

Postdoctoral fellowship (2 years): In situ structure-functions of acquired structures in dsRNA viruses

Please visit our program and lab homepage to find our research interests!

Program of Molecular Biophysics: <https://www.icm.uu.se/molecular-biophysics>

Okamoto's lab: <https://www.icm.uu.se/molecular-biophysics/okamoto-lab/>

Uppsala University is an international research university focused on the development of science and education. The Department of Cell and Molecular Biology is one of Europe's most international, broad and distinguished biomolecular departments. Research interests range from genetics to the biophysics of single molecules. Our research program, the Program of Molecular Biophysics, is multidisciplinary, focused on structural and functional aspects of viruses and macromolecular complexes using X-ray methods, cryo-EM, MD simulations and mass spectrometry. The program also has a strong interest in methods development.

Project description

The postdoc will work on a project aiming to understand structure-functions of acquired capsid structures in dsRNA viruses. Please find our recent published works (Wang et al., *bioRxiv* 2023, DOI: 10.1101/2023.11.01.564773; Wang et al., *PLoS Pathog* 2023, DOI: 10.1371/journal.ppat.1011162; Okamoto et al., *Structure* 2020, DOI: 10.1016/j.str.2020.04.016). The candidate will study in vitro molecular and in situ cellular functions of dsRNA viruses based on their previously determined structures and established reverse genetics system. The candidate will also study transcribing intermediates of the dsRNA viruses structurally using a cryo-EM single-particle analysis.

Qualifications

The candidate preferably has an academic background in virology, particularly molecular virology, or structural biology, particularly cryo-EM. However, highly motivated candidates from relevant educational backgrounds are also encouraged to apply. Practical experience in virus researches (such as virus purification, plaque/qPCR virus titration, reverse genetics, and cellular viral genome detection) or in biophysical researches (such as FRET, and DSF) is considered an advantage. The candidate should be able to work well as part of a team and independently and be proficient in written and spoken English.

Eligibility

The research fellow should have a doctoral degree from an institution other than the host institute. Unless there are particular circumstances (for example, leave of absence due to sickness, parental leave, serving on commissions of trust, military service, etc.), the doctoral degree cannot be older than six years at the time of admission.

Application

Applications are processed on a rolling basis. The application should include:

1. Letter of motivation with a short description of your research interests and why you feel you are a good match for the project (One page).
2. CV, including a description of relevant skills and experiences and a complete publication list.
3. Copy of degree diploma and other official transcripts.
4. Names, e-mail addresses and telephone numbers to 2-3 reference persons.

Scholarship: Carl Trygger Foundation

Starting: As soon as possible or as otherwise agreed.

Type of employment: 2 years

Working hours: Fulltime 100 %

For further information and to apply, please contact

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