

PhD student position in microbial ecology

at the Department of Ecology and Genetics, Uppsala University. Period of appointment: 4 years. For information on the research of the program, see <http://www.ebc.uu.se/limno/index.html>.

Starting date: As agreed upon, from the closing of the application time.

Description of the position: There is a current gap between molecular and ecological microbiology as the abundant and ecosystem-relevant microbes are scarcely characterized in regards to their metabolism, cell-division, expression, DNA exchange and repair. In this project strains belonging to the most widespread and abundant aquatic bacteria will be established as models to test hypotheses derived from computational predictions of genomic data (retrieved from metagenomes, and cultured and single cells). These often oligotrophic bacteria play a central role in the cycling of dissolved organic matter and determining which carbon compounds are used by these bacteria will serve as a resource for aquatic chemists and biogeochemists working to define the carbon cycle in greater mechanistic detail and at large geographical scales. Comparative genomics and experiments will also reveal the traits underlying their transition between biomes (i.e. from marine to freshwaters). Moreover, studies target towards evolution in controlled experimental settings can help towards understanding homologous recombination and adaptation in oligotrophic bacteria with streamlined genomes.

The successful candidate will apply (and develop) molecular tools and high-throughput functional screening assays to study abundant and ecosystem relevant microbes in laboratory cultures. The exact profile of her/his PhD project the candidate will settle together with the supervisor Dr. Alexander Eiler (Department of Ecology and Genetics, Uppsala University) and co-advisors.

During the PhD project, there will be also ample opportunity for independent and collaborative research in related areas such as microbial ecology, community ecology, theoretical ecology, and evolution.

Ranking criteria: In ranking eligible candidates, special importance will be given to scientific skills in relation to the subject area specified. These include:

- A masters degree or equivalent degree in Biotechnology, Ecology, Microbiology, Molecular Biology, Biochemistry, Cell Biology or related fields is required. Experience or strong interest in one or more related research areas, such as microbial metabolism, genomics, aquatic ecology and bacterial evolution, is highly desirable.
- Candidates with experience in novel culturing techniques, and genetic engineering are encouraged to apply.
- Strong interest in the development of laboratory and experimental approaches.
- Self-motivation, excellent communication skills, ability to work and integrate well in an international working environment
- Language: Excellent command of English, written and spoken.

Postgraduate training: The candidate will receive her/his postgraduate training within the postgraduate school at the Evolutionary Biology Centre (<http://www.ebc.uu.se/?languageId=1>). The postgraduate training comprises four years of full time studies. The successful candidate will receive a postgraduate fellowship the first year and a postgraduate position year 2-4 with competitive salary. The position can be combined with up to 20% of teaching assistantship, which will then prolong the position accordingly.

How to apply: Please send a brief statement of research interests that explains how your education,

experience and professional goals match the description of the position. Your application should further include *Curriculum vitae*, an authorized copy of the undergraduate degree, and the names and contact information (address, email address, and phone number) of two personal references. Relevant publications (including BSc/MSc thesis) should be enclosed.

For further detail on the position you may contact Dr. Alexander Eiler (email: alexander.eiler@ebc.uu.se; Tel# +46-18-471-2700; Department of Ecology and Genetics, Limnology, Uppsala University, Sweden; URL: <http://www.ebc.uu.se/Research/IEG/limno/Staff/Alexander+Eiler/>). Trade union representatives are, Anders Grundström, Saco Council, phone +46 18 471 33 80, Carin Söderhäll, ST-ATF, phone +46 18 471 19 96 and Stefan Djurström, SEKO, phone +46 18 471 33 15.

The application should be sent, preferably by e-mail to: registrator@uu.se, or by fax +46-18471 2000, or by mail to: Registrar's Office, Uppsala University, Box 256, SE-751 05 UPPSALA, Sweden. In any correspondence please use the reference number UFV-PA 2012/3288. Application deadline is on 20 February 2013.