Lund University Diabetes Centre [www.ludc.med.lu.se](http://www.ludc.med.lu.se) is one of the strongest centers for diabetes research in the world. Lund University is one of Europe's leading universities. The University has 47,000 students and 7,200 staff from all over the world, based mainly in Lund, Malmö and Helsingborg. We work with 680 partner universities in more than 50 countries.

Lund University invites applications for the following position:

**Post-doctoral scholarship**

**Placement:** Department of Experimental Medical Science  
**Ref No:** V 2017/826  
**Duration:** The scholarship can be drawn for a total of 24 months, the scholarship will be reviewed every 6 months.

**Starting time:** According to agreement  
**Last day for applying:** July 14th, 2017

**Research environment:**

The project is a collaboration between a lab with excellence in diabetes research (headed by Nils Wierup) [www.wierup-lab.org](http://www.wierup-lab.org) and a lab at the fore front of single cell sequencing technology (headed by Jens Hjerling-Leffler) [www.hjerling-leffler-lab.org](http://www.hjerling-leffler-lab.org). The Wierup lab is part of the Lund University Diabetes Centre [http://www.ludc.med.lu.se/](http://www.ludc.med.lu.se/) one of the strongest centers for diabetes research in the world situated at Clinical Research Centre at the Scania University Hospital in Malmö in southern Sweden.

**Project title - Single cell RNAseq to understand what fails in the pancreatic islets during Type 2 Diabetes**

As a part of our larger effort to understand gene-regulation in normal and T2D islets we are mapping gene expression in transcriptionally defined cell types in human islets using single our cell RNAseq pipeline (Zeisel et al., 2015, Science and Marquez et al., 2016, Science). Cell-type specific gene expression will allow us to proceed with extraordinary precision and will lead to a major leap forward for understanding of islet biology and what fails in T2D. We have established a pipeline for single cell RNAseq of human islet cells and successfully sequenced >3000 cells from human donors. This resulted in a model comprising >10 distinct cell types, including cells expressing the major islet hormones. Differential expression analysis revealed 100s of genes with cell type specific expression differences between T2D and control donors. Our model will now be validated.
using multiple single molecule in situ hybridization and immunohistochemistry as well as functionally in cell lines and animal models using siRNA and CRISPR and RNAseq.

**Qualifications:**
We are seeking a highly motivated person with a Ph.D.(Degree 2014-2017) in a relevant area and at least one first authorship publication. Excellence in molecular biology and state of the art histology. Proven skills in bioinformatics is meriting. A strong background in the diabetes field is a merit but not necessary. Excellence in the English language (written and spoken) is a prerequisite.

The application should include: CV, publication list with top 5 publications indicated, personal letter, reference letter from at least one internationally recognized senior scientist, diplomas of university degree and high school grades.

Eligible candidates must have obtained their PhD within the last three years. Moreover, eligible candidates must not have held positions at Lund University within the last two years.

**The application should contain:**

The application should include: CV, publication list with top 5 publications indicated, personal letter, reference letter from at least one internationally recognized senior scientist, diplomas of university degree and high school grades.

For further information please contact:
Nils Wierup, Research group leader
E-mail: nils.wierup@med.lu.se

**Application**
Application must state the reference number V 2017/826 and should be sent to HR Officer by e-mail: Sofia.Sonnerstedt@med.lu.se, CC to nils.wierup@med.lu.se

**Information regarding post doc scholarships at Lund University**

- The scholarship amounts are paid quarterly.

- The scholarship follows the regulations laid down by the University Vice-Chancellor (LS 2010/68, A13).

- 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 scholarship does not give any entitlement to sickness benefit, parental allowance, holiday pay or pension.

- The host faculty/department and the scholarship holder shall draw up in writing an agreed plan for the studies/development.
• The Scholarship holder is to be informed about the length of the stay, assured social conditions, and continual review of the scholarship holder’s development.

• The Scholarship holder is to be informed about insurance covering the scholarship holder and the need to check his/her own insurance requirements.

• The scholarship holder is to be treated equally to students/researchers in the same situation but with different sources of funding.

• The scholarship holder is to be assured and to contribute to a good working environment.

• The Scholarship holder is to be informed about the risk of possible retrospective taxation in Sweden in cases where the scholarships are administered and paid out by LU and the scholarship holder gains employment at LU shortly after the period of the scholarship.

• 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.