Jonathan Sandoval-Castillo

Research Fellow MELFU: Flinders University

Yuma248.github.io
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PROFESSIONAL PROFILE

I am evolutionary biologist interested on the integration of gnomic/transcriptomic and ecological data to better understand evolutionary processes. My main focus is the development of bioinformatic tools to tackle research question of significant relevance in conservation management, ecology and evolution.

EDUCATION

PhD: Biological Sciences
Macquarie University, Australia. **2012**

Msc: Marine Ecology.
CICESE, Mexico. **2005**

BSc: Marine Biology. (*Summa cum laude*)
UABCS. **2001**

EXPERIENCE

Molecular Ecology Lab, Flinders University
Research Fellow **2011 - present**

- Provide bioinformatic support and advice to all project in the lab.
- Analysis of genomic, morphological and experimental data
- Development of bioinformatic pipelines for the analysis of genomic data

Molecular Ecology Lab, CICESE
Research Assistent **2001-2007**

- Analysis of genetic data of several marine commercially important species.

SKILLS

General

- Genomics
- Transcriptomics
- Seacape/Landscape
- Population genomics
- Genome Assembly
- Metagenomics
- Phylogenomics
- Phylogeography
- GEA
- GWAS

Programming

- Perl
- Bash
- R
- Python
- Conda

LANGUAGES

Spanish: Native language

English:
Advanced

Portugues:
Intermediate

PUBLICATIONS

Selected from >50 total

Brauer, C. J., **Sandoval-Castillo, J.,** Gates, K., Hammer, M. P., Unmack, P. J., Bernatchez, L. & Beheregaray, L. B. (2023). Natural hybridization reduces vulnerability to climate change. **Nature Climate Change**. 13(3) 282-289.

Sandoval-Castillo J., Gates, K., Brauer, C. J., Smith, S., Bernatchez, L., & Beheregaray, L. B. (2020). Adaptation of plasticity to projected maximum temperatures and across climatically defined bioregions. **PNAS** 117, 17112-17121

Teske, PR, **Sandoval-Castillo J,** Golla TR, Emami-Khoyi A, Tine M, von der Heyden S, Beheregaray LB (2019) Thermal selection as a driver of marine ecological speciation. P**roceedings of the Royal Society of London B** 286: 20182023.

Sandoval-Castillo J, Robinson N, Hart A, Strain L, Beheregaray LB (2018) Seascape genomics reveals adaptive divergence in a connected and commercially important mollusc, the greenlip abalone (*Haliotis laevigata*), along a longitudinal environmental gradient. **Molecular Ecology** 27, 1603-1620.