

Biographical Sketch

Andrea Rodríguez-Villafañe

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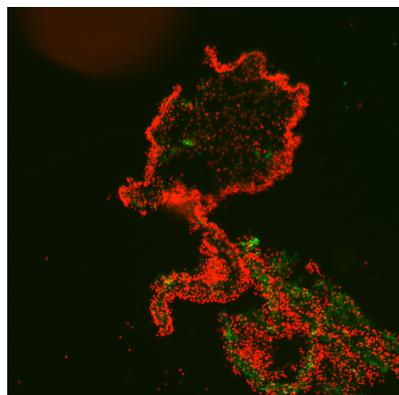
Current Status

B.S. Candidate

Dept. of Biology, UPR- Río Piedras

Education

2016-present BS. Integrative Biology, UPR- Río Piedras



Current Research Interests

I am passionate about microbiology and minority health disparities research. During my undergraduate years, I have had the opportunity to participate in different research projects that have increased my knowledge in these fields. I participated on projects that aimed to identify potential vaccine candidates against *Plasmodium falciparum* malaria, evaluate the toxicity of novel lead antimalarial compounds on erythrocytes, and examine the efficiency of Cystic Fibrosis gene therapy vectors. Currently, I am exploring the intersection of microbiology and developmental biology by studying whether the gut microbiota of the sea cucumber *Holothuria glaberrima* has an effect on its intestinal regeneration process.

Research Experience

2019-present UPR- Río Piedras, Undergraduate Researcher (mentor: Dr. José García Arrarás)

2019 summer University of Pennsylvania, Intern (mentor: Dr. Maria Limberis)

2018-2019 UPR- Río Piedras, Undergraduate Researcher (mentor: Dr. Adelfa E. Serrano)

2018 summer Brown University, Intern (mentor: Dr. Jonathan Kurtis)

2017-2018 Brown University, Undergraduate Researcher (mentor: Dr. Jonathan Kurtis)

Presentations at local meetings

Andrea Rodríguez-Villafañe, Leah Kuntz, Maria Limberis. Evaluation of Virus-based vectors for Cystic Fibrosis Gene Therapy. 6th Annual UPR Chapter ASBMB Research Symposium. San Juan, PR, August 21, 2019

Andrea Rodríguez-Villafañe, Leah Kuntz, Maria Limberis. Evaluation of Virus-based vectors for Cystic Fibrosis Gene Therapy. University of Pennsylvania Research Symposium. Philadelphia, PA, August 8, 2019

Andrea Rodríguez-Villafañe, Jafet A. Rivera-Pedrosa, Emilee E. Colón-Lorenzo, Adelfa E. Serrano. Red Blood Cell Lysis Assay for the Evaluation of Novel Lead Antimalarial Compounds. 53rd ACS Junior Technical Meeting (PRISM/JTM), Mayaguez, PR, May 4, 2019

Andrea Rodríguez-Villafañe, Harry G. Ramírez, Juan O. González Velázquez, Angélica K. de Jesús-Sosa, José G. Ortiz, Emilee E. Colón-Lorenzo, Adelfa E. Serrano. The *Plasmodium berghei abcg* gene is associated with antimalarial drug resistance and expression of detoxification genes. 6th Student Research Symposium Puerto Rico Society of Microbiologists, Ponce, PR, December 1st, 2018

Andrea Rodríguez-Villafañe, Alok Das Mohapatra, Anup Jnawali, Dipak Raj, Jonathan Kurtis. Evaluation of the anti-parasitic effect of *Plasmodium falciparum* specific murine antibodies in *in vitro* assays. Brown Research Symposium 2018. Providence, Rhode Island, August 3-4, 2018

Presentations at national meetings

Andrea Rodríguez-Villafañe, Jafet A. Rivera-Pedrosa, Emilee E. Colón-Lorenzo, Adelfa E. Serrano. Red Blood Cell Lysis Assay for the Evaluation of Novel Lead Antimalarial Compounds. Annual Biomedical Research Conference for Minority Students. Anaheim, CA, November 13-17, 2019

Andrea Rodríguez-Villafañe, Leah Kuntz, Maria Limberis. Evaluation of Virus-based vectors for Cystic Fibrosis Gene Therapy. Leadership Alliance National Symposium. Hartford, CT, July 26-28, 2019

Andrea Rodríguez-Villafañe, Alok Das Mohapatra, Anup Jnawali, Dipak K. Raj, Jonathan Kurtis. Evaluation of the anti-parasitic effect of *Plasmodium falciparum* specific murine antibodies in *in vitro* assays. Annual Biomedical Research Conference for Minority Students. Indianapolis, IN, November 14-17, 2018

Andrea Rodríguez-Villafañe, Alok Das Mohapatra, Anup Jnawali, Dipak Raj, Jonathan Kurtis. Evaluation of the anti-parasitic effect of *Plasmodium falciparum* specific murine antibodies in *in vitro* assays. Leadership Alliance National Symposium 2018. Hartford, Connecticut, July 28-29, 2018