

Isaac Brito Morales Ph.D.

Associate Research Scientist

Conservation International, Arlington, United States

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Work and Research

Conservation International

Associate Research Scientist, Betty and Gordon Moore Center for Science 2021-present

The University of California, Santa Barbara

Affiliated Researcher, Marine Science Institute 2022-present

The University of Queensland (UQ)

Postdoctoral Research Fellow, School of Mathematics and Physics Feb2021-Sep2021

Centro de Ecología Aplicada

Project Manager 2010-2016

Universidad Católica de la Santísima Concepción

Lecturer in Experimental Design 2008-2009

Education

The University of Queensland (UQ), Ph.D. Biological Sciences 2016-2021

Universidad Católica de la Santísima Concepción, Bachelor of Science (Bsc 1st Class Hons), Marine Biologist 2003-2008

Awards and Honors

Science Faculty, Universidad Católica de la Santísima Concepción, Academic Excellence 2008

Grants and Fellowships

Chilean National Research and Development Agency (ANID), Ph.D. Grant 2016

Peer-Reviewed Publications

IN PRESS AND PUBLISHED

Sanz-Martín M, Hidalgo M, Puerta P, García Molinos J, Zamanillo M, **Bruto-Morales I**, González-Irusta JM, Esteban A, Punzón A, García-Rodríguez E, Vivas M, L López-López. 2024. Climate velocity drives unexpected southward patterns of species shifts in the Western Mediterranean Sea. *Ecological Indicators*. DOI: <https://doi.org/10.1016/j.ecolind.2024.111741>.

Schoeman DS, Sen Gupta A, Harrison CS, Everett J, **Brito-Morales I**, Hannah L, Bopp L, Roehrdanz P, AJ Richardson. 2023. Demystifying global climate models for use in the life sciences. *Trends in Ecology and Evolution*. DOI: <https://doi.org/10.1016/j.tree.2023.04.005>.

Buenafe KCV, Dunn D, Everett J, **Brito-Morales I**, Schoeman DS, Hanson JO, Dabalà A, Neubert S, Cannicci S, Kaschner K, AJ Richardson. 2023. A metric-based framework for climate-smart conservation planning. *Ecological Applications*. DOI: <https://doi.org/10.1002/eap.2852>.

Brito-Morales I, Schoeman DS, Everett J, Klein CJ, Dunn D, García Molinos J, Burrows MT, Buenafe KCV, Dominguez RM, Possingham HP, Richardson AJ. 2022. Towards climate-smart, three-dimensional protected areas for biodiversity conservation in the high seas. *Nature Climate Change* 12, 402–407. DOI: <https://doi.org/10.1038/s41558-022-01323-7>.

Arafeh-Dalmau N, **Brito-Morales I**, Schoeman DS, Possingham HP, Klein CJ, AJ Richardson. 2021. Incorporating climate velocity into the design of climate-smart networks of marine protected areas. *Methods in Ecology and Evolution*. DOI: <https://doi.org/10.1111/2041-210X.13675>

Brito-Morales I, Schoeman DS, García Molinos J, Burrows MT, Klein CJ, Arafeh-Dalmau N, Kaschner K, Garilao C, Kesner-Reyes K, AJ Richardson. 2020. Climate velocity reveals increasing exposure of deep-ocean biodiversity to future warming. *Nature Climate Change* 10, 576–581. DOI: <https://doi.org/10.1038/s41558-020-0773-5>

Brito-Morales I, García Molinos J, Schoeman DS, Burrows MT, Poloczanska ES, Brown CJ, Ferrier S, Harwood TD, Klein CJ, McDonald-Madden E, Moore PJ, Pandolfi JM, Watson JEM, Wenger AS, AJ Richardson. 2018. Climate Velocity Can Inform Conservation in a Warming World. *Trends in Ecology & Evolution* 33, 441–457. DOI: <https://doi.org/10.1016/j.tree.2018.03.009>

IN PREPARATION, REVIEW OR REVISION (DRAFTS AVAILABLE UPON REQUEST)

Isaac Brito-Morales, Floriane Sudre, Sophie Laran, Christoph Rohner, Matthieu Le Corre, Audrey Jaeger, Olivier Bousquet, Salvatore Cerchio, Boris Dewitte, Daniel Dunn, Elliott Hazen, Ronel Nel, Kylie Scales, Ana Sequeira, Tammy Davies, Lee Hannah, Vincent Rossi. Ocean fronts aggregate marine megafauna in the southwest Indian Ocean. *PNAS*. *In Prep.*

Lee Hannah, William Cheung, Jessica Couture, Juliano Palacios, **Isaac Brito-Morales**, Patrick Roehrdanz. 30x30 for climate change: By land and by sea. *Trends in Ecology & Evolution*. *In Prep.*

Buenafe KCV, Dunn DC, Metaxas A, Everett JD, Schoeman DS, Pidd A, **Brito-Morales I**, Hanson JO, Richardson AJ. Designing climate-smart protected areas: current approaches and the way forward. *Nature Reviews Biodiversity*. *In Prep.*

Teaching

INSTRUCTION

Instructor, *The University of California, Santa Barbara*, ESM240 Climate Change Biology (graduate course) 2023

Teaching assistant, *The University of Queensland (UQ)*, Advanced Analysis of Scientific Data 2019-2020

Teaching assistant, *The University of Queensland (UQ)*, Analysis of Scientific Data 2019-2020

Teaching assistant, *The University of Queensland (UQ)*, Pharmacy - Data Analysis & Professional Practice 2019-2020

Teaching assistant, *The University of Queensland (UQ)*, Probability & Statistics in Engineering 2019

Teaching assistant, *The University of Queensland (UQ)*, Environmental Data Analysis 2018

Teaching assistant, *The University of Queensland (UQ)*, Biostatistics & Experimental Design 2018

WORKSHOPS

Ocean Front, Megafauna and Climate Change, *Acadia University*, 2024

Ocean Front and Climate Change, *Nelson Mandela University* 2023

Invited Talks

Association for the Sciences of Limnology and Oceanography, Palma de Mallorca, Spain, Climate velocity in the ocean and its implications for conservation, S-69: Promoting Resilience Through Climate-Smart Fisheries and Conservation Management 2023

Contributed Presentations

Species on the Move, Bonita Springs, Florida, US, Managing dynamic ocean front ecosystems for species on the move 2023

IMPAC5, Vancouver, Canada, Climate velocity in the ocean and its implications for conservation 2023

Ocean Science meeting, Challenges and opportunities for managing ocean front ecosystems in a warming world 2022

Species on the Move, Kruger National Park, South Africa, Life below the ocean surface increasingly threatened by climate change 2019

Mentoring

Mundus Masters Degree in Tropical Biodiversity and Ecosystems, Kristine Camille Buenafe, "Benefits and costs to pelagic fisheries of conservation-sensitive, climate-smart closures in the Pacific Ocean" 2021

Mundus Masters Degree in Tropical Biodiversity and Ecosystems, Rosa Mar Dominguez, "Conservation of the high seas: designing climate-smart reserves in the Indian Ocean" 2020

Mundus Masters Degree in Tropical Biodiversity and Ecosystems, Rafaela de Albuquerque Ribeiro, "Designing climate-proof marine protected areas: a case study in South America" 2019

References

Prof Anthony Richardson (anthony.richardson@csiro.au)

Prof David Schoeman (dschoema@usc.edu.au)

A/Prof Jorge Garcia Molinos (garciamj@tcd.ie)

Languages Spoken

Fluent Spanish; Fluent English