

# Cristian D. Martinez-Ramos

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## CURRENT STATUS

**UNDERGRADUATE STUDIES, DEPT. OF CHEMISTRY, UPR-RIO PIEDRAS**

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## EDUCATION

2016-PRESENT

**BS. CHEMISTRY, UNIVERSITY OF PUERTO RICO-RIO PIEDRAS**

Cumulative GPA: 3.73

2012-2016

**HIGH SCHOOL DIPLOMA, COLEGIO NUESTRA SEORA DEL CARMEN**

## CURRENT RESEARCH INTERESTS

My research focuses in the elucidation of the lipid membrane composition of Torpedo Nobileana's electric organ; rich source of nicotinic acetylcholine receptors (nAChR). The activity of these membrane proteins in many cases is dependent on the lipid environment in which these are found in their respective tissues. The problem we intend to address in our research is if by using lipid like detergents, we can end up having a non-delipidated receptor which preserves its functionality. For this, we hypothesize that if the annular lipid composition on nAChR is unique for its functionality, then other torpedo species like the *nobileana* will contain the same annular lipid composition around the nAChR. Therefore, we seek to determine if there will be identical lipids around the nAChR within the two different families of torpedoes (*Torpedo Californica* and *Torpedo nobileana*). By identifying these critical lipids, we can isolate functional preparations of nAChR for crystallization studies.

## HONORS

**2019-Present** Maximizing Access for Research Careers (MARC) Fellowship.

**2017-2019** Research Initiative for Scientific Enhancement (RISE) Fellowship.

**2019** Certificate of Achievement for Successful Completion of the 2019 Summer Research Opportunity Program.

**2018** Certificate of Achievement in recognition of "Outstanding presentation" presented at the Annual Biomedical Research Conference for Minority Students in the area of Biochemistry.

**2018** Certificate of Excellence for participating in the 2018 Summer Undergraduate Internship Program at the University of Pennsylvania.

## PRESENTATIONS

De, T.; Sanchez, S.; Perera, M.; Martinez, C. (**2019**, November 16) Genetic Basis of Pharmacokinetic Variability of Clopidogrel in African Americans. Poster session presented at the Annual Biomedical Research Conference for Minority Students Anaheim, CA.

De, T.; Sanchez, S.; Perera, M.; Martinez, C. (**2019**, August 8) Genetic Basis of Pharmacokinetic Variability of Clopidogrel in African Americans. Poster session presented at the Summer Research Opportunity Program 34<sup>th</sup> Research Forum at Northwestern University, Evanston, IL.

Melton, S., Kasznel, A., Martinez, C. (**2018**, November 17) Synthesis and Characterization of Pro-Pro-Gly and Pro-Pro-azGly Collagen Model Peptides. Poster session presented at the Annual Biomedical Research Conference for Minority Students, Indianapolis, IN.

Melton, S., Kasznel, A., Martinez, C. (**2018**, August 9) Synthesis and Characterization of Pro-Pro-Gly and Pro-Pro-azGly Collagen Model Peptides. Poster session presented at the 25th Annual Summer Undergraduate Internship Program - SUIP Research Symposium at the University of Pennsylvania, Philadelphia, PA.

Melton, S., Kasznel, A., Martinez, C. (**2018**, July 28) Synthesis and Characterization of Pro-Pro-Gly and Pro-Pro-azGly Collagen Model Peptides. Oral session presented at the Leadership Alliance National Symposium, Hartford, CT.