



**SAHLGRENKA ACADEMY
INSTITUTE OF BIOMEDICINE**

Diariennr: GU 2024/2551

Institute of biomedicine

2024-08-29

Announcement of scholarship – postdoctoral fellow

Project Title: Postdoctoral scholarship in virology and ethnopharmacology

Project duration and dates: 10 months, period: 2024-10-01 – 2025-07-31

Application deadline: 2024-09-19

Supervisor: Tomas Bergström

Contact: Tomas Bergström at tomas.bergstrom@microbio.gu.se

Project summary:

A scholarship for postdoctoral studies in basic virology and ethnopharmacology with the aim of identifying novel antiviral lead drugs from medicinal plant extracts is now available in Tomas Bergström's group (<https://www.gu.se/om-universitetet/hitta-person/tomasbergstrom>) at the institute of Biomedicine, department of Infectious diseases, section for Clinical virology at University of Gothenburg, Sweden.

Project description

The project is mainly focused on experimental studies of plant extracts with antiviral effects used in traditional medicine in Tanzania, with the aim to develop novel antiviral compounds for treatment of viral infections such as respiratory syncytial virus (RSV) and anti-herpes simplex virus 2 (HSV-2). The postdoctoral researcher is expected to investigate these plant extracts. Some of the tasks include: i) purification and structural identification of antivirally active compounds/components through ion exchange chromatography and ii) elucidation of the mechanism of antiviral activity of the active compounds/components through organoid/air-liquid-interface (ALI) cultures and cellular imaging.

Qualifications

Eligible applicants hold a PhD degree in biomedical sciences and have an interest in experimental basic virology. The candidate should have extensive experience in working with cell/virus cultures, especially ALI-cultures and antiviral cell-based screening methods. Previous experience in working with PCR and nucleotide sequencing is required. Experience in working with analytical chromatography methods such as HPLC and fluorescent and/or

electron microscopy is seen as an advantage. The candidate is expected to actively contribute scientifically to the group. Fluency in spoken and written English is essential.

The scholarship

The funding, which is provided by "Forska utan djurförsök 2023", is in the form of a scholarship covering a 10-month research period (tax exempt).

Applications should be emailed to: tomas.bergstrom@microbio.gu.se

The application should include:

- A cover letter in which you describe your qualifications and motivation
- CV and list of publications
- Copies of relevant degree certificate(s)
- Names and contact information of at least two reference persons