

Postdoc scholarship in medical microbiology with a focus on studies of unstable antibiotic resistance in human bacterial pathogens

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 <u>here.</u>

Research project: The project is aimed at understanding unstable antibiotic resistance and in particular the mechanisms and dynamics of heteroresistance. Heteroresistance is a special form of antibiotic resistance characterized by the presence of small resistant subpopulation(s), in a main population of susceptible cells. During antibiotic exposure the resistant cells can rise to high frequency and cause treatment failure or recurrent infections. Not only do many species of bacteria exhibit this form of resistance, it has also been reported against almost all antibiotic classes. Our specific goals are to identify the underlying mechanisms of heteroresistance in clinical isolates of several bacterial species and their impact on antibiotic therapy and diagnostics.

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 bacterial genetics, experimental evolution and bioinformatics 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 June 2021 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 three references

Incomplete applications will not be considered.