



**THE SAHLGRENKA ACADEMY
INSTITUTE OF NEUROSCIENCE AND PHYSIOLOGY**

Department of Physiology
Administrator: Amilia Bliding
Telephone no:
E-mail address: amilia.bliding@gu.se

Announcement - scholarship at postdoctoral level

The Department of Physiology at the Institute of Neuroscience and Physiology hereby announces a one-year scholarship at postdoctoral level in physiology, with the possibility of a one-year extension. The research will focus on neuro-immune signaling in atherosclerosis.

Plan for scientific research

The research aim is to expand on our findings (Mjörnstedt, Am J Physiol 2024, Ulleryd, Atherosclerosis 2019) with the goal to define neuro-immune signaling in atherosclerosis, more specifically to determine the signaling pathways and function of the $\alpha 7$ nAChR in atherosclerosis and pinpoint the neuronal circuits involved in sensing and modulating immune response in atherosclerosis. The postdoctoral fellow will use mouse models and human material (PBMCs, human plaque tissue) and combine functional assessments with histology, molecular biology techniques, flow cytometry and gene manipulation to identify and validate signaling pathways. In addition to the main project, the postdoctoral fellow will participate in ongoing projects in the research group as well as to supervision of research students.

The postdoctoral fellow will gain expertise in circulatory physiology, immunology and characterization of neuronal circuits, advanced analytical methods, along with skills in data integration, design, writing, interdisciplinary collaboration, as well as develop leadership and mentorship competencies.

Qualifications

- PhD in relevant field, completed within three years of the application deadline (time spent on for example, parental leave can be deducted)
- Experience in mouse phenotyping within the area of atherosclerosis
- Documented expertise in neural circuit mapping and chemogenetic tools in transgenic mouse
- Experience in bioinformatics, circulatory physiology and flow cytometry
- Excellent command of written and spoken English

A successful candidate is expected to plan, execute and interpret experiments independently and to contribute to our generous and creative research environment. Knowledge covering neuroscience, immunology and physiology is advantageous. Experience in methods related to neural circuit mapping and chemogenetics is highly meritorious.

If you require any further information, please contact Maria Johansson, maria.e.johansson@neuro.gu.se, supervisor.

Financing

A total of 330 000 SEK will be paid for the period 2026-04-01 – 2027-03-31. An additional amount of 15 000 SEK for travel will be paid.

Application

To apply please fill out the form “Application scholarship postdoc level 251023” and send it to Maria Johansson, maria.e.johansson@neuro.gu.se, supervisor.

PhD must be completed within three years of the application deadline.

Closing date is 2026-03-01.