



Announcement of a Postdoc Scholarship at the Department of Experimental medical science division of Neuroendocrine Cell Biology

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has around 46 000 students and more than 8 400 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition. Lund University welcomes applicants with diverse backgrounds and experiences. We regard gender equality and diversity as a strength and an asset. The purpose of postdoctoral development is to promote internationalization and contribute to qualifications within research following the completion of a doctoral degree.

Lund University, Faculty of Medicine hereby invites applications for a postdoctoral scholarship:

Reference number: V2024/339

Placement: Department of Experimental medical science, division of Neuroendocrine Cell Biology

Scholarship period: 2 years

Preliminary start date: 2024-06-01-2024-08-01 according to agreement

Last day for applying: 2024-05-30

Supervisor/contact person: Prof. Nils Wierup, +46703786624, nils.wierup@med.lu.se

The impact of T2D on intestinal endocrine cells

It is not well studied how the intestinal mucosa is affected by gastric bypass surgery (RYGB) or if alterations in the gut play a role in remission of T2D in humans and unbiased assessment of global gene expression is lacking. We performed transcript profiling, using RNAseq in jejunal specimens taken during surgery and from the same location one year postGBP during gastroscopy in 13 obese, non-diabetic subjects. Pathway analysis revealed that certain unexpected biochemical processes are activated after RYGB. We will now perform single cell RNAseq studies to identify the cell types involved, using SPLIT-Seq. Hits will be functionally validated using genetic or chemical

targeting in intestinal organoids, cell lines and in vivo in mice. The multitechnique nature of the project makes it well suited for postdoc studies. And we now wish to recruit a postdoc to pursue the studies and receive a 2-year stipend. The isolated nature of the project makes it suitable for a stipend. The postdoc will be trained in the above-mentioned techniques as well as state of the art methodology for assessing cellular metabolism and regulation of hormone secretion and production available at LUDC in Malmö. The postdoc will follow LUDC/ExoDiab local and national seminar series and attend international conferences. The student will pursue the studies under the supervision of the group leader and get supervision also from senior members of the lab.

Qualifications:

- To be eligible for a post doc scholarship at Lund University the recipient must hold a PhD degree within a relevant field.
- The PhD degree **must not be older than three years**.
- The applicant must not have been employed at Lund University in the past two years.
- Excellence in molecular biology and cell biology
- Deep knowledge and experience of RNAseq
- Proven skills in bioinformatics
- Excellence in English language

A written application, including reference number, is to be sent via e-mail to the supervisor and must include the following:

- PhD diploma
- CV
- Personal letter, stating the reasons why the project suits the applicant (maximum one page)
- List of publications
- References (2)

Information regarding scholarships at Lund University

- The scholarship follows the regulations established by the Vice-Chancellor of Lund University, Reg. No STYR 2020/1283.
- The scholarship is intended for the holder's own education/professional development and does not constitute remuneration for work or other service that has been carried out or will be carried out on behalf of the University.
- The host faculty/department and the scholarship holder shall draw up in writing an agreed plan for the project/development.
- The scholarship amount is paid out quarterly.

- The granted scholarship is reviewed every six months. Scholarship recipients are to complete their education/career development and be present in line with their project plan/professional development plan. In the event of misconduct, or if the recipients are not deemed able to complete their education/qualification due to illness or on other grounds, scholarship funds that have been granted but not yet paid may be withdrawn.
- Scholarships are tax-exempt. There may be a risk of the scholarship holder being taxed in his/her home country; the scholarship holder should investigate this before the period of the scholarship.
- The scholarship holder is not entitled to sickness benefit, parental allowance, holiday pay or pension.
- The scholarship holder is not entitled to subsistence allowance during travel.
- The scholarship holder is to be treated equally to students/researchers in the same situation regardless of the sources of funding and the scholarship holder should be ensured and contribute to a good working environment.