

Nicole A. Rivera Fuentes

Barrio Piñas, Villa Juventud, P. #9 Toa Alta, Puerto Rico | 787- 435-2085 | nicole.rivera57@upr.edu

Education

Bachelor's Degree | Present | University of Puerto Rico, Río Piedras Campus

- Major: Chemistry
- GPA: 4.00
- Expected graduation: 2020

High School Diploma | May 2015 | Santo Tomás de Aquino Superior

- GPA: 4.00

Research Experience

- **Present-** Nanoscale electrodes derived from the block copolymer polystyrene-b-poly (methyl methacrylate) (PS-b-PMMA) for the electrochemical detection of beta-Methylamino-L-alanine (BMAA)

Principal Investigator: Dr. Eduardo Nicolau

My research focuses on the development of biosensors for the electrochemical detection of the neurotoxin BMMA. This neurotoxin, which is often found on groundwater, has been linked to neurodegenerative diseases. We are interested in developing a highly selective detection method by using a BMMA specific aptamer in an electrochemical sensor.

- **January 2017-August, 2017-** On the Development of Catalytic Polymeric Membranes for Water Purification and Resource Recovery from Wastewater for Life Support Systems

Graduate Student: Perla E. Cruz Tato; Principal Investigator: Dr. Nicolau,

The aim of this project was to develop and characterize a novel catalytic and anti-fouling forward osmosis membrane for water purification applications and resource recovery from wastewater.

Presentations

- 255th American Chemical Society National Meeting & Exposition, New Orleans, Louisiana, March 18-22, 2018

Honors

- **2017-** Research Initiative for Scientific Enhancement (RISE) Fellowship