic pathways and NAD-dependent signaling processes (PARPs, sirtuins) in cancer cells and patient-derived samples. Metabolic profiling will be conducted to determine quantitative and qualitative changes in the NAD metabolome. Using stable isotope labeling, metabolic flux measurements will be performed to parameterize mathematical metabolic models. These experiments will be complemented by proteomics, gene expression analyses and functional studies to identify regulatory principles in the NAD metabolome and their impairment in breast cancer.

A main objective for the position is to establish and conduct robust LC-MS-based analytical methods to characterize the metabolic networks (primarily related to energy, NAD and tryptophan metabolism) in cells and other biological samples including patient-derived xenografts. Initial analyses will be performed on cultured cells following pharmacological treatments. In addition, high-resolution LC-MS-MS analyses using stable isotope-labeled precursors shall be used to determine flux rates. Besides various pharmacological challenges, functional studies will include the genetic engineering of model cell lines followed by metabolomics, proteomics and transcriptomics analyses. The results will be combined with the concomitant measurements of signaling pathways conducted by project partners and used for parameterization of mathematical models. To ensure identical experimental conditions, some of the work will need to be conducted in a partner institution.

## Qualifications and personal qualities:

- The candidate must hold a PhD-degree within the field of LC-MS/metabolomics and cell or molecular biology using relevant experimental techniques.
- The candidate must have experience and strong competence in LC-MS-based targeted methods development and validation as well as metabolomics measurements combined with multi-variate data analysis and biomarker identification.
- Prior experience with LC-MS procedures using isotope-labelled metabolites is an advantage.
- The candidate should have a solid background and working experience in molecular and cell biology. Practical experience with modern experimental techniques such as cellular assays is an advantage.
- Prior experience in handling clinical samples is an advantage.
- Knowledge, practical experience and strong interest in bioinformatics and systems biology are an advantage.
- The candidate should be proficient in spoken and written English.
- Personal skills will be emphasized. The candidate should be able to work independently and interactively in a team setting, be motivated and responsible, and also have a great work capacity and enthusiasm for research.

## About the position of postdoctoral fellow:

In general, the purpose of postdoctoral positions at the University of Bergen is the building of competence by means of further development of research work to a higher level than what is possible within an ordinary PhD program. The main goals of the positions are to qualify the successful candidate for professional top positions.

It is a goal that the employment period is carried out as a continuous research program. Leaves of absence for other purposes than those laid down by law are normally not granted.

Applicants shall, once employed, put forward a proposal for a project for qualifying work. The proposal shall include a progress plan. It is a premise that the selected candidate will complete the project within the stipulated period of employment.

The employee may be assigned up to 25 % required duties in the form of teaching and similar work at the department.

Postdoctoral fellowships are fixed term 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.

## We can offer:

- A good and challenging work environment in research front of translational signalling and metabolism.
- Salary level 59 (code 1352/pay framework 24.1) at present NOK 515 200 gross p.a., with a degree in Medicine or Dentistry level 61 (code 1352/pay framework 24.3) at present NOK 534 100 gross p.a., with a medical specialization level 63 (code 1352/pay framework

- 24.5) at present NOK 555 100 gross p.a. on the government salary scale. Further promotion will be after service seniority in the position. A pension contribute of 2 % will be deducted and deposited to the state pension scheme.
- Enrolment in the Norwegian Public Service Pension Fund
  - Good [welfare benefits](#)

## Your application must include:

- a brief, specific letter of application stating your motivation for the position
- CV
- witnessed copies of diplomas and relevant certificates (applicants with education from other countries than Norway must enclose witnessed diplomas in both the original language and authorized translations)
- 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, contact information and in which function you have known them)

Please notice that the applications will be assessed only with the information available in "Jobbnorge" when the deadline expires.

## General information:

For further information, please contact Prof. Mathias Ziegler ([mathias.ziegler@uib.no](mailto:mathias.ziegler@uib.no), phone: +47 55584591)

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 Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There

are five departments and seven centres at Faculty of Medicine. [Read More about the faculty](#) and [departments](#).

Jobbnorge-ID: 164012, Søknadsfrist: Avsluttet