



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

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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 immunometabolism, with the possibility of a one-year extension.

Plan for scientific research

This project investigates how communication between adipose tissue stem cells and macrophages is altered in insulin resistance and contributes to adipose tissue dysfunction in type 2 diabetes. Healthy adipose tissue maintains metabolic homeostasis through coordinated adipocyte formation and extracellular matrix remodeling, whereas diabetes is associated with impaired cellular interactions and fibroinflammatory remodeling. The project combines experimental mouse models, human adipose tissue samples, and in vitro cell culture systems. Methods include e.g. metabolic phenotyping, flow cytometry, single-cell RNA sequencing, 2D and 3D co-culture models, qPCR, and Western blotting. In brief, the candidate will assist in the analysis of single-cell RNA sequencing data to identify altered stem cell-macrophage signaling pathways in insulin resistance and establish co-culture systems for mechanistic studies. Prioritized ligand-receptor interactions will be functionally validated using pharmacological and/or genetic approaches. The postdoctoral fellow will gain expertise in metabolism, macrophage and stem cell biology, advanced analytical methods, along with skills in data integration, design, writing, interdisciplinary collaboration, as well as 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)
- Documented expertise in 2D/3D-cell culture and flow cytometry is meritorious
- 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.

If you require any further information about research or qualifications, please contact Ingrid Wernstedt Asterholm, IWA@neuro.gu.se, supervisor.

Financing

A total of 330 000 SEK will be paid for the period 2026-08-01 – 2027-07-31 in two equal payments.

Application

To apply please fill out the form “Application scholarship postdoc level 251023” and send it to Ingrid Wernstedt Asterholm, IWA@neuro.gu.se, supervisor.

Closing date is 2026-06-14.