



POSTDOCTORAL POSITION IN BIOGEOGRAPHY OF ANTARCTIC MICROBIOTA

Project PIA CONICYT ACT172065: **“Genomics insight into the past and present of Antarctic Biodiversity: a tool to assess the fate of a unique ecosystem in a changing world (GAB)”**

We are seeking a motivated postdoctoral fellow to join a multidisciplinary team of scientists studying species diversification processes, phylogeographical patterns, adaptation, and co-evolutionary taxa interactions along the Southern Ocean using novel genomic tools, under the historical and contemporary climate change scenario. The candidate will be involved in assessing microbial biodiversity and biogeographic patterns along Antarctic/Subantarctic gradient in diverse environments, from lake sediments to marine invertebrate gut.

The selected candidate will work closely with basic scientists specialized in molecular ecology, marine biology, microbial ecology, bioinformatics, and a group of world-renowned international collaborators from British Antarctic Survey (BAS), French Polar Institute Paul Emile Victor (IPEV), Mediterranean Institute of Oceanography (MIO), Muséum d’Histoire Naturelle (MNHN, Paris), Norwegian Polar Institute, Research Center Dynamics of High Latitude Marine Ecosystems (IDEAL) and Réserve naturelle nationale des Terres australes françaises (RN TAF).

Candidate profile

- Completed PhD in bioinformatics, microbial ecology, evolutionary biology, computational biology, biostatistics or related disciplines.
- Strong skills in dedicated bioinformatics software and pipelines applied to metabarcoding analyses and database mining, with experience in large-scale sequence analysis.
- Experience in metagenomics data generation and analysis.
- Background in Environmental Microbiology or Microbial Ecology is expected.
- Excellent communication and organizational skills, demonstrated ability for teamwork and multidisciplinary collaboration.
- Fluent in written and spoken English.

Position specific responsibilities

- Collection of environmental samples and extraction of nucleic acids.
- Maintenance and organization of biological samples collection (lake sediments, soils, and marine invertebrate guts).
- Preparation of libraries for metabarcoding sequencing (both 16S rRNA and functional genes).
- Raw sequence analyses through bioinformatic pipelines, including phylogenetic reconstructions.
- Multivariate and integrative analysis of sequencing data, including metadata.
- Analysis of metagenomes with special interest in biogeography patterns of phylogenetic and metabolic markers
- Assistance in the supervision and training of graduate and undergraduate students.
- Collaboration with principal investigators and international researchers of the project in the objectives related with the study of microbial communities.
- (Co)authorship of publications in ISI journals and scientific communications in national and international congresses.

Conditions

Duration: 18 to 24 months (Full-time).

Beginning: September 2018.

Month salary: 1.500.000 Chilean pesos – 2.500 US\$ approx.

Host laboratory: Departamento de Ciencias Ecológicas, Facultad de Ciencias, Universidad de Chile.

Supervision: Dr Elie POULIN (Director of GAB Project, Universidad de Chile), Dr Julieta ORLANDO (Deputy Director of GAB Project, Universidad de Chile), Dr Léa CABROL (International collaborator, Mediterranean Institute of Oceanography, Marseille, France).

Mobility: Participation in field expeditions in South Patagonia and Antarctica. Attendance at national and international congresses. Possible research stays in partner laboratories (e.g. Mediterranean Institute of Oceanography, Marseille, France).

Applications: send to epoulin@uchile.cl. Application guidelines are available at <http://www.ciencias.uchile.cl/concurso%20academico.html>. Preliminary enquiries are welcome (jorlando@u.uchile.cl and lea.cabrol@ird.fr).

Closing date for application: July 27th, 2018.