

Biographical Sketch

Derick N. Rosario Berrios

Current Status

Senior Undergraduate Student
Dept. of Chemistry, UPR-RP

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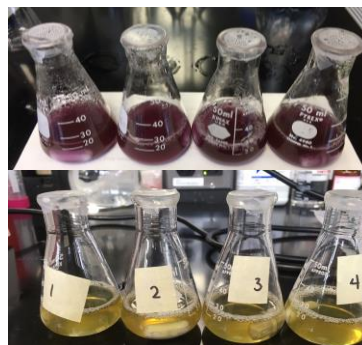
Education

B.S. Chemistry

University of Puerto Rico, Rio Piedras, Puerto Rico
Expected May 2019

Licensed Practical Nursing

Dr. José N. Gandara School, Aibonito, Puerto Rico
April 2014



Research Interests:

I currently am a nurse and after working with individual people for years, I decided that I want other challenges. My goal is to impact more than one person at a time. That's why I'm interested in research. I am interested in a research laboratory oriented to Biomedical Sciences for my professional development; specifically, in Gene Therapy and Vaccine.

RESEARCH EXPERIENCE & TRAINING

Undergraduate Research Fellow

Maximizing Access to Research Careers (MARC) Program

August 2016 – present

Puerto Rico Center Environmental-Neuroscience Program

2016 – August 2016

January

July

2015 – January 2016

Department of Chemistry, University of Puerto Rico, Rio Piedras, PR

Mentor: Liz Diaz Vazquez, PhD

- Understanding the effects of environmental stressors into the production of secondary metabolites by macroalgae and the possibility of the use of these compounds as biomarkers of environmental pollution
- Techniques: Gas chromatography, Mass Spectrometry, DPPH Method, Folin–Ciocalteu Method (total phenolic content)
- Publication: *PeerJ.* 2017; 5: e3677

Summer Undergraduate Internship Program Fellow

2017 – August 2017

Department of Medicine, University of Pennsylvania, Philadelphia, PA

Mentor: Ben Stanger, MD, PhD

- Studied the role of calcium signaling in epithelial mesenchymal transition (EMT).
- Techniques: Flow cytometry, western blotting techniques, RNA sequencing, Reverse transcription polymerase chain reaction

June

Research Experiences for Undergraduate (REU) Fellow

2016 – August 2016

Department of Chemistry, Pennsylvania State University, University Park, PA

Mentor: Scott A. Showalter, PhD

- Investigated the structure and function of Intrinsically Disordered Proteins with NMR

June

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- Techniques: Nuclear Magnetic Resonance 2 Dimension (NMR-2D), Paramagnetic Relaxation Enhancement

PUBLICATIONS

1. Toledo-Hernández, C, Ruiz-Díaz, CP, Díaz-Vázquez, LM, Santiago-Cárdenas, V, **Rosario-Berrios, DN**, García-Almedina, DM, Roberson, LM, *PeerJ*. 2017; 5: e3677

PRESENTATIONS

Poster Presentations

- Rosario, Derick.; Nogard, Robert J.; Stanger, Ben Z. *Assessing the role of calcium signaling in epithelial-mesenchymal transition (EMT)*. ABRCMS Conference. Phoenix, Arizona. (November 2017)
- Rosario, Derick.; Nogard, Robert J.; Stanger, Ben Z. *Assessing the role of calcium signaling in epithelial-mesenchymal transition (EMT)*. SACNAS National Conference. Salt Lake City, Utah. (October 2017)
- Rosario, Derick.; Nogard, Robert J.; Stanger, Ben Z. *Assessing the role of calcium signaling in epithelial-mesenchymal transition (EMT)*. Summer Undergraduate Internship Program Annual Research Symposium, University of Pennsylvania, Perelman School of Medicine, Philadelphia, Pennsylvania. (August 2017)
- Rosario, Derick.; Prieto, Victor; Showalter Scott A. *Investigating Intrinsically Disordered Proteins with NMR*. ABRCMS Conference. Tampa, Florida. (November 2016)
- Rosario, Derick.; Prieto, Victor; Showalter Scott A. *Investigating Intrinsically Disordered Proteins with NMR*. The Pennsylvania State University. State College, Pennsylvania. (August 2016)
- Rosario, Derick.; Garcia, Derek. Hernandez, Anibal. *VOCs Profiling of Seaweed via HS-SPME-GC/MS as an Indicator of Contaminants and Neurotoxins in Water*. Junior Technical Meeting. Ponce, Puerto Rico. (March 2016)
- Rosario, Derick.; Durán, Geraldo; González, Andrés F.; Mártir, Lina S. *Modificación del medicamento Hidroxicloroquina y la nanoencapsulación en Fosfato de Zirconio*. San Juan, Puerto Rico. (May 2016)

Oral Presentations

- Rosario, Derick.; Nogard, Robert J.; Stanger, Ben Z. *Assessing the role of calcium signaling in epithelial-mesenchymal transition (EMT)*. Leadership Alliance National Symposium. Hartford, Connecticut. (July 2017)
- Rosario, Derick.; Prieto, Victor; Showalter, Scott A. *Investigating Intrinsically Disordered Proteins with NMR*. The Pennsylvania State University. State College, Pennsylvania. (August 2016)

FELLOWSHIPS AND AWARDS

Intramural NIAID Research Opportunities (INRO) 2017
SACNAS Travel Award 2017
Emerging Researchers National (ERN) Conference Travel Award 2017
Puerto Rico Center Environmental-Neuroscience Program 2016

MARC Undergraduate Student Training in Academic Research Awards (U-STAR) Award (T34) 2016

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Nightingale Awards for Excellence in Nursing 2014
Dean's Honors List