

## Biographical Sketch

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### **IRIVETTE DOMINGUEZ-MARTINEZ**

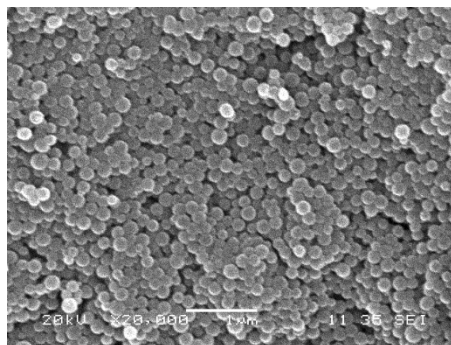
#### **Current Status**

PhD Candidate  
Department of Chemistry, UPR-Rio Piedras

**Email:** irivette.dominguez@upr.edu

#### **Education**

2011-2016 BS Chemistry  
2016-present Chemistry Graduate Program,  
UPR-Río Piedras  
2021 PhD Chemistry (expected)



**Current Research Interests:** My research has focused on the development of a folic acid-conjugated cross-linked cytochrome c nanoparticles as smart carrier combining triggered release and active targeting for lung cancer therapy. We are currently evaluating the apoptotic efficiency of the Cyt c-based NPs *in vitro* using folate-receptor expressing cancer cells.

#### **Research Experience**

2018- present Lab Manager, P. I. Kai Griebenow, Ph. D. candidate UPR-RP  
2016- present Ph.D. Candidate, Applied Biochemistry, P. I. Dr. Kaim Griebenow, UPR-RP

#### **Teaching Experience**

2019 Co-Mentor, NSF-REU: CLIMB, UPR, RP  
2018 Co-Mentor, NSF-REU: CLIMB, UPR, RP  
2016-2018 Teacher Assistant, General Chemistry Laboratory I and II, UPR-RP  
2016-2018 General Chemistry Mentoring, Pre-MARC, UPR-RP  
2014-2015 Tutor of General Chemistry, General Chemistry, UPR-Cayey

#### **Other Research Activities**

2018 Graduate Chemistry Program Student Representative, Faculty of Natural Science, Department of Chemistry, University of Puerto Rico, Rio Piedras Campus  
2018 Hands-on workshop in the acquisition and analysis of fluorescence microscopy images  
2018 SREB-State Doctoral Scholars Program  
2018 Asociación Graduada de Química (AGQ), UPR-RP  
2017 Hand-On Chemistry ACS-Chemistry Rocks Experiments Volunteer Member  
2013 American Chemical Society, UPR-Ceyey  
2014 American Medical Student Association (AMSA), UPR-Cayey

#### **Honors**

2019- present Research Initiative for Scientific Enhancement (RISE) Fellowship  
2018- 2019 Puerto Rico NASA Space Grant Fellowship  
2017-present Golden Key International Honor Society

#### **Presentations at Local Meetings**

Irivette Domínguez-Martínez and Kai Griebenow. Synthesis and Characterization of a Cytochrome c-based Nanoparticle Combining Stimulus-Triggered Release and Active Targeting for Lung Cancer Therapy. ACS-Junior Technical Meeting, University of Turabo, Gurabo, Puerto Rico, April 28, 2018.

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Irivette Domínguez-Martínez and Kai Griebenow. Smart Release Nano-formulation of Cytochrome C for Lung Cancer Therapy. Colegio de Químicos de Puerto Rico Chemical Conference and Exhibition (PRCHEM), Rio Grande, Puerto Rico, August 1-3, 2018.

Irivette Domínguez-Martínez and Kai Griebenow. Smart Release Cross-linked Cytochrome C Nanoparticles for Active Targeting of Folate Receptor-Positive Lung Cancer Cells. American Chemical Society 41st Senior Technical Meeting, Guayanilla, Puerto Rico, November 10-11, 2018.

Irivette Domínguez-Martínez, Adriana Soto Bibiloni and Kai Griebenow. Smart Redox-Triggered Release Cytochrome C Nanoparticles for Folate-targeted Lung Cancer Therapy. ACS-Junior Technical Meeting, University of Puerto Rico, Mayaguez, Puerto Rico, May 4, 2019.

### **Presentations at National Meetings**

Irivette Domínguez-Martínez, Yancy Ferrer, and Kai Griebenow. Folic Acid Conjugated Cross-Linked Cytochrome C Nanoparticles Combining Triggered Release and Active Targeting for Lung Cancer Therapy. ACS National Meeting & Exposition, Orlando, Florida, March 31-April 4, 2019.

### **Publications**

Gaur, K., Vázquez-Salgado, A., Duran-Camacho, G., Dominguez-Martinez, I., Benjamín-Rivera, J., Fernández-Vega, L., Carmona Sarabia, L., Cruz García, A.; Pérez-Deliz, F., Méndez Román, J.A., Vega-Cartagena, M. Loza-Rosas, S.A., Rodriguez Acevedo, X., Tinoco, A.D. (2018). Iron and Copper Intracellular Chelation as an Anticancer Drug Strategy. *Inorganics*, 6(4), 126.