



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

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## **Announcement - scholarship at undergraduate/advanced level**

The Department of Physiology, Institute of Neuroscience and Physiology, hereby announces a vacant scholarship at undergraduate/advanced level in Neuroscience/Neuroendocrinology.

### **Training plan**

The pharmacotherapy for overweight and obesity has been revolutionized by the use of long-acting GLP-1R agonists, such as semaglutide (the active component of Ozempic and Wegovy). Semaglutide acts on the brain to lower food intake and body weight, but the neural substrates underlying these beneficial effects remain unclear.

The overall aim of this research project is to define the neural populations and circuits involved in mediating the body weight-lowering effect of semaglutide.

Transgenic mouse models combined with viral vector delivery into brain structures will be employed for Cre-dependent ablation and chemo- and optogenetic characterization of specific populations and neuronal projections engaged by semaglutide. Viral vector expression, neuronal activation and neurochemical phenotype of semaglutide-engaged neuronal populations will be investigated using multiplex immunofluorescence and in situ hybridization.

This project is part of a larger research project. The student will always have access to supervision/practical mentoring when needed.

The student will get hands on experience with optogenetics and food intake recordings. The student will learn how to process mouse brain sections for immunofluorescence and mRNA detection (RNAscope). The student will get training in epifluorescent and confocal imaging, as well as in analyzing the emanating data. The student will also perform DNA preparations and PCR for genotyping of our transgenic mice.

This training position comes with a stipend that does not represent a salary, and the activities performed are not regarded as work.

### **Period**

2026-02-01 to 2026-05-01

### **Financing**

1 payment of 54000 SEK. A total of 54000 SEK for the whole period.

If you require any further information, please contact Linda Engström Ruud, linda.engstrom.ruud@gu.se, supervisor.

**Application**

To apply please fill out the form “Scholarship application” and send it to Linda Engström Ruud, linda.engstrom.ruud@gu.se, supervisor.

**Please attach a copy of:**

CV

Letter of motivation

Closing date is 2025-12-22.