



Jobbnorge ID: 284850
Deadline: 10/9/2025
Website: <http://www.uio.no/>
Scope: Fulltime
Duration: Fixed Term

PhD Position at Biomaterial Science

PhD Position - Serotonin Signaling in 3D Tissue Models

About the position / About the job

[Biomaterial Science \(BIOMAT\)](#) / [Institute of clinical dentistry](#), [Faculty of Dentistry](#) is offering a PhD opportunity on the investigation of serotonin receptor-mediated effects in 3D spheroid models.

This interdisciplinary project will integrate advanced 3D cell culture, confocal and nano-CT imaging, and cutting-edge transcriptomic techniques, including single-cell and spatial transcriptomics, to map receptor-driven pathways involved in bone cell development and pathology.

The position is ideal for candidates eager to contribute to the rapidly evolving area of cell signaling in functional tissue reconstruction and regenerative medicine. Collaborative opportunities with clinical and computational research teams will also be available.

The successful candidate will use a robust and physiologically relevant 3D spheroid model, closely replicating the human bone microenvironment. They will be trained in a broad range of high-impact techniques, including 3D culture systems, pharmacological modulation of signaling pathways, spatial gene expression profiling, and bioinformatic analysis.

More about the position

The main purpose of the fellowship is research training leading to the successful completion of a Ph.D. degree.

The duration of the appointment is 3 years, and the location of employment is Oslo, Norway.

The research fellow must take part in the Faculty's approved Ph.D. programme and is expected to complete the project within the set fellowship period. Normally, one must apply for admission to a Ph.D. program within 3 months after the start of the research project leading to the Ph.D. degree.

What skills are important in this role?

Mandatory Requirements:

- MSc and BSc in Biology, Biotechnology, Biomedical Sciences, Bioinformatics, or closely related fields.
- Hands-on experience with mammalian cell culture, particularly 3D culture systems.
- Experience with microscopy or imaging techniques
- Strong foundational knowledge in molecular and cellular biology.
- Fluent oral and written communication skills in English

Desirable Qualifications:

- Familiarity with transcriptomic techniques, such as single-cell RNA-seq, or spatial transcriptomics.
- Understanding and interest in bioinformatics tools and workflows for gene expression data analysis.
- Interest in interdisciplinary research at the interface of cell signaling and bone biology.
- To be employed as a PhD Research Fellow, admission to a doctoral program is required, or there must be a binding agreement for admission. Normally, one must apply for admission to a Ph.D. program within 3 months after the start of the research project leading to the Ph.D. degree.

What are we looking for in you?

- Ability to work both independently and as part of a team.
- Ability to work precise in a structured manner and swiftly adapts to new tasks.
- Good communication and collaboration skills.
- The ability to handle hectic periods.
- Employment in the position is based on a comprehensive assessment of all qualification requirements applicable to the position, including personal qualifications.

We offer

- 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.
- A pleasant and stimulating work environment.
- Good [welfare schemes](#).
- Opportunity of up to 1.5 hours a week of [exercise during working hours](#).
- A workplace with good development and career opportunities.
- Membership in the [Statens Pensjonskasse](#), which is one of Norway's best pension schemes with beneficial mortgages and good insurance schemes.
- Salary in position as Doctoral Research Fellow, position code 1017 in salary range NOK from 551 000 to 605 000, 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 workforce 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

How to apply

The application must include:

- Cover letter statement of motivation and research interests
- CV (summarizing education, positions and academic work)
- Copies of educational certificates (academic transcripts only)
- A complete list of publications and academic works
- List of reference persons: 2-3 references (name, relation to candidate, e-mail and phone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job".

Non-Norwegian applicants are advised to attach an explanation of their University's grading system. Please note that all documents should be in English (or a Scandinavian language).

When evaluating the application, emphasis will be given to the applicant's academic and personal prerequisites to carry out the project. Applicants may be called in for an interview.

Key assessment criteria

- Relevant educational background with excellent results
- Professional qualifications and experience relevant to the PhD project as listed above
- Scientific publications
- Language skills
- Other professional activities
- The successful applicant is required to possess good interpersonal skills

General information

The best qualified candidates will be invited for interviews.

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 cannot, you will hear from us.

Please refer to [Regulations for the Act on universities and colleges chapter 3](#) (Norwegian), [Guidelines concerning appointment to post doctoral and research posts at UiO](#) and [Regulations for the degree of Philosophiae Doctor \(PhD\) at the University of Oslo](#).

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

For the necessary academic and social interaction, it is a prerequisite that you are physically present and available to the institution at the campus in Oslo on a daily basis.

The appointment is carried out in accordance with the principles of the [State Employees Act](#), and [Export control](#) (legislation that regulates the export of knowledge, technology and services). Candidates who, after assessment of the application and attachments, are considered to be in conflict with the criteria in the latter act, will not be able to be employed.

University of Oslo

The University of Oslo is Norway's oldest and highest ranked educational and research institution, with 28 000 students and 7000 employees. With its broad range of academic disciplines and internationally recognised research communities, UiO is an important contributor to society.

The Faculty of Dentistry is one of the leading odontological research and educational institutions in Europe. The faculty's research groups contribute top research within several odontological fields.

In addition to educating dentists and dental hygienists, the Faculty has Ph.D program and professional-oriented specialist education. The Faculty holds significant competence in the various research and clinical disciplines, with good interdisciplinary collaboration. It is a modern faculty with approximately 420 students and approximately 420 employees. The faculty is also Norway's largest dental clinic with approximately 50,000 patient visits a year. The Faculty of Dentistry has two departments: Institute of Clinical Dentistry and Department of Oral Biology.

Additional information

Contact person:

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