

PO. Box 194327, San Juan, P.R. 00919

Phone number: 787-340-2789

Email: juanita.carballeira@upr.edu

JUANITA C. CARBALLEIRA MARTINEZ

EDUCATION

UNIVERSITY OF PUERTO RICO, MAYAGÜEZ CAMPUS

(Mayagüez, PR) AUGUST 2022- PRESENT

Faculty of Natural Sciences, Marine Science Master's

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS CAMPUS

(San Juan, PR) AUGUST 2016- MAY 2022

Faculty of Natural Sciences, Chemistry Bachelor's

GPA: 3.748

WORK EXPERIENCE

SAN JUAN BAY ESTUARY PROGRAM: COASTAL RESILIENCE MODULE COORDINATOR

(San Juan, PR) MARCH 2022-SEPTEMBER 2022

Supervisor: Ivangs Rivera (ivangs.rivera@estuario.org) / Education and citizen science manager

Program coordinator

- Coordinate meetings with the program's collaborators.
- Inventory of materials, and quotation of materials necessary for the project.
- Development and execution of work plans to offer volunteer activities.
- Elaboration and modification of training workshops belonging to the Coastal Resilience module.
- Assist in the recruitment of volunteers.
- Coordination of 8 training workshops.
- Coordination of 14 field trips belonging to the Coastal Resilience module.
- Data collection and interpretation.

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS CAMPUS: UNDERGRADUATE RESEARCH INTERN

ATMOSPHERIC CHEMISTRY AEROSOL RESEARCH

(San Juan, PR) AUGUST 2021-PRESENT

Supervisor: Elvis Torres Delgado (elvis.torres810@gmail.com) / Principal Investigator at University of Puerto Rico

Undergraduate Research intern

- Conducted gravimetric analysis for detection of dust concentration in the Caribbean.
- Collected and analyzed dust concentration data.

FLORIDA INTERNATIONAL UNIVERSITY(FIU): RESEARCH EXPERIENCE FOR UNDERGRADUATES

(Miami, FL) MAY 2021-AUGUST 2021

Supervisor: Piero Gardinali (gardinal@fiu.edu) / associate director at FIU's Institute of Environment

Research intern:

- Collaborated on the detection and identification of wastewater tracers.
- Analyzed water samples using high resolution instrumentation: Online Solid Phase Extraction-High Performance Liquid Chromatography-High Resolution Mass Spectrometry (SPE-HPLC-HRMS).
- Learned to calibrate, run samples, and troubleshoot the Online SPE-HPLC-HRMS.
- Analyzed data using statistical analysis platform SigmaPlot.

**U.S FOREST SERVICE: EL YUNQUE NATIONAL FOREST– ENVIRONMENTAL AND CONSERVATION EDUCATION
(Luquillo, PR): MAY 2020-MAY 2021**

Supervisor: Pablo Llerandi Román (pablo.llerandi-roman@usda.gov)/ Natural Resource Education specialist

Ecosystems Team Intern:

- Collaborated on developing the mission, vision, and objectives of the Environmental Education and Conservation Education Program (EE-CEP).
- Organized a custom-made database of peer-reviewed articles and secondary literature related to the concepts integral in the development of the EE-CEP.

**NEW MEXICO STATE UNIVERSITY (NMSU) AGRICULTURAL, CONSUMER AND ENVIRONMENTAL SCIENCES
(Las Cruces, NM): AUGUST-DECEMBER 2019**

Supervisor: Dr. Boeing (wboeing@nmsu.edu)/NMSU professor and expert in aquatic ecology

Undergraduate Researcher: Worked for the department of Fish and Wildlife and Conservation Ecology for a semester.

- Learned how to grow freshwater algae using the aseptic technique.
- Assisted in field for algae sampling.
- Developed a research experiment.
- Consistently measured optical density using a Spectrophotometer.

**OUTREACH PROGRAM AT ANTONIO S. PEDREIRA SCHOOL
(San Juan, PR): AUGUST 2018-DECEMBER 2020**

Supervisor: Erika Concepción (erika.concepcion1@upr.edu)/ USDA NRCT program coordinator

Environmental Science Educator:

Worked for two semesters in a multidisciplinary environmental education initiative driven by amotivation to inspire younger generations through various workshops.

- Offered weekly environmental workshops to kindergarten students that integrated science and art.
- Developed a curriculum for the different workshops given throughout the semester.

**USDA- AGRICULTURAL RESEARCH SERVICE (ARS)
(Beltsville, MD) JUNE 2019-AUGUST 2019**

Supervisor: Dr. Jinyoung Y. Barnaby (jinyoung.barnaby@usda.gov)/ Principal Investigator at USDA ARS

Research Intern:

Worked in the summer in the Adaptive Cropping Systems Lab (ACSL) on a research project in determining the accumulation of inorganic arsenic (carcinogenic chemical) in rice crops based on different water management practices.

- Disinfected and germinated rice seeds.
- Recorded daily soil oxidation reduction potential (ORP), and weekly Soil-Plant Analyses Development (SPAD) readings using a probe.
- Monitored daily soil volumetric water content to see how much water is available to the plants.

**PROGRAM FOR BELIZE ARCHAEOLOGICAL/ ECOLOGICAL PROJECT
(Belize, Central America): JULY 2018**

Supervisors/Mentors:

- Dr. Nicholas Brokaw (nybrokaw@ites.upr.edu)/ Research Ecologist
- Dr. Sheila Ward (sheila.emily.ward@gmail.com)/ Research Ecologist
- Norman Greenhawk (norman.a.greenhawk@gmail.com)/ Ms. Environmental Science

Research Assistant: Worked in the summer Forest ecology research at Belize with Dr. Nick Brokaw in collaboration with Natural Resources Career Track (NRCT) program.

- Used a botanist's key to identify and document various tree species.
- Measured tree distance and diameter at breast height (DBH), laid out transects, and took GPS points.
- Assisted graduate student Norman Greenhawk on evenings for identification and collection of herps

RESEARCH/ VOLUNTEER

ENVIRONMENTAL SCIENCE RESEARCH EXPERIENCE

(University of Puerto Rico): MARCH 2018-JANUARY 2019

Research Assistant at Atmospheric Chemistry Aerosol Research (ACAR)

Supervisor: Olga L. Mayol-Bracero (omayol@ites.upr.edu) / Professor and atmospheric chemistry researcher.

- Took air samples for dust particles using a High-Volume Aerosol Sampler in Cabezas de San Juan, Fajardo.
- Analyzed and organized data from Real Time Air Sensor (Low-cost sensor that measures for aerosols and gases).
- Collaborated on a research project that aimed at understanding the effect on Puerto Rico's air quality due to the generators after hurricane María.

MEMBERSHIPS

USDA NATURAL RESOURCE CAREER TRACK (NRCT)

(University of Puerto Rico) JANUARY 2018- MAY 2022

USDA program at the University of Puerto Rico that prepares students for a future federal job position.

Mentor: Erika Concepción (erika.concepcion1@upr.edu) / NRCT program coordinator

CAPÍTULO ESTUDIANTIL DE LA SOCIEDAD AMBIENTE MARINO

(University of Puerto Rico) OCTOBER 2018 – MAY 2022

Student society at the University of Puerto Rico that aims for the conservation and restoration of our marine and coastal ecosystems.

Supervisor: Samuel Suleimán (samuelsuleiman@gmail.com) / President of Sociedad Ambiente Marino

Activities Coordinator (2019):

- Coordinated in collaboration with various student organization a beach clean-up (OCTOBER 2018).
- Organized "Mindfulness by the Sea": Yoga/snorkeling (MARCH 2019).
- Assisted in a community effort to restore the coral reefs at Culebra, PR.

SKILLS/ ABILITIES

- Bilingual: Fluent in English and Spanish
- Third Language: French (21 credits approved at UPR)
- Computer skills: Microsoft Word, Excel, Publisher, Python, and PowerPoint
- Scuba diving: Open Waters Certification
- Musical abilities: guitar, ukulele, and vocal talent