

Jonathan Sandoval-Castillo

Research Fellow MELFU: Flinders University



Yuma248.github.io



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Adelaide, SA, Australia

PROFESSIONAL PROFILE

I am evolutionary biologist interested on the integration of gnostic/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

SKILLS

General

- Critical thinking
- Data Generation/Analysis
- Bioinformatics
- Independent learning

Codding

- Perl
- Bash
- R
- Python
- Conda

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 Assistant

2001-2007

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

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. *Proceedings 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 laevis*), along a longitudinal environmental gradient. *Molecular Ecology* 27, 1603-1620.