



Michael Tessler, PhD

St. Francis College
American Museum of Natural History
New York, NY, USA
mtessler@sfc.edu
mtessler@amnh.org
609-495-5543

Academic Appointments

- **Assistant Professor, St. Francis College**, 2020-present
- **Research Associate, American Museum of Natural History**, 2021-present
- **Adjunct Assistant Professor, New York University**, 2020-present
- **Visiting Scientist, New York University**, 2017-2020
- **Postdoctoral Fellow, American Museum of Natural History**, 2017-2020

Education

- **PhD in Comparative Biology, Richard Gilder Graduate School, American Museum of Natural History**, July 2017
- **MS in Biology (Ecology track), Fordham University**, August 2013
- **BA in Natural History, Sterling College**, December 2009

Book and Book Chapters

3. R DeSalle, **M Tessler**, J Rosenfeld. 2020. Phylogenomics: A Primer, Second Edition. CRC Press, Boca Raton.
2. **JS Neumann**, **M Tessler**, R DeSalle, B Schierwater. 2021. The phylogenetics of early Metazoa. In: Modern Invertebrate Systematics, CRC Press, Boca Raton, edited by B Schierwater and R DeSalle.
1. R DeSalle, A Narechania, M Zilversmit, J Rosenfeld, **M Tessler**. 2017. To tree or not to tree *Homo sapiens*. In: Rethinking Human Evolution, MIT Press, Boston, edited by JH Schwartz.

Publications and Peer-reviewed Book Chapters (PDFs Available Upon Request)

H-index = 14; [Google Scholar account](#)

* Denotes co-first authorship

Underlined with italics denotes high school student

Underlining denotes undergraduate student

Underlined, bolded with italics denotes graduate student

34. **D de Carle**, L Gajda, A Bielecki, S Cios, JM Cichocka, H Golden, AD Gryska, SG Sokolov, MB Shedko, R Knudsen, S Utevsy, P Świątek, **M Tessler**. 2022. Recent evolution of ancient Arctic leech relatives: systematics of Acanthobdellida. Zoological Journal of the Linnean Society. *In press*.

33. **RE Iwama, M Tessler**, S Kvist. 2022. Leech anticoagulants are ancestral and likely multifunctional. *Zoological Journal of the Linnean Society*. *In press*.
32. FM Lansac-Tôha, LM Bini, BR Meira, BT Segovia, CS Pavanelli, CC Bonecker, CP de Deus, E Benedito, GM Alves, GI Manetta, J Higuti, JD Dias, LCG Vieira, LC Rodrigues, M do Carmo Roberto, MR Brugler, MJ Lemke, **M Tessler**, R DeSalle, RP Mormul, S Amadio, SF Lolis, S Jati, T Siqueira, WM Silva, FA Lansac-Tôha, K Martens, LFM Velho. 2021. Scale-dependent patterns of metacommunity structuring in aquatic organisms across floodplain systems. *Journal of Biogeography* 48: 872-885.
31. **M Tessler***, JP Gaffney *, AG Oliveira, **A Guarnaccia**, KC Dobi, N Gujarati, M Galbraith, JD Mirza, JS Sparks, VA Pieribone, RJ Wood, DF Gruber. 2020. A putative chordate luciferase from a cosmopolitan tunicate indicates convergent bioluminescence evolution across phyla. *Scientific Reports* 10: 17724.
30. **RE Iwama, M Tessler**, ME Siddall, S Kvist. 2021. The origin and evolution of antistasin-like proteins in leeches (Hirudinida, Clitellata). *Genome Biology and Evolution* 13: evaa242.
29. NM Hensley, EA Ellis, NY Leung, J Coupart, A Mikhailovsky, DA Taketa, **M Tessler**, DF Gruber, AW De Tomaso, Y Mitani, TJ Rivers, GA Gerrish, E Torres, TH Oakley. 2021. Selection, drift, and constraint in cypridinid luciferases and the diversification of bioluminescent signals in sea fireflies. *Molecular Ecology* 30: 1864-1879.
28. R Harbert, SW Cunningham, **M Tessler**. 2020. Spatial modeling could not differentiate early SARS-CoV-2 cases from the distribution of humans on the basis of climate in the United States. *PeerJ* 8: e10140.
27. **M Tessler***, MR Brugler*, JA Burns, NR Sinatra, DM Vogt, A Varma, M Xiao, RJ Wood, DF Gruber. 2020. The impact of an ultra-gentle soft robot on jellyfish transcriptomic response during handling. *Current Biology* 30: R135–R158.
26. **JS Neumann**, DeSalle, R, A Narechania, B Schierwater, **M Tessler**. 2021. Morphological characters can strongly influence relationships in early animal phylogenomic datasets. *Systematic Biology* 70: 360-375.
25. M Fahmy, K Williams, **M Tessler**, S Weiskopf, E Hekkala, M Siddall. Multilocus metabarcoding of terrestrial leech bloodmeal iDNA increases species richness uncovered in surveys of vertebrate host biodiversity. *Journal of Parasitology* (in press).
24. G Moore, **M Tessler**, SW Cunningham, J Betancourt, R Harbert. 2020. Paleo-metagenomics of North American fossil packrat middens: past biodiversity revealed by ancient DNA. *Ecology and Evolution* 00: 1-15.
23. ME Siddall, **M Barkdull**, **M Tessler**, MR Brugler, E Borda, E Hekkala. 2019. Ideating iDNA: lessons and limitations from leeches in legacy collections. *PLOS ONE* 14: e0212226.
22. **IO Ezukanma**, **M Tessler**, AM Salaam, KS Chukwuka, AJ Ogunniran. 2019. Epiphytic bryophytes of urban agroforest in Ibadan, southwest, Nigeria. *Journal of Bryology* 41: 341-349.
21. **M Tessler**, JP Gaffney, J Crawford, E Trautman, NA Gujarati, P Alatalo, VA Pieribone, DF Gruber. 2018. Luciferin synthesis and luciferase transcription in the bioluminescent copepod *Metridia lucens*. *PeerJ* 6: e5506.
20. **M Tessler**, D de Carle, **ML Voiklis**, **OA Gresham**, **JS Neumann**, S Cios, ME Siddall. 2018. Worms that suck: phylogenetic analysis of Hirudinea solidifies the position of

- Acanthobdellida and necessitates the dissolution of Rhynchobdellida. *Molecular Phylogenetics and Evolution* 127: 129-134.
19. **M Tessler**, **S Weiskopf**, L Berniker, R Hersch, KP McCarthy, DW Yu, ME Siddall. 2018. Bloodlines: mammals, leeches, and conservation in southern Asia. *Systematics and Biodiversity* 16: 488-496.
 18. **M Tessler**, D Marancik, D Champagne, A Dove, A Camus, ME Siddall, S Kvist. 2018. Marine leech anticoagulant diversity and evolution. *The Journal of Parasitology* 104: 210-221.
 17. **M Tessler**, ME Siddall, A Ocegüera-Figueroa. 2018. Leeches from Chiapas, Mexico with a new species of *Erpobdella* (Hirudinida: Erpobdellidae). *American Museum Novitates* 3895: 1-15.
 16. **S Weiskopf**, K McCarthy, **M Tessler**, MH Rahman, J McCarthy, R Hersch, MM Faisal, ME Siddall. 2018. Using terrestrial haematophagous leeches to enhance tropical biodiversity monitoring programs. *Journal of Applied Ecology* 55: 2071-2081.
 15. MR Brugler, RE González-Muñoz, **M. Tessler**, E Rodríguez. 2018. An EPIC journey to locate single-copy nuclear markers in sea anemones. *Zoologica Scripta* 47: 756-776.
 14. MR Brugler, MT Aguado, **M Tessler**, ME Siddall. 2018. The transcriptome of the Bermuda fireworm *Odontosyllis enopla* (Annelida: Syllidae): a unique luciferase gene family and putative epitoky-related genes. *PLOS ONE* 13: e0200944.
 13. **M Tessler**, **JS Neumann**, E Afshinnekoo, M Pineda, R Hersch, LFM Velho, BT Segovia, FA Lansac-Toha, M Lemke, R DeSalle, C Mason, MR Brugler. 2017. Large-scale differences in microbial biodiversity discovery between 16S amplicon and shotgun sequencing. *Scientific Reports* 7: 6589.
 12. **M Tessler***, MR Brugler*, R DeSalle, R Hersch, LFM Velho, FA Lansac-Toh, MJ Lemke. 2017. A global eDNA comparison of freshwater bacterioplankton assemblages focusing on large-river floodplain lakes of Brazil. *Microbial Ecology* 73: 61-74.
 11. D de Carle, A Ocegüera-Figueroa, **M Tessler**, ME Siddall, S Kvist. 2017. Multilocus phylogenetic analysis of *Placobdella* (Hirudinea: Rhynchobdellida: Glossiphoniidae) with consideration of COI variation. *Molecular Phylogenetics and Evolution* 114: 234-248.
 10. D Norris, E Kraichak, A Risk, D Lucas, D Allard, F Rosengren, T Clark, N Fenton, **M Tessler**, N Phephu, E Lennette. 2017. On the diversity and richness of understory bryophytes at Nectandra Cloud Forest Reserve, Costa Rica. *Biodiversity Data Journal* 5: e11778.
 9. **M Tessler**, TA Clark. 2016. The impact of bouldering on rock-associated vegetation. *Biological Conservation* 204: 426-433.
 8. **M Tessler**, TA Clark, SW Cunningham. 2016. An updated checklist of bryophytes of the Shawangunk Mountains, New York. *Evansia* 33: 154-164.
 7. S Kvist, A Ocegüera-Figueroa, **M Tessler**, J Jiménez-Armenta, RM Freeman, G Giribet, ME Siddall. 2016. When predator becomes prey: investigating the salivary transcriptome of the shark-feeding leech *Pontobdella macrothela* (Hirudinea: Piscicolidae). *Zoological Journal of the Linnean Society* 179: 725-737.
 6. **M Tessler**, SW Cunningham, TA Clark. 2016. Noteworthy habitat and phylogeny updates for eastern US *Ulota* (Orthotrichaceae, Bryophyta). *Mitochondrial DNA* 28: 650-654.



5. JA Rosenfeld, D Reeves, MR Brugler, A Narechania, S Simon, R Durrett, J Foux, K Shianna, MC Schatz, J Gandara, E Afshinnikoo, ET Lam, AR Hastie, S Chan, H Cao, M Saghbini, A Kentsis, PJ Planet, V Kholodovych, **M Tessler**, R Baker, R DeSalle, L Sorkin, S Kolokotronis, M Siddall, G Amato, CE Mason. 2016. Genome assembly and geospatial phylogenomics of the bed bug *Cimex lectularius*. *Nature Communications* 7: 10164.
4. **M Tessler**, A Barrio, E Borda, R Rood-Goldman, M Hill, ME Siddall. 2016. Description of an extant species with microcomputed tomography and phylogenetic revision of duognathous terrestrial leeches (Hirudinida: Arhynchobdellida: Haemadipsidae: *Chtonobdella*). *Zoologica Scripta* 45: 552-565.
3. ER Hekkala, SG Platt, JB Thorbjarnarson, TR Rainwater, **M Tessler**, SW Cunningham, C Twomey, G Amato. 2015. Integrating molecular, phenotypic, and environmental data to elucidate patterns of crocodile hybridization in Belize. *Royal Society Open Science* 2: 150409.
2. **M Tessler**, KT Truhn, JD Wehr. 2014. Diversity and distributions of stream bryophytes: does pH matter? *Freshwater Science* 33: 778-787.
1. **M Tessler**. 2012. A monograph of *Hymenodon* (Orthodontiaceae). *The Bryologist* 115: 493-517.

Grants and Fellowships

- Catskill Center for Conservation and Development CRISP grant (\$25,000), 2019
 - Funding environmental DNA research for detection of invasive species in the Catskills, NY
- Catskill Center for Conservation and Development (\$19,000), 2019
 - Funding environmental DNA research for detection of invasive plants in the Catskills, NY
- Lower Hudson PRISM (\$20,000), 2019
 - Funding environmental DNA research for detection of invasive species in the Hudson, NY
- Catskill Center for Conservation and Development CRISP grant (\$25,000), 2018
 - Funding environmental DNA research for detection of invasive species in the Catskills, NY
- Richard Gilder Graduate School Fellowship and Research Assistantship (\$165,000 and full tuition remission), American Museum of Natural History, 2013-2017
- NSF DDIG (\$18,622), 2016
 - Funding field work in Finland and US, and transcriptome sequencing
 - Studying phylogenomics and anticoagulant evolution of outgroups to leeches
- Dresden Travel Grant, American Society of Parasitologists, 2015-2017 (\$1,100)
- Theodore Roosevelt Memorial Grant (\$3,124), 2015
 - Funding field work in Chiapas, Mexico
 - Studying regional leech diversity
- Expedition Fund Grant (\$1,300), The Explorers Club, 2015
 - Funding field work in Valdivia, Chile
 - Studying anticoagulant evolution of non-bloodfeeding leeches



- NSF EAPSI Fellowship (approximately \$10,000), China, 2014
 - Funded field work in China
 - Studying leech and vertebrate diversity, using environmental DNA analyses of leech gut contents
- Lerner Gray Fund for Marine Research (\$2,000), American Museum of Natural History, 2014
 - Funded field work in Canada
 - Studying anticoagulant evolution of marine leeches
- Loewy Fellowship (\$10,000), Mohonk Preserve, 2013
 - Studied the impact of bouldering on vegetation
 - Produced a checklist of Mohonk bryophytes
- Calder Graduate Research Grant (\$1,000), The Lewis Calder Center, 2012
- Presidential Scholarship (\$84,000 and full tuition remission), Fordham University, 2010-2013
- Scholarship, Humboldt Field Research Institute (partial to full tuition remission), 2008, 2009, and 2011
- Student Travel Award, ABLIS, 2009 and 2010

Board of Trustees

- Sterling College, 2019-present

Honors and Awards

- Outstanding Student Paper Award, American Society of Parasitologists meeting, 2017
- Lars Brundin Award, Hennig Society meeting, 2015
- Phi Kappa Phi Honor Society, inducted 2013
- Alpha Sigma Nu Honor Society, inducted 2013

Invited Seminar Presentations

11. American Museum of Natural History. 2021. When things fall apart: orthology and support in phylogenomics.
10. Manhattan College. 2020. Next generation natural history.
9. Mohonk Preserve and State University of New York, New Paltz. 2020. Climbing, conservation, and our beloved Shawangunks.
8. Columbia University. 2019. Environmental DNA for natural history and conservation.
7. College of Mount Saint Vincent. 2019. Using new tools to study natural history and conservation.
6. The John B. Pierce Laboratory (Yale Affiliated). 2018. Making light and sucking blood, an exploration of evolutionary novelty in animals.
5. The Academy of Natural Sciences of Philadelphia. 2018. Using new tools to study traditional natural history.
4. Drexel University. 2018. Making light and sucking blood, an exploration of gene evolution in marine invertebrates.
3. Manhattan College. 2018. Advancing leech biology through methodological innovations.
2. Fordham University. 2016. Description of a soft-bodied invertebrate with microcomputed tomography and revision of the two-jawed terrestrial leeches.



1. Universidad Nacional Autónoma de México. 2016. Description of a soft-bodied invertebrate with microcomputed tomography and revision of the genus *Chtonobdella* (Hirudinea: Haemadipsidae), with a discussion of reclassifying invalid higher taxa.

Presentations

Underlined with italics denotes high school student

Underlining denotes undergraduate student

Underlined, bolded with italics denotes graduate student

27. **M Tessler**. 2021. Environmental DNA (eDNA) for detecting aquatic invasive plants. NEAPMS, talk.
26. **RE Iwama**, **M Tessler**, S Kvist. 2021. Leech anticoagulants are ancestral and multifunctional. Evolution, talk.
25. **RE Iwama**, S Kvist, ME Siddall, **M Tessler**. 2019. Back to the roots: on the origin of the molecular armory of hemostasis inhibition in leeches. Evolution, talk.
24. **D de Carle**, A Ocegüera-Figueroa, **M Tessler**, AJ Phillips, ME Siddall, S Kvist. 2019. Repeated evolution of bloodfeeding in leeches. Evolution, talk.
23. R Harbert, **G Moore**, SW Cunningham, **M Tessler**. 2019. Paleo-Metagenomics of Late Quaternary Packrat Midden Plant Macrofossils. Botany, talk.
22. **JS Neumann**, SW Cunningham, **JY Chen**, **PN Guevara**, **M Tessler**. 2018. Is higher taxonomy even scientific? Evolution, poster.
21. **K Williams**, **M Fahmy**, **M Tessler**, E Hekkala, M Siddall. 2018. Surveying vertebrate biodiversity in southern Asia via metabarcoding of terrestrial leech bloodmeals. New England Association of Parasitologists Meeting, poster.
20. **OA Gresham**, **ML Voiklis**, D de Carle, **JS Neumann**, S Cios, ME Siddall, **M Tessler**. 2018. Phylogenetic relationships of leeches and their relatives. Northeast Natural History Conference, poster.
19. SW Cunningham, SC Galen, E Hekkala, SD Warring, MR Brugler, **M Tessler**. 2018. Transatlantic Hitchhiking: A possible case of acanthocephalan parasites transported to New York by a rare vagrant, the corncrake (*Crex crex*). Northeast Natural History Conference, talk.
18. **M Tessler**, S Kvist, ME Siddall. 2017. Salivary transcriptomics and anticoagulants diversity of marine leeches. Annual meeting of the American Society of Parasitologists, talk.
17. **M Tessler**, S Kvist, ME Siddall. 2017. Diversity and evolution of marine leech anticoagulants. Annual meeting of the Society for Molecular Biology and Evolution, poster.
16. ME Siddall, **M Tessler**. 2017. Bloodsucker proxy. March for Science Celebration of American Science and Engineering, University of Maryland, poster.
15. **M Tessler**, ME Siddall. 2016. Host and parasite diversity: mammalian diversity from leech blood meals and terrestrial leech (*Haemadipsa*) phylogenetics. Annual meeting of the American Society of Parasitologists, talk.
14. **S Weiskopf**, K McCarthy, **M Tessler**, ME Siddall, H Rahman, J McCarthy, MM Faisal. 2016. Using terrestrial hematophagous leeches to monitor vertebrate biodiversity. Society for Conservation Biology Asia Chapter Meeting, talk.



13. **Tessler, M, A Barrio, E Borda, R Rood-Goldman, M Hill, ME Siddall.** 2015. Description Of An Extant Species With Micro-Computed Tomography And Phylogenetic Revision Of Duognathous Terrestrial Leeches (Hirudinida: Arhynchobdellida: Haemadipsidae). Annual meeting of the American Society of Parasitologists, talk.
12. **M Tessler, A Barrio, E Borda, R Rood-Goldman, M Hill, ME Siddall.** 2015. Description Of An Extant Species With Micro-Computed Tomography And Phylogenetic Revision Of Duognathous Terrestrial Leeches (Hirudinida: Arhynchobdellida: Haemadipsidae). Hennig Society Meeting, talk.
11. S Kvist, A Ocegüera-Figueroa, M Brugler, **M Tessler**, G Giribet, ME Siddall. 2015. On the Evolution of Anticoagulation Factors in Leeches (Annelida: Clitellata). Hennig Society Meeting, talk.
10. **M Tessler**, TA Clark. 2015. The Impact of Bouldering on Boulder-Associated Plants and Lichens. Botany, talk.
9. **M Tessler**, C Meydan, E Afshinnekoo, S Ahsanuddin, JA Rosenfeld, R DeSalle, CE Mason. 2015. Microbial Community Structuring in NYC Subways. Microbes in the City, poster.
8. M Lemke, R DeSalle, M Brugler, **M Tessler**, R Hersch, LF Velho. 2015. A Comparison of the bacterioplankton assemblages from the large-river floodplain lakes of the Amazon, Araguaia, Parana, and Parguai (Pantanal) Rivers, Brazil. Freshwater Science Meeting, poster.
7. AJ Phillips, **M Tessler**. 2014. Endoparasitic leeches from frogs (Anura: Hylidae, Ranidae) in Papua New Guinea. Annual meeting of the American Society of Parasitologists, talk.
6. **M Tessler**, TA Clark. 2014. The impact of bouldering on boulder-associated vegetation. Student Conference on Conservation Science, poster.
5. **M Tessler**, KT Truhn, JD Wehr. 2012. Diversity and distributions of stream bryophytes: does pH matter? Biodiversity symposium (Philadelphia Academy of Natural Sciences), poster.
4. **M Tessler**, KT Truhn, JD Wehr. 2012. Diversity and distributions of stream bryophytes: does pH matter? Botany, poster.
3. **M Tessler**, L Struwe. 2011. *Hymenodon* (Orthodontiaceae): exploring evolution and disjunction in a tropical moss genus. International Botanical Congress, poster.
2. **M Tessler**, L Struwe. 2011. *Hymenodon* (Orthodontiaceae): exploring evolution and disjunction in a tropical moss genus. Northeast Natural History Conference, talk.
1. **M Tessler**, L Struwe. 2010. *Hymenodon* (Orthodontiaceae): exploring evolution and disjunction in a tropical moss genus. Botany, talk.

Teaching

- **Assistant Professor**, St. Francis College, 2020-present
 - Created curriculum for teaching undergraduate course General Biology, Anatomy and Physiology, Forensic Biology, Evolution, and an honors course on NYC parks.
- **Adjunct Assistant Professor**, New York University, 2020-present
 - Created curriculum for teaching undergraduate course Darwin to DNA: An Overview of Evolution, fall 2020 through present
- **Adjunct Assistant Professor**, The Cooper Union, 2020
 - Created curriculum for teaching undergraduate course Evolution, fall 2020



- Created curriculum for teaching undergraduate course Ecology and Biological Conservation, spring 2020
- **Adjunct Assistant Professor**, Baruch College (CUNY), 2019-2020
 - Taught Introductory Biology labs and recitation, fall 2019, spring 2020
- **Adjunct Faculty in Ecology**, Sterling College, 2013-present
 - Created curriculum and taught upper-level undergraduate course Field Botany of Cryptogams, 2013, 2015, 2017, 2019
- **Science co-teacher for High School Course on Tree of Life**, American Museum of Natural History, fall 2017, spring 2018, fall 2018, fall 2019
 - Co-taught class on the tree of life, focusing on biodiversity, notable groups of organisms, and systematics
- **Graduate Teaching Assistant for Graduate-level Course in Invertebrate Zoology**, American Museum of Natural History, 2016
 - Taught class and worked with students on their personal projects
 - Mentored students
- **Graduate Teaching Assistant for Graduate-level Course in Phylogenomics**, Columbia University, 2015
 - Created and conducted labs (half the course) on phylogenetics, R scripting, command line use, bioinformatics, and evolution
- **Graduate Assistant**, Fordham University, fall 2010-spring 2013
 - TA for undergraduate Ecology, fall 2011-spring 2013
 - TA for undergraduate Biology I and II, fall 2010- spring 2011

Mentoring Student Research

- **PhD Committee Member, Johannes Neumann**, American Museum of Natural History
- **PhD Committee Member, Andrew Guarnaccia**, CUNY
- **MSc Committee Member, Daniel Weber**, SUNY Albany (graduated 2021)
- **SRMP Mentor**, American Museum of Natural History, 2016-2021
 - Mentored 11 New York City high school students (Nicole Buitron, Jannatul Islam, Jude Ortega, Olivia Gresham, Magda Voiklis, Janelle Chen, Paula Guevara, Braden Vande Plasse, Silvie Schlein, David Gonzalez, and Amy Pytel) on DNA sequencing, metabarcoding, phylogenetics, bioinformatics, statistics, and scientific writing
- **Urban Barcode Project Mentor**, Cold Spring Harbor Laboratory, 2017-2020
 - Mentored six New York City high school students (Anjali Dutt, Kristina Chen, Shubh Kanna, Neil Sarkar, Deborah George, and Alex Garcia) on environmental DNA research
- **NSF REU Mentor and Co-mentor**, American Museum of Natural History, 2016-2018
 - Mentored three undergraduate students (Laura Blum, Megan Barkdull, and Melanie Wilson) in DNA sequencing, phylogenetics, and eDNA
- **Additional Informal Mentoring**, American Museum of Natural History, 2016
 - Taught student to script R pipelines for data mining project
 - Taught student molecular methods and analyses



Outreach, Invited Lectures, and Employment

- **Research Associate**, Mohonk Preserve, 2011-present
- **Presenter**, Northeast Aquatic Nuisance Species Panel and Mid-Atlantic Panel on Aquatic Invasive Species, 2019
 - Presented my research on aquatic environmental DNA in New York
- **Presenter**, Lower Hudson PRISM partners meeting, 2019
 - Presented my research on aquatic environmental DNA in the Hudson River
- **Presenter**, Catskill Center and CRISP partners meeting, 2019
 - Presented my research on aquatic environmental DNA in the Catskills
- **Presenter**, NYC DEP presentation, 2019
 - Presented my research on aquatic environmental DNA in New York
- **Guest Lecturer**, St. Francis College, 2019
 - Created and taught a lecture on invertebrate evolution and ecology
- **Guest Presenter**, Science and Nature Program (elementary school level), American Museum of Natural History, 2015, 2017, 2018
 - Created and taught hands-on presentation, including live specimens
- **Guest Presenter**, Tree of Life class (high school level), American Museum of Natural History, 2017
 - Taught about leeches, my research, and how I got interested in science
- **Daniel Smiley Research Center Planning Participant**, Mohonk Preserve, 2016
 - Member of a workshop to plan the center's future research agenda
- **Presenter**, Notes from the Field Presentations, the Metropolitan Society of Natural Historians, 2016
 - Presented on my fieldwork and research
- **Panel Participant**, From the Field, American Museum of Natural History, 2016
 - Participated in the question session about fieldwork, with a focus Cambodia
- **Guest Lecturer**, Columbia University's Summer Program for High School Students, 2015, 2016
 - Created and taught a lecture on leeches in conservation for a Conservation Biology course
- **Guest Lecturer**, New York University, 2016
 - Created and taught a lecture on species concepts for Darwin to DNA course
- **Invited Scientist**, Junior Council, American Museum of Natural History, 2016
 - Hosted a table doing speed science, discussing leech evolution
- **Guest Instructor**, After School Program, American Museum of Natural History, 2016
 - Created and taught a lecture on leeches and leech evolution
- **Guest Presenter**, Mechanisms of Evolution class (high school), American Museum of Natural History, 2016
 - Taught about leeches, my research, and how I got interested in science
- **Panel Member**, Alumni Leaders, Sterling College, 2016
 - One of six panel members discussing environmental stewardship
- **Guest Presenter**, Family Party, American Museum of Natural History, 2015
 - Demonstration of microscopy, focusing on live plant and animal specimens



- **Guest Instructor**, Murry Bergtraum High School, 2015
 - Created and taught hands-on class to high school students about leeches
- **Guest Instructor**, YouthCaN program at AMNH, 2014
 - Created and taught hands-on classes on biodiversity to high school students
- **Assistant Presenter**, World Science Festival's Cool Jobs, 2014
 - Presented leeches on stage and assisted with preparing for the presentation
- **Guest Lecturer**, St. Francis College, 2013
 - Created and taught a lecture on bryophytes for a Botany course
- **Created and Led Public Event on Bryophytes**, Mohonk Preserve, 2013
- **Internship on Moss Flora of Cape Horn**, The New York Botanical Garden, 2010
 - Researched *Bartramia* species in Cape Horn
- **Ecological Survey Intern**, Arrowwood Environmental, summer 2008
 - Assisted in surveys of wildlife habitat, vegetation, and wetland status

Media

- **Articles** relating to “Moore et al. 2020. Paleo-metagenomics of North American fossil packrat middens: past biodiversity revealed by ancient DNA.”
 - [New York Times](#), [Popular Science](#), [CNET](#), [the Virginian Pilot](#), [AMNH](#)
- **Article** relating to “Harbert et al. 2020. Spatial modeling could not differentiate early SARS-CoV-2 cases from the distribution of humans on the basis of climate in the United States.”
 - [AMNH](#)
- **Articles** relating to “Tessler et al. 2020. A putative chordate luciferase from a cosmopolitan tunicate indicates convergent bioluminescence evolution across phyla.”
 - [Popular Science](#), [AMNH](#), [LabRoots](#), [earth.com](#), [phys.org](#), [New Zealand Online News](#), [Science Daily](#), [Technology Networks](#)
- **Articles** relating to “Tessler et al. 2020. The impact of an ultra-gentle soft robot on jellyfish transcriptomic response during handling.”
 - [Gizmodo](#), [The Independent](#), [Science Daily](#), [Courthouse News](#), [IFL Science](#), [Inverse](#), [Digital Trends](#), [Le Monde](#), [Engineering 360](#), [Cosmos Magazine](#)
- **Article** relating to ongoing research on an invasive plant in 2019.
 - [New York Times](#)
- **Articles** relating to paper, “Tessler et al. 2018. Bloodlines: mammals, leeches, and conservation in southern Asia.”
 - [New York Times](#), [National Public Radio](#), [National Resource Defense Council](#), [The Scientist](#), [Science News for Students](#), [Mongabay](#), [Genomeweb](#), [American Museum of Natural History](#), [The Seattle Times](#), [phys.org](#), [Laboratory Equipment](#), [Science Daily](#), [DNA Barcoding](#), [New Atlas](#)
- **Article** relating to paper, “Tessler et al. 2018. Marine leech anticoagulant diversity and evolution.”
 - [New York Times](#)



- **Articles** relating to paper, “Brugler et al. 2018. The transcriptome of the Bermuda fireworm *Odontosyllis enopla* (Annelida: Syllidae): A unique luciferase gene family and putative epitoky-related genes.”
 - [Popular Mechanics](#), [CBC](#), [Live Science](#), [Smithsonian Magazine](#)
- **Articles and podcast** relating to paper, “Tessler et al. 2017. Large-scale differences in microbial biodiversity discovery between 16S amplicon and shotgun sequencing.”
 - [The Scientist](#), [BioTechniques](#), [The Bioinformatics Chat](#), [Health Medicine Network](#), [Technology Networks](#), [phys.org](#), [Microbiome Digest](#)
- **Articles** relating to paper, “Tessler and Clark. 2016. The impact of bouldering on rock-associated vegetation.”
 - [Climbing Magazine](#), [Alpinist Magazine](#), [Sierra Club](#), [Science News](#)
- **Articles** relating to paper, “Rosenfeld, J., Reeves, D., Brugler, M. et al. 2016. Genome assembly and geospatial phylogenomics of the bed bug *Cimex lectularius*.”
 - [New York Times](#), [CBS](#), [Christian Science Monitor](#), [National Public Radio](#), the [New Yorker](#)
- **Articles** relating to paper, “Tessler et al. 2016. Description of an extant species with microcomputed tomography and phylogenetic revision of duognathous terrestrial leeches (Hirudinida: Arhynchobdellida: Haemadipsidae: *Chtonobdella*).”
 - [New York Times](#), [The Guardian](#), [Live Science](#), [Gizmodo](#), [Science Daily](#), [phys.org](#), [\(e\) Science News](#), [UPI](#), [Big News Network](#)
- **Video** video on my leech research and trip to Cambodia
 - [American Museum of Natural History](#)
- **Video and radio mention** for NPR Science Friday online, focusing on my leech research
 - [NPR Science Friday](#)

Committees

- Lectureship Committee Member, American Society of Parasitologists, 2016-2018
- Student Committee Member, American Bryological and Lichenological Society, 2011-2012
- Startup Committee Member, Fordham Biology Graduate Student Association, 2011

Non-degree Education

- **Humboldt Field Research Institute Courses (Six): Plant Biodiversity**, 2008-2011
- **Rutgers University Graduate Course: Methods in Plant Systematics**, 2010
- **U.C. Berkeley’s Jepson Herbarium Course: Tropical Bryophytes, Costa Rica**, 2010
- **Semester Abroad, Duke University/OTS Tropical Biology, Costa Rica**, 2009

Field Experience and Collecting Trips

- USA and Canada, 2006-present
- Finland, Germany, and the Netherlands, 2016
- Mexico, 2014 and 2016
- Chile, 2015
- Cambodia, 2015
- China, 2014



- Tasmania, 2011
- Costa Rica, 2009 and 2010
- Newfoundland and Labrador, 2007

Journal Referee

- Genome Biology and Evolution 2021; Molecular Ecology Resources 2021; Gene 2017 and 2021; BMC Zoology 2021; AMNH Novitates 2021; Parasitology 2019-2020; Zootaxa 2019-2020; European Journal of Wildlife Research 2018, 2020; Ecological Research 2020; Ecology and Evolution 2019; Scientific Data 2019; Organisms Diversity & Evolution 2019; Systematics and Biodiversity 2019; PLOS ONE 2019; Mitochondrial DNA 2013, 2016-2019; Israel Journal of Ecology and Evolution 2019; Journal of Zoological Systematics and Evolutionary Research 2018-2019; Molecular Omics 2018; Journal of Tropical Ecology 2018; Check List 2018; Species Diversity 2017; Cryptogamie Bryologie 2015; Biology Letters 2014; The Bryologist 2014