



PhD Research Fellow in Pharmaceutics

About the position

Position as PhD Research Fellow in Pharmaceutics available at the Department of Pharmacy.

The fellowship period is up to 4 years, with 3 years devoted to research education. The position entails a compulsory work load of 25% that may consist of teaching, supervision duties, and research assistance.

No one can be appointed for more than one PhD Research Fellowship period at the University of Oslo. Starting date no later than 01.10.2019

Job description

The candidate is expected to carry out a research project that aims to increase our comprehension of drug passive diffusion through biologically relevant aqueous environments and to clarify the influence of some classical nanocarriers on drug diffusion/absorption. Passive diffusion through unstirred water layers (UWL) is the spontaneous migration of molecules through region where stagnation conditions apply due to chemical activity gradient. This physical phenomenon is fundamental in order to achieve a proper drug accumulation in human body as unstirred aqueous environments (e.g. mucous) cover most of the biological barriers of the body. Yet, this interesting phenomenon is still poorly understood and investigated, especially when nanocarriers are employed.

The candidate will first study by an analytical/computational approach (UV-vis localized spectroscopy method) the passive diffusion of selected drugs through mucin solutions as well as fast/fed-state simulating intestinal fluids. Later, the candidate will utilize the same analytical method to study drug release kinetics from classical nanocarriers (cyclodextrins, liposomes).

In the last part of the project, the candidate will combine different localized spectroscopic techniques (UV-vis and NMR) in order to describe the influence of nanocarriers on the drug diffusion through unstirred environments composed by biorelevant media.

In addition, 25% of the candidate working load should be dedicated to teaching and administrative duties.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. Candidates for these fellowships will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

Required:

- Master's degree in Pharmacy
- Foreign completed degree (M.Sc.-level) should correspond to a minimum of four years in the Norwegian educational system
- Candidates without a Master's degree have until 30 June, 2019 to complete the final exam
- Excellent command of spoken and written English
- Good command (both spoken and written) of at least one Scandinavian language due to teaching responsibilities

Preferred:

- Experience in computational data fitting
- Good theoretical (and possibly practical) knowledge in different spectroscopy techniques (UV and NMR)
- Good theoretical (and possibly practical) knowledge in drug nanocarrier technology

Grade requirements:

The norm is as follows:

- The average grade point for courses included in the Bachelor's degree must be C or better in the Norwegian educational system
- The average grade point for courses included in the Master's degree must be B or better in the Norwegian educational system
- The Master's thesis must have the grade B or better in the Norwegian educational system
- Fluent oral and written communication skills in English and a Scandinavian language (due to teaching responsibilities):

<https://www.mn.uio.no/english/research/phd/application/application.html>

Personal requirements

- Ability to conduct high-quality independent research within a broad collaboration
- Interpersonal communication skills and the ability to work as part of a team
- Self-motivation, creativity, genuine curiosity about the subject, work discipline, professional ethics, and ambition
- Willingness in commuting for short/medium periods within foreign Scandinavian institutions

We offer

- Salary NOK 449 400 - 505 800 per annum depending on qualifications and seniority as PhD Research Fellow (position code 1017)
- Attractive [welfare benefits](#) and a generous pension agreement
- Vibrant international academic environment
- Oslo's family-friendly surroundings with their rich opportunities for culture and outdoor activities

How to apply

The application must include:

- Cover letter - statement of motivation and research interests
- CV (summarizing education, positions and academic work - scientific publications)
- Copies of the original Master's degree diploma, transcripts of records and letters of recommendation
- Documentation of English proficiency
- Documentation of Scandinavian language proficiency equivalent to B2 level of the Bergenstest (this apply only if a Scandinavian language is not your native language)
- List of publications and academic work that the applicant wishes to be considered by the evaluation committee
- Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number)

The application with attachments must be delivered in our electronic recruiting system, please follow the link "apply for this job". Foreign 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). Applicants may be called in for an interview.

Formal regulations

Please see the [guidelines and regulations](#) for appointments to Research Fellowships at the University of Oslo.

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.

The fellowship requires admission to the PhD programme at the Faculty of Mathematics and Natural Sciences. The application to the PhD programme must be submitted to the department no later than two months after taking up the position. For more information see: <http://www.mn.uio.no/english/research/phd/>

According to the Norwegian Freedom and Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an [agreement](#) for all employees, aiming to secure rights to research results etc.

The University of Oslo aims to achieve a balanced gender composition in the workforce and to recruit people with ethnic minority backgrounds.

Contact information

Ass. Professor Massimiliano Pio di Cagno, phone: +47 22 85 65 98, e-mail: m.p.d.cagno@farmasi.uio.no or Professor Sverre Arne Sande, phone: +47 22 85 65 90, e-mail: s.a.sande@farmasi.uio.no

For technical questions regarding the recruitment system, please contact HR Officer Therese Ringvold, e-mail: therese.ringvold@mn.uio.no, phone: +47 22 85 16 06.

About the University of Oslo

The University of Oslo is Norway's oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

The Department of Pharmacy has 130 employees. We have an active research and innovation environment based on independent research in pharmaceutical topics. The Department of Pharmacy is responsible for the popular master's degree program in pharmacy and has 350 competent and committed students.

Pharmaceutical related research and education forms the base of all activities at the Department of Pharmacy. The science of pharmacy lies in the interface between the natural sciences, pharmaceutical technology, health related topics and social sciences. This interdisciplinarity is reflected both in our study programmes and in our research.

Jobbnorge-ID: 166293, Søknadsfrist: Avsluttet