

**Ester Álvarez Benedicto**

**Current Status:**

B.S. Student

Dept. of Chemistry

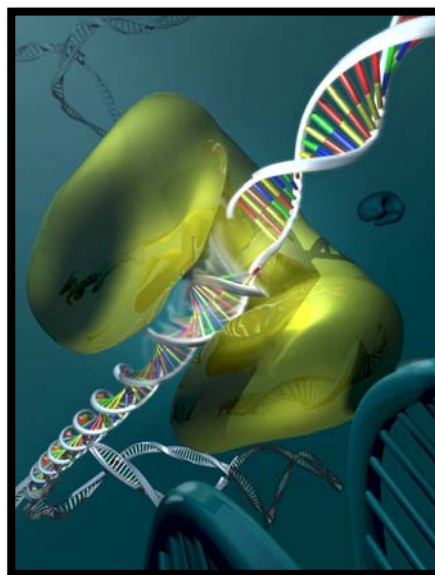
University of Puerto Rico, Río Piedras Campus

**Email:** ester.alvarez@upr.edu

**Education**

2013-present      University of Puerto Rico-Río Piedras

2018                BS Chemistry (expected)



**Research Interest:**

Nature has been the source of inspiration for the design and development of novel treatments for several diseases such as visceral leishmaniasis and cancer. Our laboratory focuses on the synthesis of acetylenic and olefinic fatty acids as potential antileishmanial and anticancer agent by targeting the Topoisomerase IB enzymes of each type of cell. These enzymes are involved in the relaxation of the DNA during replication and transcription processes. Their inhibition is achieved by the interactions of the fatty acids with the active site, which compromises the integrity of the DNA.

**Research Experience**

2015                University of Puerto Rico, Lipid Chemistry and Synthesis of Marine Natural Products for Biomedical Application (Mentor: Dr. Néstor M. Carballeira)

**Honors**

2013-present      Dean's List

2016                Minority Access to Research Careers (MARC) Program Trainee

**Presentations at Local Meetings**

2016                36<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting, 51<sup>th</sup> Junior Technical Meeting. Ponce, PR (Oral presentation)