PhD student in Physical Mechanisms of Virus Infection

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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 Biophysics, 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 ~50 Ph.D. students. Please read more about the department’s work at https://icm.uu.se.

This PhD position will be located in the Biophysics program with in the Kasson Group, which is an international and interdisciplinary team of researchers who come from different backgrounds to study virus entry mechanisms using biophysical analysis. You will join a diverse team studying viral entry with backgrounds in physics, chemistry, computer science, and virology. The group provides an exciting, dynamic environment for science, and good communication skills and positive interactions with teammates are critical for success. Read more about us and our research at http://kassonlab.org.

Duties
The doctoral project is about measuring enveloped virus entry using fluorescence microscopy and biophysical chemistry. The Kasson group previously published an approach to measure viral entry using native and artificial receptors (DOI 10.1039/D2SC06967A). You will begin by extending the system to help understand the physical role receptors play in viral entry and answer other questions about the biophysics and cell biology of viral entry. The project will include equal parts virus measurement and rigorous quantitative analysis.
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/utbildning-pa-forskarniva/.

Requirements
To meet the entry requirements for doctoral studies, you must

- hold a Master’s (second-cycle) degree in infection biology, biophysics, or within another subject which the employer considers to be equivalent or
- have completed at least 240 credits in higher education, with at least 60 credits at Master’s level including an independent project worth at least 15 credits, or
- have acquired substantially equivalent knowledge in some other way.

Prior experience in both quantitative analysis and viral culture or microscopy are essential. 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.

Additional qualifications
Experience in optical microscopy of viruses, fluorescence techniques, and specifically studies of enveloped viral entry are added merits when candidates are assessed. Skills and background in both biophysical chemistry and viral infection biology are also merits.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 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 information about the position, please contact: Peter Kasson, peter.kasson@icm.uu.se. For administrative questions please contract via personal@icm.uu.se

Please submit your application by 31 January 2024, UFV-PA 2023/4723

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Read more about our benefits and what it is like to work at Uppsala University https://uu.se/om-uu/jobba-hos-oss/

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
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 2023/4723
Apply for position