GENOPSLAG: Bioinformatics/Data Science Postdoc: Analysing mutation processes in the human genome

Are you interested in studying human genomics and increasing our understanding of the mutation processes that drive human evolution?

The Department of Molecular Medicine at the Faculty of Health at Aarhus University invites applications for a position as Postdoc in bioinformatics/data science as per 1 October 2024 or as soon as possible thereafter. The position is a fixed-term full-time position for 2 years.

You will work on an exciting project concerning germline mutational processes in humans. Depending on your interests and skills, the focus can be on methods development, large-scale data analysis, or both.

The research group

The bioinformatics groups at the Department of Molecular Medicine consist of 3 PIs and around 15 temporary researchers (graduate students and postdocs). The groups have strong ties and dual affiliations with the Bioinformatics Research Centre (BiRC) (www.birc.au.dk) at Aarhus University, where parts of the project may be carried out. The research activities span from statistical modeling and methods development to experimental hypothesis evaluation and clinical translation. There are also close collaborations with the wet-lab and clinical groups at the department (https://moma.dk/bioinformatics).

About the research project

The project is funded by a Data Science Investigator grant from the Novo Nordisk Foundation to study mutational processes in germline and cancer. You will be working at the Department of Molecular Medicine (PI: Søren Besenbacher) and will contribute to the development of new analytical frameworks and to data analysis of publicly available and in-house generated data to study germline mutation processes. The research group is involved in a collaborative project between Aarhus University (data science) and the Department of Growth and Reproduction at Copenhagen University Hospital (data generation) to study the mutational and selective processes that occur during spermatogenesis. You can contribute to the analysis of the deep sequencing data created in this project in collaboration with research groups at the Bioinformatics Research Centre (Mikkel Heide Schierup & Thomas Bataillon) and the Department of Mathematics (Asger Hobolth).

Your competences

You have academic qualifications at the Ph.D. level, for example in bioinformatics, population/statistical genetics, genomics, or statistics.

As a person, you have good interpersonal skills, are inclusive and team-oriented, and can contribute to a good work environment. We expect you to be fluent in oral and written English.

The following skills will be an advantage:

- Experience in handling and analyzing large genomic datasets.
- Good programming skills in R/Python
- Experience with high-performance computing environments.
- Interest in genome evolution

Questions about the position

If you have any questions about the position or application process, please contact Associate Professor Søren Besenbacher (besenbacher@clin.au.dk).

Your place of work will be the Department of Molecular Medicine, Brendstrupgårdsvej 21, 8200, Aarhus N, Denmark.

Terms of employment

- Appointment as a postdoc requires academic qualifications at PhD level.
- Further information on the appointment procedure can be found in the <u>Ministerial</u>
 Order on the Appointment of Academic Staff at Universities.
- The appointment is in accordance with the <u>Danish Confederation of Professional</u> <u>Associations</u> (Akademikerne).

Application Deadline:

29 July 2024

Faculty:

Faculty of Heatlh

Institute/Faculty:

Department of Clinical Medicine

Academic contact person:

Søren Besenbacher Lektor

besenbacher@clin.au.d

+4540767286

Vacant positions:

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Hours per week:

Number of months: 24

Expected date of accession: 01/10/2024

- Remuneration is in accordance with the above, and the <u>Salary agreement</u> catalogue for staff at Health.
- The yearly base salary for a fulltime postdoc is between DKK 484.214,84 and DKK 538.720,20 depending on the years of working experience after achieved MSc degree. The base salary includes a position related supplement and pension (17.1 %). Additional supplement(s) for special qualifications can be negotiated. Authorisation supplemenent(s) will be granted, if relevant for the position. Your local eligible trade union representative at Aarhus University negotiates your salary on your behalf.
- Researchers recruited from abroad are offered a <u>special researcher tax scheme</u> with a lower tax rate.
- Further information on qualification requirements and job description can be found in the Ministerial Order on Job Structure for Academic Staff

Application

Your application must include the following:

- · Motivated application
- Curriculum Vitae
- Diploma
- Template for applicant postdoc
- · A list of publications
- A teaching portfolio. We refer to Guideline on the use of teaching portfolios
- A maximum of five of the publications of greatest relevance to the job may be submitted (optional)
- Research plan can be uploaded (optional)
- Coauthor statement(s) can be uploaded (optional)
- References/recommendations can be uploaded separately in the e-recruitment system (optional)

We refer to the faculty's **Guidelines for applicants**.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline.

Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

International applicant?

Aarhus University offers a broad variety of services for international researchers and accompanying families, including assistance with relocation and career counselling to expat partners. Please find more information about the International Staff Office and the range of services here. Aarhus University also has a Junior Researcher Association and offers career development support. You can read more about these resources here.

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/