



Bioinformatician in Single Cell Analysis and Epigenetic Reprogramming

The Reprogramming and Hematopoiesis lab is currently seeking a highly motivated postdoctoral fellow in bioinformatics!

Cell Reprogramming in Hematopoiesis and Immunity lab

Cellular reprogramming can be achieved experimentally in different ways, including nuclear transfer, cell fusion or expression of transcription factors that have been mainly explored in regenerative medicine. We have recently pioneered cell fate reprogramming approaches in immunology with induced dendritic cells (Rosa et al, Science Immunology 2018). This conceptual shift opens exciting opportunities to merge cellular reprogramming and cancer immunotherapy, leading to the generation of patient-specific immune cells for immunotherapy.

We are currently generating large amounts of population and single cell data along with chromatin accessibility and transcription factor occupancy in both mice and humans. We are looking for a postdoctoral fellow with a strong background in bioinformatics that is interested in **extracting biologic information from large datasets and harnessing the full potential of single cell analysis**. Our lab is generously funded by the Wallenberg Centre for Molecular Medicine, Swedish research council, Cancerfonden and the NovoNordisk foundation.

Candidate Profile

The candidate should be an enthusiastic and motivated scientist, with a background in bioinformatics, willing to join a young international research group in a highly dynamic and multidisciplinary environment (with English as main language). Candidates with a passion for cell identity, epigenetics and single cell analysis who recently completed their PhD thesis or currently finishing up are encouraged to apply. The ideal candidate should have experience in next generation sequencing data analysis, programming and scripting languages as well as a large array of bioinformatic tools and graphic tools in R. Experience with building websites for making data available to the community is preferential. Excellent verbal and written communication skills in English are required.

Research at Lund University

Lund University is Scandinavia's largest institution for education and research and consistently ranks among the world's top 100 universities. Lund Stem Cell Center hosts 15 research groups in experimental hematology and is one of Europe's most prominent in the field of hematopoietic research. This environment has all facilities and equipment essential for the project including an outstanding animal facility, technical platforms for flow cytometry and cell sorting, a human ES/iPS core facility, viral vector technology and single cell genomics facility. This creates a very interactive environment with weekly seminars and annual retreats for students, postdocs and PIs.

Start of Position and Application Deadline

The position start date is flexible from October 2019.

How to apply

Please send a letter of motivation, your curriculum vitae, and the contacts for three references to:

Associate Professor Filipe Pereira

Contact: filipe.pereira@med.lu.se

References

Rosa FF, Pires CF, Kurochkin I, Ferreira AG, Gomes A, Palma LG, Shaiv K, Solanas L, Azenha C, Papatsenko D, Schulz O, Reis e Sousa C, **Pereira CF**. Direct Reprogramming Fibroblasts into Antigen-Presenting Dendritic Cells. *Science Immunology* **2018**, 7, 3 (30).

Gomes A, Chang B, Kurochkin I, Daniel M, Law K, Satija N, Lachmann A, Wang Z, Ferreira L, Ma'ayan A, Chen B, Papatsenko D, Lemischka IR, Moore KA*, **Pereira CF**. Human Hemogenic Reprogramming is Mediated by Cooperative Transcription Factor Induction. *Cell Reports* **2018**, 25(10), 2821-25.