



NORDIC EMBL
PARTNERSHIP FOR
MOLECULAR MEDICINE

2 years postdoc position in data-driven antimicrobial research

We are looking for a postdoctoral researcher in Data-driven antimicrobial-resistance research to The Integrated Science Lab (IceLab) and the Department of Molecular Biology at Umeå University, Sweden. The opening is for two years but can be extended and is available immediately or as agreed.

Umeå University provides creative environments for learning and work. We offer a wide variety of courses and programs, world leading research, and excellent innovation and collaboration opportunities. More than 4 400 employees and 34 000 students have already chosen Umeå University. **IceLab** promotes transdisciplinary collaborations with a focus on cutting-edge research that integrates theoretical, computational, and empirical work. We combine mathematical and computational modeling expertise with a deep interest in working with empirical researchers.

The recruited postdoc will be part of a multidisciplinary team with complementing expertise in molecular infection biology, systems biology, and machine learning.

For more information, see: www.icelab.se; www.molbiol.umu.se

We welcome your application!

Project

The Cava lab at the Laboratory of Molecular Infection Medicine Sweden (MIMS) and the Department of Molecular Biology (Umeå University) studies a major “Achilles heels” of bacteria - the cell wall - both to provide answers to fundamental scientific questions and to improve our options to combat long-standing and emerging infectious diseases. The goal of this project is to improve the inventory of players in cell wall biogenesis and regulation, characterize their function and interplay, and evolve our work into quantitative studies and computational modelling. This research program has potential in the development of novel antimicrobial strategies to combat multidrug-resistant bacterial pathogens.

Selected recent publications:

1. *Nature*. 2023 Jan;613(7945):721-728.
2. *Nature Communications*. 2022 Dec 24;13(1):7927
3. *Nature Microbiology*. 2018 Dec; 3(12):1346-1353.

Qualifications

Candidates must hold a university degree in bioinformatics/computational biology or in microbiology/molecular biology equivalent to a European University PhD at the time of recruitment.

It is particularly qualifying to have skills in modern computer programming languages such as C++, Python, MATLAB or R. You should be highly motivated, have very good communication skills with senior colleagues and peers in English and the ability to interact in a team.

Application

A complete application should be sent in English to Felipe Cava (felipe.cava@umu.se) including: (i) a cover letter summarizing your qualifications and motives for applying, (ii) a curriculum vitae, and (iii) the names and contacts of three references. Application submitted electronically (MS Word or PDF).

Information

For further information please contact Dr. Felipe Cava, felipe.cava@umu.se

<https://thecavalab.com/>

<http://www.mims.umu.se/groups/felipe-cava.html>

<https://icelab.se/about/team/felipe-cava/>