Postdoc in bioinformatics/epigenetics/transcription

A highly attractive postdoctoral position is available in the Choudhary group at the Novo Nordisk Foundation Center for Protein Research (CPR – www.cpr.ku.dk), University of Copenhagen. Salary: approx. 55,872€ PA, plus 17.1% in pension contributions.

About the groups
The postdoc will be employed in the Choudhary group, and will collaborate closely with the Rasmussen group. The Choudhary and Rasmussen laboratories are technically and internationally diverse and embedded in an excellent environment that supports high-quality research and encourages interdisciplinary collaboration. The Choudhary lab primarily conducts experimental research using interdisciplinary, state-of-the-art technologies, including quantitative proteomics, next-generation nucleic acid sequencing, advanced microscopy, and CRISPR-based genome editing. The lab uses diverse cell models, including stem cells and their derivatives. The Rasmussen lab uses computational approaches to analyze large-scale biomedical data. In addition, the group develops and applies deep learning methods to integrate and mine proteomic, genomic and microbiome datasets.

Both labs work closely with almost all other groups at CPR. Notably, the Rasmussen group works closely with the group of Prof. Søren Brunak, and the Choudhary lab works with the group of Prof. Matthias Mann. Additionally, both of the groups extensively collaborate with top-level international researchers, routinely publish in top-ranked journals, and have an outstanding track-record in training the next generation of researchers. The major publications from the groups include Narita et al., *Mol Cell*. 2021, Nissent et al. *Nat Biotechnol*. 2021; Rascovan et al. *Cell* 2019; Narita et al. *Nat Rev Mol Cell Biol* 2019; Weinert and Narita et al., *Cell* 2018; Gupta et al., *Cell* 2018; Scholz et al., *Nat Biotech* 2015; Weinert et al., *Mol Cell* 2013; Povlsen and Beli et al., *Nat Cell Biol* 2012; and Beli et al. *Mol Cell* 2012.

We are now looking for enthusiastic candidates with a PhD and/or MD, level of education corresponding to the Danish PhD degree.

Project description
Recently, we revealed the global scope and kinetics of enhancer-regulated transcription control in mammalian cells, and identified the Pol2 “recruit-and-release” as a novel mechanism of enhancer-mediated dynamic transcription control (Narita et al., *Mol Cell*. 2021). The current project builds on our recent work and aims to understand the epigenetic basis of gene transcription regulation, with a focus to understand how distal-acting enhancers control gene transcription. In this project, we will use embryonic stem cells and their derivatives and apply quantitative proteomics, CRISPR-based genome editing, PROTACs, and next generation genomics technologies to understand the epigenetic basis of cellular differentiation and cell fate maintenance. Depending on the candidate´s background, s/he will perform laboratory research or perform bioinformatic analyses of next-generation sequencing data, including ChIP-seq, RNA-seq, Nascent-seq, ATAC-seq. The candidate will be jointly working with the Choudhary and Rasmussen groups. If you would like to know more about the project(s), please contact us!

Tentative start date: Summer 2021 or later.

Qualifications
The candidate should have demonstrated excellent scientific productivity, evidenced by high-quality research publications, be able to conduct independent and creative research, and show good interpersonal and communication skills.

- The candidate is required to have a PhD/MD level of education corresponding to the Danish PhD degree in natural or medical science.
- Excellent scientific track-record, including at least one publication in a high-quality, peer-reviewed international journal.

- Expert knowledge in one or more of the following areas is required:
  Experience in computer programming languages, such as R, Python
  Hands-on experience in analyzing next-generation sequencing dataset, such as ChIP-seq, RNA-seq, ATAC-seq
  Strong background in the statistical analysis of large-scale data
  Prior experience in CRISPR, epigenetics, and gene transcription regulation.
- Prior experience in the application of machine learning and neural network approaches will be considered an advantage.
- Good communication skills, both oral and written.
- An analytical aptitude for devising innovative scientific or technical solutions.
- Demonstrate enthusiasm, motivation, flexibility and confidence.

For further information, please contact Professor Chunaram Choudhary, email: chuna.choudhary@cpr.ku.dk

Place of employment and work
The employment is at CPR (www.cpr.ku.dk), University of Copenhagen, located in central Copenhagen. In the past 10 years, CPR has established itself as a top-level research institute in protein signaling and network biology research. The research environment at CPR is ambitious and international, with approx. 30 different nationalities currently represented. The Center comprises modern laboratories, supercomputer resources and state-of-the-art research facilities. Seminars with high-profile international speakers and regular internal research seminars are organized at the Center. Denmark is often ranked as the happiest nation and Copenhagen is consistently ranked as one of the best cities for living. For more information on working and living in Denmark visit www.ism.ku.dk (International staff mobility) and www.workingconditions.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 is around 34.622 DKK approx. 4,656 €, plus 17.1 % in pension contribution. Depending on qualifications, a supplement may be negotiated.

The Danish Ministry of Finance and the Danish Confederation of Professional Associations (AC) have agreed on a protocol that makes it possible for all international researchers employed by the University to achieve a pension exemption, where the pension can be paid out as salary. For more information about the different pension schemes www.ism.ku.dk/onarrival/pension/

Duration: The duration of the full-time position is 2 years with a possibility of extension (depending on the performance, and previous employment at the University of Copenhagen).

Application procedure
Your application must be submitted electronically by clicking 'APPLY NOW' below or via this advertisement found on http://employment.ku.dk/faculty/

Your application should include the following documents:
1. Cover letter
2. Curriculum vitae, incl. educational qualifications, experience, and a list of publications
3. A scanned copy of the final degree (PhD or equivalent) certificate. If the degree is not yet awarded, it is sufficient to mention in the cover letter when the applicant expects to submit the thesis, and/or receive the qualifying degree
4. Names and contact details for 2-3 referees

The applicants can submit these materials in the given fields in the online submission system. We reserve the right not to consider material received after the deadline, and not to consider applications that do not live up to the above-mentioned requirements.

After the expiry of the application deadline, 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 www.employment.ku.dk . For further information about the position or the process or if you experience any technical difficulty with the online submission system, please contact SUND HR: sund-hr-cpr@sund.ku.dk

CPR and the University of Copenhagen wish to reflect the diversity of society and welcome applications from all qualified candidates regardless of personal background.