

## KØBENHAVNS UNIVERSITET



# Postdoc in Stem Cell Bioinformatics in the Porse Group at the Finsen Laboratory/BRIC, University of Copenhagen

An exciting position in cancer bioinformatics with focus on normal and malignant hematopoiesis as well as cancer stem cell models is available in the Porse Group, at the Biotech Research and Innovation Centre (BRIC)/DanStem in Copenhagen.

We are seeking a PhD level computational biologist with an expertise in analysis and interpretation of complex biological data. In our group, we generate omics data using the latest technologies (RNA-seq, single cell RNA-seq, ChIP-seq, proteomics) and have expertise in integrated analysis of gene expression and epigenetic data using cutting edge machine learning approaches.

## The Research Centre

The Biotech Research and Innovation Centre (BRIC) is a research centre of excellence for biomedical research, focusing on disease-oriented basic research, at the Faculty of Health and Medical Sciences, University of Copenhagen. BRIC hosts 24 independent research groups that perform basic and translational research aimed to understand diseases like cancer, neurological and metabolic disorders.

For further information about the Porse group and BRIC: http://www.bric.ku.dk/

## Our research

Several cancers, including acute myeloid leukemias (AML), are maintained by Cancer Stem Cells (CSCs). Similar to normal stem cells, CSCs are able to self-renew and are thus the cells that need to be targeted in order to efficiently eradicate the disease. The focus of the Porse group is therefore to study cancer from a stem-cell centric viewpoint. Specifically, we address the gene regulatory mechanisms governing both normal and malignant hematopoiesis with the aim to identify novel targets for future therapeutic intervention in patients suffering from AML. Additionally, we use single-cell technologies to unravel cellular heterogeneity in normal and malignant stem cells.

Key publications relevant for computational biologists:

Paul F et al., Cell 2015, 163, 1663-77

Pundhir S, Nucleic Acids Research 2016, 44, 4037-51

Bagger FO et al., Nucleic Acids Research (2016), 44, D917-24

Rapin N. et al., Blood 2014, 123, 894-904

Vitting-Seerup K et al., BMC Bioinformatics 2014, 15, 81

Jakobsen JS et al., Genome Research 2013, 23, 592-603

Weischenfeldt J. et al, Genome Biology 2012, 13, R35

#### Your job

The successful candidate will join our bioinformatics team, currently consisting of two people. Your time will be

## Contact

**Bo Torben Porse** 

E-mail

About the position

Workplace: BRIC

Work hours:

Hiring type:

Tip en ven

Print

#### Links

Homepage: http://www.sund.ku.dk

Advice for your application: http://jobportal.ku.dk/alle-opslag/

## Apply for position

Application due: 7/1/2018

**Apply** 

shared between involvement/support in projects originating from our wet lab, and your own projects, on which you can dedicate 20-30% of your time. You will have substantial input on the nature and the direction of the ongoing research projects within the lab and will be encouraged to explore projects that broadly fit within the lab's goals of understanding normal and cancer stem cells. You will have the opportunity to develop your own research ideas, which can potentially be supported by experiments from our wet lab.

#### **Profile**

We are looking for a highly motivated and enthusiastic scientist with the following competences and experience:

- Essential: PhD in Computer Science, Bioinformatics, or Computational Biology
- Strong experience in Python or R and in Linux/UNIX computing environment.
- Documented experience with NGS data analysis (ChIP-seq, ATAC-seq, or RNA-seq)
- Experience in integrated analysis of large-scale biological data sets
- Strong communication and collaboration skills, including the ability to work well in a diverse academic setting, and to balance scientific and day-to-day needs
- · Ability to work in a team of multidisciplinary scientists, and independently with minimal direction
- Excellent written and oral communication skills in English

#### Desirable but not required:

- Experience with analysis of single cell RNA-seq data
- Experience with applying supervised and unsupervised statistical learning and mathematical methods to biological problems
- Experience with system administration
- Interest in modern visualisation tools (e.g. plotly, dash, tableau, shiny)
- Background in molecular biology and genetics, especially related to disease and drug development will be considered an advantage.

#### We offer

- A two-year(possibly extendable) with a competitive salary and social benefits (e.g. social security, health coverage, parental leave)
- Access to state-of-the art tools and infrastructure
- Tailored support in raising competitive funds and communicate your research
- A stimulating and supportive international research environment

We have weekly internal seminars with PhD students and postdocs presenting their work as well as external seminars with international speakers. BRIC also hosts several research clubs; hematology club, Chromosome Biology club, Stem cell club and single cell transcriptomics seminar series. The institute has an association for students and postdocs (ASAP), a PhD programme (MoMeD) and a Postdoc Career Programme (PCP). BRIC has extensive international collaborations and actively participates in the European alliance, EU-LIFE consisting of 13 excellent life science research institutions and is part of the EU-funded LIBRA initiative to obtain gender balance in life science research.

BRIC has a highly international profile (over 60% international researchers) and English as working language. An International StaffMobility Office at UCPH supports and guides international researchers through your initial steps in Denmark (e.g. residence and work permits, tax and pension, banking, medical care, childcare). They also offer a dual career network open for spouses of our researchers.

Start date: preferably September 1 or after agreement

For further information regarding the position, please contact Bo Porse on e-mail:

bo.porse@bric.ku.dk

#### Terms of salary and employment

Salary, pension and terms of employment will be in accordance with the agreement between the Ministry of Finance and The Academics Central organization. Currently, the monthly salary starts at 33,224.48 DKK/ca. 4.456 Euro. An additional 17.1 % monthly contribution to pension will be paid by the employer. Depending on qualifications, a higher salary may be negotiated.

Non-Danish and Danish applicants may be eligible for tax reductions, if they hold a PhD degree and have not lived in Denmark the last 10 years.

The position is covered by the "Memorandum on Job Structure for Academic Staff at the Universities" of June 28, 2013.

Application

Your application must be submitted electronically by clicking 'Apply now' below or via BRIC's website on http://www.bric.ku.dk/jobs/. The application must include the following documents/attachments – all in PDF format:

- 1. Motivated letter of application (max. one page).
- 2. CV incl. education, work/research experience, language skills and other skills relevant for the position.
- 3. A certified/signed copy of a) PhD certificate and b) Master of Science certificate. If the PhD is not completed, a written statement from the supervisor will do.
- 4. List of publications.

## Letters of recommendation

Furthermore, the shortlisted applicant should provide two letters of recommendation. To be taken into consideration, the letter must be signed by the supporting person on paper with institutional letter head and in PDF-format and send to bo.porse@bric.ku.dk with subject "name candidate-postdoc-year"; preferably by the supporting person. The letters should be received 1 week after being notified about shortlisting. Please make sure that an easy match between the recommendation letter and the individual applicant is possible.

## Application deadline: July 1, 2018

We reserve the right not to consider material received after the deadline, and not to consider applications or letters of recommendation that do not live up to the abovementioned requirements.

#### Application procedure

After the expiry of the deadline for applications, the authorized recruitment manager selects applicants for assessment on the advice of the Appointments Committee. All applicants are then immediately notified whether their application has been passed for assessment by an expert assessment committee. Selected applicants are notified of the composition of the committee and each applicant has the opportunity to comment on the part of the assessment that relates to the applicant him/herself.

You can read about the recruitment process at http://employment.ku.dk/faculty/

BRIC and University of Copenhagen wish to reflect the diversity of society and welcome applications from all qualified candidates regardless of age, disability, gender, nationality, race, religion or sexual orientation.

Appointment will be based on merit alone.

Part of the International Alliance of Research Universities (IARU), and among Europe's top-ranking universities, the University of Copenhagen promotes research and teaching of the highest international standard. Rich in tradition and modern in outlook, the University gives students and staff the opportunity to cultivate their talent in an ambitious and informal environment. An effective organisation – with good working conditions and a collaborative work culture – creates the ideal framework for a successful academic career.