

Nguyen Tien Anh Quach

Department of Geography and Environment
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599
(667)-310-9659
ntaquach@unc.edu
<https://ntaquach.github.io/>

EDUCATION

Ph.D. in Geography and Environment

- University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
- Advisor: Dr. Amanda G. DelVecchia
- Graduate Association of Geography and Environment Students
 - *Prospective Graduate Student Recruitment Coordinator* - 2023
- Anticipated date of completion: May 2028

M.S. in Biology – May 2023

- Towson University, Towson, Maryland
- Thesis title: *Road Salt: A Likely Driver of Long-term Benthic Macroinvertebrate Decline in an Urbanizing Stream* - Advisor: Dr. Susan E. Gresens
- Biology Graduate Student Association – *Ecology Liaison*

B.S. in Environmental Science – May 2020 – *Summa Cum Laude*

- Troy University, Troy, Alabama
- Program Advisor: Dr. Kewei Yu

University of Skövde

- Exchange Student in Sweden; Sp18

HONORS/AWARDS

University of North Carolina at Chapel Hill

Inclusive Excellence Top-Up – 2023

Towson University

Towson University Graduate Student Association

- Research Grant – 2021
- Travel Grant – 2021; 2022
- Professional Development Grant – 2022

Fisher College of Science & Mathematics Travel Grant – 2022

Troy University

Chancellor's List (GPA 4.0) – Sp20; Fa19; Sp/Fa18; Fa17

Provost's List (GPA 3.6) – Sp19; Sp17; Fa16

Chancellor's Award for Global Competitiveness – Fa17

PUBLICATIONS

Peer-reviewed

Quach, N. T. A., Moore, J., Brittingham, K. B., Genito, D., Gresens, S. E., *In preparation*. A Comparison of Benthic Macroinvertebrate Communities and Water Quality in Red Run Watershed Over Two Decades of Urban Development and Salt Application. Word count: 11,914.

Miller, J. M., **Quach, N. T. A.**, Patel, M., Guillaumet, A., *Submitted*. Environmental Factors and Individual Characteristics Influencing Mussel Survival During Extraordinary Drought Periods: A Dewatering Experiment.

Non-peer reviewed

Miller, J. M., Patel, M. K., **Quach, N. T. A.**, Guillaumet, A., 2021. Survivability of Mussels, Targeting Federally Listed Species, Over a 13-week Period During the Drawdown of Gantt Reservoir. A Report to Power South Energy Cooperative and U.S. Fish and Wildlife Service as part of the Gantt Reservoir Drawdown Project Agreement (USFWS Project No. 2016-F-0576).

INVITED PRESENTATION(S)

Quach, N. T. A., 2023. Road Salt: A Likely Driver of Long-Term Benthic Macroinvertebrate Decline in an Urbanizing Stream. Oral presentation at the virtual Chesapeake Bay Seminar Series at the Maryland Department of the Environment, August 2nd.

PRESENTATIONS

Quach, N. T. A., Moore, J., Gresens, S. E., 2022. Consequences of Freshwater Salinization for Benthic Macroinvertebrate Communities and Water Chemistry. Poster presentation at the 28th Annual Maryland Water Monitoring Council Conference, December 15th. Linthicum, MD.

Quach, N. T. A., Gresens, S. E., 2022. A Comparison of Benthic Communities and Water Quality in Red Run Watershed Over Two Decades of Urban Development. Oral presentation at the Baltimore Ecosystem Study 24th Annual Meeting, October 13th – 14th. Baltimore, MD.

Quach, N. T. A., Gresens, S. E., 2022. Can a Maryland Piedmont Trout Stream Be Protected from Rapid Urban Development? The Long-Term View. Oral presentation at the virtual 2022 Joint Aquatic Sciences Meeting, May 14th – 20th. Grand Rapids, MI.

Quach, N. T. A., Miller, J. M., Guillaumet, A., Patel, M. K., 2020. Tracking Movement of a Federally Threatened Species of Mussel During the Drawdown of Gantt Reservoir. To be presented at the 81st Annual Meeting of Association of Southeastern Biologists, March 25th – 28th. Jacksonville, FL. *Cancelled due to COVID-19*.

Quach, N. T. A., Miller, J. M., Guillaumet, A., Patel, M. K., 2020. Tracking Movement of a Federally Threatened Species of Mussel During the Drawdown of Gantt Reservoir. Oral presentation at Alabama Mollusk & Crayfish Working Group Meeting, January 15th – 16th. Cullman, AL.

Quach, N. T. A., Moore, A. T., Davis, E. C., Temple, T. N., Miller, J. M., 2019. Preliminary Investigations of Refuges as a Method to Capture Riverine Crayfish. Poster presentation at the 80th Annual Meeting of Association of Southeastern Biologists, April 3rd – 6th. Memphis, TN.

RESEARCH EXPERIENCE

Graduate Student Researcher - Road Salt: A Likely Driver of Long-term Benthic Macroinvertebrate Decline in an Urbanizing Stream (*April 2021 – May 2023*) – Towson University – Thesis Advisor: Dr. Susan E. Gresens

Graduate Student Researcher - Non-thesis Research in Benthic Taxonomy (*January 2021 – May 2021*) – Towson University – Supervisor: Mr. Dennis Genito

Undergraduate Research Assistant - Survivability of Mussels, Targeting Federally Listed Species, During the Drawdown of Gantt Lake Reservoir (*September 2019 – May 2020*) – Troy University – Principal Investigator/Supervisor: Mr. Jonathan M. Miller

Undergraduate Student Researcher - Using bird vocalization as a tool for identification and taxonomy (*January 2020 – May 2020*) – Troy University – Principal Investigator: Dr. Alban Guillaumet

Undergraduate Student Researcher - NSF RAPID - Rapid response to drought in a biodiversity hotspot (*September 2018 – May 2020*) – Troy University – Principal Investigator: Dr. Brian Helms

Undergraduate Student Researcher - Preliminary investigations of refuges as a method to capture riverine crayfish (*September 2018 – May 2019*) – Troy University – Principal Investigator: Mr. Jonathan M. Miller

WORK EXPERIENCE

Field Scientist (*February 2023 – May 2023*) - Countywide Biological, WQ and Stream Geomorphological Monitoring and Assessment: Round 5/Year 1 And 23-Year Retrospective Analysis, Prince George's County, MD – Clean Streams LLC – Supervisor: Mr. Alexi Sanchez de Boado

Field Technician Intern (*May 2019 – December 2019*) - Sanders Lead Company, Inc. - Supervisor: Mr. Chris Rutherford & Mr. Matt Brown

Volunteer Zoological Museum Technician (*September 2018 – May 2020*) - Faculty supervisor: Mr. Jonathan M. Miller

TEACHING EXPERIENCE

Guest Lecture – BIOL207L – General Zoology (*March 2023*) – Towson University – Instructor: Dr. Will H. Ryan

Head Teaching Assistant – BIOL120L – Principles of Biology (*August 2021 – May 2023*) – Towson University – Supervisor/Lab Coordinator: Mrs. Pamela Healey

Teaching Assistant – BIOL120L – Principles of Biology (*August 2020 – May 2023*) – Towson University – Supervisor/Lab Coordinator: Mrs. Pamela Healey

SKILLS & ABILITIES

- R and RStudio
 - Certified in Data [Visualization](#) and [Wrangling](#) by HarvardX
- ArcGIS Desktop
- PC-ORD v7.09
- Benthic macroinvertebrate sampling (certified by the Maryland Biological Stream Survey)
- Taxonomy of freshwater benthic macroinvertebrate of Piedmont region, Maryland
- Stream health and habitat assessments using fish and benthic macroinvertebrate assemblages, IBI, and RBP (EPA)
- Experienced with soil and water quality field instruments (Hydrolab, pH meter, YSI, etc.)
- Proficient with Microsoft Office programs

NEWS COVERAGE

1. TROY researcher and students studying habitat changes on federally-listed species of mussel. *TROY Today* (2019). Available at: <https://today.troy.edu/faculty-staff/troy-researcher-and-students-studying-habitat-changes-on-federally-listed-species-of-mussel/>

PROFESSIONAL MEMBERSHIPS

Society for Freshwater Science – 2021-present

Beta Beta Beta - National Biology Honor Society Mu Epsilon Chapter – 2019-2020

Association of Southeastern Biologists – 2019-2020