



THE SAHLGRENKA ACADEMY
INSTITUTE OF NEUROSCIENCE AND PHYSIOLOGY

Department of Pharmacology
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Announcement - scholarship at undergraduate/advanced level

The Department of Pharmacology, Institute of Neuroscience and Physiology, hereby announces a vacant scholarship at undergraduate/advanced level in *Joint cells interaction*.

Training plan

Subject: Joint-on-a-Chip

Background: The joint is a complex organ composed of multiple interacting tissues that work together to maintain homeostasis and regulate inflammation and mechanical stress. Articular nociceptors innervate both the synovium and subchondral bone, responding to harmful mechanical stimuli and contributing to pain signaling.

Purpose: This project aims to investigate the interactions between joint-resident cells and sensory neurons in an in vitro setting using a commercially available organ-on-a-chip platform.

Methods: Primary cells will be isolated from rats and, following the optimization of culture and differentiation conditions, will be seeded onto the organ-on-a-chip device. Cellular interactions will be analyzed using immunofluorescence techniques.

Timeline: Training and data analysis will be completed within five months.

Learning outcomes: the researcher will acquire theoretical knowledge on the physiology of the joint cells and sensory neurons. He/she will also obtain technical skills on primary cell isolation and cell cultures.

Period

2025-06-01 to 2025-10-30

Financing

18000 SEK/month. One anticipated payment of 90000 SEK for the whole period.

If you require any further information, please contact Carmen Corciulo,
carmen.corciulo@gu.se, supervisor.

Application

To apply please fill out the form "Scholarship application" and send it to Carmen Corciulo,
carmen.corciulo@gu.se, supervisor.

Please attach a copy of:

CV

Letter of motivation

Closing date is 2025-05-01