

# Marietta Mayo

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## SUMMARY OF EXPERIENCES

- Over 15 years of research experience in the US and abroad ranging from studies of endangered marine fauna to geochemical research of wetland sediments.
- Grant management experience in non-for-profit and academic settings, with large scale budgets reaching over \$2.3 million.
- Over 12 years of development and implementation of K-12 and citizen science curricula in both the US and abroad, including lesson plans and classroom activities.
- Mentoring and supervision of multicultural undergraduate and graduate students, primarily Hispanic females, to encourage their participation in the STEM fields.
- Extensive experience in planning and coordinating logistics associated with large educational events, laboratory activities and research trips for students.
- Comprehensive training on Science Communication and managing Natural Protected Areas.
- Extensive outreach experiences with non-English speakers in the STEM fields.
- Fully Bilingual (native Spanish speaker).

## EDUCATION

### **ABD PhD candidate, Chemical Oceanography,**

College of Marine Science, University of South Florida, St. Petersburg, FL.

### **Masters of Science in Environmental Management,**

Universidad Metropolitana, San Juan, PR.

### **Bachelors of Science in Environmental Science and Policy,**

University of South Florida, Tampa, FL.

## PROFESSIONAL EXPERIENCES

August 2021-present

**Instructor,** The Pearl Remote Democratic High School

Curriculum development, instruction and evaluation of high school students in a project-based learning democratic setting. Instruction of STEM courses (Biological Science, Earth Science) and Spanish to small size classes.

June 2020- July 2021

**Co-learner**, Buckeye Friends School

Curriculum development, instruction and evaluation of K-6 students in a project-based learning private school. Served as the primary science and Spanish instructor school-wide, also instructed in Social-Emotional Learning, Math and Language Arts to small size classes.

Spring and Fall Semesters 2019

**Adjunct Instructor**, Eastern Illinois University- Department of Biological Science

Develop and implement lessons and laboratory exercises for undergraduates majoring in the field of Biology, including courses General Biology I and General Biology II. As well as, the course Biological Principles and Issues for non-biology majors.

June 2016- July 2019

**Grants Manager**, Protectores de Cuencas, Inc.

Provide leadership and direction in the identification of federal, state and private funding sources, grant writing, coordination and logistics of project implementation, oversee the financial administration of federal, state and private grants, report writing and ensure staff accomplish the program objectives. Also, coordinated student events related to summer internships, field trips and research groups. Assisted with activities associated with greenhouse management.

August 2010-May 2014

**Research Assistant**, University of South Florida- College of Marine Science

Cooperative Assistantship with the US Geological Survey working on the determination of uranium fluxes within the Florida Everglades.

Fall 2009, Spring 2010 and Fall 2010

**Teaching Assistant**, University of South Florida- College of Marine Science

Served as teaching assistant for the College of Marine Science in undergraduate and graduate courses, including *Introduction to Oceanography* and *Scientist in the Classroom*.

August 2009-July 2010

**National Ocean Sciences Bowl Regional Coordinator**, Consortium for Ocean Leadership

Appointed to be the Ocean Leadership representative and coordinate the facility's Regional Ocean Sciences Bowl.

August 2004- 2009

**Research Assistant**, University of South Florida- College of Marine Science

Determination of radiogeochemical properties with the use of gamma spectrometry, ICP- OES, Loss on Ignition, and X-Ray diffractometry.

## CONFERENCE PRESENTATIONS

**Mayo, M.**, Smoak, J.M., Smith, C.G., Fanning, K.A., Smith, T.J. (February 2013) A Comparison of Uranium Budgets for Estuarine Wetlands of the Everglades National Park, Florida and Mobile Bay, Alabama. Aquatic Sciences Meeting, New Orleans, LA.

**Mayo, M.**, Smoak, J.M., Smith, C.G., Smith, T.J., Fanning, K.A. (February 2011) Determination of the Uranium Budget in the Shark River Estuary System, Everglades National Park. Aquatic Sciences Meeting, San Juan, Puerto Rico.

**Mayo, M.**, Pyrtle, A.J. (March 2008) Assessing Radiogeochemical Techniques as a Tool for Management of Two Marine Protected Areas in Puerto Rico: A Case Study. Ocean Sciences Meeting, Orlando, FL.

**Mayo, M.**, Ithier-Guzman, W., Pyrtle, A., Betzer, P., Batson, B., Bhansali, S., Greene, B., Turner, R. (May 2007) Enhancing Ocean Literacy and Expertise of Diverse Populations via Graduate School Fellowship Opportunities, *Eos Trans. AGU*, 88(23), Jt. Assem. Suppl., Abstract ED32A-05, Acapulco, Mexico.

Habtes, S. Y., **Mayo, M.**, Ithier-Guzman, W., Pyrtle, A., Williamson-Whitney, V. (May 2007) MS PHD'S PDP: Vision, Design, Implementation, and Outcomes of a Minority Focused Earth System Sciences Program, *Eos Trans. AGU*, 88(23), Jt. Assem. Suppl., Abstract ED32A-02, Acapulco, Mexico.

Ithier-Guzman, W., **Mayo, M.**, Pyrtle, A. (May 2007) Sediment Monitoring at Vieques National Wildlife Refuge in Puerto Rico: Assessing the Current Conditions, *Eos Trans. AGU*, 88(23), Jt. Assem. Suppl., Abstract OS34B-05, Acapulco, Mexico.

**Mayo, M.** and A.J. Pyrtle (April 2007) Radiogeochemistry as a Tool for the Development of Management Strategies for Mangroves in the Vieques National Wildlife Refuge and Jobos Bay National Estuarine Research Reserve. 3<sup>rd</sup> Annual USF Interdisciplinary Graduate Research Symposium. Research Park, University of South Florida, Tampa, Florida.

**Mayo, M.**, Pyrtle, A.J. (February 2007) Radiogeochemistry as a Tool for the Development of Management Strategies for Mangroves in the Vieques National Wildlife Refuge. ASLO Aquatic Sciences Meeting, Santa Fe, NM.

Williams, N.B., Pyrtle, A.J., Dixon, B., Hernandez-Cruz, L. R., Ithier Guzman, W., **Mayo, M.** (February 2007) Assessing Impacts of Land use Changes on Estuaries in the Island of Puerto Rico: An Integrative Approach. ASLO Aquatic Sciences Meeting, Santa Fe, NM.

Berríos-Rodríguez, C. M., Torres, S., Ithier, W., **Mayo, M.**, Hernández-Cruz, L.R., Williams, N. and Pyrtle, A.J. (October 2006) An Analysis of Sediments Collected from Emerson Point and Puerto Rico, Using Three Methodologies. SACNAS,

Tampa, FL.

**Mayo, M.**, Pyrtle, A.J., Ithier, W. (February 2006) Sediment Quality Baseline Data for Coastal Resource Management in Two Protected Areas in Puerto Rico. Oceans Sciences Meeting, Honolulu, HI.

**Mayo, M.**, Pyrtle, A.J., Ithier, W. (February 2005) Aquatic Resource Management and Anthropogenic Impact in Two Controlled Environments in Puerto Rico. ASLO Spring Meeting, Salt Lake City, UT.

Quijano, A., **Mayo, M.**, Ithier-Guzmán, W., and Pyrtle, A.J. (October 2005) Determination of particle size and radionuclides in the island of Puerto Rico and Vieques. SACNAS Meeting, Denver, CO.

**Mayo, M.**, Williams, C., Rodriguez, T., Greely, T., Pyrtle, A.J., Rivera-Rentas, A.L., Vilches, M. (December 2004) Reciprocal Education Experiences in Two GK-12 Programs: Teachers Learning and Students Teaching in Diverse Settings, *Eos Trans.* American Geophysical Union (AGU), 85(47), Fall Meet. Suppl., Abstract ED43C-04, San Francisco, CA.

## **PUBLICATIONS**

Martinez, E., S.M. Velez, **M. Mayo** and M.P. Sastre (2015) Acute Toxicity Assessment of N,N-Diethyl-m-toluamide (DEET) on the Oxygen Flux of the Dinoflagellate *Gymnodinium instriatum*. *Ecotoxicology*, 1-5.

**Mayo, M.** and A.J. Pyrtle (2007) Radiogeochemistry as a Tool for the Development of Management Strategies for Mangroves in the Vieques National Wildlife Refuge and Jobos Bay National Estuarine Research Reserve. Proceeding of the 3<sup>rd</sup> Annual USE Interdisciplinary Graduate Research Symposium, April 11, 2007: Transcending Boundaries in Graduate Research and Education. Research Park, University of South Florida, Tampa, Florida. ISBN: 978-0-9790189-1-6 0-97901 89-1-9.

## **GRANTS**

2018	NOAA, NFWF, USFWS, and private funds reaching \$312,000, Protectores de Cuencas, Inc.
2017	NOAA, NFWF, USFWS, and private funds reaching \$649,000, Protectores de Cuencas, Inc.
2016	NOAA, NFWF, USFWS, and private funds reaching \$689,000, Protectores de Cuencas, Inc.

## **FELLOWSHIPS AND AWARDS**

- 2010 USF & USGS Cooperative Assistantship, University of South Florida- College of Marine Science
- 2009 Bridge to the Doctorate Endowed Fellowship, University of South Florida- College Marine Science
- 2008 American Geological Institute Minority Participation Program Scholarship
- 2008 Wachovia Bank Endowed Fellowship, University of South Florida College Marine Science.
- 2005 Alfred P. Sloan Foundation Scholarship, University of South Florida, College of Marine Science.
- 2005 American Society of Limnology and Oceanography Minority Program travel award to attend the American Society of Limnology and Oceanography, Salt Lake City, UT
- 2004 National Science Foundation, FGLSAMP Bridge to the Doctorate Fellowship, University of South Florida, College of Marine Science.
- 2004 Minorities Striving to Pursue Higher Degrees of Success (MS PHDS) travel award to attend the American Geophysical Union, San Francisco, CA.
- 2004 National Science Foundation GK-12 Graduate Teaching Fellowship, University of South Florida, College of Marine Science.
- 2003 National Science Foundation GK-12 Graduate Teaching Fellowship, Universidad Metropolitana, School of Environmental Affairs.
- 2003 National Aeronautics and Space Administration, Geographic Information Systems and Environmental Informatics (GISEI), Universidad Metropolitana, Environmental Affairs.

## **OUTREACH EXPERIENCE**

- 2017-2018 Coordination and assistance with post-hurricane Maria recovery efforts in collaboration with the Hispanic Federation, the Municipality of Yauco, Community Foundation of Puerto Rico and Protectores de Cuencas, Inc.
- 2017 Coordination with the public school system of environmental stewardship activities for underrepresented groups funded by federal grants (NOAA, NFWF, USFWS), primarily within the Guanica State Forest.

- 2016 Assisted in the education and outreach activities of a community based NOAA-funded project focused on the reduction of marine debris in beaches.
- Summers 2004-10 Science Mentor for the Oceanography Camp for Girls (OCG), a three week program that provides hands-on activities and field trips to young women entering high school. OCG also promotes careers in Marine Science and provides volunteering opportunities. The program is hosted by the College of Marine Science, University of South Florida.
- Summer 2008 Instructor for *Understanding the Profile of Tampa Bay Aquatic Quality Program*, a collaborative program between the College of Marine Science, College of Education and Environmental Science, Policy & Geography Program intended to educate teachers about the Tampa Bay area through environmental science instructional, training and learning activities.
- 2004-2008 Participant of the Great American Teach-In, a yearly event that brings community volunteers to classrooms to teach about their careers.
- 2004-2005 GK-12 Graduate Teaching Fellow for the University of South Florida, College of Marine Science OCEANS Program. Designed to help bring the study of ocean sciences into Pinellas County schools through the development of lessons and hands-on activities.
- 2003-2004 GK-12 Graduate Teaching Fellow for Universidad Metropolitana, School of Environmental Affairs FEST Program. Geared towards the introduction of environmental science concepts while relating these concepts to real-world issues.
- 2002-2003 Educator and Instructor for the Caribbean Stranding Network (CSN), housed at Universidad Metropolitana. The outreach program implemented at CSN intended to educate the community about the threats to marine mammals and their habitats.