

Alyssa Lauren Liguori

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Education

- 2014-Present Stony Brook University, NY
PhD Candidate, Ecology and Evolution
Advisor: Robert Thacker, Degree expected: May 2020
- 2014 Dowling College, Oakdale, NY
BS Biology and Environmental Science (*summa cum laude*)

Fellowships & Awards

- 2016-2019 National Science Foundation, Graduate Research Fellowship
2019 Conchologists of America, Academic Grants to Malacology
(*declined award due to a change in dissertation research plans*)
- 2018-19 Stony Brook Graduate Student Organization Professional Development Fund
2018 National Science Foundation, Graduate Research Internship Program
2018 American Museum of Natural History, Lerner-Gray Memorial Fund
2018 Friday Harbor Laboratories, Research Fellowship Endowment
2017 Women in Science and Engineering, Mentor Professional Development Fund
2017 Sigma Xi, The Scientific Research Society, Grant-In-Aid of Research
2017 American Microscopical Society Student Research Fellowship
2017 Friday Harbor Laboratories, Beatrice Crosby Booth Endowed Scholarship
2017-18 Friday Harbor Laboratories, Patricia L. Dudley Endowment Award
2017 Stony Brook Ecology & Evolution Graduate Student Excellence Award
2017-18 Stony Brook Graduate Student Organization Travel Grant
2017-18 Society for Integrative & Comparative Biology Charlotte Mangum Award
2016 The Crustacean Society, Physiology and Reproductive Biology Scholarship
2016 Friday Harbor Laboratories, Alan J. Kohn Endowed Fellowship
2016 Stony Brook University, GSEU Professional Development Award
2015 Friday Harbor Laboratories, Brooks and Suzanne Ragen Scholarship
2015, 2017 Friday Harbor Laboratories, Adopt-A-Student Program Award
2015-16 Friday Harbor Laboratories, Marine Science Fund
2015-19 Stony Brook University, Lawrence B. Slobodkin Graduate Research Award
2014 Stony Brook University Recruitment Fellowship
2012 Dowling College, Distinguished Professor Grant for Earth & Marine Studies
2010-14 Dowling College Honors Scholarship
2010-14 Dowling College Presidential Scholarship

Peer-Reviewed Publications

- Padilla D. K., D. Charifson, **A. Liguori**, M. McCarty-Glenn, M. Rosa, and A. Rugila. 2018. Factors affecting gastropod larval development and performance: a systematic review. *Journal of Shellfish Research*. 37(4): 851-867.
- Boyko, C. B. and **A. Liguori**. 2015. Grapsoid and Gall Crabs (Crustacea: Brachyura: Grapsoidea and Cryptochiroidea) of Easter Island. *Pacific Science*. 69(4): 509-523.
- Boyko, C. B. and **A. Liguori**. 2014. Swimming Crabs (Crustacea: Brachyura: Portunoidea) of Easter Island. *Pacific Science*. 68(4): 563-575.

Manuscripts in prep

Liguori A. Multigenerational responses to pH in distinct populations of the copepod *Tigriopus californicus*.

Liguori A. Exploring local adaptation to salinity and temperature variability in the copepod *Tigriopus californicus*.

Selected Presentations

Liguori, A. 2019. "Exploring local adaptation in tidepools: Will copepods be resilient to rapid global change?" Graduate Women in Science and Engineering, Women's Research in STEM Showcase, Stony Brook University, NY. Poster presentation.

Liguori, A. 2019. "Exploring local adaptation to salinity and temperature variability in the copepod *Tigriopus californicus*." Stony Brook University, Department of Ecology and Evolution Retreat, Port Jefferson, NY. Contributed talk. ***Received Cedar Brook Award for best talk**

Liguori, A. 2018. "Multigenerational responses to pH in different populations of the copepod *Tigriopus californicus*." Hofstra University, Department of Biology Seminar Series, Hempstead, NY. **Invited talk.**

Liguori, A. 2018. "Multigenerational responses to pH in different populations of the copepod *Tigriopus californicus*." Stony Brook University, Department of Ecology and Evolution Retreat, Port Jefferson, NY. Contributed talk. ***Received Cedar Brook Award for best talk**

Liguori, A. 2018. "Population level differences in life history responses to long-term pH stress in *Tigriopus californicus*." The Society for Integrative & Comparative Biology Annual Meeting, San Francisco, CA. Contributed talk.

Liguori, A. 2017. "Transgenerational responses to lowered pH in the copepod *Tigriopus californicus*." The Society for Integrative & Comparative Biology Annual Meeting, New Orleans, LA. ***Awarded Best Poster Presentation by the Crustacean Society**

Liguori, A., V. Shah, T. Green. 2013. "Radiation resistant bacteria from the soil of the Gamma Forest." Brookhaven National Laboratory, U.S. DOE SULI Program, Upton, NY. Poster presentation.

Research & Professional Experience

Spring 2018 Graduate Research Internship Program, National Science Foundation
NOAA Northwest Fisheries Science Center, Seattle, WA
*Examined population structure of the copepod *Tigriopus californicus* using RAD-seq and Pool-seq strategies. Learned laboratory and bioinformatics skills to conduct population genomics on non-model organisms.*
Mentor: Krista Nichols

2016-2019 Research Assistant, Stony Brook University, Padilla Laboratory
NOAA Northeast Fisheries Science Center, Milford, CT
NY Sea Grant funded project on blue mussel responses to ocean acidification (OA)
Aim: To test for acclimation & adaptation to OA and assess resilience of populations.
Contributions: Experimental design and proposal development, maintenance of animals and experimental treatments, field assistance, data collection.
Principal Investigators: Dianna K. Padilla, Lisa Milke, Shannon Meseck

2016-Present Graduate Researcher, University of Washington, Friday Harbor Laboratories
*Investigated the effects of pH, temperature variability, and salinity on the life history and morphology of multiple populations of the copepod *Tigriopus californicus*.*
Characterized abiotic conditions within high shore pools on San Juan Island, WA.

Research & Professional Experience

- 2015 Graduate Research Assistant, Mentor of Brentwood High School students
Stony Brook University, Department of Ecology and Evolution
Quantified ribbed mussel abundance and salt marsh health on Long Island, NY
Mentor: Dianna K. Padilla
- 2013 U.S. Department of Energy Science Undergraduate Laboratory Internship
Brookhaven National Laboratory, Upton, NY
Studied the soil microbial ecology of a forest exposed to gamma radiation
Mentors: Vishal Shah, Timothy Green
- 2012-14 Dowling College Biodiversity and Ecology Laboratory, Oakdale, NY
Research Assistant, *Characterized crustacean biodiversity on Easter Island*
Mentor: Christopher B. Boyko
- 2010-12 Center for Estuarine, Environmental and Coastal Oceans Monitoring, Blue Point, NY
Research Assistant, *Monitored American horseshoe crab populations*

Teaching Experience

- Fall 2018 Presented at a workshop funded by the NY State Department of Education:
Scientists and Teachers Engaging in Professional Development with University
Personnel (STEPD-UP) grant (*Dr. Rebecca Grella PI, with Dianna K. Padilla & Ross
Nehm*) for the training of middle school teachers on new science standards for NY
- 2014-Present **Graduate Teaching Assistant, Stony Brook University**
- Fall 2019 BIO 351: *Ecology*
- Spring 2016 BIO 353: *Marine Ecology*
- Fall 2015 BIO 343: *Invertebrate Zoology*
- Spring 2015 BIO 201: *Fundamentals of Biology: Organisms to Ecosystems*
- Fall 2014 BIO 204: *Fundamentals of Scientific Inquiry in the Biological Sciences I*
- Summer 2015 Padilla Laboratory, Department of Ecology and Evolution, Stony Brook University
Mentor of students from Brentwood High School, *Project title: "Mussel Power"*
Students achieved semifinalist status in the national Siemens Science Competition
- 2011-14 Dowling College Learning Center, Oakdale, NY
General Science Tutor, Volunteer "Peer-to-Peer" Math and Writing Tutor

Professional Affiliations

- 2018-Present American Society of Naturalists
- 2017-Present Sigma Xi, The Scientific Research Society, *Associate Membership*
- 2016-Present American Microscopical Society
Executive Committee Member, Graduate Student Representative
- 2016-Present The Crustacean Society
- 2014-Present Society for Integrative and Comparative Biology
Divisional affiliations: Ecology and Evolution, Invertebrate Zoology
- 2013-Present Long Island Pine Barrens Society
- 2012-Present Alpha Chi National College Honor Society, New York Rho Chapter

University, Departmental, and Professional Service

- 2019-Present Graduate Student Employees Union, Department Mobilizer
- 2018-Present American Microscopical Society, Graduate Student Representative
Served on the Executive Committee & led social media outreach efforts
- Fall 2018 Participant in the Flax Pond Marine Laboratory Strategic Planning Workshop
Met with academics, government employees, educators, and local environmental groups to discuss how to maximize the utility of the Flax Pond Marine Lab as it is renovated into a shellfish hatchery to meet the needs of multiple stakeholders
- 2017-Present Graduate Women in Science and Engineering, Stony Brook University
Secretary (2017-18), Vice President (2018-19)
Organized events to advance the professional development of women in STEM
Received the Outstanding Organization Award at the Jerrold L. Stein Student Life Awards (2019)
- 2017-Present Women in Science and Engineering Guides Mentorship Program
Mentor to female undergraduate students at Stony Brook University
- 2017-Present Stony Brook University, Department of Ecology & Evolution Mentoring Program
- 2016-17 Natural History Club, Stony Brook University, *Vice President and founding member*
Organized lectures, off-campus excursions, and environmental outreach efforts
- 2015-2018 Darwin Day Event, Stony Brook University, Department of Ecology and Evolution
Participated in outreach on campus to promote evolution education
- Fall 2016 Stony Brook University, NSF GRFP Workshop Panelist
- 2015-17 Ecology and Evolution Club, Stony Brook University, *Treasurer*
Secured funds and maintained budgets for Student-Invited Speaker Events

Additional Academic Experience & Training

- Summer 2019 Methods in Ecological Genomic Analysis Workshops: *Population genomics using low coverage/RAD data & Functional genomics and gene network analysis with TagSeq*
Instructors: Mikhail Matz, Evelyn Abbott
- Spring 2018 Women in Science and Engineering Graduate Leadership Workshop Series
Stony Brook University Career Center, Alan Alda Center for Communicating Science
Topics: scientific communication, salary negotiation, interviewing, work-life balance
- 2018-19 Software Carpentry Workshops
Institute for Advanced Computational Science, Stony Brook University
Learned the basics of the Unix shell, Python programming, and version control with Git
- Summer 2017 Summer Institute in Statistical Genetics
University of Washington, Department of Biostatistics
Quantitative Genetics & Integrative Genomics Modules
Instructors: Bruce Walsh, Guilherme Rosa, Greg Gibson, Michael Inouye
- Spring 2017 Functional Ecological Genomics Workshop, *Lacawac Biological Field Station*
Instructors: David Liberles, Liang Liu, Stephanie Spielman, Laurel Yohe
- Summer 2015 Ocean Acidification Graduate Summer Course
University of Washington, Friday Harbor Laboratories
Learned best practices for ocean acidification experiments
Instructors: Jon Havenhand, Terrie Klinger, Andrew Dickson
Research Project: "The embryonic development of an autotroph-associated gastropod under varying pH"
- Summer 2015 The New York Master Naturalist Program, *Cornell University*
Learned conservation management and education strategies
- Fall 2014 Alan Alda Center for Communicating Science, Improvisational Workshops
Developed skills to make science approachable to students and the public