

PhD Student in Prokaryotic Microbiology

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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 Cell and Molecular Biology is organized into seven research programmes which all focus on different areas of cell and molecular biology: Computational Biology and Bioinformatics, Microbiology and Immunology, Molecular Biology, Molecular Biology, Molecular Evolution, Molecular Systems Biology and Structural Biology. The scientific basis of what we do lies in biology, but our research overlaps with other areas such as medicine, computer science, mathematics, chemistry, engineering sciences and physics. In total, we are over 200 staff and ~60 Ph.D. students. Please read more about the department's work at https://icm.uu.se.

The PhD position is placed in Erik Holmqvist's research group at the Microbiology and Immunology program, please visit http://www.icm.uu.se/microbiology/holmqvist-lab/.

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PhD student in Microbiology – Functions of small proteins in bacterial physiology and virulence

General description

Recent large-scale studies have identified thousands of previously unknown small proteins encoded by a large variety of bacterial species, indicating that the full extent of protein-coding genes has been greatly underestimated. Generally, the impact of such small proteins on bacterial physiology and pathogenicity is so far unknown. Within the PhD project we aim to gain a detailed understanding of how small proteins impact three important aspects of bacterial life; growth, gene regulation, and host cell infection. The main model organism used for these studies is the pathogenic bacterium *Salmonella* Typhimurium, which infects a wide range of animals, including humans. The methods applied within this PhD project include high-throughput sequencing of RNA, flow cytometry, as well as other molecular and microbiological techniques.

Duties

The Ph.D. student shall primarily focus on postgraduate studies, but other duties related to teaching and administrative work may be involved, up to a maximum of 20 % of the time. Information about doctoral education, eligibility requirements and admission rules can be found at the faculty website, http://www.teknat.uu.se/utbildning-pa-forskarniva/.

Requirements

The applicant must have a master's degree in microbiology, molecular biology, biotechnology, or within another subject which the employer considers to be equivalent. The applicant must have a good ability to work independently as well as in a group. A prerequisite is good written and oral knowledge of English, as the work takes place in an international environment. Strong written and oral communication skills are required. Assessment of personal suitability will be an important aspect in the selection.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in <u>Uppsala University's rules and guidelines</u>.

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 agreed. Placement: Uppsala.

For further information about the position, please contact: Erik

Holmqvist, erik.holmqvist@icm.uu.se.

Please submit your application by May 25th 2022, UFV-PA 2022/1618.

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Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

Placement: Department of Cell and Molecular Biology

Type of employment: Full time, Temporary position longer than 6 months

Pay: Fixed salary

Number of positions: 1 Working hours: 100 %

Town: Uppsala

County: Uppsala län

Country: Sweden

Union representative: ST/TCO tco@fackorg.uu.se

Seko Universitetsklubben seko@uadm.uu.se

Saco-rådet saco@uadm.uu.se

Number of reference: UFV-PA 2022/1618

Last application date: 2022-05-25

Apply for position