ERC-funded Postdoc in Cancer Research

Lunds universitet, Med. fak, Inst. för laboratoriemedicin

Lund University was founded in 1666 and is repeatedly ranked among the world's top universities. The University has around 47 000 students and more than 8 800 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition. Lund University welcomes applicants with diverse backgrounds and experiences. We regard gender equality and diversity as a strength and an asset.

Description of the workplace

An ERC-funded post-doc position is available for a highly motivated candidate with a strong interest in cancer research.

The Molecular Pediatric Oncology lab, led by PI Daniel Bexell, is working with neuroblastoma (NB), a severe childhood cancer. The overall aims are to unravel mechanisms leading to metastasis and treatment resistance of NB, and to test compounds targeting aggressive NB.

We are interested in phenotypic plasticity and NB cell states and their relation to treatment resistance, the metastatic niche, and relapse. We perform molecular and functional studies of primary and metastatic tumor cells, as well as in vitro and in vivo drug testing using 3D tumor organoids and PDXs as model systems.

The lab has established and characterized multiple NB orthotopic patient-derived xenografts (PDXs). These PDXs retain the genotype, phenotype, tumorigenic, and metastatic properties of the tumors from which they were derived, making them authentic models for studying and targeting NB metastasis and resistance (Braekeveldt, *Cancer Res*, 2018). By applying standard-of-care treatment to PDXs, we recently revealed patterns of NB chemoresistance including an immature MES-like NB phenotype linked to treatment resistance (Manas, *Science Adv*, 2022).

We are now looking for a post-doc to join our team. Focus will be on developing and utilizing patient-derived *in vivo* model systems (Grigoryan et al., *Sci Transl Med*, 2022) to investigate NB treatment resistance in the metastatic niche. The post-doc will lead and develop his/her own analyses and projects, and also work in close collaboration with the rest of the team members, including our bioinformatician. Tasks also include scientific writing.

We offer an international research environment with the opportunity to develop as a researcher. The lab is committed to an inclusive environment based on mutual respect and there is substantial diversity in our backgrounds. We value a welcoming, collaborative, curious, ambitious, open, and non-hierarchical culture with focus on improving the lives for children with cancer.

Lab page: https://www.tcr.lu.se/research-groups/molecular-pediatric-oncology

What we offer

Lund University is a public authority, which means that you will have special benefits, generous annual leave and an advantageous occupational pension. We also have a flexitime agreement that creates good conditions for work/life balance. Read more on the University's website about being a Lund University employee.

Work duties and areas of responsibility

Mainly research-related tasks: focus on in vivo procedures and model development, drug testing in vivo, in vitro cell culturing, cell- and molecular biology techniques, immunofluorescence, single-cell technologies, and more. Documentation, writing grant applications and manuscripts. Other tasks may be included.

Qualification requirements

To qualify for the position, the applicant must have a PhD or an international degree deemed equivalent to a PhD, within a subject relevant for the position (i.e. biology, biomedicine, medicine, chemistry), completed **no more than three years** before the date of employment decision. Under special circumstances, the doctoral degree can have been completed earlier.

Qualifications

The requirements for the position are:

- 1. The applicant should be able to conduct projects independently and critically.
- 2. Broad experience of cell- and molecular biology and cancer research.
- 3. PhD in a relevant subject such as cancer research or similar (PhD degree should not be more than three years old at the last day of applying. Candidates about to finish their PhD are welcome to get in touch).
- 4. Substantial experience with in vivo procedures including in vivo drug testing.
- 5. Excellent communication skills and ability to interact efficiently in a team.
- 6. Personal suitability is very important.
- 7. Excellent spoken and written English.

Research expertise is the foremost criterion for employment. The evaluation of applicants will take account of their research profile, experience and knowledge.

Further information

The employment is time-limited to 2 years full-time, with possibility of an extension for 1 more year. The employment is time-limited according to the agreement, "Agreement on limited-time employment as postdoctoral researcher-2022-02-01". Start date is 2024-09-01 or according to agreement (can be discussed).

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How to apply

You apply for the position via the University's recruitment system Varbi. The application is to include a personal letter describing how you meet the qualification requirements and why you are interested in the position. The application is also to include a CV with a list of publications, a general description of previous research work, a copy of your doctoral degree and any other documents to which you wish to draw attention (copies of degree certificates, grade transcripts, details of referees, letters of recommendation, etc.)

The Faculty of Medicine is a part of Lund University, and is responsible for education and research within medicine and healthcare. Our academic programs are closely linked with the healthcare system and are firmly anchored in the faculty's strong research tradition. Our research spans a broad field within experimental preclinical research, near-patient clinical research and health sciences research. The Faculty of Medicine, with its 1,800 employees and 2,700 students in Lund

and Malmö, is a knowledge-intensive meeting place for students, teachers and researchers from all over the world.

The Department of Laboratory Medicine is one of six departments at Lund University's Faculty of Medicine. We conduct leading research, both broad and specialised, within the field of laboratory medicine, focusing on the onset of disease and how we can improve diagnostics and treatment for patients. Some of our strongest areas with world-class research deal with cancer, genetics and blood.

We kindly decline all sales and marketing contacts.

Type of employment Contract type First day of employment	Temporary position Full time 2024-09-01 or as agreed.
Salary	monthly salary
Number of positions	1
Full-time equivalent	100
City	Lund
County	Skåne län
Country	Sweden
Reference number	PA2024/1440
Contact	 Daniel Bexell, daniel.bexell@med.lu.se
Union representative	 OFR/ST:Fackförbundet ST:s kansli, 046-2229362 SACO:Saco-s-rådet vid Lunds universitet, kansli@saco-s.lu.se SEKO: Seko Civil, 046-2229366
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