GÖTEBORGS UNIVERSITET

SAHLGRENSKA AKADEMIN
INSTITUTIONEN FÖR BIOMEDICIN

Diarienr: GU 2023/2284

Postdoctoral scholarship: Modelling Molecular Drivers of Human Development *in vitro*

Location: Sahlgrenska Center for Cancer Research, Institute of Biomedicine, Sahlgrenska Academy, University of Gothenburg, Sweden
Duration: 1 year
Application Deadline: 2024-01-22
Position Start Date: 2024-03-15.

Project description
The purpose of this project is to establish an analysis workflow for comprehensive single-cell transcriptomics datasets from in vitro models of human embryonic development. Human pluripotent stem cells (hPSCs) have near-indefinite expansion potential, and the ability to differentiate into every cell type in the body. As in vitro differentiation of hPSCs mimics defined processes of embryonic development, it can be used to dissect molecular mechanisms underlying developmental perturbations. In our lab we are implementing high-throughput single-cell profiling to hPSC-derived models of development, with the goal of identifying lineage specification trajectories and molecular drivers of cell-fate decision processes.

Qualifications
- PhD in Bioinformatics, Computational Biology, Mathematical modelling or Statistics (completed in 2020 or later)
- Interest in analysis of large datasets and high dimensional data
- Coding proficiency in command line, Python, and R
- English written and oral communication skills

What we offer
- A supportive and multidisciplinary research environment.
- Access to unique in-house generated datasets and national computing infrastructure.
- Opportunity and support to apply for own additional funding.

Application Process
Interested applicants should submit:
1. A cover letter detailing your research experience and interests, as well as motivation for applying. (Maximum 1 A4)
2. A CV, including a list of publications.
3. Names and contact information for three references.
4. Copies of relevant degree certificates(s)

Applications should be sent to Dr Carolina Guibentif (carolina.guibentif@gu.se) with the subject line "Postdoctoral Application – modelling human development".
For more information about our lab and list of relevant publications, see https://www.gu.se/en/research/carolina-guibentif