

Biographical sketch

Carlos Ríos-Velázquez

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Academic Background

- 2003 - Present Associate Professor, UPR- Mayagüez, Biology Department
- 2001 - Assistant Professor, UPR-Mayagüez, Biology Department
- 2001 - Post Doctoral Fellow
Dr. Stephen Leppla's laboratory, NIDCR, National Institutes of Health, Bethesda, Maryland
- 2000 - PhD in Bacteriology U-Wisconsin-Madison, Madison, Wisconsin
- 1993 - Master in Sciences in Biology UPR-Mayagüez Campus
- 1989 - Bachelor in Science in Industrial Microbiology UPR-Mayagüez Campus.
- 1989 - Teacher License for Secondary School Education in Sciences
From the Department of Education of PR.

Academic appointments

- 2006 – present Undergraduate Science Mentoring Coordinator, PR-LSAMP, UPR-Mayaguez.
- 2005 – present Co-Director – Center for Hemispherical Cooperation in Research and Education in Engineering and Applied Sciences (CoHemis).University of Puerto Rico at Mayagüez.
- 2004 – present Biotechnology Advisory Board. Council for Superior Education in Puerto Rico (CES).
- 2002- present President of the Scientific Review Committee
Southwestern Educational Society (SESO) Mayagüez, PR.
- 2000 - present Research Methods professor of the Science and Math
Upward Bound Summer Program Interamerican UPR-Ponce.
- 1994 - 1995 Faculty at Pontifical Catholic University of PR at Ponce
- 1993 - Faculty at Interamerican University of PR at Arecibo
- 1992 - 1995 Qualified Assessor on the Academy of Scientific Research
for Talented Students (AICET). Interamerican University, San
Germán Campus
- 1991 - 1994 Faculty at Interamerican University, San Germán Campus
Upward Bound Science and Math Program.

Honors

- 2005 Computational and System Biology initiative (CSBi) awardee.
Massachusetts Institutes of Technology (MIT).
- 2002 Institute for teaching and mentoring, Bridges Scholar Awardee, Virginia
- 2002-2003 NSF/DOE Faculty and Students Team Program (FaST) awardee,
LBLN, Berkeley
- 2000 Chair's Award. University of Wisconsin-Madison Microbiology Department.
- 1999 Vilas Professional Development Award. Madison-Wisconsin.
- 1998 Predoctoral Fellowship for Minority Students, National Research Service

Award (NRSA), 1FGM19382
1996 Advanced Opportunity Fellowship (AOF). Graduate School, UW-Madison
1989 Medal of excellence in teaching, Teachers Association of Puerto Rico

Relevant publications

Ríos-Velázquez, C., R. Cox, and T.J. Donohue. 2001. Characterization of ***Rhodobacter sphaeroides* cytochrome c_2 proteins with altered heme attachment sites**. Archives of Biochemistry and Biophysics. 389: 234-244.

Ríos-Velázquez, C., Coller R., and T.J. Donohue 2003. Features of ***Rhodobacter sphaeroides* CcmFH**. J. Bacteriol. 185:2: 422-431.

López G.J., and C. Ríos-Velázquez. 2005. **A non-toxic Scanning Electron Microscopy Method to Study the Reproductive Structures of Agaricales Using Simple Fixation in the Field**. *Caribbean Journal Science*. 857-860.

Ríos-Velázquez, C., R. Robles-Suárez, A.J. González-Negrón, and I. Báez-Santos. 2006. **The Delta Cooperative Model: a Dynamic and Innovative Team-Work Activity to Develop Research Skills in Microbiology**. *Microbiology Education*.7:20-27.

Ríos-Velázquez, C. 2006. “Constructing knowledge” actively in Bacterial genetics Using Synthetic Biology. Focus on Microbiology Education (FOME).

Synergistic activities

Developing modules and pedagogical strategies (**Cooperative Delta Model**) to bring research experiences and the application of the scientific method to high school students. This project involves faculty from two different educational systems.

RUI:Microbial Observatory at Cabo Rojo Salterns, understanding microbial diversity and their geomicrobiological impact and importance in microbial mats. Also this system has been used as an educational tool.

Design of the Prokaryotic Molecular Biology & Gene Regulation, Plasmid Biology and Technology, Advanced Biotechnology, and Topics in Biotechnology courses

Collaborators and other affiliations

- Lilliam Casillas – Associate Professor, UPR- Humacao
- Timothy Donohue - University of Wisconsin-Madison
- Jo Handelsman - University of Wisconsin-Madison
- Terry Hazen - Lawrence Berkeley National Laboratory (LBNL)
Senior Staff Scientist and Department Head Ecology Department
- Stephen Leppla – National Institute of health (NIAID-NIH)
- Jaime Ramírez – Assistant Professor Engineering Department, University of Puerto Rico at Mayaguez
- Tamas Torok - Lawrence Berkeley National Laboratory (LBNL)
Scientist, Center for Environmental Biotechnology.