

Postdoctoral Researcher in Symbiosis

Division of Microbial Ecology (www.microbial-ecology.net), Centre for Microbiology and Environmental Systems Science, University of Vienna, Austria

A postdoctoral researcher position is available within the Group of Jillian Petersen
<http://www.microbial-ecology.net/people/jillian-petersen>

ERC Starting Grant project '400 Million Years of Symbiosis: Host-Microbe Interactions in Marine Lucinid Clams from Past to Present'

Project description: interactions with microbes drive the health, development and evolution of virtually all animals, including humans, but the underlying mechanisms are still poorly understood. Many marine animals have evolved intimate associations with just one or a few species of chemosynthetic bacteria, which makes them ideal for investigating fundamental aspects of host-microbe interactions such as molecular crosstalk and co-evolution. The ERC project focuses on marine lucinid clams, which host a specific species of sulfur-oxidizing bacteria in their gill cells. These clams inhabit shallow marine environments such as coastal seagrass sediments that are easily accessible for sampling, and they can be kept and bred in aquaria. The postdoctoral researcher will have the unique opportunity to combine work in the field with lab-based experiments to investigate host-microbe interactions in lucinid symbioses. Possible techniques include metagenomics, heterologous expression of symbiont proteins, mass spectrometry imaging, metabolomics, metabolic modeling, stable isotope probing, or NanoSIMS, depending on the interests and experience of the candidate. You will have full access to the support and resources of one of the leading centres for microbiology research worldwide (<http://dmes.univie.ac.at/>). Vienna is also a dynamic hub for research on symbiosis and host-microbe interactions (<https://sym.csb.univie.ac.at/>).

Required qualifications. We are looking for a talented and creative researcher with a strong interest in host-microbe interactions. Applicants must have a PhD biology in a field related to the position (e.g. microbiology) and ideally have a practical background in molecular techniques. Experience in one or more of the following areas/techniques will be an advantage: heterologous expression, microbial genomics/population biology, transcriptomics, proteomics or metabolomics, fluorescence in situ hybridization (FISH), setup and maintenance of laboratory aquaria, molecular profiling of microbial communities. Excellent communication skills in English (written and spoken) and the ability to work in a team are essential.

Conditions of appointment. The successful candidate will receive funding for two years according to the salary scheme of the University of Vienna. The University of Vienna is an equal opportunity employer. Minorities are strongly encouraged to apply.

Application details. Applicants should submit a letter of motivation outlining your past research, future interests and how you fit the position, curriculum vitae, as well as names and contact information or reference letters of at least 2 referees. **These documents should be sent as a single pdf file to Jillian Petersen via email, ideally before March 6th: petersen@microbial-ecology.net.**

Start date is as soon as possible. Review of applications will begin immediately, and will continue until the position is filled. A short email to let me know you are interested in applying is also appreciated.