



POSTDOCTORAL POSITION IN BIOGEOGRAPHY OF ANTARCTIC MARINE FAUNA

Anillo Project 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 estimating and forecasting species past, present and future distribution based on macro-environmental features. We are particularly interested in predicting the distribution of species and investigate the potential effect of climate change on past, present and future patterns of species distributions using SDM-techniques. Such skill should be associated to strong analytical capabilities, experience with NGS molecular data, and an interest in analyzing diversification processes in time and geographical space.

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 Genomics, Computational Biology, Evolutionary Biology or related disciplines.
- Strong computing background, prior experience with handling large-scale data and use of bioinformatics and statistical tools would be an advantage.
- Experience with NGS molecular data, and an interest in analyzing diversification processes in time and geographical space
- Some experience in species distribution and niche modeling is also expected.
- Excellent communication, organizational and teamwork skills.
- Fluent in written and spoken English.

Position specific responsibilities

- Compilation and checking of species recorded occurrence data. Visit of public collections to integrate additional data.
- Selection of ecologically relevant environmental parameters to be used for the different species models and constitution of species-specific datasets.
- Running present, past, and future Spatial Distribution Models for marine/freshwater species
- Multivariate and integrative analysis of SNPs data through bioinformatic pipelines.
- 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 Antarctic Biodiversity.
- (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 Juliana Vianna (Main Researcher GAB Project, P. Universidad Católica de Chile).

Mobility: Participation in field expeditions in South Patagonia and Antarctica. Attendance at national and international congresses. Possible research stays in partner laboratories (e.g. Laboratoire Biogeoscience, Dijon, France; Marine Biology Lab, Brussels, Belgium).

Applications: send to epoulin@uchile.cl. Application guidelines are available at <http://www.ciencias.uchile.cl/concurso%20academico.html>. Preliminary enquiries are welcome (epoulin@uchile.cl and jvianna@uc.cl).

Closing date for application: July 27th, 2018.