JULIAN DAMASHEK, PHD

Hamilton College • Biology Department
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Hamilton College
Visiting Assistant Professor of Biology, 2023–present (two-year term)

Utica University
Assistant Professor of Biology, 2019–2023
Approved for promotion to Associate Professor, 2023
On parental leave, Fall 2020 semester

EDUCATION

University of Georgia
Postdoctoral research associate, 2016–2019
Advisors: Tim Hollibaugh (Marine Sciences), Liz Ottesen (Microbiology)

Stanford University
Ph.D. in Earth System Science, 2016
Advisor: Chris Francis

Amherst College
B.A. (*Summa Cum Laude* with distinction) in Biology, 2009
Thesis advisor: Rachel Levin

OVERALL RESEARCH MOTIVATIONS

- What drives patterns in **nitrogen cycling** rates and associated **microbial communities** in aquatic ecosystems?
- What is the ecology and physiology of **novel aquatic archaea**?
- How does human activity affect **antibiotic resistance** in aquatic environments?

My students and I use microbial ecology, 'omics, cultivation-based microbiology, and isotope geochemistry to explore these questions.

PUBLICATIONS

(underlining indicates undergraduate mentee)

16) Hollibaugh, J.T., **J. Damashek**, H.W. Ducklow, B.N. Popp, and N.J. Wallsgrove. (*In review*) Substrate pulses as selection factors for clades of marine Thaumarchaeota. Preprint available: doi.org/10.21203/rs.3.rs-3129706/v1

15) Hollibaugh, J.T., A.O. Okotie-Oyekan, **J. Damashek**, H.W. Ducklow, B.N. Popp, N.J. Wallsgrove, and T. Allen. (*In review*) Oxidation of nitrogen supplied as ammonia or urea in coastal waters west of the Antarctic Peninsula.

14) Cho, S., L.M. Hiott, Q.D. Read, **J. Damashek**, J.R. Westrich, M. Edwards, R.F. Seim, D.A. Glinsk, J.M. Bateman McDonald, E.A. Ottesen, E.K. Lipp, W.M. Henderson, C.R. Jackson, and J.G. Frye. (*In revision; initial decision of "minor revisions"*) Distribution of antibiotic resistance in a mixed-use watershed and the impact of wastewater treatment plants on antibiotic resistance in surface water.

13) **Damashek J.**, B. Bayer, G.J. Herndl, N.J. Wallsgrove, T. Allen, B.N. Popp, and J.T. Hollibaugh. (*In revision; initial decision of "major revisions"*) Limited accessibility of nitrogen supplied as amino acids, amides, and amines as energy sources for marine *Thaumarchaeota*. Preprint available: doi.org/10.1101/2021.07.22.453390

12) **Damashek J.**, J.R. Westrich, J.M. Bateman McDonald, M.E. Teachey, C.R. Jackson, J.G. Frye, E.K. Lipp, K.A. Capps, and E.A. Ottesen. (2022) Non-point source human fecal contamination from aging wastewater infrastructure is a primary driver of antibiotic resistance in surface waters. *Water Research* 222:118853. doi.org/10.1016/j.watres.2022.118853

11) **Damashek J.**, A.O. Okotie-Oyekan, S.M. Gifford, A. Vorobev, M.A. Moran, and J.T. Hollibaugh. (2021) Transcriptional activity differentiates families of Marine Group II *Euryarchaeota* in the coastal ocean. *ISME Communications* 1:5. doi.org/10.1038/s43705-021-00002-6

10) Rasmussen A.N., **J. Damashek**, E.A. Eloe-Fadrosh, and C.A. Francis. (2021) In-depth spatiotemporal characterization of planktonic archaeal and bacterial communities in North and South San Francisco Bay. *Microbial Ecology*. 81(3):601-616. doi.org/10.1007/s00248-020-01621-7

9) **Damashek J.**, C.F. Edwardson, B.B. Tolar, S.M. Gifford, M.A. Moran, and J.T. Hollibaugh. (2019) Coastal ocean metagenomes and curated metagenome-assembled genomes (MAGs) from Marsh Landing, Sapelo Island (Georgia, USA). *Microbiology Resource Announcements* 8:e00934-19. doi.org/10.1128/MRA.00934-19

8) **Damashek J.**, B.B. Tolar, Q. Liu, A.O. Okotie-Oyekan, N.J. Wallsgrove, B.N. Popp, and J.T. Hollibaugh. (2019) Microbial oxidation of nitrogen supplied as selected organic nitrogen compounds in the South Atlantic Bight. *Limnology and Oceanography* 64(3):982-995. doi.org/10.1002/lno.11089

7) **Damashek J.** and C.A. Francis. (2018) Microbial nitrogen cycling in estuaries: from genes to ecosystem processes. *Estuaries and Coasts* 41(3):626-660. doi.org/10.1007/s12237-017-0306-2

6) **Damashek J.**, K.P. Pettie, Z.W. Brown, M.M. Mills, K.R. Arrigo, and C.A. Francis. (2017) Regional patterns in ammonia-oxidizing communities throughout Chukchi Sea waters from the Bering Strait to the Beaufort Sea. *Aquatic Microbial Ecology* 79(3):273-286. doi.org/10.3354/ame01834

5) **Damashek J.**, K.L. Casciotti, and C.A. Francis. (2016) Variable nitrification rates across environmental gradients in turbid, nutrient-rich estuary waters of San Francisco Bay. *Estuaries and Coasts* 39(4):1050-1071. doi.org/10.1007/s12237-016-0071-7

4) Smith J.M., **J. Damashek**, F.P. Chavez, and C.A. Francis. (2016) Factors influencing nitrification rates and the abundance and transcriptional activity of ammonia oxidizing microorganisms in the dark realm of the northeast Pacific Ocean. *Limnology and Oceanography* 61(2):596-609. doi.org/10.1002/lno.10235

3) Ying S.C., **J. Damashek**, S. Fendorf, and C.A. Francis. (2015) Indigenous arsenic(V)-reducing microbial communities in redox-fluctuating near-surface sediments of the Mekong Delta. *Geobiology* 13(6):581-587. doi.org/10.1111/gbi.12152

2) **Damashek J.**, J.M. Smith, A.C. Mosier, and C.A. Francis. (2015) Benthic ammonia oxidizers differ in community structure and biogeochemical potential across a riverine delta. *Frontiers in Microbiology* 5:743. doi.org/10.3389/fmicb.2014.00743

1) Miller J.S., A. Kamath, **J. Damashek**, and R.A. Levin. (2011) Out of America to Africa or Asia: Inference of dispersal histories using nuclear and plastid DNA and the *S-RNase* self-incompatibility locus. *Molecular Biology and Evolution* 28(1):793-801. doi.org/10.1093/molbev/msq253

FUNDING

"Understanding gut-microbiome interactions following mass deworming against soil-transmitted helminths (STHs) among young Ethiopian schoolchildren." Co-PIs: Ken Belanger (Colgate University), Bineyam Taye (Colgate University), Zeleke Mekonnen (Jimma University, Ethiopia). Picker Interdisciplinary Science Institute at Colgate University, 2020-2023, $149,000.

WORKING GROUP LEADERSHIP

Leader of the "Biodiversity" working group for the Aquatic N_2-Fixation Research Coordination Network (https://www.aquaticnfixation.com; funded by the National Science Foundation to Marcarelli, Scott, and Fulweiler), a collaborative international group of scientists. Leading two subgroups on compiling and analyzing DNA sequence data related to N_2-fixing microbes across global aquatic ecosystems. Attended weeklong workshop at Boston University (June 2022) to work on this project, with virtual work continuing. 2022 – present.

TEACHING AT HAMILTON

Water and Life (themed Introductory Biology course)
Ecology (including Lab)
Seminar in Bioinformatics

TEACHING AT UTICA

Average ± S.D. weekly contact hours per semester: 14.6 ± 2.4

General Biology (including Lab)
Research Methods I and II
Fundamentals of Ecology (including Lab)
Aquatic Biology (including Lab)
Molecular Biology Lab
Bioinformatics (Selected topics course)
Antibiotic Resistance (Selected topics course)
Independent Studies on "Animal Microbiome Research," "Aquatic Field Biology," and "Microbial Bioinformatics"
Fundamentals of Biology (including Lab) (non-majors biology course)
First-Year Seminar (for incoming biology and animal behavior majors)

UNDERGRADUATE MENTORSHIP

Trang Pham Hamilton College '25 (Fall 2023–present)
Studying nitrite, nitrate, and phosphate cycling in Oneida Lake (NY).

Zachary Orluk Hamilton College '25 (Fall 2023–present)
Studying ammonium and urea cycling in Oneida Lake (NY).

Julie Ying Hamilton College '25 (Fall 2023–present)
Studying nitrite, nitrate, and phosphate cycling in Otsego Lake (NY).

Benjamin LaBranche Hamilton College '25 (Fall 2023–present)
Studying ammonium and urea cycling in Otsego Lake (NY).

Leah Griffin Utica University '25 (Summer 2023)
Quantified antibiotic resistance genes in estuaries by analyzing shotgun metagenomic data (funded by LSAMP).

Alexis Rando Utica University '25 (Summer 2023)
Studied the distribution and transcription of pyrophosphatase genes (hppA) in the ocean using existing shotgun metagenomes and metatranscriptomes. Lexi presented a poster on this research at the 2023 NEMPET Conference (Blue Mountain Lake, NY, June 2023).

Tara Smith Utica University '23 (Spring 2023)
Testing nitrogen isotopic methods using MALDI-TOF mass spectrometry.
• Currently: research associate at Curia Global.

Isabella Raux Utica University '23 (Fall 2021–Spring 2023)
Dog-owner fecal microbiomes using 16S rRNA amplicon data.
• Currently: attending veterinary school at Cornell University.

Brieann Lohmann Utica University '23 (Summer 2021–Spring 2023)
Nitrogen-cycling microbes and fecal source tracking in the Mohawk River.
• Currently: graduate student in the Master's of Education program at Utica University

Tyler LaFramboise Utica University '24 (Spring 2022–Fall 2023)
Made, refined, and analyzed metagenome-assembled genomes (MAGs) from freshwater creek metagenomes.

Alexandra Marsh Utica University '23 (Spring 2022–Fall 2023)
Water quality research in the Mohawk River and Oneida Lake, studying phytoplankton and N cycling.

Tanya Kuts Utica University '22 (Fall 2021–Spring 2022)
Urea and ammonium cycling in Oneida Lake.

Kristina Kuts Utica University '24 (Spring 2022–Summer 2022)
Nitrite and nitrate cycling in Oneida Lake.

Trinity Howell Hampton University '22 (Summer 2021)
Fecal source tracking in estuary waters using 16S rRNA amplicon data. Stipend funded by the National Summer Undergraduate Research Project (NSURP) 2021 program.

Nikki Pickett Utica University '21 (Fall 2020–Spring 2021)
Shotgun metagenomic analysis of antibiotic resistance genes in San Francisco Bay.

Matt Fedullo Utica University '20 (Spring 2020)
Antibiotic resistance in the Mohawk River using PCR.
• Currently: graduate student in the Physician Assistant program at Marrywood University.

Sammet Braun *Utica University '20 (Spring 2020)*
Diversity and transcription of ammonium uptake genes using metatranscriptomic data.
• Currently: laboratory technician, AGRANA Fruits US.

Arijana Dautovic *Utica University '23 (Spring 2020)*
Ammonia-oxidizing microbes in the Mohawk River.

Carrilynn Garrett *Utica University '23 (Spring 2020)*
Nitrogen biogeochemistry in the Mohawk River.

Hailey Goldberg *University of Georgia '20 (Summer 2018)*
Analysis of *Thaumarchaeota* in freshwater metagenomes.
• Currently: Ph.D. student at Weill Cornell Graduate School of Medical Sciences.

Aimée Okotie-Oyekan *University of Georgia '17 (Fall 2016 to Summer 2018)*
Abundance of Marine Group II *Euryarchaeota* in coastal Georgia waters and nitrifiers in coastal Antarctic waters. Co-author on a manuscript published in *Limnology and Oceanography* and another published in *ISME Communications*.
• Currently: M.S. student, University of Oregon Environmental Studies Program.

Tynan Challenor *Stanford University '17 (Summer 2014 to Summer 2016)*
Biogeochemistry and microbial ecology of nitrification in Artesian Slough and the Sacramento River. First-author poster presentation, 2014 AGU Fall Meeting; completed honors thesis (2017) studying ammonia oxidizers in the Sacramento River.
• Currently: U.C. Berkeley Labor Center.

Aubriana Menendez *Stanford University '17 (Summer 2014)*
Microbial ecology of Artesian Slough (San José, CA). Co-author on poster presentation, 2014 AGU Fall Meeting.
• Currently: UX specialist at Change Healthcare.

Kade Pettie *Amherst College '15 (Summer 2013, 2014)*
Microbial ecology of ammonia oxidizers in Arctic Sea waters. Co-author on manuscript published in *Aquatic Microbial Ecology* (2017).
• Currently: Ph.D. student, Stanford University Department of Biology.

Kofi Christie *Morehouse College '14 (Summer 2013)*
Biogeochemistry of nitrogen cycling in creeks and sloughs throughout the Baylands Nature Preserve (Palo Alto, CA).
• Currently: Assistant Professor of Environmental Engineering, Louisiana State University.

Yari Greaney *Stanford University '15 (Fall 2012 to Spring 2013).*
Microbial ecology of ammonia oxidizers in San Francisco Bay sediments.
• Currently: Program Manager for Local Politics and Environmental Justice at Preston-Werner Ventures.

Samuel Miller *Amherst College '10 (Summer 2009 to Spring 2010)*
Bacterial diversity of natural gas well water in the New Albany Shale. First-author poster presentation, 2010 GSA Northeastern/Southeastern Joint Section Meeting.
• Currently: programmer for the Center for Chemical Currencies of a Microbial Planet.

INVITED SEMINARS

"Studying freshwater nitrifier ecology using 'omics, from global patterns to the Finger Lakes." *Cornell University, Microbiology Department Seminar Series, 3/16/23.*

"Spatial and seasonal dynamics of nitrogen in Oneida Lake and the Mohawk River." *Cornell Biological Field Station, Summer Seminar Series*, 7/20/22.

"Determining global patterns of freshwater thaumarchaeal diversity by mining hundreds of metagenomes." *Archaea Power Hour*, 9/14/21.

"Using publicly-available 'omics data to unravel the ecology of freshwater archaea, from the Amazon River to Central New York lakes." *Asa Gray Seminar Series, Utica University*, 10/21/19.

"Understanding nitrogen uptake in the ocean using metatranscriptomics, or: How I learned to stop worrying and love the command line." *Amherst College Department of Biology*, 3/5/18.

"Using microbial and biogeochemical techniques to investigate hotspots of aerobic nitrogen cycling in San Francisco Bay." *University of Georgia Marine Sciences Seminar Series*, 11/7/16.

"Nitrification from the Pacific Ocean to the Sacramento River: Do distinct microbial communities affect biogeochemical nitrogen cycling in a large urban estuary?" *Stanford University Seminar in Prokaryotic Molecular Biology*, 11/16/15.

CONFERENCE ORAL PRESENTATIONS

(underlining designates undergraduate mentee)

Damashek J., C.S. Sheik, B.J. Kramer, C. Petro, S.E. DeVilbiss, J.J. Pierella Karlusich, C.F. Reeder, S. Chowdhury, J.C. Marks, P.C. Furey, P.M. Valdespino Castillo, J.E. Kostka, M.J. Church, M.E. Berberich, R.W. Fulweiler, A.M. Marcarelli, and J.T. Scott. "Uncovering global diazotroph diversity across the freshwater-coastal continuum by synthesizing thousands of amplicon and metagenomic datasets." *NorthEastern Microbiologists – Physiology, Ecology, Taxonomy (NEMPET) 2023 Symposium*, 6/24/23 (Blue Mountain Lake, NY).

Damashek J. "Summarizing research on aquatic microbial ecology, bioinformatics, and biogeochemistry at an undergraduate institution." *2023 Microbes and Social Equity (MSE) Symposium*, 6/9/23 (virtual, hosted by the University of Maine).

Damashek J., A.O. Okotie-Oyekan, N.J. Wallsgrove, B. Bayer, G.J. Herndl, B.N. Popp, and J.T. Hollibaugh. "Field rates and physiological mechanisms of polyamine-N oxidation by marine *Thaumarchaeota*." *2019 Aquatic Sciences Meeting*, 2/25/19 (San Juan, Puerto Rico). **Early Career Travel Award recipient.**

Damashek J., B.M. Satinsky, H.V. Goldberg, S. Sharma, J.P. Payet, B.C. Crump, J.T. Hollibaugh, and M.A. Moran. "Targeted analysis of 'omics data reveals the prevalence of *Nitrosotenuis* spp. *Thaumarchaeota* in low-latitude freshwater ecosystems." *2018 Southeastern Branch Annual Meeting, American Society for Microbiology (ASM),* 12/1/2018 (Atlanta, GA).

Damashek J., P.J. Kearns, J.L. Bowen, K.L. Casciotti, and C.A. Francis. "Relating ammonia oxidizer diversity to nitrification throughout the northern San Francisco Bay water column." *2017 Coastal and Estuarine Research Federation (CERF) Biennial Conference*, 11/8/17 (Providence, RI). **Early Career Travel Award recipient.**

Damashek J., K.L. Casciotti, and C.A. Francis. "Turbid bottom waters and ammonium-rich freshwaters as nitrification hotspots in a large urban estuary (San Francisco Bay, CA)." *2015 American Geophysical Union (AGU) Fall Meeting*, 12/18/15 (San Francisco, CA).

Damashek J., K.L. Casciotti, and C.A. Francis. "Relating ammonia oxidizer communities and gene expression to nitrification across diverse San Francisco Bay waters." *2015 Coastal and Estuarine Research Federation (CERF) Biennial Conference*, 11/11/15 (Portland, OR).

Damashek J., K.L. Casciotti, and C.A. Francis. "Linking ammonia-oxidizing microbial communities to nitrification rates across the steep gradients of San Francisco Bay (CA, USA) waters." *2015 Aquatic Sciences Meeting*, 2/24/15 (Granada, Spain). **Outstanding Student Presentation Award recipient.**

Damashek J., K.L. Casciotti, and C.A. Francis. "Microbial ecology and biogeochemical impacts of ammonia-oxidizing microbes in San Francisco Bay waters." *2014 California Estuarine Research Society Fall Conference*, 9/27/14 (Bodega Bay, CA).

Damashek J., and C.A. Francis. "Population dynamics of ammonia-oxidizing archaea and bacteria during estuarine phytoplankton blooms: How fierce is the fight for ammonium?" *2014 Ocean Sciences Meeting*, 2/24/14 (Honolulu, HI).

Damashek J., K.L. Casciotti, and C.A. Francis. "Nitrification and ammonia-oxidizing microbial communities in the turbid, nutrient-replete waters of San Francisco Bay (CA)." *2013 Coastal and Estuarine Research Federation (CERF) Biennial Conference*, 11/7/13 (San Diego, CA).

Damashek J., S.E. Miller, M.F. Kirk, A.M. Martini, S.T. Petsch, J.C. McIntosh, and M.E. Schlegel. "Microbial community structure and geochemistry of the New Albany Shale (Illinois Basin) and its potential to produce biogenic methane." *2010 Goldschmidt Conference*, 6/17/10 (Knoxville, TN).

Damashek J., J.S. Miller, and R.A. Levin. "Phylogenetics of Chinese *Lycium* (Solanaceae)." *2009 Northeast Undergraduate Research and Development Symposium*, 3/28/09 (Biddeford, ME). **Oral Presentation Award recipient.**

CONFERENCE POSTER PRESENTATIONS

(underlining designates undergraduate mentee)

Rando A., S. Huskic, A. Lumley, A. Stapf, D. Toussaint, S.M. Zukic, and **J. Damashek**. "Membrane-bound pyrophosphatase transcription in marine environments using meta-genomics and -transcriptomics and bacterial strains *in vivo*." *NorthEastern Microbiologists – Physiology, Ecology, Taxonomy (NEMPET) 2023 Symposium*, 6/24/23 (Blue Mountain Lake, NY). Lexi Rando '25 presented.

Damashek J., B.K. Lohmann, M.J. Fedullo, I. Hewson, and M.L. McCormick. "The invisible biology of freshwater: Urban and rural land use is reflected in the microbial communities of the Mohawk River and nearby freshwater systems." *Mohawk Watershed Symposium 2023*, 3/17/23 (Schenectady, NY).

Damashek J., N.I. Pickett, and T.D. Howell. "Tracing fecal contamination and antimicrobial resistance in rivers to link environmental science, community health, and public policy." *Institute for the Study of Integrative Healthcare 2022 Conference*, 9/20/22 (Utica, NY).

Damashek J. "Divining the ecology of freshwater *Thaumarchaeota* using hundreds of metagenomes collected across the globe." *International Conference on Nitrification and Related Processes (ICoN7)*, 7/21/21 (virtual, hosted by Utah State University).

Damashek J. "Divining the ecology of freshwater *Thaumarchaeota* using hundreds of metagenomes collected across the globe." *Bioinformatics Virtual Coordination Network 2021 Conference*, 6/11/21 (virtual, hosted by the University of Southern California). See poster here!

Damashek J., A. Dautovic, and C. Garrett. "Relating microbial diversity to nitrogen cycling in the Mohawk River and diverse freshwater ecosystems." *Mohawk Watershed Symposium 2020* (Schenectady, NY); *canceled due to COVID-19*.

Damashek J., N.J. Wallsgrove, B. Bayer, G.J. Herndl, B.N. Popp, and J.T. Hollibaugh. "Oxidation of polyamine nitrogen by *Thaumarchaeota*-dominated mixed communities and *Thaumarchaeota* isolates from the coastal ocean." *Fifth International Conference on Nitrification and Related Processes (ICoN5)*, 7/26/17 (Vienna, Austria).

Damashek J., B. Bayer, G.J. Herndl, B.N. Popp, N.J. Wallsgrove, and J.T. Hollibaugh. "Oxidation of polyamine nitrogen by marine *Thaumarchaeota* in the coastal ocean and the laboratory." *2017 Southeastern Biogeochemistry Symposium*, 4/1/17 (Athens, GA).

Damashek J., T. Challenor, K.L. Casciotti, and C.A. Francis. "Nitrification from the Pacific Ocean to the Sacramento River: Do distinct microbial communities affect biogeochemical nitrogen cycling in the waters of a large urban estuary?" *2016 Ocean Sciences Meeting*, 2/22/16 (New Orleans, LA).

Damashek J., T. Challenor, K.L. Casciotti, and C.A. Francis. "Factors influencing nitrification rates and ammonia-oxidizing microbes throughout the San Francisco Bay estuary." *2015 Young Environmental Scholars Conference*, 12/2/15 (Stanford, CA).

Damashek J., T. Challenor, K.L. Casciotti, and C.A. Francis. "Biogeochemical effects of shifts in ammonia-oxidizing microbial community structure and gene expression in the waters of Suisun Bay and the Sacramento River." *2015 State of the San Francisco Estuary Conference*, 9/17/15 (Oakland, CA).

Damashek J., K.L. Casciotti, and C.A. Francis. "Partitioning nitrification between specific archaeal and bacterial clades in a large, nitrogen-rich estuary (San Francisco Bay, CA)." *2014 American Geophysical Union (AGU) Fall Meeting*, 12/16/14 (San Francisco, CA).

Damashek J., K.L. Casciotti, and C.A. Francis. "Can San Francisco Bay 'filter' nitrogen between the land and the sea? The microbiology and biogeochemistry of nitrification in estuary waters." *2014 Bay-Delta Science Conference*, 10/28/14 (Sacramento, CA).

Damashek J., K.L. Casciotti, and C.A. Francis. "Does pelagic nitrification in estuaries 'filter' nitrogen between the land and the sea? Microbial and biogeochemical considerations from San Francisco Bay (CA)." *2014 Marine Microbes Gordon Research Conference*, 6/22/14 (Waltham, MA).

Damashek J., and C.A. Francis. "Nitrogen cycling in the mud: Functional gene and biogeochemical analyses of nitrification in a large urban estuary." *2013 Aquatic Sciences Meeting*, 2/21/13 (New Orleans, LA).

Damashek J., and C.A. Francis. "Seasonal dynamics of microbial ammonia oxidation in San Francisco Bay." *2012 American Society for Microbiology General Meeting*, 6/18/12 (San Francisco, CA).

Damashek J., and C.A. Francis. "Aquatic microbial nitrogen cycling: Molecular evidence of planktonic ammonia oxidation in San Francisco Bay." *2011 Beyond the Golden Gate Symposium*, 11/1/11 (San Francisco, CA).

PROFESSIONAL DEVELOPMENT

Student in "The Inclusive STEM Teaching Project" (virtual through edX, facilitated by Bryant Buchanan and Xiao Xiao at Utica University). 2022.

FELLOWSHIPS AND AWARDS

Harold T. Clark Summer Fellowship Award
Utica University (2021; $2,300)

Early Career Travel Award
ASLO Aquatic Sciences Meeting (2019; $500)
CERF Biennial Conference (2017; $300)

Stanford-USGS Graduate Fellowship
Stanford University (2014-2015 academic year)

Oral Presentation Award
ASLO Aquatic Sciences Meeting (2015)
Northeast Undergraduate Research and Development Symposium (2009)

McGee Research Grant
Stanford University (2014, $2,200; 2011, $3,800)

John Mason Clarke 1877 Fellowship in Paleontology and Geology
Amherst College (2011-2012 academic year, $3,300; 2010-2011 academic year, $5,200)

Oscar E. Schotte Award & Scholarship Prize
Amherst College Department of Biology (2009)

Funded Summer Research Internship
Five College Coastal and Marine Sciences Program (Summer 2007)

William C. Young Prize
Amherst College Department of Biology (Summer 2007)

Howard Hughes Medical Institute Summer Fellow
Amherst College (Summer 2006)

PROFESSIONAL AND INSTITUTIONAL SERVICE

Utica University

- Curriculum Committee (2021–2023)
- Strategic Advisory Committee on DEI (2-year term: 2020–2022)
- Asa Gray Seminar Series coordinator (2022–2023)
- Academic Planning Task Force on Academic Information Management (2019–2020)
- Search committee member: "Assistant professor of Biochemistry" (2021), "Assistant Professor of Biology: Genetics and Cell Biology" (2019).

Environmental Consortium Liaison (2021–2023)

Social Media Team Lead (Communications Committee)
Coastal and Estuarine Research Federation (CERF; 2017–2019)
Coordinate social media outreach, develop strategies and standard operating procedures for social media team and interactions with CERF headquarters and other committees.

Conference Attendee Experience Committee Member
2019, 2017 Coastal & Estuarine Research Federation (CERF) Biennial Conference
Co-leader of social media committee.

Conference Session Organizer
2017 Coastal & Estuarine Research Federation (CERF) Biennial Conference
Organized session: "Microbial Communities and the Dynamics and Resilience of Ecosystem Function" (https://cerf.confex.com/cerf/2017/webprogrampreliminary/Session1364.html).

2016 Ocean Sciences Meeting
Organized session: "Nitrogen at the Interface: The N-Cycle across Physical and Disciplinary Boundaries" (http://agu.confex.com/agu/os16/preliminaryview.cgi/Session9274).

2014 American Geophysical Union (AGU) Fall Meeting
Organized judges for student presentations for the "Marine Microbial Genomics" session (https://agu.confex.com/agu/fm14/webprogrampreliminary/Session3363.html).

Graduate Student Consultant
Stanford University Center for Teaching and Learning (2013–2015)

Peer Reviewer

Funding agencies: NSF OCE (Chemical Oceanography, ad hoc), Maryland Sea Grant (ad hoc).

Journals: *Applied & Environmental Microbiology*, *Aquatic Microbial Ecology*, *Aquatic Sciences*, *Biogeosciences*, *Environmental Microbiology*, *Estuaries and Coasts*, *Freshwater Science*, *Frontiers in Marine Science*, *Frontiers in Microbiology*, *ISME Journal*, *Journal of Geophysical Research: Biogeosciences*, *Limnology & Oceanography*, *Marine Ecology Progress Series, Microbial Ecology*, *Microbiome*, *mSphere*, *mSystems*, *PeerJ*, *Science of the Total Environment*, *Water Resources Research*.

SOCIETY MEMBERSHIPS

Association for the Sciences of Limnology and Oceanography (ASLO)

American Geophysical Union (AGU)

Coastal and Estuarine Research Federation (CERF)

Last updated: 10/2023

Squid cartoon by Melissa Weintraub