



UNIVERSITETET I BERGEN

**University of
Bergen**
Department of
Physics and
Technology

Jobbnorge ID: 303741

Deadline: 7/2/2026

Website: <https://www.uib.no/om/84775/ledige-stillinger-ved-uib>

Scope: Fulltime

Duration: Fixed Term

Postdoctoral Research Fellow position within Medical Physics

UiB - Knowledge that shapes society

UiB shall be among Europe's leading universities, internationally recognized for high quality in research and education. As a societal institution, we shall contribute to sustainable and democratic development and be an attractive and inclusive place to study and work.

Video: <https://youtu.be/i4SDcLir6Oc>

Postdoctoral Research Fellow position within Medical Physics

At the [Department of Physics and Technology](#) there is a vacancy for a postdoctoral research fellow position within medical physics. The position is for a fixed term of 3 years and is associated with the BioPrecise Protons project - a Toppforsk project funded by the Research Council of Norway.

About the project/work tasks:

The candidate will play a central role in the 8-year research project [BioPrecise Protons](#) (2026-2034). The objective of BioPrecise Protons is to increase the precision of dose delivery and to generate new knowledge about biological effectiveness in proton therapy, in order to better spare healthy tissue surrounding the tumor. The project will include both preclinical studies with cells and mice, as well as detector development for real-time measurement of radiation dose.

The postdoctoral researcher's main task will be to carry out Monte Carlo simulations of preclinical studies and detector experiments at the proton centers in Bergen and Oslo. The duties will also include the development of new methods for so-called biological optimization in proton therapy. This involves using parameters such as linear energy transfer (LET) and micro- and nanodosimetric quantities in treatment planning. The postdoctoral researcher will use both research-based and commercial software for dose planning and dose calculation in the project. The postdoctoral researcher will also participate in experimental work.

The postdoctoral fellow will work in the medical physics group at the University of Bergen, which has a broad range of activities in proton therapy, with particular expertise in radiobiology, Monte Carlo simulations, and advanced dose planning for proton therapy. The work will be carried out in close collaboration with other participants in BioPrecise Protons, including the Western Norway University of Applied Sciences as well as proton therapy research environments at the cancer clinics of Haukeland University Hospital and Oslo University Hospital. International partners include the German Cancer Research Center in Heidelberg and Helmholtz-Zentrum Dresden-Rossendorf / Institute of Radiooncology - OncoRay. The postdoctoral fellow will thus work in an international and interdisciplinary research environment with established expertise in proton therapy, and will be encouraged to apply for mobility stipends for extended research stays with international collaborators.

Qualifications and personal qualities:

- Applicants must hold a degree equivalent to a Norwegian doctoral degree (PhD) within physics or equivalent, or must have submitted his/her doctoral thesis for assessment prior to the application deadline. It is a condition of employment that the PhD has been awarded.
- Hands-on experience or expertise within Monte Carlo simulations is a requirement.
- Hands-on experience or expertise within proton therapy is a requirement.
- Hands-on experience or expertise within programming is a requirement.
- Hands-on experience or expertise within treatment planning systems or dose optimization algorithms is an advantage.
- Hands-on experience from or expertise within preclinical research or detector technology is an advantage.
- Own research ambitions and motivation to advance proton therapy is an advantage.
- Applicants must be able to work independently and in a structured manner, and have the ability to cooperate with others.
- Applicants must have good written and oral English skills.

Personal and relational qualities will be emphasized. Research experience, ambitions and potential will also count when evaluating the candidates.

Special requirements for the position

The University of Bergen is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

About the position of postdoctoral research fellow:

The postdoctoral position is a fixed term position with the primary objective of qualifying the appointee for work in top academic positions. Candidates who lack teaching experience and/or other qualifying competencies will be given the opportunity to undertake qualifying work, either during the fixed-term appointment period or through a possible extension of the appointment period (up to a maximum of four years in total). The position may be extended by up to one year (maximum 4 years in total) if the appointee is granted externally financed research stays abroad. Individuals may not be hired for more than one fixed-term period as a postdoctoral research fellow at the same institution. In accordance with the Research Council's rules, neither can anyone be hired more than once as an NFR-financed postdoctoral research fellow.

For postdoctoral research fellow positions associated with externally financed projects, the completion of the project proposal for the qualifying work, as well as a progress plan, will be developed in cooperation with the supervisor and head of department.

It is a requirement that the project is completed in the course of the period of employment.

We can offer:

- A good and professionally stimulating working environment.
- Position as postdoctoral fellow (code 1352 in the basic collective agreement) and a gross annual salary of NOK 685 900 upon appointment. Further increases in salary are made according to length of service in the position. A higher salary may be considered for a particularly well-qualified applicant.
- 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 motivation for applying for the position.
- A detailed justification of your qualifications in relation to the listed requirements, explaining how you meet each criterion. Additionally, you should address the "advantages" mentioned above, as these will be taken into account when ranking the candidates.
- The names and contact information for two referees. One of these should be the main advisor from the PhD programme.
- CV
- transcripts and diplomas. If you have not yet completed your PhD degree, please submit a statement from your institution confirming that the thesis has been submitted.
- relevant certificates/references
- list of any works of a scientific nature (publication list with links)

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at JobbNorge.

General information:

For further details about the position, please contact: Professor Kristian Smeland Ytre-Hauge, Department of Physics and Technology, UiB, kristian.ytre-hauge@uib.no, or Head of Department Kjetil Ullaland, Department of Physics and Tehnology, kjetil.ullaland@uib.no.

For HR related questions contact: Vivian Stegen Jacobsen, vivian.jacobsen@uib.no.

Diversity is a strength that enables us to solve our tasks even better. UiB therefore needs qualified employees regardless of gender, ethnicity, religion, worldview, disability, sexual orientation, gender identity, gender expression, and age.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

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.

We encourage applicants with disabilities, immigrant backgrounds, or gaps in their CV to apply. By indicating such circumstances in your application, you may receive favourable consideration. We ensure that at least one qualified applicant from each of these groups is invited for an interview as part of our commitment to inclusivity and equal opportunity.

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 seven departments and several centres at Faculty of Science and Technology. [Read more about the faculty](#) and [departments](#).

Additional information

Contact persons:

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Place of service:

Allegaten 55 5007 Bergen (Bergen Municipality)