

Department of Biomedicine - Forsk. & udd., Skou-bygningen - Faculty: Health

Postdoc in CRISPR/Cas9 and hematopoietic stem cell biology

The Department of Biomedicine at Faculty of Health at Aarhus University invites applications for a position as Postdoc in the field of hematopoietic stem cell biology and CRISPR/Cas9 genetic engineering as per 1 November 2021 or as soon as possible thereafter. The position is a 2-year full-time position with the possibility of extension.

Department of Biomedicine

We offer a vibrant international research environment where English is the preferred language in the

laboratory, at meetings, and at seminars. The Department employs some 450 people and covers a range of research areas within Biomedicine. We contribute to the Bachelor's degree programs in medicine, molecular medicine, odontology and the Master's degree programs in biomedical engineering and medical chemistry. Our infrastructure is well developed with modern laboratories, core and animal facilities. You can read more about the department here and about the faculty here.

About the research group

The research group is led by Associate Professor Rasmus O. Bak. The group specializes in genetic engineering using various CRISPR/Cas platforms, and we focus on applying these for gene therapy and the development of novel cell therapies. The lab is supported by several major grants, and will from 2021 Q3 host 6 postdocs, 2 PhD students, 1 lab manager, 1 lab technician and a number of students. The research group is based in the new Skou Building in the heart of the Aarhus University campus. For more information on the research group, please visit our homepage.

About the research project

The research project will use CRISPR-based tools to study genetic programs that govern the plasticity of hematopoietic stem and progenitor cells. Increased insights into this phenomenon might bring new treatment modalities to regenerative medicine and hematological disorders. You will be using state-of-the-art CRISPRa and CRISPRi tools for transient manipulation of gene expression, and you will combine these with genome-wide screens to probe genetic mechanisms in hematopoietic stem cell biology. Ultimately, the impact of gene manipulation will be assessed in mouse transplants and hematopoietic repopulation studies.

Deadline

23 Aug

Expected start

1 Nov



Department of Biomedicine - Forsk. & udd., Skou-bygningen
Høegh-Guldbergs Gade 10
8000 Aarhus C

Fixed term full-time position

1 Nov 2021 - 31 Oct 2023

ID: 6601

Your job responsibilities

The Postdoc position is primarily research-based but will also involve teaching assignments. You will contribute to the development of the department through research of high international quality.

Your main tasks will consist of:

- › Cell culturing, transfection, CRISPR/Cas genetic manipulation, and lentiviral vector production.
- › Genetic, phenotypic, and functional characterization of hematopoietic stem cell properties *in vitro* and *in vivo*.
- › Analysis, interpretation, and presentation of research data including publication in peer-reviewed journals.

You will be under daily supervision and guidance by group leader Rasmus O. Bak, and you will formally report to the Head of Department Thomas G. Jensen.

Your competences

You must have academic qualifications at PhD level in medicine, molecular medicine/biology, biotechnology, or similar. Furthermore, you must have experience in bioinformatics and performing large scale genetic screens.

Ideally, you will have experience in:

- › mammalian cell culture
- › electroporation
- › mouse handling
- › flow cytometry
- › production of viral lentiviral vectors
- › and CRISPR/Cas9 guide libraries for genome-wide screens

You are highly motivated, scientifically curious, a self-starter, and with a proven track-record of publishing high-quality research. Excellent communication and inter-personal skills are a prerequisite. We expect you to be fluent in oral and written English.

In order to be assessed as qualified for a Postdoc position, you must meet these academic criteria.

Shortlisting will be used.

Questions about the position

If you have any questions about the position, please contact Rasmus O. Bak, email bak@biomed.au.dk.

Your place of work will be the Department of Biomedicine, Skou Building, Høegh-Guldbergsgade 10, 8000 Aarhus C, Denmark.

We expect to conduct interviews in the end of September 2021.

Terms of employment

- › Appointment as an assistant professor requires academic qualifications at PhD level.

- › Further information on the appointment procedure can be found in the Ministerial Order on the Appointment of Academic Staff at Universities.
- › The appointment is in accordance with the Danish Confederation of Professional Associations (Akademikerne).
- › Remuneration is in accordance with the above, and the Salary agreement catalogue for staff at Health.
- › The yearly base salary for a fulltime assistant professor with minimum 3 years of working experience after achieved MSc degree is DKK 486,969.17 or DKK 512,713.62 with minimum 4 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 supplement(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 special researcher tax scheme 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 at Universities.

Application

Your application must include the following:

- › Motivated application
- › Curriculum Vitae
- › Diploma
- › 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
- › Template for applicant - assistant professor or tenure track assistant professor must be completed and uploaded under 'Extra documents'
- › Strategic research plan, which is part of the 'Template to applicant - assistant professor or tenure track assistant professor' can be uploaded separately
- › Coauthor statement(s) can be uploaded
- › References/recommendations can be uploaded separately in the e-recruitment system

We refer to the faculty's [Guidelines for applicants](#).

The assessment committee may decide to include non-submitted material in its statement. In such cases, you will be informed and obliged to submit material, unless your application is withdrawn.

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 relocation service and career counselling to expat partners. Please find more information about entering and working in Denmark here. Aarhus University also has a Junior Researcher Development Programme. You can read more about it 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.

Questions about the position?

Rasmus O. Bak

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uddannelse, Skou-bygningen

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Questions about application and process?

HE Administrative Centre - Health HR

+4587162578

employ.he.hr@au.dk

Discover the benefits of working at a top 100 university

At the Faculty of Health we conduct world-class health science research. We offer a vibrant and informal research environment with longstanding traditions for collaboration with the Danish health care sector and with international university partners in the absolute elite. The workplace at Health is reflected by professionalism, equality, and ethics, as well as attractive opportunities for career development.

The Faculty of Health is an international workplace. English is widely spoken and we welcome applicants from abroad. Read about the Danish work-life balance, special opportunities for junior researchers, and the services available when relocating to Aarhus University.