

Date:  
Reg. No.: 2023 / 220



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

Department of 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 mucosal immunology.

### **Training plan**

**Background:** Ulcerative colitis (UC) is a chronic inflammatory disease that affects the colon. The pathogenesis of UC is still unknown, however the inflammatory response, is thought to be directed towards the intestinal microbiota. We have previously shown that colonic goblet cells (GCs) play an essential role in regulation of colonic health by sampling and delivering luminal antigens to the immune system. At this point the majority of knowledge in this area comes from animal studies and less is known about this process in the human colon.

**Purpose:** In this project we will explore the role of the mucus barrier in regulation of T cell differentiation and LP-APC subsets in the colon during early life of mice

**Method:** We will explore the role of the mucus barrier in regulation of T cell differentiation and LP-APC subsets using the C1galt1 model of colitis. T cell differentiation and LP-APC subsets will be assessed by flow cytometry and immunohistochemistry on colonic sections.

**Time plan:** The first weeks will be dedicated to training the student in the respective methods and data analysis. During the remaining time the student is expected to work independently.

**Learning outcome:** Following completion of the project the student will have obtained practical and theoretical training in mucosal immunology. The practical experience includes flow cytometry and immunohistochemistry. The theoretical aspects focus on immune cell activation in the colon lamina propria. This training position comes with a stipend that does not represent a salary and the activities performed are not regarded as work.

### **Period**

2023-02-13 to 2023-04-13

### **Financing**

1 payments of 30000 SEK. A total of 30000 SEK for the whole period

If you require any further information, please contact Jenny Gustafsson, jenny.gustafsson@gu.se, supervisor.



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**Application**

To apply please fill out the form "Scholarship application" and send it to Jenny Gustafsson, jenny.gustafsson@gu.se, supervisor.

Please attach a copy of:

CV

Letter of motivation

Registration certificate

Closing date is 20xx-xx-xx (låt stå tills prefekt signerat inrättande).

