Matías Gómez-Corrales

matias_gomez@uri.edu • https://linktr.ee/matiasgoco

EDUCATION

2024 - Ph.D. Biological and Environmental Sciences

Expected Graduation Date: August 2024 University of Rhode Island (Kingston, USA)

Dissertation: Cryptic diversity matters for coral conservation

Advisor: Dr. Carlos Prada

2018 - M.S. Biological Sciences

Universidad of Los Andes (Bogotá D.C., Colombia)

Thesis: Asynchronous spawning reflects genetic structure in a Caribbean brain coral, Diploria

labyrinthiformis (Scleractinia: Faviinae)

Advisor: Dr. Juan A. Sánchez

2015 - B.S. Marine Biology

Universidad of Bogotá Jorge Tadeo Lozano (Bogotá D.C., Colombia) Thesis: Foraminifera as bioindicators of water quality on coral reefs

Advisors: Dr. Juan A. Sánchez & Dr. Elvira Alvarado

PUBLICATIONS

- 7. Gómez-Corrales, M., González, A., Kamel, B., Medina, M., Levitan, D.R., Knowlton, N., & Prada, C. Speciation across depth gradients in reef corals. https://doi.org/10.21203/rs.3.rs-4202515/v1 (In review).
- **6.** Grupstra, C., **Gómez-Corrales**, **M**., Fifer, J., Aichelman, H.E., Meyer-Kaiser, K.S., Prada, C. & Davies, S.W. *Nature Ecology & Evolution* (2024). Integrating cryptic diversity into coral evolution, symbiosis, and conservation. https://doi.org/10.1038/s41559-023-02319-y
- 5. Rodríguez, L., Acosta, A., González-Zapata, F.L., Gómez-Corrales, M., Marrugo, M., Alvarado-Ch, E.M., Dueñas, L.F., Andrade, J., Gutierrez-Cala, L. & Sánchez, J.A. *Biodiversity and Conservation* (2023). Conservation at the edge: connectivity and opportunities from non-protected coral reefs close to a national park in the Colombian Caribbean. https://link.springer.com/article/10.1007/s10531-022-02539-x
- **4. Gómez-Corrales M.** & Prada C. (2020). Cryptic lineages respond differently to coral bleaching. *Molecular Ecology*, 00:1–9. https://doi.org/10.1111/mec.15631
- **3.** Sánchez, J. A., **Gómez-Corrales, M***., Gutierrez-Cala, L. Vergara, D.C., Roa, P., González-Zapata, F.L., Gnecco, M., Puerto, N., Neira, L. & Sarmiento, A. (2019). Steady Decline of Corals and Other Benthic Organisms in the SeaFlower Biosphere Reserve (Southwestern Caribbean). *Frontiers in Marine Science*, *6.* https://doi.org/10.3389/fmars.2019.00073*Equal Contribution.
- **2. Gómez-Corrales M.,** Flórez E., Hernández L. & Fajardo Medina, G. E. (2017). Post-embryonic development stages of *Tityus columbianus* (Thorell, 1846), (Scorpiones, Buthidae):

- morphometric estimation approach. Revista Mutis, 7(2), 75-80. https://doi.org/10.21789/22561498.1257
- Alonso, D., Vides, M., Cedeño, C., Marrugo, M., Henao, A., Sánchez, J.A., Dueñas, L., Andrade, J.C., González, F. & Gómez, M. (2015). Parque Nacional Natural Corales de Profundidad: descripción de comunidades coralinas y fauna asociada. Serie de Publicaciones Generales del Invemar, (88), 20.

PRESS & RESEARCH FEATURES

- **Gómez-Corrales M.** (2022). Cryptic diversity matters for coral conservation. In: Ormond, R. and Rogers, C (eds), Reef Encounter 51, Vol 37, No. 1, 82. http://coralreefs.org/publications/reef_encounter_51/
- Baird A and Harrison H: H1 Connect Recommendation of [Gómez-Corrales M, Prada C, Mol Ecol 2020 (:)]. In H1 Connect, 05 Nov 2020; https://connect.h1.co/article/738876544

FELLOWSHIPS, GRANTS & RESEARCH AWARDS

- 2022 Rosemary Grant Advanced Award, Society for the Study of Evolution (3,500).
- 2022 Lerner-Gray Grants for Marine Research, American Museum of Natural History (\$2,000).
- 2022 Dean's Fellowship Award, University of Rhode Island (\$34,563).
- 2022 Early Career Training Award, Coral Bleaching Research Coordination Network (\$2,500).
- 2021 Global Marine Initiative Student Research Award Program, The Nature Conservancy & University of Rhode Island (\$10,000).
- 2020 Graduate Student Research Award, Society of Systematic Biologists (\$3,000).
- 2020 Enhancement of Graduate Research Awards, University of Rhode Island (\$1,000).
- 2020 Graduate Fellow, International Coral Reef Society (\$2,500).
- 2017 Master's Research Grant, Universidad of Los Andes (\$1,000).
- 2015 Master's Scholarship, Universidad of Los Andes (\$7,000).
- 2014 Excellence Student Award, Universidad of Bogotá Jorge Tadeo Lozano (\$1,250).
- 2013 Excellence Student Award, Universidad of Bogotá Jorge Tadeo Lozano (\$1,250).

TRAVEL AWARDS

- 2024 Dean's Travel Award, University of Rhode Island (\$300).
- 2023 Sea Grant Travel Award, University of Rhode Island Graduate School of Oceanography (\$800).
- 2022 Dean's Travel Award, University of Rhode Island (\$450).

- 2022 Annual Grant Fund, University of Rhode Island Graduate Assistants United (\$500).
- 2020 Species Delimitation Workshop Travel Grant, University of Michigan (\$600).
- 2011 Conference Registration Grant, III Latin-American Conference of Arachnology (\$250).

RESEARCH EXPERIENCE

- 2019 2024 Graduate Research Assistant, University of Rhode Island.
- 2016 2017 Graduate Research Assistant, Universidad of Los Andes, Colombia.
- 2012 2013 Junior Researcher in Coral Reef Ecology. Ecoral, Colombia.
- 2011 2012 Junior Researcher in Marine Invasions. Dr. Michael J. Ahrens, Consultancy.

UNDERGRADUATE TEACHING EXPERIENCE

- 2020 Zoology of Invertebrates, Laboratory. University of Rhode Island.
- 2018 Marine Ecology, Laboratory. Universidad of Los Andes, Colombia.
- 2017 Cellular Biology, Laboratory. Universidad of Los Andes, Colombia.
- 2015 2016 Zoology of Invertebrates, Laboratory. Universidad of Los Andes, Colombia.

ORAL PRESENTATIONS

- 2024 **Gómez-Corrales, M.**, González, A., Kamel, B., Medina, M., Levitan, D.R., Knowlton, N., Prada, C. Speciation across depth gradients in reef corals. XII Congreso Mexicano de Arrecifes Coralinos y III Congreso Panamericano de Arrecifes Coralinos. Ensenada, Mexico.
- 2024 **Gómez-Corrales, M.**, González, A., Kamel, B., Medina, M., Levitan, D.R., Knowlton, N., Prada, C. Coral Cryptic Lineages Segregate across a Depth Cline in the Caribbean. Ocean Sciences Meeting. Louisiana, US.
- 2023 **Gómez-Corrales, M.**, González, A., Kamel, B., Medina, M., Levitan, D.R., Knowlton, N., Prada, C. Adaptation to light drives speciation in depth-segregated corals via temporal reproductive isolation. Evolution. New Mexico, US.
- 2022 **Gómez-Corrales, M.**, Medina, M., Prada, C. Speciation in Caribbean Corals. 2nd Early Career Researcher Symposium, International Fossil Coral and Reef Society.
- 2022 **Gómez-Corrales, M.**, López-Londoño., T, Huntley, N., Iglesias-Prieto, R., Prada, C. Depth matters for coral restoration. Reef Futures, Key Largo, US.
- 2022 **Gómez-Corrales, M.**, Medina, M., Prada, C. Coral cryptic lineages segregate across a depth cline in the Caribbean. 15th International Coral Reef Symposium, Bremen, Germany.
- 2022 **Gómez-Corrales, M.**, Medina, M., Prada, C. Coral cryptic lineages across a depth cline. 50th Benthic Ecology Meeting, Portsmouth, US.

- 2021 **Gómez-Corrales, M.** & Prada, C. Cryptic lineages matter for coral conservation under climate change. Society for Integrative and Comparative Biology (SICB) meeting, US.
- 2021 **Gómez-Corrales, M.** & Prada, C. Cryptic lineages matter for coral conservation under climate change. Virtual Stand-Alone Conference of The American Society of Naturalists, US.
- 2017 Gómez-Corrales, M., Chamberland V, Snowden S, Vermeij M.J., Sánchez J.A. Genomic insights into a sympatric Caribbean brain coral population with two non-overlapping reproductive cohorts, *Diploria labyrinthiformis* (Scleractinia: Mussidae). European Coral Reef Symposium, Oxford, UK.

POSTER PRESENTATIONS

- 2024 Prada, C., **Gómez-Corrales, M.**, Girard, J., Lasker, H., Benson, K., Gardner, C., Etnoyer, P. Potential for colony propagation in Mesophotic Octocorals of the Gulf of Mexico. Ocean Sciences Meeting. Louisiana, US.
- 2023 **Gómez-Corrales, M.**, González, A., Kamel, B., Medina, M., Levitan, D.R., Knowlton, N., Prada, C. Coral cryptic lineages segregate across a depth cline in the Caribbean. Ecological and Evolutionary Genomics Gordon Research Conference. Rhode Island, US.
- 2022 Alvarado-Cerón, V., Gómez-Corrales, M., Padilla-Souza, A.C., León-Pech, M.G., Rivera-Madrid, R., Prada, C., Arias-Gónzalez, J.E. Population genomics of natural and restored populations of the Elkhorn coral in northern Quintana Roo, Mexico. 15th International Coral Reef Symposium, Bremen, Germany.
- 2019 **Gómez-Corrales, M**., Chamberland V, Snowden S, Vermeij M.J., Sánchez J.A. Temporal reproductive isolation uncovers cryptic speciation in a common Caribbean brain coral. Evolution. Providence, US.
- 2011 **Gómez-Corrales, M**., Flórez, E., Fajardo Medina, G. E. Post-embryonic development stages of *Tityus columbianus* (Thorell, 1846), (Scorpiones, Buthidae): morphometric estimation approach. III Latin American Arachnology Conference. Armenia, Colombia.

RESEARCH EXPEDITIONS

- 2021 Puerto Rico (USA), 45 days
- 2018 Malpelo Island (Colombia), 10 days
- 2017 Malpelo Island (Colombia), 20 days
- 2017 San Andres Islands (Colombia), 12 days
- 2016 Curação Island (The Netherlands), 10 days
- 2015 Barú Island (Colombia), 7 days
- 2014 Rosario Islands (Colombia), 21 days
- 2013 Barú Island (Colombia), 21 days

MENTORING

- 2024 Blake Freas (University of Rhode Island)
- 2022 Willow Dunster (University of Rhode Island)
- 2022 Zack Bergeron (University of Rhode Island)
- 2019 2021- Myles Wagner (University of Rhode Island)
- 2017 Andrés Chilma (Universidad of Los Andes, Colombia)
- 2017 Diana Vergara (Universidad of Los Andes, Colombia)
- 2016 Karen Naranjo (Universidad El Bosque, Colombia)

SERVICE AND OUTREACH

- 2021 Student Chapter International Coral Reef Society English/Spanish Translator
- 2020 Current Biology Journal reviewer (1)
- 2020 Coral Reefs Journal reviewer (1)
- 2017 Coral Collection Curator, Universidad of Los Andes, Bogotá D.C.
- 2012 Student Representative, Marine Biology program. Universidad of Bogotá Jorge Tadeo Lozano
- 2011 Arachnological Collection Curator, Universidad of Bogotá Jorge Tadeo Lozano

PROFESSIONAL SOCIETIES

- 2022 Society for the Study of Evolution
- 2020 The Society of Systematic Biologists
- 2019 International Coral Reef Society

LANGUAGES

Spanish - Native

English - Proficient

Portuguese - Basic

REFERENCES

Dr. Carlos Prada Dr. Juan A. Sánchez Dr. Andrea Quattrini Dr. Roberto Iglesias-Prieto

prada@uri.edu juansanc@uniandes.edu.co QuattriniA@si.edu rzi3@psu.edu