Postdoc scholarship in medical microbiology with a focus on studies of interactions between antibiotics

At the Department of Medical Biochemistry and Microbiology, Uppsala University, Sweden.

Time-limited postdoc scholarship (stipend) 100% during 2 years beginning as soon as possible.

Research group: Prof. Dan I. Andersson's research group is part of the Department of Medical Biochemistry and Microbiology and we work on bacterial genetics and evolution with a special focus on antibiotic resistance. The group presently consists of 12 people. More information can be found at: www.imbim.uu.se/forskargrupper/infektion-och-forsvar/Andersson Dan I/

Research project: The project is aimed at understanding interactions between antibiotics. Many responses to various internal and external exposures and changes in living organisms involve nonlinear pathways where the relation between the signal and output can be dampened or amplified. For example, bacteria can respond to antimicrobial exposure in non-linear ways where drugs can be either synergistic or antagonistic. Our specific goals are to determine the prevalence of these antibiotic interactions in clinical isolates of E. coli, identify the underlying mechanisms, and establish a predictive understanding that can be used to guide antibiotic therapy.

Qualifications: We are looking for an outstanding postdoc that has a PhD in microbiology, genetics, evolutionary biology or similar where your PhD work was focused on bacterial systems. Experience of work with experimental evolution, bioinformatics and bacterial genetics is a merit. We want a person with high creativity, willingness to implement cutting edge-new methods, the ability to independently plan experiments as well as excellent analytical and practical skills. You should have high skills in written and spoken English and the ability to work in a multi-disciplinary team.

Instructions for application: Please send your application to Prof. Dan I. Andersson (<u>Dan.Andersson@imbim.uu.se</u>) before 1 Oct 2020 and include in your application, compiled in a <u>single pdf file</u>, the following:

- A short letter that describes your research interests and a motivation for why you would be suitable for this position (maximum 2 pages)
- Curriculum vitae including publication list
- Copy of proof of passed PhD exam
- ➤ Names, email addresses and telephone numbers to two references and two recommendation letters

Incomplete applications will not be considered.