



UPPSALA
UNIVERSITET

PhD Position in Protein science

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our ultimate goal is to conduct education and research of the highest quality and relevance to make a long-term difference in society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has over 54,000 students, more than 7,500 employees and a turnover of around SEK 8 billion.

The Department of Medical Biochemistry and Microbiology (IMBIM) at Uppsala University provides a broad international environment for research and teaching. Research at IMBIM broadly spans the areas of biochemistry, cell and molecular biology, tumour biology, comparative genetics, functional genomics, immunology, bacteriology, and virology. The research is essentially of fundamental nature, but with relevance and application in health and disease in both animals and humans. More info: <https://www.imbim.uu.se/research-areas/>.

[Read more about our benefits and what it is like to work at Uppsala University](#)

Project description: We are looking for a highly motivated person, with an ability to work independently and in collaboration with other groups. The candidate should have a strong interest in pursuing a PhD degree in the field of protein science with a focus on intrinsically disordered proteins. The position is one of eleven PhD positions in the Horizon Europe-funded Marie Skłodowska-Curie Action (MSCA) Doctoral Network IDPro, Intrinsically disordered proteins in health and disease: mechanisms, molecular context and opportunities for drug discovery.

IDPro is an exceptional network of nine beneficiaries (eight academic and one industrial) and five partner organisations (four industrial and three academic) from seven different countries, with excellent track records in protein research and

supervision. Together, we will train eleven doctoral candidates, with distinct competencies of relevance for the field of intrinsically disordered proteins, to secure future scientific breakthroughs in a rapidly developing field. In particular, we will investigate how disordered proteins interact, how interaction is affected by disease-related mutations, and assess how disordered proteins cause aberrant cellular signaling in relevant human disease models. Furthermore, we will design ligands that can be further developed into molecular probes, which could represent lead structures for the development of drugs. The goal of IDPro is to strengthen an emerging field in biology and medicine with implications for both academia and industry in the European union.

The project will address fundamental questions regarding mechanism and evolution of protein-protein interactions involving intrinsically disordered regions. The goal is to define principles governing these interactions with a special focus on flanking regions. The work includes heterologous expression and purification of proteins and characterization of their interactions using a range of biophysical and bioinformatics methods and analyses (in house and in collaboration).

Qualifications: The person we are looking for should have a master's degree or equivalent (240 ECTS) in molecular biology, biochemistry, structural biology or similar, providing basic theoretical and practical knowledge. Experience in working with proteins should be demonstrated through a MSc project.

The applicant must be fluent in written and spoken English (see entry requirements at: <https://www.uu.se/en/study/masters-studies/application/entry-requirements>). The candidate is expected to take initiative driving the project, but also to collaborate with the other members of the doctoral network. Emphasis will be given on personal qualities, including analytical capacity, accuracy, flexibility and collaborative skills.

Please note: This MSCA Doctoral Network grant aims to promote mobility within the EU. Applicants must not have resided or carried out their main activity (work, studies, etc.) in Sweden for more than 12 months in the 36 months immediately before their date of recruitment.

Additional merits or desired skills: The ideal candidate would be able to express and purify proteins in *E. coli* and perform basic characterization of the proteins. Furthermore, experience of protein interaction techniques such as isothermal titration

calorimetry, fluorescence polarization (or other methods), and structural methods (circular dichroism, X-ray crystallography, NMR or Cryo-EM) are meritorious.

The selection is based on the following criteria: Completion of the above qualifications, grades in relevant courses, suitability of the courses to the research program, previous experience in working and/or performing research in the wider area that relates to the project described above. An integrated assessment of the applicant is generated in order to employ the best possible candidate that can succeed in the doctoral studies and contribute to a positive development of the department and the research program.

To be employed as a PhD student, the applicant must be accepted in a doctoral program. Information concerning doctoral education, requirements and rules of admission can be found at [Medicine and Pharmacy - Uppsala University \(uu.se\)](https://www.uu.se/medicin-farmaceutik)

The length of the study period for full time employment is a maximum of four years. Terms for graduate studies can be found in Högskoleförordningen 5 kap 1-7 §§ and in: Uppsala University's [rules and guidelines](#).

About the employment: The employment is a temporary position according to the Higher Education Ordinance chapter 5 § 7. Scope of employment 100 %. Starting date as soon as possible or as agreed. Placement: Uppsala

For further details, please contact: Per Jemth, Per.Jemth@imbim.uu.se

Application: Please submit your application using the Uppsala University application portal, by including a CV, a letter describing your research interest and skills, publications or a copy of master thesis or equivalent, contact information of two referees (phone number and e-mail address).

You are welcome to submit your application **no later than September 21, 2023, UFV-PA 2023/2601**.

Are you considering moving to Sweden to work at Uppsala University? If so, you will find a lot of information about working and living in Sweden at www.uu.se/joinus. You

are also welcome to contact International Faculty and Staff Services at ifss@uadm.uu.se.

Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

Placement: Department of Medical Biochemistry and Microbiology

Type of employment: Full time , Temporary position

Pay: According to local agreement

Number of positions: 1

Working hours: 100

Town: Uppsala

County: Uppsala län

Country: Sweden

Union representative: Saco-rådet saco@uadm.uu.se

ST/TCO tco@fackorg.uu.se

Seko Universitetsklubben seko@uadm.uu.se

Number of reference: UFV-PA 2023/2601

Last application date: 2023-09-21

[Apply for position](#)