



NAME: Margarete Bayron-Arcelay

DEGREE: Biology(MSc)-U. of Puerto Rico, Mayaguez (2017)
Biology/Microbiology(BSc)-U. of Puerto Rico,
Mayaguez (2014)

DEGREE SEEKING: Ph.D.

THESIS/DISSERTATION TITLE: It takes two to tango:
foraminifera and bacteria as bioindicators of estuarine health in
tropical/subtropical environments.

RESERCH INTEREST:

Coastal environments, hosts a great variety of ecosystems with biodiversity of fishes, birds, marine mammals, mangroves, sea grass beds and coral systems. Yet, is constantly being impacted by anthropogenic activities such as urban development. As a result, different parts of the marine ecosystem, such as water quality, sediment and organismal biodiversity started to be under pressure by these activities. Since conservation efforts are needed, I am interested in bio-monitoring anthropogenic activities in marine environments using benthic foraminifera as bio-indicators.

PUBLICATIONS:

- Ticak, T., Hariraju, D., **Arcelay, M. B.**, Arivett, B. A., Fiester, S. E., & Ferguson, D. J. (2014). Isolation and characterization of a tetramethylammonium-degrading Methanococcoides strain and a novel glycine betaine-utilizing Methanobolus strain. Archives of Microbiology, 197(2), 197-209.

ABSTRACTS:

- **Bayron-Arcelay M.** and Acosta-Mercado D. (2017) Spatial Distribution of Benthic Foraminifera Changes Through Time: Contrasting the Diversity Between Live and Dead Assemblages. IX Congreso de la Biodiversidad Caribeña. Santo Domingo, Republica Dominicana. (**POSTER**)
- **Bayron-Arcelay M.**, Rodriguez-Camacho K., and Acosta-Mercado D. (2016) Patch Size Does Matter: Diversity Patterns of Benthic Foraminifera Vary Across Time and Space in La Parguera, Puerto Rico. Society of Microbiologists of Puerto Rico (SMPR) Chapter of the Catholic University at Ponce, PR. (**ORAL**)
- Rodriguez-Camacho K., **Bayron-Arcelay M.**, and Acosta-Mercado D. (2016) Size and Shape Does Matter: A Morphometric Study of the Benthic Foraminiferal *Bolivina* sp. of La Parguera, Puerto Rico. Society of Microbiologists of Puerto Rico (SMPR) Chapter of the Catholic University at Ponce, PR. (**POSTER**)
- **Bayron-Arcelay M.** and Acosta-Mercado D. (2016) Patch Size Does Matter: Diversity Patterns of Benthic Foraminifera Vary Across Time and Space in La Parguera, Puerto Rico. IX Frontiers of Microbiologists Symposium. University of Turabo, Puerto Rico. (**POSTER**)
- Rodriguez-Camacho K., **Bayron-Arcelay M.**, and Acosta-Mercado D. (2016) Size and Shape Does Matter: A Morphometric Study of the Benthic Foraminiferal *Bolivina* sp. of

La Parguera, Puerto Rico. Undergraduate Research Symposium of the Biology Department at University of Puerto Rico at Mayaguez (URS-UPRM), PR. (**ORAL**)

- **Bayron-Arcelay M.** and Acosta-Mercado D. (2014) Intermediate disturbance hypothesis: Do benthic foraminifera follow the trend? Undergraduate Research Symposium of the Biology Department at University of Puerto Rico at Mayaguez (URS-UPRM), PR. (**ORAL**)

HONORS AND AWARDS:

- NOAA Center for Coastal and Marine Ecosystem (CCME) Scholarship, January 2018-present
- Latin American-Caribbean Scholarship, January 2018-present