Fransheska Joanne Rivera Vega, M.S.

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EDUCATION

University of California, Berkeley CA
Master of Science in Microbiology | 2011

University of Puerto Rico, Mayagüez P.R.
Bachelor of Science in Industrial Biotechnology | 2009
Graduation Honors - *Cum Laude*

WORK EXPERIENCE

Gordon and Betty Moore Foundation |Palo Alto, CA

Program Associate | Marine Microbiology Initiative, Science Program — April 2013 – Present

- ☐ Provide programmatic and administrative support to the Initiative.
- ☐ The primary responsibilities include ensuring that the systems to manage grants and strategic program workflows are implemented efficiently by the MMI team through effective team coordination.

Microbiology & Quality Associates, Inc. |Concord, CA

Project Manager and Environmental Monitoring Coordinator | Microbiology Laboratory — April 2012 – April 2013

- ☐ Responsibilities include: communicating with client (meetings, conference calls or emails), generation of documentation (protocols and procedures), experimental design, placing schedules and maintaining it up to date for all parties involved, ensuring all resources are available (quotes, purchase orders and work orders), training, traveling to site and supervising execution, data analysis and report, and follow up support.

Microbiology Analyst | Microbiology Laboratory — May 2011 – April 2012

- ☐ As team leader of the microbiology laboratory, responsibilities include managing technicians and scheduling daily tasks. Execute and report microbiological tests according to USP as well as chemical tests. Other responsibilities include maintenance of the laboratory equipment and laboratory reagents/supplies.
- ☐ Assist in method validation activities, including experimental design, data collection, data analysis, and report preparation.

Department of Plant and Microbial Biology | UC - Berkeley

Graduate Student Instructor | Microbiology Laboratory — August 2010 – December 2010

- ☐ As an instructor of microbiology, taught laboratory lectures and guided students step by step during each experiment. Discussed the scientific method in detail and evaluated their critical thinking through laboratory reports.

Amgen Scholars Program by The Amgen Foundation | UC - Berkeley

Graduate Student Advisor | Scientific training and mentorship — May 2010 – August 2010

- ☐ Under the guidance of Ms. Audrey Knowlton, advised undergraduate students' independent research with a faculty professor at UC Berkeley.

Bioprocess Development and Training Center | Mayagüez, PR

Internship Industrial Biotechnology — August 2008 – December 2008

- ☐ Start up team in charge of development of SOPs and validation for all the new scientific equipment of this center.
- ☐ Collaborated with the administrative offices in the procurement system and public relations.

RESEARCH EXPERIENCE

Applied Environmental Microbiology Lab | UC - Berkeley

Graduate Student Researcher | Applied Environmental Microbiology — August 2009 – May 2011

- ☐ Worked in the Coates lab studying physiological mechanisms and environmental determinants of microbial metabolisms. Collaborated on unraveling the genetic and biochemical mechanisms of nitrate dependent iron (II) biooxidation at neutral pH.
- ☐ Explored other forms of primary productivity in non-photosynthetic microorganisms, like coupling photoreduced humics to abiotic iron reduction creating bioavailable iron for microbial oxidation.

Amgen Scholars Program by The Amgen Foundation | UC - Berkeley

Undergraduate Student Researcher | Applied Environmental Microbiology June 2008 – August 2008

- Under the mentoring and guidance of Dr. John Coates, successfully developed a novel spectrophotometric assay for rapid screening of a transposon library of mutants as part of understanding the genetic mechanisms of anaerobic nitrate dependent iron biooxidation.

Tropical Microbial Ecology Lab Sponsored by BioMINDS (Amgen Foundation) | UPR - Mayagüez

Undergraduate Student Researcher | Molecular Biology, Ecology and Statistics January 2007 – May 2009

- Under the mentoring of Dr. Arturo Massol-Deya, worked on a project which provided primary insight of the microbial diversity of the phyllosphere of tropical forest and the coffee tree in Puerto Rico through TRFLP of 16S rDNA.

REU Molecular Genetics & Biochemistry | OSU - Columbus

Undergraduate Student Researcher | Structural Biology, Biophysics and Biochemistry June 2006 – August 2006

- Under the mentoring of Dr. Mark P. Foster, worked on a project characterizing protein-protein interactions between the subunits of the Ribonuclease P through NMR Spectroscopy.

NIH Center Of Biomedical Research Excellence | UPR-Mayagüez

Undergraduate Student Researcher | Microbiology and Ethno Botany January 2005 – August 2006

- Evaluated different bioanalytical and microbiological methods to search for antimicrobial activity in the sap of *Musa paradisiaca* with Dr. Joseph Bonaventura.

VOLUNTEER EXPERIENCE

Casa Pueblo Institute of Biodiversity and Culture | Adjuntas, PR

Active Member since June 2003

- Volunteered in different cultural and educational activities as an interpretative guide in Bosque Del Pueblo. Collaborated in a hydroponics cultivar research with Dr. Arturo Massol and Ariel Massol.
- Supported and promoted the active conversationalist cause of the organization for projects such as conservation and management of Bosque de la Olimpia, and Vieques Island Restoration.

Ciencia Puerto Rico (www.cienciapr.com) | Web Based

Active Member since May 2011

- CienciaPR is a web based networking alliance for Puerto Rican scientists and students. Involved in promoting scientific research and creating a link between industry and academia.

Annual Biomedical Research Conference for Minority Students, 2009 | Phoenix, AZ

- Ambassador of the University Of California- Berkeley outreach initiative to recruit minority students for math and science graduate programs.

MARC and Sloan Program of the University of Puerto Rico | Mayaguez, PR

- Volunteered as a mentor for the 2009 summer workshops on laboratory research for freshmen in the fields of biochemistry, genetics and molecular microbiology.

Upward Bound Math and Sciences of the Interamerican University of Puerto Rico | San German, PR

- Participated from 2002 to 2004 of this federal outreach program whose purpose is to engage outstanding high school students in math and science by taking college level courses and performing independent scientific research.

SELECTED PUBLICATIONS, AWARDS AND RECOGNITIONS

Van Trump, J.I., Rivera Vega, F.J. and Coates, J.D. 2013. Natural organic matter as global antennae for primary production. *In Press.*

August 2009 | International House Gateway Fellowship Award of UC-Berkeley
2008| Featured BioMINDS student from the UPR - Mayaguez | Amgen Foundation Charitable Contributions Report 2008
November 2008 | Microbiology Poster Presentation Award | Annual Biomedical Research Conference for Minority Students
2008 - 2009| NIH Foundation Minority Access to Research Career (MARC)
2008 - 2009| Biotechnology Mentorship Initiative to Develop Scientists Program (BioMINDS) | The Amgen Foundation
2004 – 2009 | Honor Roll of the College of Arts and Science of the UPR - Mayagüez
2004 – 2009 | National Math and Science SMARC Scholarship

QUALIFICATIONSAND TECHNICAL SKILLS

- Experience in project management and administration
- Experience in documentation for academic and industrial field (i.e. protocols, SOPs, reports)
- Experience in mentoring and training in the academic and industrial environment
- Development, optimization and validation of microbiological assays
- Mastery of the following techniques: Anaerobe microbe culture, DNA extraction, PCR and rt-qPCR, FISH, T-RFLP for 16S rDNA analysis, sequencing, cloning, cell culture, electrophoresis, HPLC, IC, GC, TOC, LAL Endotoxin and MIC

studies
- ☐ Strong communication skills in English and Spanish
- ☐ Proficiency in MS Office software