

Post Doc Project

Call for interest for FCT Post-Doctoral grant application

We welcome Post-Doctoral applications to work on the subject “Nitrogen Biogeochemistry and Communities in the Extreme Antarctic Terrestrial Environments” within the NITROEXTREM project (<http://www.propolar.org/nitroextrem.html>) from PROPOLAR (<http://www.propolar.org/>) and within ongoing research programs from International Centre for Terrestrial Antarctic Research (<http://www.ictar.aq/projects.cfm>). Work will be carried out at CIIMAR-Porto University (with Catarina Magalhães [www.cmagalhaes.com]), and at the University of Waikato (with Craig Cary [<http://sci.waikato.ac.nz/about-us/people/caryc>] and Charles Lee [<http://sci.waikato.ac.nz/about-us/people/cklee>]). Candidate will have the opportunity to integrate a multidisciplinary team and participate in Antarctica international scientific research.

RESUME OF THE PROJECT

Antarctica Dry Valleys of Victoria Land are vast, ice-free regions considered to be the most physically and chemically extreme terrestrial environments on Earth. In such harsh conditions, microorganisms dominate and are believed to drive all processes in the system, however fundamental questions on the structure and functionality of the microbial communities remain unanswered. From the point of view of nitrogen (N) cycling, such ecosystems offer a unique natural environment with extreme gradients of N isotopic compositions. In this project we propose to investigate the N biogeochemistry and microbial communities involved in N transformations in these extreme Antarctica ecosystems, by using emergent biochemical and molecular microbial techniques. We believe that this interdisciplinary study, by integrating complementary projects will be essential for a global understanding of the dynamics and importance of the N cycle in permanently cold environments. In addition, these unique unexplored environments will certainly lead to the discovery of novel organisms and aspects of the ecology of microbial communities that mediate N transformation in natural environments, with great impact on future global nitrogen cycle under current climate change predictions.

Candidates interested will need to apply to a FCT Post-Doctoral grant.

Education: PhD degree in Biology, Microbiology, Biological Engineering, Biotechnology, Biochemistry, Chemical Engineering, Environmental Engineering, Environmental Science, or related fields.

Motivated potential candidates with interest for developing work in the scope of the presented subject are cordially invited to send the *curriculum vitae*. A minimum requirement is a complete PhD and a minimum of 5 papers published in international journals.

Deadline for application: 15th September 2014

Candidate selection: Candidates will be selected based on their *curriculum vitae*; the pre-selected candidates may be called for an individual interview.

Contact/address for further information and applications:

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