



## Postdoctoral position in marine passive acoustic monitoring

**Job Description:** The Southern Ocean Research Partnership Blue and Fin Whale Acoustic Trends Program is opening a post-doctoral position at the University of Concepcion (Chile) in marine passive acoustic monitoring for a highly motivated candidate with a strong background in hydroacoustics. The successful candidate will work on a full-time 14-month project to implement a standardized analytical framework for estimating Antarctic blue and fin whale call densities from passive acoustic data. This involves assessing automated call detector performance using an existing annotated call library, determining the probability of detection of calls at a hydrophone location using sound propagation modelling, and applying automated detectors to selected annual data sets, which can then be replicated for other years and other sites across the Antarctic. This project includes a research visit to the University of St. Andrews, Scotland. The candidate will be expected to assist with submitting funding applications to continue this research beyond the 14 months of this project. More information on the Southern Ocean Research Partnership Blue and Fin Whale Acoustic Trends Program can be found at

(<http://www.marinemammals.gov.au/sorp/antarctic-blue-whales-and-fin-whales-acoustic-program>).

### Required skills/qualifications:

- PhD in hydroacoustics, signal processing, oceanography or a related discipline
- Experience with detection and classification of signals in audio data
- Experience with acoustic propagation modelling techniques
- Experience of statistical analysis
- Strong computer competency in MATLAB, R, or equivalent
- Excellent written and oral communication skills in English.

### Preferred skills:

- Basic Spanish strongly preferred
- Project management skills
- Analyst and student supervision skills

The candidate will be working closely with members of the Southern Ocean Research Partnership Blue and Fin Whale Acoustic Trends Working Group, which is a multinational project involving researchers from Australia, Chile, France, Germany, South Africa, the United States and the United Kingdom. The candidate will also be part of a team in Chile working on passive acoustics within the research center COPAS Sur-Austral and the Department of Oceanography at the University of Concepción, which is Chile's largest oceanography department. The candidate will be expected to be proactive and contribute to the development of bioacoustics in Chile, and present at national and/or international seminars and conferences. A working knowledge of Spanish is strongly recommended. While scientific activities can be undertaken in English, day to day life (including banking, insurance, local registration) is all undertaken in Spanish. While there are international scholar facilities at the University to assist with this, having a basic knowledge of Spanish will greatly help.

Expected start date will be March 2020. Review of applications will start in September 2019 until a suitable candidate is identified, and the selection process will be carried out by the Southern Ocean Research Partnership Blue and Fin Whale Acoustic Trends Working Group. Interested applicants should send a letter of interest, a statement of current and future research interest, their curriculum vitae, and the names of two references, to Dr. Susannah Buchan ([sbuchan@udec.cl](mailto:sbuchan@udec.cl)).