

# Job description

Position as  
Professor in Clinical and Translational Proteomics

Department of Clinical Research,  
Faculty of Health Sciences, University of Southern Denmark,  
and  
Department of Clinical Biochemistry, Odense University  
Hospital

February 2024

## 1. The vacant position

The vacant position is a combined post as Professor in Clinical and Translational Proteomics at the Research Unit for Clinical Biochemistry, Department of Clinical Research, University of Southern Denmark and as a senior scientist at the Department of Clinical Biochemistry, Odense University Hospital. The time is allocated with 50% to university (professor) and 50% to clinical (senior scientist) duties. The employment is limited to a period of 5 years with the possibility of prolongation.

### 1.2. Qualifications and expertise

The applicant is expected to have experience with high-quality research within the area of clinical proteomics. Particularly, development of protein mass spectrometry on large numbers of plasma and tissue samples used in basic and translational research, but also with a focus to implement the technology in daily clinical work is a prerequisite. Moreover, the candidate should have demonstrated teaching, student supervision and obtained external funding and experience with obligations within the clinical environment of a hospital department.

The applicant must be well qualified with a strong research profile in the areas mentioned above. Commitment to teaching and the ability to lead a research group, including experience with attaining funding, supervision of master's students and PhD students are required.

The applicant must submit the following documents in order to be considered for the position:

- An application
- A detailed CV with a summary of research outputs, including h-factor (source)
- Degree certificates (including PhD-diploma) (combined as one single PDF-file)
- A teaching portfolio which details the candidate's prior teaching experience, teaching skills, and teaching philosophy
- A research plan which details the candidate's ideas and plans for her/his future research work
- A complete and numbered list of publications
- Ten (10) scientific peer-reviewed publications that the candidate considers as most important for the position. Please notice that one PDF- or docx. - file must be attached for each publication

The candidate must provide a successful record in obtaining research funding, experience in practice with international research collaborations, experience as a research leader and effective oral, written and verbal communication and interpersonal skills. Documented experience as head of research, head of large research projects, head of teaching and other administrative jobs will be an advantage. The applicant is expected to be qualified in academic teaching as an associate professor or equivalent.

#### 1.2.1. Obligations

The professor's obligations will primarily be:

- To consolidate and develop the functions of protein mass spectrometry at the Research Unit of Clinical Biochemistry, Department of Clinical Research, SDU.
- To perform high-quality research related to Clinical and Translation Proteomics.

- To perform research and develop methods related to focus areas, such as amyloidosis and cardiovascular biomarkers, of the Research Unit for Clinical Biochemistry and the Department of Clinical Biochemistry.

The fundamental tasks are research (including an obligation regarding publishing/scientific procurement) and research-based teaching (with the associated obligation in terms of examination). In this context, research-based public sector consultancy may be added. Furthermore, the tasks may consist of knowledge sharing with society, including participation in the public debate. Moreover, handling of research management, counselling and supervision of assistant professors and researchers and assessment work may be added.

#### **1.2.1.1. Research**

The professor is expected to contribute to further developing the research strategy and profile of the department with special emphasis on proteomics and relevant data handling and bioinformatics as part of the integration of proteomics into clinical research and clinical use. The professor is also expected to increase the research activity and establish collaboration with other researchers at OUH and SDU. The professor should participate in further scientific development of the fields, both nationally and internationally. Also, profiling the field in the public eye will be a task. Finally, the professor is expected to supervise post-docs, PhD students and pre-graduate students.

#### **1.2.1.2. Teaching**

The professor is expected to be engaged in teaching at the Faculty of Health Sciences, SDU.

##### **1.2.1.2.1. Planning**

The Head of Research is responsible for planning the teaching within the department; additionally, the professor is expected to plan his/her own teaching.

#### **1.2.2. Other obligations**

The applicant is expected to cover the area of Mass Spectrometry-Based Proteomics applied to clinical diagnostics, also in the public debate. Moreover, the applicant is expected to perform public duties, *i.e.*, chairing commissions and boards, etc.

#### **1.2.3. Management and administration**

The professor is expected to:

- Perform evaluations of other researchers at the Faculty of Health Sciences
- Actively participate in and chair committees and councils etc. at the Faculty of Health Sciences and at other universities, locally, regionally, and nationally

#### **1.3. University position**

The position as professor is affiliated with [the Research Unit of Clinical Biochemistry](#) at the Department of Clinical Research.

The professor refers to the departmental management. Regarding research and teaching and other university aspects, the professor refers to the Head of Department of Clinical Research through the Head of Research of the Research Unit of Clinical Biochemistry. Organisational matters in relation to Clinical and Translational Proteomics at Odense University Hospital

should be coordinated with the Centre of Clinical Proteomics OUH/SDU and the Research Unit of Clinical Biochemistry.

Employment as a professor requires successful evaluation by an expert panel consisting of a professor from the Department of Clinical Research taking on the role of chairman and two external professors.

## 2. Odense University Hospital (OUH)

OUH is one of Denmark's largest hospitals and the only one having all medical specialties collected under one roof. The hospital comprises the units in Odense, Svendborg and Nyborg, sharing the same board of directors. In total, the staff comprises about 11,000 people. (See [Key Figures](#).)

A new university hospital is under construction and is expected to be finished in 2025/2026. The new hospital will be located adjacent to the current main campus of the University of Southern Denmark. This co-location of the two institutions is unique in Europe and will facilitate the cooperation between the clinical departments and faculties of the University of Southern Denmark.

Further information:

- [OUH's website](#)
- [OUH's organisation](#)
- [Research Strategy 2021 - 2025](#)

## 3. The Hospital Department

Please refer to the Departments [Danish](#) or [English](#) website for more information.

### 3.1 Clinical Specialities and Expertise

The Dept. of Clinical Biochemistry provides services, including blood and cerebrospinal liquid sample collection and analysis, as well as counselling regarding clinical biochemistry tests. In addition, the department runs a research service for scientists at OUH and SDU with clinical biochemistry analysis for research projects and help concerning biobank build-up. Geographically, the department is located at OUH, J. B. Winsloews Vej 4, 5000, Odense C.

The academic staff of the department comprises 5 MDs with a speciality in clinical biochemistry and 6 biochemists. The clinical laboratory at the department are involved in approximately 1,2 million blood samplings and produces approximately 12 million test results per year. The department is managed by the Head of Department, consultant Mads Nybo, PhD and Head Technician Helle Weimar-Sørensen.

### 3.2. Catchment area and regional functions

In accordance with the plans issued by the Danish National Board of Health, the department provides all services on the local level (population of approximately 220,000) and relevant regional services for Region Southern Denmark (population of approximately 1,2 million).

### 3.3. Highly specialised functions

The department has the obligation to provide highly specialised services according to the Danish Health Authorities plan for Clinical Biochemistry. This includes biochemical analysis for porphyria, myelomatosis and amyloidosis.

### **3.4. Teaching**

The Department and the Research Unit for Clinical Biochemistry provide teaching for medical students, biomechanical students, biomedicine students and other students at SDU, as well as teaching for laboratory technicians.

### **3.5. Research**

The departments research is organised under the Department of Clinical Research, SDU, in the Research Unit for Clinical Biochemistry, with Professor Lars Melholt Rasmussen as the Head of Research.

The research unit consists of groups and individual researchers, which particularly focus on stem cell research, arterial molecular pathophysiology, development and use of biochemical biomarkers and decision support by AI. The research unit comprises approximately 30 individual researchers (many as part-time scientists) and students.

### **3.6 The Clinical and Translational Proteomics Group**

The proteomics group was initiated as part of a strategic investment at SDU and OUH in 2012. The proteome laboratory at the Department of Clinical Biochemistry has since then gradually been built up, now covering a series of instruments, including 2 orbitrap-based mass spectrometers together with other relevant equipment. A series of publications document the group's experience with proteome analysis on clinical specimens. The laboratory has, during the last years, particularly focused on developing pipelines for both handling many samples for quantitative proteomics and on developing and use of proteome analysis on specific tissues for both diagnostic and research purposes. Two senior scientists (ass. Professor) are responsible for daily management of the laboratory. Several lab. technicians and students are part of the group.

## **4. Faculty of Health Science**

The [Faculty of Health Science](#) is one of five faculties at the University of Southern Denmark. The faculty offers a grand variety of bachelor- and master's programs. (For further details, please see [Programmes](#).)

## **5. Department of Clinical Research**

The [Department of Clinical Research](#) comprises [>45 research units](#) based on departments at Odense University Hospital and Mental Health Services in the Region of Southern Denmark. (For more information about the department's research, please see [SDU's Research Portal](#).)

The department staffs teach at all the programmes offered by the Faculty of Health Sciences, however, primarily in medicine. (Read more about the department and its key figures [here](#).)

Professor Kirsten Ohm Kyvik, MD, PhD, MPM, heads the department.

## **6. Living and working in Denmark**



OUH  
Odense Universitetshospital  
Svendborg Sygehus



The [International Staff Office](#) (ISO) at SDU provides a grand variety of services for new employees, guests and people who are considering applying for a job at the University of Southern Denmark.