NATALIA MUSHEGIAN

(913) 522-6625 ⋄ nmu@unc.edu ⋄ nataliamush.github.io

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

· Synthesized diverse datasets to produce model results concerning emissions from land-use change for use by EPA Office of Transportation and Air Quality
· Developed methodology for spatial and economic assessment of thawing permafrost on infrastructure in the Russian Arctic
· Modified structure of an integrated assessment model, the Global Change Analysis Model (written in R), to include new land-use change parameters

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 (and carried out) lab methodology and best-practices for data management for research on post-fire nutrient cycling

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

· Identified key questions and wrote MATLAB code for project investigating the biomechanics of the pelagic polychaete *Tomopteris*

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

UC Berkeley Division of Data Science   *May 2019 - August 2019*
Lecturer, Foundations of Data Science

· Taught a summer section of the course as one of two primary instructors, delivering lectures and managing staff of 24 TAs and tutors

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

PROFESSIONAL EXPERIENCE

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

PUBLICATIONS

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.

PRESENTATIONS

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

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

SKILLS

Spoken Languages Russian (fluent), Spanish (int.), Macedonian (int.)
Programming Languages & Tools ArcGIS, Python, R, SQL, Google Earth Engine