

NATALIA MUSHEGIAN

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EDUCATION

University of North Carolina, Chapel Hill *2023 - present*

PhD Student in Geography and Environment, advised by Dr. Paul Delamater

University of California, Berkeley *2014 - 2019*

B.S. with High Honors in Molecular Environmental Biology

Honors Thesis: Assessing Belowground Impacts of Thin-Layer Sediment Deposition on a Tidal Marsh

RESEARCH EXPERIENCE

Joint Global Change Research Institute (PNNL) *May 2020 - Dec 2020*

Post-Bachelors Research Associate

- Developed model updates to Global Change Analysis Model to produce land-use change emissions results for EPA Office of Transportation and Air Quality; Developed methodology for spatial and economic assessment of thawing permafrost on infrastructure in the Russian Arctic

NOAA Beaufort Laboratory *May 2018 - August 2018*

Research Intern (Ernest F. Hollings Scholar)

- Conducted research on belowground nutrient cycling and carbon storage in coastal marshes, presenting results at NOAA Student Education and Science Symposium and 2018 American Geophysical Union Conference.

Department of Integrative Biology, Sousa Lab *September 2017 - May 2018*

Undergraduate Research Assistant

- Developed lab methods and data management for research on post-fire chaparral nutrient cycling

Smithsonian Museum of Natural History *June 2016 - August 2016*

Research Intern

- Developed MATLAB code for characterizing the biomechanics of the pelagic polychaete *Tomopteris*

PROFESSIONAL AND TEACHING EXPERIENCE

UNC Chapel Hill Department of Geography and Environment *August 2023 - December 2023*

Teaching Assistant, Spatial Data Science

- Updated course infrastructure in response to rapid growth of a popular introductory course
- Provided research support to undergraduates developing their own spatial questions

American Forest Foundation *January 2021 - June 2023*

Western Conservation Coordinator 1/2021-6/2022, Forest Carbon Analyst 6/2022-6/2023

- Aligned predictive methods for determining carbon benefit of improved management with post-implementation monitoring
- Identified forest management practices with potential for carbon benefit given uncertainty in carbon monitoring capacity

Cultivating New Frontiers in Agriculture

January 2020 - May 2020

Farmer-to-Farmer Program Intern

- Developed project management tools for tracking status of USAID volunteer assignments, reimbursements, and travel information and prioritizing administrative processes

UC Berkeley Division of Data Science

August 2016 - May 2019

Teaching Assistant, Foundations of Data Science

- Over 6 semesters, taught a 30-person section and took on progressively more responsibility in developing pedagogy for computational and inferential thinking to class of 1500 students

PUBLICATIONS AND PRESENTATIONS

Davis, J., Currin, C., **Mushegian, N.** (2022). Effective use of thin layer sediment application in *Spartina alterniflora* marshes is guided by elevation-biomass relationship. *Ecological Engineering*, 177, 106566.

Mushegian, N. (2018, August). *Rising to meet the sea: assessing thin-layer sediment deposition as a management strategy for coastal marshes* [Symposium presentation]. NOAA Science and Education Symposium, Silver Spring, MD.

Mushegian, N. (2018, December) *Assessing Implications of Thin-Layer Sediment Deposition on Belowground Carbon Balances in Coastal Salt Marshes* [eLightning conference presentation]. American Geophysical Union, Washington, DC.

AWARDS

2019 Outstanding Graduate Student Instructor Award: *Received based on faculty nomination and student reviews*

2017-2019 NOAA Ernest F. Hollings Scholar: *Scholarship, internship, and conference support from National Oceanic and Atmospheric Administration, awarded to approx. 120 undergraduates annually*

2014-2015 Kennedy-Lugar Youth Exchange and Study Scholar: *Lived in North Macedonia on Department of State scholarship to study abroad for one year, awarded to approx. 65 students annually*

VOLUNTEER WORK

American Association of Geographers

January 2024 - present

UNC Local Node Coordinator

Graduate and Professional Student Government, UNC Chapel Hill

August 2023 - present

GPSG Senator

Twin Oaks Compost Collective

June 2021 - July 2023

Compost Coordinator

Sunrise Movement, DC Hub

March 2020 - August 2022

Co-Lead, Creative Tactics Team; Member, Finance Team

Bluebonnet Data

September 2020 - November 2020

Tech Fellow