

Jenny Rodríguez
Professor

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EDUCATION

- Ph. D. in Life and Health Sciences, 1994, Université Blaise Pascal, Clermont-Ferrand II. Ecole doctorale de sciences de la vie et de la santé, France
- DEA (Diplôme d'études approfondies) in Fundamental and applied biology, 1990, Université Blaise Pascal, Clermont-Ferrand II. Ecole doctorale de sciences de la vie et de la santé, France
- Bachelor in Biology, 1986, State University of Guayaquil, Faculty of Natural Sciences, School of Biology, Ecuador

SERVICE ON THIS FACULTY (10 years)

- 2013-present, Professor

OTHER RELATED EXPERIENCE

- 2023. Member of the organizing committee of the Marine Biology school, Daniel Jouvance Foundation, Sorbonne University, ESPOL
- 2023. Member of the organizing committee of the Ocean Pacific Talks (World Oceans Day), June 8 and 9
- 2022. Member of the organizing committee of the webinar for World Oceans Day, June 8 and 9 2021. Member of the organizing committee of the webinar for World Oceans Day, June 8 and 9
- 2012. Postdoctoral fellow. Université de Nice Sophia-Antipolis, France

CONSULTING AND PATENTS

- Invention patent, Food composition for aquatic organisms. SENADI-2021-592025

STATE IN WHICH REGISTERED (n/a)

- SENADI (Ecuador). International patent pending

PUBLICATIONS LAST FIVE YEARS

1. Agurto, G., Andrade, E., Tomalá, C., Domínguez, C., Guillén, P., Jaramillo, K., ... & Rodríguez, J. (2018). Database and WebGIS: tools for integration and access to biodiversity information of invertebrates of the marine reserve 'El Pelado'(REMAPE). *Neotropical Biodiversity*, 4(1), 173-178.
2. Steiner, S. C., Riegl, B., Lavorato, A., & Rodríguez, J. (2018). Community structure of shallow water Alcyonacea (Anthozoa: Octocorallia) from the southern Tropical Eastern Pacific. *Ecological research*, 33(2), 457-469.
3. Jaramillo, K. B., Reverter, M., Guillen, P. O., McCormack, G., Rodriguez, J., Sinniger, F., & Thomas, O. P. (2018). Assessing the zoantharian diversity of the Tropical Eastern Pacific through an integrative approach. *Scientific reports*, 8(1), 7138.

4. Guillen, P. O., Gegunde, S., Jaramillo, K. B., Alfonso, A., Calabro, K., Alonso, E., ... & Thomas, O. P. (2018). Zoanthamine alkaloids from the zoantharian *Zoanthus* cf. *pulchellus* and their effects in neuroinflammation. *Marine Drugs*, 16(7), 242.
5. Domínguez-Borbor, C., Chalén-Alvarado, B., & Rodríguez, J. A. (2018). A simple in vitro method to evaluate the toxicity of functional additives used in shrimp aquaculture. *MethodsX*, 5, 90-95.
6. Guillen, P. O., Calabro, K., Jaramillo, K. B., Dominguez, C., Genta-Jouve, G., Rodriguez, J., & Thomas, O. P. (2018). Ecdysonelactones, ecdysteroids from the Tropical Eastern Pacific zoantharian *Antipathozoanthus hickmani*. *Marine Drugs*, 16(2), 58.
7. Calabro, K., Chalén, B. E., Genta-Jouve, G., Jaramillo, K. B., Domínguez, C., de la Cruz, M., ... & Rodríguez, J. (2018). Callyspongic acids: Amphiphilic diacids from the tropical eastern pacific sponge *Callyspongia* cf. *californica*. *Journal of natural products*, 81(10), 2301-2305.
8. Domínguez-Borbor, C., Ardiles, V., Bermeo, M., Bolívar-Alvarado, C., Tomalá, C., Sonnenholzner, S., & Rodríguez, J. A. (2019). The marine symbiont *Pseudovibrio denitrificans*, is effective to control pathogenic *Vibrio* spp. in shrimp aquaculture. *Aquaculture*, 508, 127-136.
9. Guillen, P. O., Jaramillo, K. B., Jennings, L., Genta-Jouve, G., de la Cruz, M., Cautain, B., ... & Thomas, O. P. (2019). Halogenated tyrosine derivatives from the Tropical Eastern Pacific zoantharians *Antipathozoanthus hickmani* and *Parazoanthus darwini*. *Journal of natural products*, 82(5), 1354-1360.
10. Van Nguyen, T., Alfaro, A., Leon, J., Arroyo, B., & Sonnenholzner, S. (2020). Metabolomics investigation of molecular responses of whiteleg shrimp (*Penaeus vannamei*) to hypoxia. *Authorea Preprints*.
11. Domínguez-Borbor, C., Sánchez-Rodríguez, A., Sonnenholzner, S., & Rodríguez, J. (2020). Essential oils mediated antivirulence therapy against vibriosis in *Penaeus vannamei*. *Aquaculture*, 529, 735639.
12. Reyes, A., Restrepo, L., Domínguez-Borbor, C., Bajarña, L., Betancourt, I., Rodríguez, J., & Bayot, B. (2021). Application of probiotics mitigates acute hepatopancreatic necrosis disease in shrimp.
13. Alfaro, A. C., Nguyen, T. V., Bayot, B., Rodriguez Leon, J. A., Domínguez-Borbor, C., & Sonnenholzner, S. (2021). Metabolic responses of whiteleg shrimp to white spot syndrome virus (WSSV).
14. Nguyen, T. V., Alfaro, A., Arroyo, B. B., Leon, J. A. R., & Sonnenholzner, S. (2021). Metabolic responses of penaeid shrimp to acute hepatopancreatic necrosis disease caused by *Vibrio parahaemolyticus*. *Aquaculture*, 533, 736174.
15. Restrepo, L., Domínguez-Borbor, C., Bajarña, L., Betancourt, I., Rodríguez, J., Bayot, B., & Reyes, A. (2021). Microbial community characterization of shrimp survivors to AHPND challenge test treated with an effective shrimp probiotic (*Vibrio diabolicus*). *Microbiome*, 9, 1-20.
16. Jaramillo, K. B., Córdor-Luján, B., Longakit, B., Rodriguez, J., Thomas, O. P., McCormack, G., & Hajdu, E. (2021). New records of Demospongiae (Porifera) from Reserva Marina El Pelado (Santa Elena, Ecuador), with description of *Tedania* (*Tedania*) *ecuadoriensis* sp. nov. *ZooKeys*, 1011, 101.

17. Nguyen, T. V., Alfaro, A. C., Rodríguez, J., Bayot, B., & Sonnenholzner, S. (2022). Changes in metabolic profiling of whiteleg shrimp (*Penaeus vannamei*) under hypoxic stress. *Journal of Invertebrate Pathology*, 193, 107798.
18. Saucedo-Vázquez, J. P., Gushque, F., Vispo, N. S., Rodriguez, J., Gudiño-Gomezjurado, M. E., Albericio, F., ... & Alexis, F. (2022). Marine Arthropods as a source of antimicrobial peptides. *Marine drugs*, 20(8), 501.
19. Ramirez, M., Domínguez-Borbor, C., Salazar, L., Debut, A., Vizuite, K., Sonnenholzner, S., ... & Rodríguez, J. (2022). The probiotics *Vibrio diabolus* (Ili), *Vibrio hepatarius* (P62), and *Bacillus cereus sensu stricto* (P64) colonize internal and external surfaces of *Penaeus vannamei* shrimp larvae and protect it against *Vibrio parahaemolyticus*. *Aquaculture*, 549, 737826.
20. Alfaro, A. C., Nguyen, T. V., Rodríguez, J. A., Bayot, B., Domínguez-Borbor, C., Sonnenholzner, S., ... & Venter, L. (2022). Evaluation of immune stimulatory products for whiteleg shrimp (*Penaeus vannamei*) by a metabolomics approach. *Fish & Shellfish Immunology*, 120, 421-428.
21. Vergara-Florez, D. C., Abad, R., Jaramillo, K. B., Rodríguez, J., Sarmiento, A., & Sánchez, J. A. (2022). New octocoral records for the Ecuadorian Tropical Eastern Pacific. *Journal of Natural History*, 56(21-24), 1139-1151.
22. Constante, C. K., Rodríguez, J., Sonnenholzner, S., & Domínguez-Borbor, C. (2022). Adaptation of the methyl thiazole tetrazolium (MTT) reduction assay to measure cell viability in *Vibrio* spp. *Aquaculture*, 560, 738568.
23. Abad, R., Jaramillo, K. B., Castro, D., Sánchez, J. A., & Rodríguez, J. (2022, May). Octocoral Distribution Patterns at the Equatorial Front (Tropical Eastern Pacific): *Muricea* and *Leptogorgia*. In *Oceans* (Vol. 3, No. 2, pp. 218-230). MDPI.
24. Morales-Covarrubias, M. S., Ramírez-Azpilcueta, B. A., Rodríguez, J. A., & Rosa, R. D. (2023). An in vitro method for the analysis of hemocyte-derived extracellular traps in shrimp. *MethodsX*, 102220.

PROFESSIONAL SOCIETIES

- Women in Science Network

HONORS AND AWARDS

- 2002. CENAIM-ESPOL. Best research project: Effect of hyperthermia on the pathogenicity of WSSV. ·
- 2008. CENAIM-ESPOL. Best CENAIM researcher ·
- 2017. SENESCYT. National Awards 2017. Recognition for being the tutor of the winning project in the area of Marine Resources and Fisheries ·
- 2017. UPSE. For scientific work and support for students ·
- 2019. Special distinction from ESPOL for supporting and promoting ESPOL's aquaculture research activities ·
- 2021. ESPOL, Major Quartiles. Recognition of research by QS knowledge subarea in Pharmacy and Pharmacology. ·
- 2022. ESPOL, Major Quartiles. Recognition for Innovative Research.

INSTITUTIONAL AND PROFESSIONAL SERVICE (LAST FIVE YEARS)

- 1994-Present: Researcher in Shrimp Immunology. National Center for Aquaculture and Marine Research (CENAIM – ESPOL).
- 2013-Present. Director of the Marine Biodiversity and Biodiscovery Program, CENAIM-ESPOL

TIME DISTRIBUTION

30% Scientific research in marine biodiversity and biodiscovery, 45% Research in immunology and shrimp microbiology, 25% Teaching and supervision pre- and post-graduated.