



THE SAHLGRENKA ACADEMY
INSTITUTE OF MEDICINE

Department of Internal Medicine and Clinical
Nutrition
Administrator: Mirela Ribic
Telephone No: 031-786 2879
E-mail address: mirela.ribic@gu.se

Announcement - scholarship at postdoctoral level

The Department of *Internal Medicine and Nutrition* at the Institute of Medicine hereby announces a scholarship at postdoctoral level in research subject “Skeletal Biology”.

Plan for advancement

Background: Skeletal biology underlies a wide range of diseases that severely affect the human population. For example, a degenerative joint disease, osteoarthritis, affects approximately 50% of individuals over the age of 65. Growth abnormalities are another large group of disorders, affecting children's longitudinal growth and, mostly, associated with malfunctioning of the growth plate. Together, disorders of the skeletal system represent a substantial burden on individuals, healthcare systems, and society as a whole. Despite their prevalence, the mechanisms driving the development of osteoporosis and osteoarthritis remain poorly understood, and elucidating these mechanisms is a central objective of the proposed project.

Purpose: To obtain postdoctoral training in skeletal biology

Methods: During the training period, the scholar is expected to acquire expertise in mouse lineage tracing, including clonal genetic tracing and time- and tissue-specific genetic manipulations under both physiological and pathological conditions. To achieve this, the scholar will work with a range of transgenic mouse lines, including Pthrp-CreERT2:tdTomato, Wif1-CreERT2:R26-Confetti, Sfrp5-CreERT2:R26-Confetti, and Smad2 and Smad7 floxed mice. These genetic tools represent state-of-the-art approaches for dissecting the cellular and molecular mechanisms that regulate skeletal stem cells. In parallel, the scholar will be trained in and gain proficiency with a broad set of analytical techniques, including single-cell RNA sequencing (scRNA-seq), spatial transcriptomics, confocal and light-sheet microscopy. In addition, the scholar will learn to master carbon dating of human tissues.

Time plan: The training period is accounted for 2 years.

Outcome: The success of the training will be assessed by the ability to address a scientific question through a high-quality, peer-reviewed scientific publication.

Period

2026-04-01 – 2028-03-31

Financing

A total of 672,000 SEK will be paid for the whole period.

If you require any further information, please contact Prof. Andrei S Chagin, andrei.chagin@gu.se, supervisor.

Application

To apply please fill out the form "Application for a scholarship at postdoctoral level" and send it to Prof. Andrei S Chagin, andrei.chagin@gu.se, supervisor.

Please attach a copy of your PhD certificate with the application. PhD must be completed within three years of the application deadline.

- Cover letter (1 page)
- CV (3 pages max)
- A complete publication list
- The contact information of 3 references (one of whom should be your PhD advisor)

Closing date is 2026-03-01.