

PÉREZ-ROSALES, Gonzalo, PhD

Availability: From November 2023. Currently in a Post-Doctoral contract at WHOI

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Platforms:



PROFESSIONAL EXPERIENCE

- Nov 2022 - Nov 2023** **Postdoctoral Investigator - Woods Hole Oceanographic Institution.** Woods Hole, United States
Postdoc to work on the "Super Reefs" project under the supervision of Dr. Anne Cohen and Dr. Simon Thorrold. Identify reefs across the tropics that can survive ocean heatwaves and climate change. Project in collaboration with Stanford University and The Nature Conservancy
- 2018 - July 2022** **PhD - École Pratique des Hautes Études – CRIOBE (CNRS-EPHE-UPVD).** Moorea, French Polynesia and Perpignan, France
Complete PhD thesis entitled "Diving deep on the reef slopes in French Polynesia: new insights into mesophotic coral ecosystems"
- Aug 2018 - July 2019** **PhD Fieldwork CRIOBE (CNRS-EPHE-UPVD) - UNDER THE POLE.** French Polynesia
Manage and offshore scientist research for DEEPHOPE expedition. Sample and process with ecological and environmental (CTD, temperature and light) data for quantitative studies, as well as molecular (DNA, microbiome, ARN, eDNA), taxonomy, physiology, acoustic and oceanographical data
- Feb - July 2018** **Internship for Dr. Hédouin, CRIOBE (CNRS-EPHE-UPVD).** Moorea, French Polynesia
Work in spatial and temporal dynamics of coral reefs with special attention to Climate Change. Realise assessments of mesophotic corals in French Polynesia. Participate in restoration fieldwork and laboratory programs
- Feb - July 2017** **Internship for Dr. Parravicini, CRIOBE (CNRS-EPHE-UPVD).** Perpignan, France
Analyse the biogeography of coral reef fish functional diversity according to anthropogenic and environmental variables
- Aug 2016 - present** **MESOPHOTIC.ORG** www.mesophotic.org. Brisbane, Australia and remote
Curate database. Update relevant information and publications. Mesophotic.org [website](http://www.mesophotic.org)
- Feb - May 2016** **CHASING CORAL - Exposure LABS and The Ocean Agency.** Great Barrier Reef, Australia
Production assistant, secondary camera and fieldwork team member recording coral bleaching and mortality through the GBR (**Lizard Island Research Station, Heron Island Research Station**, Keppel Islands and outer GBR). **Emmy Award** as camera. Chief diving safety and technician, boat driving and multiskilling assistant on inland operations. Exchanges with Dr. Ove Hoegh-Guldberg, Dr. J. Veron, Dr. Andrew Baird, Dr. Justin Marshall
- Nov 2015 - July 2016** **Volunteer for CORAL REEF ECOSYSTEMS LAB, UNIVERSITY OF QUEENSLAND.** Brisbane and Heron Island research station, Australia
7 months - Collaborate with Dr. Bongaerts to launch the website project <www.mesophotic.org>. Review and categorise all bibliography published by mesophotic
1 month - Perform fieldwork to set up the <Mesocosms Project> of Dr. Hoegh-Guldberg and Dr. Dove. Collect coral species for the Mesocosms and maintain the infrastructure
- 2013 - 2014** **OCEANOGRÁFICA: Educación, Divulgación y Ciencia S.L.** Gran Canaria, Spain
Carry out Marine Science campaigns. Lead surveys, press conferences, social media management and events for environmental awareness and education
- 2013 - 2014** **Divemaster PADI.** Gran Canaria, Spain
Assist instructor Luis Piñana Luque (MSDT-279850). Teach and guide beginner and intermediate diving groups

ACADEMIC BACKGROUND

- 2018 - July 2022** **PhD - École Pratique des Hautes Études – CRILOBE (CNRS-EPHE-UPVD).** Moorea, French Polynesia and Perpignan, France
“Diving deep on the reef slopes in French Polynesia: new insights into mesophotic coral ecosystems” Supervision of Dr. Hédouin, Dr. Parravicini. Co-supervision Prof Pichon, Dr. Bongaerts
- 2016 - 2018** **MSc - École Pratique des Hautes Études.** Multiple cities, France
 Master of Science in Biodiversity and Environmental Management of Coral Reefs (av. mark 14.857/20 M1 & 16.389/20 M2, 1st of the promotion)
- 2010 - 2014** **BSc - University of Las Palmas de Gran Canaria.** Gran Canaria, Spain
 Bachelors in Marine Science - Oceanography (240ECTS; av. mark 7.965/10)
 Member of *Ciencia Compartida – Biblioteca ULPGC*. Conferences organization. Member of *DyC Ocean*. Excellence Grant “Formula Santander Bank”. Academic Exchange program to Pontificia Universidad Católica de Valparaíso Chile (2012)

SCIENTIFIC PUBLICATIONS

PUBLISHED PEER-REVIEWED:

- Carlot J, Voutsoukas M, Rovere A, Karambas T, Lenihan HS, Kayal M, Adjerooud M, **Pérez-Rosales G**, Hédouin L, Parravicini V. (2023) Coral reef structural complexity loss exposes coastlines to waves. *Scientific Reports*; 13(1):1683 <https://doi.org/10.1038/s41598-023-28945-x>
- Raick X, Di Iorio L, Lecchini D, Gervaise C, Hédouin L, Under The Pole Consortium, **Pérez-Rosales G**, Rouzé H, Bertucci F, Parmentier E (2023) Fish sounds of photic and mesophotic coral reefs: variation with depth and type of island. *Coral Reefs* <https://doi.org/10.1007/s00338-022-02343-7>
- **Pérez-Rosales G**, Hernández-Agreda A, Bongaerts P, Rouzé H, Pichon M, Carlot J, Torda G, UTP Consortium, Hédouin L, Parravicini V. (2022) Mesophotic depths hide high coral cover communities in French Polynesia. *Science of the Total Environment* <https://doi.org/10.1016/j.scitotenv.2022.157049>
- **Pérez-Rosales G**, Pichon M, Rouzé H, Villeger S, Toda G, Carlot J, Bongaerts P, UTP Consortium, Parravicini V, Hédouin L. (2022) Mesophotic coral ecosystems of French Polynesia are hotspots of alpha and beta generic diversity for scleractinian assemblages. *Diversity & Distribution* <https://doi.org/10.1111/ddi.13549>
- Carlot J, Rouzé H, Barneche DR, Mercière A, Espiau B, Cardini U, Brandl DJ, Casey JM, **Pérez-Rosales G**, Adjerooud M, Hédouin L, Parravicini V. (2022) Scaling up calcification, respiration, and photosynthesis rates of six prominent coral taxa. *Ecology and Evolution* <https://doi.org/10.1002/ece3.8613>
- **Pérez-Rosales G**, Rouzé H, Torda G, Bongaerts P, Pichon M, Parravicini V, Hédouin L. (2021) Mesophotic coral communities escape thermal coral bleaching in French Polynesia. *R. Soc. Open Sci.* 8: 210139. <https://doi.org/10.1098/rsos.210139>
- **Pérez-Rosales G**, Brandl SJ, Chancerelle Y, Siu G, Martinez E, Parravicini V, Hédouin L. (2021) Documenting decadal disturbance dynamics reveals archipelago-specific recovery and compositional change on Polynesian reefs. *Marine Pollution Bulletin*; 170:112659. <https://doi.org/10.1016/j.marpolbul.2021.112659>
- Rouzé H, Galand PE, Medina M, Bongaerts P, Pichon M, **Pérez-Rosales G**, Torda G, Moya A, Raina JB, Hédouin L. (2021) Symbiotic associations of the deepest recorded photosynthetic scleractinian coral (172 m depth). *The ISME journal*; 15(5):1564-8. <https://doi.org/10.1038/s41396-020-00857-y>
- Moritz C, Brandl SJ, Rouzé H, Vii J, **Pérez-Rosales G**, Bosserelle P, Chancerelle Y, Galzin R, Liao V, Siu G, Taiarui M, Nuges MM, Hédouin L. (2021) Long-term monitoring of benthic communities reveals spatial determinants of disturbance and recovery dynamics on coral reefs. *Mar. Ecol. Prog. S.* 672:141-152. <https://doi.org/10.3354/meps13807>
- Hédouin L, Rouzé H, Berthe C, **Pérez-Rosales G**, Martinez E, Chancerelle Y, Galand PE, Lerouvreur F, Nuges MM, Pochon X, Siu G. (2020) Contrasting patterns of mortality in Polynesian coral reefs following the third global coral bleaching event in 2016. *Coral Reefs*; 39(4):939-52. <https://doi.org/10.1007/s00338-020-01914-w>
- Bongaerts P, **Pérez-Rosales G**, Radice VZ, Eyal G, Gori A, Gress E, Hammerman NM, Hernandez-Agreda A, Laverick J, Muir P, Pinheiro H. (2019) Mesophotic.org: a repository for scientific information on mesophotic ecosystems. *Oxford Database*; <https://doi.org/10.1093/database/baz140>

IN PREPARATION:

- **Pérez-Rosales G**, Rouzé H, Bongaerts P, Bregere N, Carlot J, Torda G, UTP Consortium, Pichon M, Parravicini V, Hédouin L. Multidisciplinary mechanisms of light-dependent corals to live in the twilight zone.

NON-PEER REVIEWED PUBLICATIONS:

- **Pérez-Rosales, G** (2020). Les mystères de la zone crépusculaire. Book Étonnants récifs - CNRS Éditions
- **Pérez-Rosales, G** (2019). Los ecosistemas mesofóticos. Una esperanza para los arrecifes de coral superficiales. *Revista InMare* N°3, 15-17

- **Pérez-Rosales, G** (2017). Un Paraíso al Borde del Colapso. El blanqueamiento del coral pone en riesgo su futuro. Journal *Okeanos*. Revista de la Sociedad Atlántica de Oceanógrafos Nº5, 18-22
- **Pérez-Rosales, G** (2014). Estado de sobrepesca de las Islas Canarias/The state of overfishing in the Canary Islands. BSc Thesis. Acceda ULPGC

REVIEWED PUBLICATIONS:

- Three currently published publications

GRANTS & SCHOLARSHIPS

- École Pratique des Hautes Études – Grant to cover expenses ICRS International Conference
- École Pratique des Hautes Études – PhD Grant (2018-2021) 63,648 €
- Formula Santander Bank - Excellence Grant. Academic Exchange program to Pontificia Universidad Católica de Valparaíso Chile (2012) 5,000 €

INTERNATIONAL CONFERENCES & WORKSHOPS

- Workshop: Super Reefs with WHOI, Stanford and TNC (Majuro 2023, Maui 2023 & Belize 2023)
- Hawaii Conservation Conference. Honolulu, Oahu, 2023.
- International Coral Reef Symposium (Bremen 2022) First author oral presentation: Diving deep in French Polynesia reveals new insights on the ecological importance of mesophotic coral ecosystems; Non-First author oral presentation: Scleractinian coral assemblages on the deeper fore-reef slopes: mesophotic, oligophotic, ... or rariphotic?
- International Coral Reef Symposium (Remotely-Bremen 2021) Non-First author oral presentation: Diving deep in paradise shines new light on the twilight zone: preliminary results of the "deephope" mesophotic programme in French Polynesia
- European Coral Reef Symposium (Oxford, 2017)
- Workshop: Delving into the Depths: What do we study on Mesophotic Reefs? (Oxford, 2017)
- International Symposium of Marine Science (Gran Canaria, 2014)
- Workshop: PSL Research University, Summer Coral Reef Formation, Moorea, French Polynesia (May, 2017)

INSTITUTION SEMINARS

- WHOI. Biology Seminar. Pérez-Rosales, G. Diving deep on the reef slopes in French Polynesia: new insights into mesophotic coral ecosystems (Woods Hole, 2023)
- WHOI. Invited Seminar Marine Chemistry & Geochemistry. Diving Deep: Mesophotic Coral Ecosystems of French Polynesia (Woods Hole, 2023)
- CRIOBE.

LANGUAGES

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| ▪ Spanish | Mother tongue |
| ▪ Catalan | Mother tongue |
| ▪ English | Fluent |
| ▪ French | Professional working and communication knowledge |

ADDITIONAL INFORMATION

Awards:

- Prix Europcar RESIPOL. Finalist PhD Thesis. (Tahiti, 2019)
- The National Academy of Television Arts & Sciences. Emmy Award-winning. Additional Camera (Los Angeles, 2017)

Scientific advisor:

- Biodiversitat Sitges, 2020 - present, Barcelona, Spain
- Coral Gardeners, 2017 - 2020, Moorea, French Polynesia

Teaching:

- Master EPHE – BGE, 2020 - 2021, Online and in person
- Master Université Polynésie Française. 2020, Moorea, French Polynesia
- Vive MANEA ENSAD, CRIOBE, EPHE, PSL, Online 2021-present

Diving:

- TDI - Rebreather certification - Air on JJCCR (Cert Number: 998913)
- TDI - Advanced NITROX (Cert Number: 998912)
- AAUS - American Academy of Underwater Sciences 60 feet

- CMAS*** - N3 Star Diver
- DIVEMASTER (PADI Nb. 348471)
- Certification for Aptitude Hyperbaric (CAH) - Scientific Diving (Level 1 Mention B)

Sailing:

- Sailing and offshore experience living in a boat
- Navigation License P.E.R. up to 15 m boats and 12 miles

Training:

- CPR and O2 (2013, Spain; 2015 Australia; 2019 France, 2023 USA)
- R Studio Workshops (CRIOBE)
- Python (CRIOBE)
- Project Management (EPHE)

Non-profit Organisations:

- Més Que Surf, 2015 – present (occasional weekends), Sitges, Spain
- Coral Gardeners, 2017 - 2020, Moorea, French Polynesia
- Sea Shepherd inland team member, 2015 - 2016, Brisbane, Australia

Computer skills:

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| ▪ R | ▪ Matlab |
| ▪ Microsoft | ▪ Python |
| ▪ Adobe (Illustrator, Photoshop, Lightroom, InDesign) | ▪ SPSS |
| ▪ QGIS | ▪ Inkscape |
| | ▪ Ocean Data View, Grapher, surfer |

Content creation:

- Underwater camera (RED, Sony, Canon, Gopro) and filming experience (FA5, FA7). Emmy Award-winning program for Additional Camera in CHASING CORAL. Advanced knowledge skills

Other:

- International Driver's License
- CPR. First Aid Certificate and O₂

References:

- Valeriano Parravicini, PhD Supervisor, CRIOBE, valeriano.parravicini[at]univ-perp.fr
- Laetitia Hedouin, PhD Supervisor, CRIOBE, laetitia.hedouin[at]criobe.pf
- Michel Pichon, PhD Mentor & Colleague, Queensland Museum, michel.pichon[at]bigpond.com
- Anne Cohen, Postdoctoral advisor PI, WHOI, acohen[at]whoi.edu
- Simon Thorrold, Postdoctoral advisor PI, WHOI, sthorrold[at]whoi.edu