Post-doctoral research fellowship in Bioinformatics (2 years) –

Bioinformatic analysis of bacterial cell wall dynamics

Umeå University is dedicated to providing creative environments for learning and work. We offer a world leading research, and excellent innovation and collaboration opportunities. More than 4000 employees and 36000 students have already chosen Umeå University. We welcome your application!
Department of Molecular Biology and the laboratory for Molecular Infection Medicine Sweden (MIMS)

The Cava Lab at MIMS (EMBL-Umeå University, Sweden) is performing an innovative project to discover and exploit the cell wall chemical diversity in the Bacteria Kingdom. This research program will generate abundance and novelty of results that will be instrumental to address fascinating unanswered questions in microbiology (i.e. how cell wall dynamics influence: adaptation to extreme environments, pathogen-host interactions, biofilm life cycle, sporulation/germination and social-related behaviors…). Our goal is to improve the inventory of players in cell wall biogenesis, remodeling and regulation, characterize the function and interplay of known components, and evolve our work into quantitative studies and computational modeling. Gathered data will have an extraordinary potential as novel cell wall targets for the development of antimicrobials.
A main focus of the lab will be to train the next generation of scientists. We will create a stimulating environment that is conducive to learning and testing new skills.

The recruited postdoc will focus on the following specific topics: 1) development of a dedicated software for the comparative analysis of cell wall chromatographic and MS data; 2) generation and management of a cell wall database.
Candidates must have a degree in bioinformatics or computational biology. Knowledge particularly qualifying includes: Linux, statistical analyses using R, imaging analysis using MATLAB, software development (Perl, Python), relational database management with MySQL, Perl DBI/DBD and phpMyAdmin, protein structure prediction and analysis, data mining of proteomics and genomics databases, and web design using php/HTML, Perl CGI, JavaScript and extensive Jmol scripting. Enthusiasm, the ability for good team work, and a good command of the English language, both written and spoken, are also key qualifications. Knowledge in microbiology and analytical chemistry (i.e. HPLC and mass spectroscopy methods) is appreciated.
The positions include a competitive salary for a period of 2 years that can be renewed.

Application
A complete application should be sent in English to Felipe Cava (felipe.cava@molbiol.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@molbiol.umu.se
http://www.mims.umu.se/groups/felipe-cava.html
http://www.wallenbergacademyfellows.se/en/List-of-scientists/CavaFelipe/