



**SAHLGRENKA ACADEMY
INSTITUTE OF BIOMEDICINE**

Diariennr: GU 2025/1884

Institute of biomedicine

2025-05-19

Announcement of scholarship – postdoctoral fellow

Project Title: Postdoctoral fellow in mucosal mucin expression and glycosylation

Project duration and dates: 1 year, first day as agreed

Application deadline: 2025-06-09

Supervisor: Sara Lindén

Contact: +46709817979,

Project summary:

Our group investigates the role of mucins during host defense against bacteria, and the biological function of changes in mucosal mucin expression and glycosylation associated with disease. For further information regarding the research in the group see <https://www.gu.se/en/research/sara-linden>.

Purpose

Identification of mechanisms that control mucus production and interactions between molecules in the mucus and bacteria at the molecular level

Method

1) scientific articles are continuously written together with the supervisor, 2) bacterial cultivation on plates and in broth, 3) bacteria are labeled with various conjugates and molecules, 4) mucins are isolated and quantified and binding between bacteria and mucins is analyzed on membranes and in microtiter plates, 5) the amount of bacteria in a sample is quantified using rt-PCR 6) mucin production in tissue is analyzed and quantified by metabolic binding, 7) tissue (so-called explants) is cultured in the laboratory and treated with various reagents to manipulate mucus production 8) the candidate is allowed to develop their own research ideas and discuss these with the supervisor, 9) the candidate is allowed to practice communicating research ideas and results at weekly meetings.

Applications should be emailed to: sara.linden@gmail.com

The application should include:

- Motivation letter
- CV including contact info.
- PhD Certificate