

Jennifer Lynne Martínez Bocanegra

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EDUCATION

University of Washington, Seattle, WA **2019- Present**
Ph.D. student, Hoppins Lab, Department of Biochemistry
Marine Biological Laboratory, Woods Hole, MA **2017**
SPINES (Summer Program in Neuroscience, Excellence and Success)
University of Richmond, Richmond, VA **2017**
Additional coursework in Biochemistry and Biological Basis of Neurodegenerative Diseases
Interamerican University of Puerto Rico (IUPR), Metro Campus, San Juan, PR **2014**
B.S. in Biology

PROFESSIONAL EXPERIENCE

University of Washington, Seattle, WA **2019 – present**
Graduate Research Assistant, Suzanne Hoppins Lab

- Using *C. elegans* and mammalian cells, I aim to determine how the mitochondrial outer membrane fusion proteins are genetically and post-translationally regulated and the implications that this has on cellular function and health.

University of Washington, Seattle, WA **2018 – 2019**
Research Scientist I, Michael Ailion Lab

- Investigated the roles of newly identified proteins involved in dense-core vesicle biogenesis using *C. elegans*. Specifically, my aim was to determine the function of CPD and its possible relation to dense-core vesicles.

University of Richmond, Richmond, VA **2016 – 2018**
Post-Baccalaureate Research Assistant, Omar Quintero Lab

- Applied biochemical and cell biology techniques to better understand the role of Myosin 19 (Myo19), a novel motor protein, in mitochondria dynamics and behavior. Specifically, my focus was to determine the cellular roles associated with Myo19 and identify how it binds to the outer mitochondrial membrane.

Ciencia Puerto Rico and Yale Ciencia Initiative **2015 – 2016**
Leadership Intern and Project Coordinator

- Logistics and planning of Yale Ciencia Academy project.
- Handled communications and coordinated interviews with 11 STEM professionals for career exploration project titled "The Voice of Experience", to be released.
- Developed a successful crowd-funding campaign and fundraising materials that helped increase the visibility and network of the organization while raising \$15,000 to support the implementation of future science outreach programs.
- Coordinated collaboration with the VII International Spanish Language Congress to evaluate 90 entries to a national science essay competition for high school students in Puerto Rico. Helped manage and recruit 12 scientists and communicators to serve as jurors.
- Handled program logistics, social media, and communications with ~160 middle school students, their parents and mentors, and ~60 volunteers for the STEM outreach project Seeds of Success. Developed

surveys, coordinated focus groups, performed literature research, and analyzed data to evaluate how to implement this program on a broader scale.

Bahia Beach Resort & Golf Club, Río Grande, PR

2013 – 2015

Natural Resources Interpreter

- Aided in site visits with biologists, collecting and compiling data about flora and fauna for Audubon annual report indicating any noticeable changes in population.
- Designed and guided nature, kayak, walking and nursery tours within the property and close by areas for ~70 visitors every month.
- Supported the Natural Resources Manager in tasks related to conservation as well as with local, regional or international environmental initiatives

SERVICE AND VOLUNTEER EXPERIENCE

UW Biochemistry Department, Seattle, WA

2020-2021

- Served as a graduate student representative for the newly established DEI committee of the department. Roles included assisting in developing and establishing programs that would increase diversity and promote equity and inclusion and bridging the communication between the graduate students of the department and the DEI committee.

CienciaPR, Seattle, WA

2020

- Served as a virtual mentor to a young girl for the program Seeds of Success, which aims to increase participation of Hispanic women in STEM fields by exposing them to culturally relevant female STEM role models while developing their leadership skills. Assisted the participant in the development of a community outreach program that impacted over 200 people.

Burke Museum of Natural History, Seattle, WA

2019-2020

- SPARK volunteer program: Provided interpretation of exhibits to guests, helping them understand the significance of what they are observing and how it ties into their daily lives.
- Girls in Science: Assisted in the program that connects middle-school girls with women currently working in STEM fields. Aided the participants during activities and workshops.

Department of Natural Resources, San Juan, PR

2015

- Helped track and maintain records of Leatherback Sea Turtle nesting patterns.

Centro Ambiental Santa Ana, Bayamón, PR

2012 – 2015

- Assisted a project called "Forest, Nature and a Purpose... The Adventure Begins!", supervising 36 participants ages 8-12 with Attention Deficit and Hyperactivity Disorder (ADHD) during nature related activities. Helped assess and collect data on their behaviors to determine the effectiveness of programs involving nature therapy to reduce symptoms of ADHD in children.

Project “Más Bosques para Nuestra Ciudad”, San Juan, PR

2012 – 2014

- Assisted in the taxonomic identification of trees in the IUPR Metro Campus and aided in the design of 2 interpretive walkthroughs for high school and college students.

Center for Education, Conservation and Environmental Interpretation, San Juan, PR

2012 – 2014

- Led educational workshops on resource conservation for students and faculty IUPR metro campus.

PUBLICATIONS AND PRESENTATIONS

- **Bocanegra J.L.**, Adikes R., Quintero O.A. (2020) Myosin XIX. In: Coluccio L. (eds) Myosins. Advances in Experimental Medicine and Biology, vol 1239. Springer, Cham

- **Bocanegra, J. L.**, Fujita, B. M., Melton, N. R., Cowan, J. M., Schinski, E. L., Tamir, T. Y., ... Quintero, O. A. (2019). The MyMOMA domain of MYO19 encodes for distinct Miro-dependent and Miro-independent mechanisms of interaction with mitochondrial membranes. *Cytoskeleton*, (August), 1–18. <https://doi.org/10.1002/cm.21560>
- “Characterizing the function of CPD in *C. elegans*”, GSA International *C. elegans* meeting, Los Angeles, CA (2019). Poster presentation
- “Myo19 interacts weakly with Miro-family GTPases on the Mitochondrial outer membrane”, ASCB Meeting, San Diego, CA (2018). Poster Presentation
- “Characterization of a MYO19 knockdown phenotype in a cultured neuron-like cell line”, ASCB Meeting, Philadelphia, PA and Cytoskeleton Meeting, Saxapahaw, (2017). Poster Presentation.
- “Engaging the Public through Interpretation in a Private Sanctuary”, National Association for Interpretation Regional Workshop, San Juan, PR (2014). Talk.

AWARDS

- 2020 National Science Foundation, Graduate Research Fellowship
- 2019 University of Washington Department of Biochemistry, Top Scholar Award
- 2018 American Society for Cell Biology (ASCB) Minority Affairs Committee (MAC) Travel Award.
- 2018 National Institute of General Medical Sciences, NIH Research Diversity Supplement Award.

SKILLS

- Proficient in DNA analysis, cell culture, and immunocytochemistry
- Excellent science communication skills
- Organized and responsible project manager
- Able to work well independently as well as in a team
- Able to work well under pressure
- Fluent in English and Spanish