## MAITÊ G. DILORENZO

#### Curriculum Vitae

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Maitê DiLorenzo is a Ph.D. with more than 10 years of experience in academia and government. She specializes in research & development, communication, teaching, and leadership. Maitê is professionally trained in communication and project management and is experienced in navigating different cultural and intellectual landscapes. Specific highlights include exceeding experience in:

- > Interdisciplinary research & analysis
- Lecture and laboratory-based instruction
- > Written, verbal, and visual communication across multiple disciplines for various platforms
- Quantitative laboratory-based and computational techniques in biology including genomics, R programming, and statistical analysis
- Networking & collaboration

### Education

Doctorate in Environmental Health Sciences (EHS), College of Public Health: 2015 – 2020 University of Georgia (UGA) | NSF Graduate Research Fellow & UGA Presidential Fellow | 4.0 GPA

Bachelor of Science in Environmental Sciences, Marine Science & Biology Minors: 2011 – 2015 UNC Chapel Hill | Highest Honors & Carolina Research Scholar | 3.4 GPA

## Peer-reviewed Published Works

(ORCID: 0000-0002-0616-8002)

- Shaver, E. C., Renzi, J.J., <u>Bucher, M. G.,</u> Silliman, B. R. (2020). Relationships between a common Caribbean corallivorous snail and protected area status, coral cover, and predator abundance. *Nature Scientific Reports*.
- Bucher M. G., Zwirzitz B., Oladeinde A., Cook K., Plymel C., ... & Sistani K., (2020). Reused poultry litter microbiome with competitive exclusion potential against Salmonella Heidelberg. *Journal of Environmental Quality*.
- Ries, J. B., <u>Ghazaleh, M. N.</u>, Connolly, B., Westfield, I., & Castillo, K. D. (2016). Impacts of seawater saturation state (Ω<sub>A</sub> = 0.4–4.6) and temperature (10, 25° C) on the dissolution kinetics of whole-shell biogenic carbonates. *Geochimica et Cosmochimica Acta*, 192, 318-337.
- <u>Ghazaleh, M. N.,</u> Froelich, B. A., & Noble, R. T. (2014). The effect of storage time on *Vibrio* spp. and fecal indicator bacteria in an Isco autosampler. *Journal of Microbiological Methods*, 104, 109-116.
- Bergemann, C., Bullock, N., Edwards, J., Fickes, B., <u>Ghazaleh, M.,</u> ... & Rhoton, J. L. (2013) Quantifying Several Environmental Effects Associated with Floating Docks in a Commercial Marina. *University of North Carolina Institute of Marine Science Press*.

#### Online Published Works

- 1. iBiology: Health and Disease Signatures of the Coral Microbiome.
- 2. MassiveSci.com: How Saharan dust can influence health all the way in Florida.
- 3. *MassiveSci.com:* Can corals be saved? The key may be in their microbes.
- 4. Pacific Standard: Could Dust Storms from Africa Damage Ecosystems in FL?

https://bit.ly/2NttDINhttps://bit.ly/2QBqdDx

https://bit.ly/2VFo7pM

https://bit.ly/2YosOZb

#### **Fellowships**

Curious Science Writers Inaugural Educator Fellowship (2023)
National Science Foundation Postdoctoral Research Fellowship in Biology (2020-22)
National Science Foundation Graduate Research Fellowship Program (2017-20)
American Society of Microbiology National Teaching Fellowship (2016-17)
University of Georgia Presidential Fellowship (2015-17)

## **Funded Grants**

UGA Graduate Education Advancement Board Scholarship (2019) \$2,500 National Science Foundation Graduate Research Grant (2017-20) \$24,000 UGA Innovative and Interdisciplinary Research Grant (2017) \$2,191 UGA Graduate School Travel Award (2017) \$1,065

Association of Marine Laboratories of the Caribbean Grant (2016) \$400

Lerner Gray Memorial Fund Grant Program (2016) \$1,495

Intl. Women's Fishing Association Marine Science Scholarship (2016) \$1,000 UGA Innovative and Interdisciplinary Research Grant (2016) \$1,000 Women Divers Hall of Fame Advanced Dive Training Grant (2015) \$1,000 NC Association of Environmental Professionals Schölarship (2014) \$1,500

UNC Chapel Hill Full-Tuition Grant (2014) \$7,000 Mary and Watts Hill Jr. Scholarship (2013) \$2,500

NOÁA Ernest F. Hollings Undergraduate Scholarship (2013-15) \$23,000 National Society of Collegiate Scholars Scholarship (2013) \$1,000

# Featured In

University of Georgia Today, Jun. 2019 https://bit.lv/317Bbq3 https://bit.lv/2LK13og University of Georgia, Graduate School

- University of Georgia, College of Public Health
- MassiveSci.com, Člimate Change Consortium
- University of Georgia Today, Apr. 2016

#### https://bit.ly/2ydgggb https://bit.ly/32QUk0W

iBiology Young Scientist Seminar Series (2019)

https://bit.ly/32Tt2XE

https://bit.ly/20X2654

**Featured Awards** 

EHS Research Showcase 1st Place Poster (2019) EHS Research Showcase 1st Place Poster (2018)

ISME2017, Germany, QIAGEN Intl. 1st Place Poster (2018) American Society of Microbiology Teaching Fellowship (2017)

UGA Presidential Fellowship (2015)

NSF Graduate Research Fellowship (2016) UNC Most Outstanding Research Award (2015) NOAA Outstanding Oral Presentation Award (2014)

Quintiles Women in Science Award (2010)

# **Techniques & Skills**

Microsoft Office **Bioinformatics** Science Communication Scientific Editing Experimental Design DNA Extraction, PCR, aPCR 16S rDNA amplicon sequencing Analyzing and interpreting scientific data

Portuguese (fluent) Spanish (familiar) Social Media Marketing

# Professional Experience

Instructor of Biology

North Carolina School of Science and Mathematics (NCSSM), Durham, NC

Develop and conduct high-level molecular genetics, cellular & molecular biology, and evolution courses for high school juniors and seniors.

Lead data science projects using R/RStudio for several simultaneous projects.

Mentor and submit recommendations for upwards of 10 students a semester.

- Participate in professional development 12 hours annually including Diversity. Equity and Inclusivity training and online tools training (such as Canvas, Canva, and Lucid).
- Contribute to NCSSM service activities such as hosting student Service-Learning presentations, presenting short courses for Online Enrichment Weekends, and judging for multiple science fairs.

Participate in the hiring committee for the Biology Department.

#### Inaugural Educator Fellow

Curious Science Writers (CSW), Remote

Jun. - Jul. 2023

Aug. 2022 – present

- Increased the effectiveness of the week-long CSW Science Communication Boot Camp experience by ensuring the program format, materials and activities optimally engage and educate high school students.
- Worked with program faculty, guest speakers and students to help participants build effective, lifelong, science communication skills.

#### Environmental Microbiologist: Environmental Protection Agency

Nov. 2021 - Aug. 2022

Oak Ridge Institute for Science and Education (ORAU), Research Triangle Park, NC Office of Research and Development, Center for Environmental Measuring and Modeling

- Analyze quantitative data to investigate presence of aquatic, bacterial and viral emerging pathogens.
- Utilize qPCR to process samples for ID of emerging pathogens in Puerto Rico and the Gulf of Mexico.
- Laboratory management: oversee lab activity and collaborations, mentorship, orders, general maintenance.

## Postdoctoral Researcher: Department of Marine Sciences

Aug. 2020 - Mar. 2021

University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

University of Amsterdam, Amsterdam, Netherlands

- Investigated the response of the coral microbiome under favorable and extreme environments.
- Involved in increasing diversity by increasing the participation of underrepresented groups in biology.
- Laboratory management: lead lab meetings, set up lab virtually, general maintenance, mentorship, etc.

## Doctor of Philosophy in Environmental Health Sciences

Aug. 2015 - May 2020

University of Georgia, Athens, GA

- Presented in 6 conferences nationally and internationally.
- Earned 8 research grants and scholarships (totaling more than \$34,000 in research funds).
- Investigated impacts of Saharan dust nutrient influx on water- and coral-associated microbial communities.
- Described microbial signatures of disease in coral during a multi-species, multi-disease outbreak in FL.
- Studied the potential of Vibrio species to bloom and pose a threat to human health in recreational waters.

# Participant: Nature Journal Masterclass in Scientific Writing & Publishing University of Georgia, Athens, GA

Jun. 2018

- Received scientific writing training from experienced Nature journal editors.
- Gained expertise of the scientific editorial and peer-review process.

#### Attendee: COMSCICON Atlanta Conference

Mar. 2019

- Attended a specialized conference for science communicators
- Received training in sci. comm. audiences, policy & advocacy, sci. comm. ethics, and sci. comm. data visualization.

#### Founder & CEO of GA Chapter, Board of Directors Member

Aug. 2015 - Dec. 2023

Scientific Research & Education Network (SciREN), Chapel Hill, NC

- Founded chapters of SciREN at the University of Georgia and George Mason University.
- Hosted 8 successful annual events hosting 6 UGA departments, 5 NGOs, and 100+ K-12 educators.

# Laboratory Technician Assistant: Dept. of Cell Biology & Physiology

Aug. 2014 - May 2015

University of North Carolina, Chapel Hill, NC

- Conducted DNA extraction. PCR based genotyping, and gel electrophoresis to confirm genotypes of mice.
- Maintained several colonies of experimental mice and collected specimen samples for processing.

#### Intern: National NOAA Hollings Scholarship Program

May - Jul. 2014

NOAA Southeast Fisheries Science Center, Key Biscayne, FL

- Completed a literature review followed by using microscopy to standardize species identification characteristics of Farfantepenaeid shrimp.
- Presented information crucial for researchers studying the effects of the Comprehensive Everglades Restoration Plan (CERP) on commercially important *Farfantepenaid* shrimp stock dynamics.

# Undergraduate Researcher: UNC Institute of Marine Science

Aug. 2013 - Jul. 2014

University of North Carolina, Morehead City, NC

- Designed, conducted, and analyzed an experiment to investigate the effect of storage time on Vibrio spp. and fecal indicator bacteria in an autosampler.
- Transformed project into UNC Honors Thesis (received Highest Honors) and published results in peer-reviewed journal.

#### Social Media Manager: UGA Environmental Health Science Dept.

Fall 2018

• Utilized Twitter (@uga\_ehs) to advertise events, internships, scholarships, and seminars.

#### Board of Directors Member: Southeastern Biogeochemical Research Symposium Oct. 2016 - Apr. 2017

• Recruited sponsor donations, managed budget allocation, and led day-of registration/conference logistics.

# Research Mentorship: UGA Environmental Health Science Dept.

Advised the students in experimental design, data analysis, manuscript preparation, and applications:

William Norfolk	Ph.D. Student	2019 – 2020
Jacob Davis	Undergraduate	Spring 2019
Megan Lott	Ph.D. Študent, UGA Presidential Fellow	2018 – 2019
Roland Seim	Undergraduate, UGA CURO Fellow	2017 – 2018
Madison O'Malley	Master's Student	2017 – 2019
Andre Jove	Undergraduate	2016 – 2018
Rena Geng	Master's Student	2016 – 2017
Martinique Edwards	Undergraduate	2015 – 2016

#### Visiting & Remote Scientist: Walton-Smith Research Cruise, DE

Oct. 2018

- Planned week-long lesson plan incorporating science, math, writing, social studies, and technology curriculum standards using concrete research examples in real-time.
- Communicated with Wayne County 3<sup>rd</sup> graders at Meadow Lane Elementary through video-blogs in Twitter to share research experiences and teach science (@DrMaite and #cruisetoclassroom).
- Based on surveys, the project inspired students to stay in school and participate in STEM clubs.

## Guest Instructor: RBIO Molecular Biology Module

Jan. – Feb. 2020

North Carolina School of Science & Mathematics, Durham, NC

- Led interactive lecture presentations and student-led *Exaiptasia* anemone experiment.
- Supervised DNA extractions, sequencing via Mr. DNA, and sequence data analysis for journal publication.

# Teaching Assistant: EHSC4310 Environmental Microbiology

Fall 2017 & Spring 2019

University of Georgia, Athens, GA

- Developed and led laboratory sections, interactive lecture presentations, and hands-on research activities.
- Lectured on environmental pathogens and their epidemiology.

# Program Instructor: Duke Talent Identification Program (Duke TIP)

Nov. 2018 - Apr. 2019

University of Georgia Torrance Education Center, Athens, NC

- Taught Cellular Gene-ius: 5th through 6th graders. Topics covered: DNA, Mendelian genetics, cells.
- Taught Introduction to Microbiology: 8th through 11th graders. Activities included: in-lab, student-led microbiology research (sample collection, microbial plating, and data analysis).

# Trainee: An Introduction of Evidence-Based Undergraduate STEM Teaching

Fall 2018

EDX & Center for the Integration of Research, Teaching, and Learning Network, Athens, GA

- Completed 8-week course on effective STÉM teaching strategies and supporting research.
- Topics covered: evidence-based learning (practices, assessments, objectives), learning communities (interdependence, diversity), and learning through diversity (enhanced learning and development).

#### Trainee: Getting Ready to Teach in the American Classroom

Oct. 2018

Center for the Integration of Research, Teaching, and Learning Network, Athens, GA

 One-day class on how to assist immigrant undergraduate and graduate students in U.S. classrooms using evidence-based learning and by creating a learning community through diversity.

# Trainee: ASM Science Teaching Fellowship Program

Dec. 2016 - Apr. 2017

American Society of Microbiology (ASM), Athens, GA

- Completed six two-hour webinars on undergraduate science education with emphasis on active learning.
- Completed pre- and post-webinar assignments and received structured mentoring.

#### Other Featured Communications

# Environmental Health Science Research Showcase

Mar. 2019

University of Georgia, Athens, GA

- Poster: Capturing microbial signatures of coral health during a multi-species, multi-disease outbreak.
- 1st Place Poster awarded, \$500 in Travel Money from EHS.
- Author on: The differential effects of leached vs. whole Saharan dust on aquatic microbial community composition following trans-Altantic transport (Madison O'Malley, Master's Student).
- Author on: Saharan dust alters the microbial community structure of near surface marine aerosols following trans-Atlantic transport (Roland Seim, CURO Undergraduate Fellow).

# International Society of Microbial Ecology (ISME) Conference Leipzig, Germany

Aug. 2018

- Poster: Capturing microbial signatures of coral health during a multi-species, multi-disease outbreak.
- QIAGEN 1st Place Poster awarded, \$1,000.

## Environmental Health Science Research Showcase

Apr. 2018

University of Georgia, Athens, GA

- Poster: Impact of Saharan dust nutrient influx on Acropora spp. microbial communities.
- 1st Place Poster awarded, \$500 in Travel Money from EHS.
- Author on: Impact of Saharan dust nutrient input on *Cryomorphaceae* and mesocosm microbial community structure (Madison O'Malley, Master's Student).

# American Society of Microbiology (ASM) Microbe Conference New Orleans, LA

Jun. 2017

• Poster: Oligotyping reveals hidden diversity in Vibrio spp. after Saharan dust nutrient input.

## Association of Marine Laboratories of the Caribbean (AMLC) Scientific Meeting

Apr. 2017

• Virtual Poster: Influence of Saharan dust nutrient input on coral-associated Vibrio spp.

## Environmental Health Science Research Showcase

Apr. 2017

University of Georgia, Athens, GA

- Poster: Influence of Saharan dust nutrient input on coral-associated Vibrio.
- Author on: The use of Google Trends for tracking norovirus cases during Hurricane Matthew in GA, FL, NC, SC in the United States (Rena Geng, Master's Student).

# NOAA Hollings Scholarship Program Symposium

Jul. 2014

- Silver Springs, MD
  - Presentation: Sympatric Farfantepenaid shrimp in Biscayne Bay, FL: Identification and species composition.
     Earned NOAA Office of Education Outstanding Oral Presentation Award.