

## Biographical Sketch

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*Estrella M. Otero González*

### Current Status

B.S. Student  
Dept. of Chemistry  
University of Puerto Rico, Río Piedras Campus

**Email:** estrella.otero@uprrp.edu

### Education

2012-present University of Puerto Rico-Río Piedras  
2019 BS Chemistry (expected)



### Research Interests:

Lung cancer is the leading cause of cancer-related death worldwide. Currently scientists have not been able to produce an effective and targeted approach to treat large cell carcinoma (LCC) nor small cell lung cancer (SCLC). One of the most promising drug delivery systems are based on the use of nanoparticles, due to their size and functionalization capacities. My interest is to contribute to this field, applying the extraction of bioactive compounds from green macroalgae (*Ulva fasciata*) in order to produce non-toxic carbon nanomaterials, in an effort to create novel ways to combat cancer development.

### Research Experience

2016 - 2017 Puerto Rico Center for Environmental Neuroscience

#### Projects

2016 Study of the myocardial effect on the *Callinectes sapidus* exposed to sub-lethal  
2016 Annual variation in the presence and distribution of phthalates and PAH's in the San Juan Bay Estuary  
2016 Detection of Persistent Organic Contaminants in Riparian Spiders within the Rio Piedras Watershed  
2017 Synthesis and Functionalization of Fluorescent Carbon Nanoparticles for Bioremediation

### Honors

2012-present Dean's List  
2016-present Student Affiliate American Chemical Society (ACS)  
2017-present Minority Access to Research Careers (MARC) Program Trainee

### Presentations at Local Meetings

2016 PRCEN 5th Annual Retreat  
2016 Undergraduate Research Poster Presentation - PRCEN Summer Internship