



Jessica I. Rivera Pérez

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Education

University of Puerto Rico-Rio Piedras Campus, Puerto Rico
Bachelor of Science, May 2012 (Magna Cum Laude)
Major: Cellular-Molecular Biology

Research Experience

Undergraduate Research

Laboratory of Environmental Microbiology (Dr. Gary A. Toranzos, PI)

2010-2012: "Antibiotic-resistance and virulence genes in the bacterial and viral fractions of tropical environmental samples" (article published in 2013; See Publications)

2010-2012: "Novel Reservoirs for *mecA*: Conferring Methicillin-Resistance in Tropical Environments."

2011-2012: "Identification, isolation and adaptation of fresh and marine water microalgae in Puerto Rico, as possible biofuel sources" (stipend funded by the Center for Renewable Energy and Sustainability, UPR)

Graduate Research

Laboratory of Environmental Microbiology (Dr. Gary A. Toranzos, PI)

2012 to present: "Isolation and characterization of halo-viruses found in the Uyuni salt flat (Bolivia)." (manuscript in process)

2012 to present: "Genomic survey of microbial diversity preserved within 4,000 year old coprolites from two ancient civilizations in Vieques, Puerto Rico." (manuscript in process)

Funding History

2010-2011: Undergraduate fellowship funded by the Center for Renewable Energy and Sustainability (CRES-UPR) University of Puerto Rico, Rio Piedras

2012-2013: Teaching Assistant at General Microbiology Laboratory (University of Puerto Rico, Rio Piedras Campus)

2013-present: Graduate Funding provided by Research Initiative for Scientific Enhancement (RISE) Program

Publications	<p>"Antibiotic-resistance and virulence genes in the bacterial and viral fractions of tropical environmental samples" Santiago-Rodriguez, TM., Rivera, JI., Coradin, M. and Toranzos, GA (Journal of Water and Health In Press, Uncorrected Proof © IWA Publishing 2013 doi:10.2166/wh.2013.005)</p> <p>"<i>luxS</i> in bacteria isolated from 25 to 40 million year-old amber" Santiago-Rodriguez, TM., Patricio, AR., Rivera, JI., Coradin, M., Gonzalez, A., Tirado, G., Cano, RJ., Toranzos, GA (FEMS Microbiology Letters, 2013; doi: 10.1111/1574-6968.12275)</p> <p>"Data on ancient microorganisms causes skepticism" Santiago-Rodriguez, T., Cano, R., Toranzos, G., Patricio, A., Rivera-Perez, J. (FEMS Microbiology Letters, 2014; FEMSLE-14-02-0172)</p>
Presentations and Posters	<p>Poster Session: '2011 Health-Related Water Microbiology Symposium' (Rotorua, New Zealand) "Prevalence of Methicillin-resistance genes and MRSA in tropical recreational waters and sewage"</p> <p>Oral Presentation: '42nd Annual Junior Tech Conference 2012' (University of Puerto Rico Campus of Carolina) "Microalgae-based biodiesel production: Possible in Puerto Rico?"</p> <p>Poster Session: '2012 Lilly Academy Technical Forum' (Sila M. Calderon Foundation, Rio Piedras, PR) "Evaluation of Methicillin-resistance in Environmental <i>Enterococcus</i> spp."</p> <p>Poster Session: '2012 American Society for Microbiologists Conference' (San Francisco, California) "Prevalence of Methicillin-resistance (<i>mecA</i>- and Non-<i>mecA</i>-conveyed) in Environmental Enterococci Isolates".</p> <p>Invited Oral Presentation: '2012 Symposium for Scientific Investigation' (University of Puerto Rico, Campus of Bayamon) "Studying Microbiology: A fascinating field full of discoveries!"</p> <p>Invited Oral Presentation: '2013 U.S. Recreational Water Quality Criteria: A Vision for the Future', (Water Resources Research Center, University of Hawaii, Manoa) "Bacteriophages, coliphages, enterophages: from D'Herelle to What-the-Hell?"</p> <p>Poster Session: '2013 American Society for Microbiologists Conference' (Denver, Colorado) "Novel Reservoirs for <i>mecA</i>: Conferring Methicillin-Resistance in Tropical Environments"</p> <p>Poster Session: '2013 American Society for Microbiologists Conference' (Denver, Colorado) "Diversity of Extremophiles in Salt Flats of Bolivia and Puerto Rico"</p>
Activities	<p>2011- present: Training and mentoring students in undergraduate research (BIOL 4990)</p> <p>2012-2013: Teacher's Assistant at the General Microbiology Laboratory</p> <p>2013- present: Vice-President of the Microbiology Student Chapter of the University of Puerto Rico, Rio Piedras Campus</p>

References

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