



# Postdoctor in Cell Bioprocessing

## About the position

We have a vacancy for a 2 year Post Doctor position in Cell Bioprocessing

A two-year Postdoc position in Cell Bioprocessing is available at the Department of Biotechnology and Food Science (IBT). The current research fields at the Department includes Microbial Biotechnology, Synthetic Biology, Analysis and Control of Microbial Systems, Food Science, and Biopolymers and Biomaterials. Further information is available at <http://www.ntnu.edu/biotech/research>. The post doc candidate will work in the Microbial and Cell Physiology research group <https://www.ntnu.edu/ibt/research/bruheim-lab#/view/about> associated the Microbial Biotechnology research division and report to Professor Per Bruheim.

The position is part of the NTNU Research project "Chemically defined cell culture media" funded by the NTNU Biotechnology programme ([www.ntnu.edu/biotechnology](http://www.ntnu.edu/biotechnology)) and internal resources at IBT. Cell Bioprocessing is a rapidly expanding area, where a major challenge is development of efficient, robust and sustainable cultivation conditions based on serum-free media for production of biomedical as well as cultured meat commodities.

The main objective of postdoctoral research fellowships is qualification for academic positions and research career development programs and supervision are offered as part of this fellowship.

The position reports to Professor Per Bruheim.

## Job description

The postdoc will focus on developing work flows for efficient design of chemically defined cell culture media for primary cells from higher eukaryotic organisms. The overall research project includes advanced micro-bioreactor cell cultivation systems, deep phenotyping, high throughput robot technology, dynamic modelling and machine learning. The postdoc will be responsible for the cell cultivation and phenotyping work. A key approach will be microbio-reactor-cultivations combined with mass spectrometric based metabolite and protein profiling to follow intracellular metabolic state, signaling network activities and media nutrient uptake and waste product excretion. The MS work will be performed in the Natural Science faculty Mass Spectrometry lab (<https://www.ntnu.edu/nv-mslab>) currently equipped with six MS instruments and GC, UPLC, capillary UPLC, UPC2, capillary ion chromatography separation technologies and software for advanced processing of both low molecular weight analytes (Metabolomics), lipids (Lipidomics), <sup>13</sup>C-label experimentation (Fluxomics) and protein/ peptides (Proteomics). A significant part of the work will involve processing of large data-sets and bioinformatic analyses. The postdoc will have a central role in the overall project and will also be responsible for outreach activities and recruitment and supervision of MSc students.

## Qualification requirements

A postdoctoral research fellowships is a qualification position in which the main objective is qualification for work in academic positions.

Completion of a Norwegian doctoral degree in Biotechnology, Cell Biology or similar field or corresponding foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree is required. Candidates that are about to submit their thesis/ defend in near future are also encouraged to apply. In particular, experience with cell cultivation/ cell culture technology and bioprocessing will be highly valuable. Some prior experience with liquid chromatography/mass spectrometry instrumentation in a metabolomics work-flow context is also a valuable asset.

The appointment is to be made in accordance with the regulations in force concerning State Employees and Civil Servants and [national guidelines for appointment as PhD, postdoctor and research assistant](#)

## Personal characteristics

The applicant must document ability to work independently as well as in group situations, be an active member in the research groups and presenting the projects in conferences and to other interested parties. Previous experience with supervision of students and writing project proposals is considered an advantage.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement

## We offer

- exciting and stimulating tasks in a strong international academic environment

- an open and [inclusive work environment](#) with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)
- [employee benefits](#)

## Salary and conditions

Postdoctoral candidates are remunerated in code 1352, and are normally remunerated at gross from NOK 515 200 before tax per year. From the salary, 2 % is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 2 years.

Appointment takes place on the terms that apply to State employees at any time, and after the appointment you must assume that there may be changes in the area of work.

## General information

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background. Under the Freedom of Information Act (offentleglova), information about the applicant may be made public even if the applicant has requested not to have their name entered on the list of applicants.

Questions about the position can be directed to Professor Per Bruheim, e-mail: [per.bruheim@ntnu.no](mailto:per.bruheim@ntnu.no)

About the application:

Publications and other academic works that the applicant would like to be considered in the evaluation must accompany the application. Joint works will be considered. If it is difficult to identify the individual applicant's contribution to joint works, the applicant must include a brief description of his or her contribution.

Please submit your application electronically via [jobb norge.no](http://jobb norge.no) with your CV, diplomas and certificates. Applicants invited for interview must include certified copies of transcripts and reference letters. Please refer to the application number **NV-36/19** when applying.

**Application deadline: 15.06.2019**

## NTNU - knowledge for a better world

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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

### Department of Biotechnology and Food Science

Our activities contribute to increased exploitation of existing and new ingredients for sustainable food production as well as next-generation energy solutions and medical technology. We educate graduates for a wide range of careers in industry, public administration and academia. [The Department of Biotechnology and Food Science](#) is one of eight departments in the [Faculty of Natural Sciences](#).

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