

## JAY-TERRENCE LENNON

Department of Biology, Indiana University, Bloomington, Indiana 47405

Phone: (812) 856-0962; Fax: (812) 855-6082, [lennonj@indiana.edu](mailto:lennonj@indiana.edu)

Lab website: [indiana.edu/~microbes](http://indiana.edu/~microbes); Lab wiki: [indiana.edu/~lennon](http://indiana.edu/~lennon)

Google Scholar: <https://goo.gl/qx4hHR>

### EDUCATION:

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1995	BS	Environmental Forest Biology	SUNY-ESF at Syracuse
1999	MA	Ecology & Evolutionary Biology	University of Kansas
2004	Ph.D.	Ecology & Evolutionary Biology	Dartmouth College

### PROFESSIONAL EXPERIENCE:

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2016-	Professor, Indiana University, Department of Biology, Core Faculty in the Evolution, Ecology & Behavior Section, Affiliated Faculty in Microbiology Section
2012-2016	Associate Professor, Indiana University, Department of Biology, Core Faculty in the Evolution, Ecology & Behavior Section, Affiliated Faculty in Microbiology Section
2016-2017	Whitman Center Associate, Marine Biological Laboratory (MBL), Woods Hole
2016-2017	Visiting Professor, Montana State University, Department of Microbiology and Immunology
2012-2015	Adjunct Professor, W.K. Kellogg Biological Station, Michigan State University
2012	Associate Professor, W.K. Kellogg Biological Station and the Department of Microbiology & Molecular Genetics, Michigan State University
2011-	Ad hoc Graduate Faculty, Michigan Technological University
2008-2012	Adjunct Professor, Plant Biology Department, Michigan State University
2006-2012	Assistant Professor, W.K. Kellogg Biological Station and the Department of Microbiology & Molecular Genetics, Michigan State University
2004-2006	Postdoctoral Research Associate, Brown University, Department of Ecology & Evolutionary Biology

### PUBLICATIONS

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*Commissioned, In Review, In Revision, and/or Preprint:*

Moger-Reischer, Lennon JT (Commissioned) Microbial longevity. Nature Reviews Microbiology

Mueller EA, Wisnoski NI, Peralta AL, Lennon JT (Commissioned) The microbial rescue effect. Functional Ecology

Lennon JT. (Commissioned) Seed bank dynamics of the skin microbiome. Philosophical Transactions of the Royal Society B

Wisnoski NI, Leibold MA, Lennon JT (2018) Dormancy in metacommunities. OSF Preprint doi: 10.17605/OSF.IO/UJMZC (In Review at American Naturalist)

- Muscarella ME, Lennon JT (2018) Trait-based approach to bacterial growth efficiency. *bioRxiv* doi: <https://doi.org/10.1101/427161>
- Muscarella ME, Boot CM, Broeckling, Lennon JT (2018) Resource diversity structures aquatic bacterial communities. *bioRxiv*. doi: <https://doi.org/10.1101/387803> (In Review at ISMEJ)
- Salazar A, Lennon JT, Dukes JS (2018) Microbial dormancy improves predictability of soil respiration at the seasonal time scale. *bioRxiv*. doi: <https://doi.org/10.1101/434654> (In Review at Biogeochemistry)
- Webster KD, Schimmelmanna A, Drobniak A, Mastalerz M, Lagarde LR, Boston PJ, Lennon JT (2018) Diversity and composition of cave methanotrophic communities. *bioRxiv* doi: <https://doi.org/10.1101/412213>
- Larsen ML, Wilhelm SW, Lennon JT (2017) Nutrient stoichiometry shapes microbial coevolution. *bioRxiv*. doi: <https://doi.org/10.1101/183657> (In Review at Ecology Letters)
- Locey KJ, Lennon JT (2017) A modeling platform for the simultaneous emergence of ecological patterns. *PeerJ Preprints*. 5:e1469v3 <https://doi.org/10.7287/peerj.preprints.1469v3>
- Locey KJ, Lennon JT (2017) A residence-time framework for biodiversity. *PeerJ Preprints* 5:e2727v2 <https://doi.org/10.7287/peerj.preprints.2727v2>. (In Review at American Naturalist)

*In Press and Published:*

- Schimmelmanna A, Streil T, Fernandez-Cortes A, Cuezva S, Lennon JT (2018) Radiolysis via radioactivity is not responsible for rapid methane oxidation in subterranean air. doi: <https://doi.org/10.31223/osf.io/ky9up> In Press PLOS ONE
- Lennon JT, Muscarella ME, Placella SA, Lehmkuhl BK (2018) How, when, and where relic DNA biases estimates of microbial diversity. *mBio* 9:e00637-18
- Shade A, Dunn RR, Blowes SA, Keil P, Bohannan BMJ, M Hermann, K K  sel, Lennon JT, Sanders NJ, D Storch, J Chase (2018) Macroecology to unite all biodiversity great and small. *Trends in Ecology and Evolution*. <https://doi.org/10.1016/j.tree.2018.08.005>
- Hall EK, Bernhardt ES, Bier R, Bradford MA, Boot CM, Cotner JB, del Giorgio PA, Evans SE, Graham EB, Jones SE, Lennon JT, Nemergut D, Osborne B, Rocca JD, Schimel JS, Waldrop MS, Wallenstein MW (2018) Reframing the use of microbial information in ecosystem science. *Nature Microbiology* 3: 977–982
- Peralta AL, Sun Y, McDaniel MD, Lennon JT (2018) Crop diversity increases disease suppressive capacity of soil microbiomes. *Ecosphere* 9: e02235
- Shoemaker WR, Lennon JT (2018) Evolution with a seed bank: the population genetic consequences of microbial dormancy. *Evolutionary Applications* 11: 60–75
- Long H, Sung W, Kucukyildirim S, Williams E, Miller S, Guo W, Patterson C, Gregory C, Strauss Ch, Stone C, Berne C, Kysela D, Shoemaker WR, Muscarella M, Luo H, Lennon JT, Brun YV, Lynch M (2018) Evolutionary determinants of genome-wide nucleotide composition. *Nature Ecology and Evolution*. <https://doi.org/10.1038/s41559-017-0425-y>

- Shoemaker WR, Locey KJ, Lennon JT (2017) A macroecological theory of microbial biodiversity. *Nature Ecology and Evolution* 1:0107
- Lennon JT, Locey KJ (2017) Macroecology for microbiology. *Environmental Microbiology Reports*. 9: 38-40
- Locey KJ, Fisk MC, Lennon JT (2017) Microscale insight into microbial seed banks. *Frontiers in Microbiology* 7: 2040
- Webster KD, Rosales Lagarde L, Sauer PE, Schimmelmänn A, Lennon JT, Boston PJ (2017) Isotopic evidence for the migration of thermogenic methane in Cueva de Villa Luz cave, Tabasco, Mexico. *Journal of Cave and Karst Studies* 79: 24-34
- Kuo V, Shoemaker WR, Muscarella ME, Lennon JT (2017) Whole genome sequence of the soil bacterium *Micrococcus* sp. KBS0714. *Genome Announcements* 5:e00697-17
- Nguyễn-Thùy D, Schimmelmänn A, Nguyễn-Văn H, Drobniak A, Lennon JT, Tạ PH, Nguyễn N (2017) Subterranean microbial oxidation of atmospheric methane in cavernous tropical karst. *Chemical Geology* 466: 229-238
- Lamit LJ, Romanowicz JH, Potvin LR, Rivers A, Singh K, Lennon JT, Tringe S, Kane E, Lilleskov E (2017) Patterns and drivers of fungal community depth stratification in Sphagnum peat. *FEMS Microbiology Ecology* 93: doi: 10.1093/femsec/fix082.
- LaSarre B, McCully AL, Lennon JT, McKinlay JB (2017) Microbial mutualism dynamics governed by dose-dependent toxicity and growth-independent production of a cross-fed nutrient. *ISMEJ*. 11: 337–348
- Skelton J, Geyer KM, Lennon JT, Creed RP, Brown BL (2017) Multi-scale ecological filters shape crayfish microbiome assembly. *Symbiosis*. 72: 159-170
- Lennon JT, Locey KJ (2016) The underestimation of global microbial diversity. *mBio* 7 e01298-16
- Lennon, JT, Nguyễn Thùy D, Phạm Đức N, Drobniak A, Tạ PH, Phạm NĐ, Streil T, Webster KD, Schimmelmänn A (2016) Microbial contributions to subterranean methane sinks. *Geobiology*. 15: 254-258
- Locey KJ, Lennon JT (2016) Powerful predictions of biodiversity from ecological models and scaling laws. *Proceedings of the National Academy of Science of the United States of America*. 113: E5097
- Locey KJ, Lennon JT (2016) Scaling laws predict global microbial diversity. *Proceedings of the National Academy of Science of the United States of America*. 113: 5970–5975
- Lennon JT, Lehmkuhl (2016) A trait-based approach to biofilms in soil. *Environmental Microbiology*. 18: 2732–2742
- Muscarella ME, Jones SE, Lennon JT (2016) Species sorting along a subsidy gradient alters community stability. *Ecology* 97: 2034-2043
- Kinsman-Costello LE, Hamilton SK, O'Brien J, Lennon JT (2016) Phosphorus release from the drying and reflooding of diverse wetland sediments. *Biogeochemistry* 130: 159-176

- Aanderud ZT, Vert JC, Lennon JT, Magnusson TW, Breakwell DP, Harker AR. (2016) Bacterial dormancy is more prevalent in freshwater than hypersaline lakes. *Frontiers in Microbiology* 7:853. doi: 10.3389/fmicb.2016.00853
- Wiggington CH, Sonderegger DL, Brussard CPD, Buchan A, Finke JF, Fuhrman JA, Lennon JT, Middelboe M, Stock CA, Suttle CA, Wilson WH, Wommack EK, Wilhelm SW, Weitz JS (2016) Re-examining the relationship between virus and microbial cell abundances in the global oceans. *Nature Microbiology* 1: article 15024
- Lennon JT, Denev VJ (2016) Evolutionary ecology of microorganisms: from the tamed to the wild, p 4.1.2-1–4.1.2-12. In Yates MV, Nakatsu C, Miller R, Pillai S (ed), *Manual of Environmental Microbiology*, 4th ed. ASM Press, Washington, DC. [Epub ahead of print] doi:10.1128/9781555818821.ch4.1.2. PeerJ Preprint. DOI: 10.7287/peerj.preprints.1025v1
- Hall EK, Schoolmaster DR, Amado, AM, Stets, EG, Lennon JT, Domine L, Cotner JB (2016) Scaling relationships among drivers of aquatic respiration: from the smallest to the largest freshwater ecosystems. *Inland Waters* 6: 1-10
- Martiny JBH, Jones SE, Lennon JT, Martiny AC (2015) Microbiomes in light of traits: a phylogenetic perspective. *Science* 350: aac9323
- Bier RL, Bernhardt ES, Boot CM, Graham EB, Hall EK, Lennon JT, Nemergut D, Osborne BB, Ruiz-Gonzalez C, Schimel JP, Waldrop MP, Wallenstein MD (2015) Linking microbial community structure and microbial processes: an empirical and conceptual overview. *FEMS Microbiology Ecology*. doi: <http://dx.doi.org/10.1093/femsec/fiv113>
- Shoemaker WR, Muscarella ME, Lennon JT (2015) Genome sequence of the soil bacterium *Janthinobacterium* sp. KBS0711. *Genome Announcements* 3: e00689-15
- Treseder KK, Lennon JT (2015) Fungal traits that drive ecosystem dynamics on land. *Microbiology and Molecular Biology Reviews* 79: 243-262
- Solomon CT, Jones SE, Weidel BC, Buffam I, Fork ML, Karlsson J, Larsen S, Lennon JT, Read JS, Sadro S, Saros JE (2015) Ecosystem consequences of changing inputs of terrestrial dissolved organic matter to lakes: current knowledge and future challenges. *Ecosystems* 18: 376-389.
- Aanderud ZT, Jones SE, Fierer N, Lennon JT (2015) Resuscitation of the rare biosphere contributes to pulses of ecosystem activity. *Frontiers in Microbiology* 6: 24
- Rocca JD, Hall EK, Lennon JT, Evans SE, Waldrop MP, Cotner JB, Nemergut DR, Graham EB, Wallenstein MD (2015) Relationships between protein-encoding gene abundance and corresponding process are commonly assumed yet rarely observed. *The ISME Journal* 9: 1693–1699
- Weitz JS, Stock CA, Wilhelm SW, Bourouiba L, Buchan A, Coleman ML, Follows MJ, Fuhrman JA, Jover LF, Lennon JT, Middelboe M, Sonderegger DL, Suttle CA, Taylor BP, Thingstad TF, Wilson WH, Wommack EK (2015) A multitrophic model to quantify the effects of marine viruses on microbial food webs and ecosystem processes. *The ISME Journal* 9: 1352-1364
- Jones SE, Lennon JT (2015) A test of the subsidy-stability hypothesis: effects of terrestrial carbon in aquatic ecosystems. *Ecology* 96: 1550-1560

- Muscarella ME, Bird KC, Larsen ML, Placella SA, Lennon JT (2014) Phosphorus resource heterogeneity in microbial food webs. *Aquatic Microbial Ecology* 73: 259-272
- Peralta AL, Stuart D, Kent AD, Lennon JT (2014) A social-ecological framework for "micromanaging" microbial services. *Frontiers in Ecology and the Environment*. 12: 524-531
- terHorst CP, Lennon JT, Lau JA (2014) The relative importance of rapid evolution for plant-soil feedbacks depend on ecological context. *Proceeding of the Royal Society B*. 281: 20140028
- Krause S, Le Roux X, Niklaus PA, van Bodegom P, Lennon JT, Bertilsson S, Grossart HP, Philippot L, Bodelier P (2014) Trait-based approaches for understanding microbial biodiversity and ecosystem functioning. *Frontiers in Microbiology* 5: 251
- Dzialowski AR, Rzepecki M, Kostrzevska-Szlakowska I, Kalinowska K, Palash A, Lennon JT (2014) Are the abiotic and biotic characteristics of aquatic mesocosms representative of in situ conditions? *Journal of Limnology*. 73: 603-612
- Bertilsson S, Burgin A, Carey CC, Fey SB, Grossart HP, Grubisic L, Jones I, Kirillin G, Lennon JT, Shade A, Smyth RL (2013) The under-ice microbiome of seasonally frozen lakes. *Limnology and Oceanography* 58: 1998-2012
- Lennon JT, Hamilton SK, Muscarella ME, AS Grandy, K Wickings, SE Jones (2013) A source of terrestrial organic carbon to investigate the browning of aquatic ecosystems. *PLOS ONE* 8: e75771
- Ponsero AJ, Chen F, Lennon JT, Wilhelm SW (2013) Complete genome sequence of a non-lysogenizing cyanobacterial siphoviridae. *Genome Announcements* 1: e00472-13
- Lauber CL, Ramirez KS, Aanderud ZT, Lennon JT, Fierer N. (2013) Temporal variability in soil microbial communities across land-use types. *The ISME Journal* 7: 1641-1650
- Shade A, Peter H, Allison S, Baho D, Berga M, Bürgmann H, Huber D, Langenheder S, Lennon JT, Martiny JBH, Matulich K, Schmidt TM, Handelsman J (2012) Fundamentals of microbial community resistance and resilience. *Frontiers in Microbiology*. 3: 417
- Aanderud ZT, Jones SE, Schoolmaster DR, Fierer N, Lennon JT (2013) Sensitivity of soil respiration and microbial communities to altered snowfall. *Soil Biology & Biochemistry*. 57: 217–227
- Lau JA, Lennon JT (2012) Rapid responses of soil microorganisms improve plant fitness in novel environments. *Proceedings of the National Academy of Science of the United States of America*. 109: 14058–14062
- Lennon JT, Aanderud ZA, Lehmkuhl BK, Schoolmaster DR (2012) Mapping the niche space of soil microorganisms using taxonomy and traits. *Ecology* 93: 1867–1879
- Burgin AJ, Hamilton SK, Jones SE, Lennon JT (2012) Denitrification by sulfur-oxidizing bacteria in a eutrophic lake. *Aquatic Microbial Ecology* 66: 283–293
- O'Brien JM, Hamilton SK, Kinsman-Costello LE, Lennon JT, Ostrom NE (2012) Nitrogen transformations in a through-flow wetland revealed using whole ecosystem pulsed <sup>15</sup>N additions. *Limnology and Oceanography* 57: 221-234

- Treseder KK, Balser TC, Bradford MA, Brodie EL, Eviner VT, Hofmockel KS, Lennon JT, Levine UY, MacGregor BJ, Pett-Ridge J, Waldrop MP (2012) Integrating microbial ecology into ecosystem models. *Biogeochemistry* 109: 7-18
- Lau JA, Lennon JT (2011) Evolutionary ecology of plant-microbe interactions: soil microbial structure alters natural selection on plant traits. *New Phytologist* 192: 215-224.
- Aanderud ZT, Lennon JT (2011) Validation of heavy-water stable isotope probing for the characterization of rapid responding soil bacteria. *Applied and Environmental Microbiology* 13: 4589-4596
- Lennon JT, Jones SE (2011) Microbial seed banks: ecological and evolutionary implications of dormancy. *Nature Reviews Microbiology* 9:119-130
- Lennon JT (2011) Replication, lies, and lesser-known truths regarding experimental design in environmental microbiology. *Environmental Microbiology* 13: 1383-1386
- Fierer N, Lennon JT (2011) The generation and maintenance of diversity in microbial communities. *American Journal of Botany* 98: 439-448
- Aanderud ZT, Schoolmaster DR, Lennon JT (2011) Plants mediate the sensitivity of soil respiration to rainfall variability. *Ecosystems* 14: 156-167
- Jones SE, Lennon JT (2010) Dormancy contributes to the maintenance of microbial diversity. *Proceedings of the National Academy of Science of the United States of America* 107: 5881-5886
- Hall EK, Singer GA, Kainz MJ, Lennon JT (2010) Temperature acclimation in tow freshwater bacteria: an empirical test of a hypothesized membrane-mediated trade-off. *Functional Ecology* 24: 898-908
- Thum RA, Lennon JT (2010) Comparative ecological niche models predict the invasive spread of variable-leaf milfoil (*Myriophyllum heterophyllum*) and its potential impact on closely related native species. *Biological Invasions* 11: 1177-1188
- Jones SE, Lennon JT. (2009) Evidence for limited microbial transfer of methane in planktonic food webs. *Aquatic Microbial Ecology* 58: 45-53
- Lennon JT, Martiny JBH. (2008) Rapid evolution buffers ecosystem impacts of viruses in a microbial food web. *Ecology Letters* 11: 1178-1188
- Lennon JT, Cottingham KL (2008) Microbial productivity in variable resource environments. *Ecology* 89: 1001-1014
- Lennon JT, Khatana SAM, Marston MF, Martiny JBH (2007) Is there a cost of virus resistance in marine cyanobacteria? *The ISME Journal* 1: 300-312
- Lennon JT (2007) Diversity and metabolism of marine bacteria cultivated on dissolved DNA. *Applied and Environmental Microbiology* 73: 2799-2805.
- Reyns NB, Langenheder S, Lennon JT (2007) Specialization vs. diversification: a trade-off for young scientists? *Eos* 88: 343

- Dzialowski AD, Lennon JT, Smith VH (2007) Food web structure provides biotic resistance against plankton invasion attempts. *Biological Invasions* 9: 257-267
- Lennon JT, Faiia AM, Feng X, Cottingham KL (2006) Relative importance of CO<sub>2</sub> recycling and CH<sub>4</sub> pathways in lake food webs along a terrestrial carbon gradient. *Limnology and Oceanography* 51: 1602-1613
- Thum RA, Lennon JT (2006) Is hybridization responsible for invasive growth of non-indigenous water-milfoils? *Biological Invasions* 84: 1061-1066
- Cottingham KL, Lennon JT, Brown BL (2005) Regression versus ANOVA. *Frontiers in Ecology and the Environment* 3: 358
- Cottingham KL, Lennon JT, Brown BL (2005) Designing more informative ecological experiments. *Frontiers in Ecology and the Environment* 3: 145-152
- Lennon JT, Pfaff LE (2005) Source and supply of terrestrial carbon affects aquatic microbial metabolism. *Aquatic Microbial Ecology* 39: 107-119
- Thum RA, Lennon JT, Connor J, Smagula AP (2005) A DNA fingerprinting approach for distinguishing native and non-native milfoils. *Lake and Reservoir Management* 21: 1-6
- Lennon JT (2004) Experimental evidence that terrestrial carbon subsidies increase CO<sub>2</sub> flux from lake ecosystems. *Oecologia* 138: 584-591
- Lennon JT, Smith VH, Dzialowski AR (2003) Invasibility of plankton food webs along a trophic state gradient. *Oikos* 102: 191-203
- Dzialowski AR, Lennon JT, O'Brien WJ, Smith VH (2003) Predator-induced phenotypic plasticity in the exotic cladoceran *Daphnia lumholtzi*. *Freshwater Biology* 48: 1593-1602. (cover)
- Cottingham KL, Brown BL, Lennon JT (2001) Biodiversity may regulate the temporal variability of ecological systems. *Ecology Letters* 4: 72-85
- Lennon JT, Smith VH, Williams K (2001) Influence of temperature on exotic *Daphnia lumholtzi* and implications for invasion success. *Journal of Plankton Research* 23: 425-434

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#### **COMMENTARIES, BOOK REVIEWS, MAGAZINE ARTICLES:**

- Lennon JT, Locey KE (2018) How many microbial species are there on Earth? *Aeon*  
<https://bit.ly/2OGsEEv>
- Lau JA, Lennon JT, Heath KD (2017) Trees harness the power of microbes to survive climate change. *Proceedings of the National Academy of Science of the United States of America*.  
[www.pnas.org/cgi/doi/10.1073/pnas.1715417114](http://www.pnas.org/cgi/doi/10.1073/pnas.1715417114)
- Moger-Reischer RZ, Lennon JT (2017) Book Review. The human superorganism: how the microbiome is revolutionizing the pursuit of a healthy life by Rodney Dietert. *Quarterly Review of Biology* 92: 203
- Wisnoski NI, Lennon JT (2016) Book Review. Principles of Microbial Diversity by James W. Brown. *Quarterly Review of Biology* 91: 98-99

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#### **GRANTS:**

USDA (Pending) "The role of microbial dormancy in plant-pathogen interactions" PI with V Kuo. \$120,000 12/15/2018-12/14/2020

NASA Exobiology (Pending). "Energy limitation and the evolution of microbial dormancy". PI with J Bird. \$622,220. 12/01/2018 to 11/30/2021

Army Research Office "Microbial evolution: linking genes, phenotype, and fitness in bacterial populations" PI with JB McKinlay and M Lynch. \$499,330. 12/1/2018-11/31/2020

Indiana University Collaborative Research Grant (IUCRG). "Complexity of the gut microbiome: an experimental approach" PI with A Gumennik, N Moldovan, D Rusch, K Locey. \$74,990. 2018-2019.

NSF Integrated and Organismal Systems Panel. "Microbiome influences on the development of sociality in uni- and bi-parental rodents." Senior Personnel with GE Demas, JR Alberts, CL Wellman. \$699,573. 2018-2021.

Department of Defense "Connecting phenotype to genotype in evolved prokaryotic populations." Co-PI with J.B. McKinlay. \$197,390. 2017-2018.

NSF Ecosystems Panel. "Dissertation Research: Metabolic resource partitioning: scaling microbial physiology from individual activity to ecosystem function." PI with ME Muscarella. \$19,004.

Multidisciplinary University Research Initiatives (MURI) Program, Department of Defense. "Mechanisms of prokaryotic evolution." PI with M Lynch, P Foster, J McKinlay, A Drummond. \$6,248,455. 2015-2020.

NSF Dimensions of Biodiversity "Dimensions: Collaborative Research: Microbial seed banks: processes and patterns of dormancy-driven biodiversity." PI with K Locey and S Jones. \$1,997,144. 2015-2020.

Indiana Academy of Science "Metabolic fate of terrestrial carbon resources: anabolic vs. catabolic processes." Co-PI with M Muscarella. \$2,200.

Polish Ministry of Science and Higher Education. "Interactive effects of multiple regulating factors on cladoceran species richness and community structure". Co-PI with AR Dzialowski, P Dawidowicz, I. Feniov, IM Kostrzevska-Szlakowska, MZ Rzepecki, ID Jasser, VI Razloutski, JT Lennon, and JZ Uchmański. \$128,000, 2013 – 2015 (all funds are administered through the Centre for Ecological Research, Polish Academy of Sciences).

Center for Water Sciences (CWS) and Environmental Science and Policy Program (ESPP), Michigan State University, "Building partnerships in water research between Grand Valley State University and Michigan State University: the molecular genetic basis for invasiveness of milfoils and a time-series observatory for investigating metabolism in Muskegon Lake." Co-PI with P. Ostrom, N. Ostrom, B. Biddanda, and R. Thum, \$99,996, 2012-2014.

National Science Foundation (NSF) "Collaborative Research: PEATcosm: Understanding the interactions of climate, plant functional groups and carbon cycling in peatland ecosystems". Ecosystems Panel, Co-PI with E. Kane and others, \$677,185, 2012-2015.

United States Department of Agriculture (USDA) "Microbial seed banks: patterns and mechanisms of bacterial dormancy in soils." Agriculture and Food Research Initiative (AFRI), Microbial Communities in Soils Panel, PI, \$499,956, 2011-2014.



National Science Foundation (NSF), “Do biological processes result in the atmospheric  $^{17}\text{O}$  mass independent anomaly in nitrous oxide? Resolution and establishment of  $^{17}\text{O}$  as a tracer of microbial production.” Geobiology and Low Temperature Geochemistry Panel, Co-PI with N Ostrom and others, \$677,366, 2011-2014.

Huron Mountain Wildlife Foundation (HMWF), “Browning of freshwater ecosystems: will terrestrial carbon loading alter the diversity and function of aquatic microbial communities?” PI, \$5,600, 2011-2012.

BEACON, Michigan State University, “Contemporary evolution of cyanobacteria and viruses: implications for marine nutrient cycling” PI, \$76,964, 2011-2012.

National Science Foundation (NSF), “Greenhouse facility to support field ecology and evolution research and teaching at the Kellogg Biological Station”, Field Stations and Marine Laboratories Panel, Co-PI with K. Gross and others, \$200,000, 2010-2013.

National Science Foundation (NSF), “Field facilities improvements for terrestrial and aquatic ecology at the Kellogg Biological Station.”, Field Stations and Marine Laboratories Panel, Co-PI with K. Gross and others, \$176,000, 2010-2013

Polish Ministry of Sciences, “Zooplankton invasions: how do local and regional processes affect invasion success in relation to ecosystem productivity and intensity of disturbances.” Co-PI with A.R. Dzialowski, I. Feneva, P. Dawidowicz, M. Rzepecki, J. Ejosmont-Karabin, K. Kalinowska, I. Kostrzewska-Szlakowski, B. Sosak-Swidarska, and J. Uchmanski, \$54,000, 2009-2012.

National Science Foundation (NSF) “Collaborative Research: Characterizing the constraints on virus infection of cyanobacteria.” Biological Oceanography Panel, Co-PI with S. Wilhelm and others, \$500,000, 2009-2012.

Environmental Change Institute, University of Illinois, “Terrestrial carbon loss to aquatic ecosystems: pattern detection and hypothesis testing at the regional scale.” Co-PI with J. Fraterrigo and others, \$25,000, 2008-2011.

Gordon & Betty Moore Foundation and the Broad Institute, “Identifying viral mechanisms involved in rapid co-evolutionary dynamics between marine *Synechococcus* and its phage”. payment in kind for virus genome sequencing, PI, 2009-2010

National Science Foundation (NSF) “Terrestrial carbon in aquatic ecosystems: experimental tests of the subsidy-stability hypothesis.” Ecosystems Panel, PI, \$350,695, 2009-2012.

United States Department of Agriculture (USDA) “Moisture variability as a master regulator of microbial diversity and soil respiration across an agricultural landscape.” National Research Initiative (NRI), Soil Processes Panel, PI, \$324,000, 2008-2011

Center for Water Sciences, Michigan State University, “Microbial and ecosystem responses to land-water linkages: the energetic importance of terrestrial-derived dissolved organic carbon (DOC) in lakes.” PI, \$142,318, 2008-2010

National Science Foundation (NSF) “Water level fluctuations and internal eutrophication in lakes and wetland.” Ecosystems Panel, Co-PI with S. Hamilton and others, \$391,734, 2007-2010.

Michigan Agricultural Experiment Station, Rackham Foundation “Microbial responses to soil moisture variability in agricultural landscapes.” PI, \$75,000, 2007-2010.

United States Department of Agriculture (USDA) “Pulsed ecosystem activity: Responses of soil microorganisms to variable water supply.” National Research Initiative (NRI), Soils and Soil Biology Panel, PI, \$110,000, 2006-2009.

Center for Water Sciences, Michigan State University “Towards a mechanistic framework of how changing temperatures affect aquatic bacterial community structure and function.” PI, \$28,254, 2007.

Center for Water Sciences, Michigan State University “Quantifying biogeochemical processes in flow-through wetlands.” Co-PI with S. Hamilton, \$145,036, 2006-2009.

Environmental Protection Agency (EPA) and the NH Department of Environmental Services “Using dispersal and environmental variables to predict the occurrence and susceptibility to invasion by non-native milfoil.” Co-PI with R. Thum, \$50,000, 2005-2007.

National Science Foundation (NSF) “Linking lakes with the landscape: fate of terrestrial carbon in plankton food webs.” Doctoral Dissertation Improvement Grant (DDIG), Ecosystems Panel, Co-PI K. Cottingham, awarded \$8,075, 2002-2004.

United States Geological Survey (USGS) & National Institutes for Water Resources (NIWR) “Linking lakes with the landscape: fate of terrestrial carbon in planktonic food webs.” PI, \$30,020, 2002-2004.

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#### HONORS AND AWARDS:

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2012	Kavli Fellow, National Academy of Sciences
2004	USDA National Research Initiative (NRI) Postdoctoral Fellowship Award
2004	Hannah T. Croasdale Graduate Scholar Award. College-wide award given to a graduating Ph.D. student that best exemplifies the qualities of academic scholarship, Dartmouth College.
2004	Milton L. Shifman Endowed Scholarship, Marine Biological Laboratory
2004	Albert Cass Fellowship, The Rockefeller University
2004	Nathan Jenks Biology Award, Dartmouth College
2003	Best student presentation, North American Lake Management Society, National Meeting
2002	NSF Doctoral Dissertation Improvement Grant (DDIG)
1999-2004	Dartmouth Fellowship, Dartmouth College, Hanover, New Hampshire, USA
1996	Undergraduate honors: <i>Magna Cum Laude</i> ; President’s List; Alpha Sigma Xi, SUNY-ESF, Syracuse, New York, USA
1992	Outstanding first year history student, SUNY Oswego, Oswego, New York, USA

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#### INVITED KEYNOTE, SYMPOSIUM, AND CONFERENCE PRESENTATIONS:

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2018	Invited Lecturer, Microbial Biodiversity Course, Marine Biological Laboratory, Massachusetts, USA
2018	Invited Lecturer, Strategies and Techniques for Analyzing Microbial Population Structures (STAMPS), Marine Biological Laboratory, Massachusetts, USA
2018	Plenary speaker, Midwest Ecology and Evolution Conference (MEEC), Michigan State University, Hickory Corners, Michigan, USA

- 2018 Special Session: "Plant microbiomes in a changing world" Ecological Society of America, New Orleans, Louisiana, USA
- 2017 Argonne Soil Metagenomics Meeting, Argonne National Laboratory, Lemont, Illinois, USA
- 2017 Gordon Research Conference (GRC), Microbial Population Biology, Andover, New Hampshire, USA
- 2017 Gordon Research Conference (GRC), Applied and Environmental Microbiology, South Hadley, Massachusetts, USA
- 2017 Special Session: "Eco-evo feedbacks in microbial communities". American Society of Microbiology, New Orleans, Louisiana, USA
- 2017 Special Session: "Integrating trait based ecology across plants and microbes to predict ecosystem functioning". Ecological Society of America, Portland, Oregon, USA
- 2016 Invited speaker at the National Academies of Sciences, Engineering, and Medicine meeting on Microbiomes of the Built Environment: From Research to Application, Irvine, California, USA
- 2016 Special Session: "The role of microbes in biogeochemical cycles: linking responses to ecosystem processes and environmental change". American Geophysical Union, San Francisco, California, USA
- 2016 Guest speaker: 7th Annual Translational Plant Science Program. Theme: plant-soil microbiome, Virginia Tech, Blacksburg, Virginia, USA
- 2016 Invited presentation at workshop on "The skin microbiome - untold stories", Society of Cosmetic Chemists, Orlando, FL, USA (presentation given by Sarah Cummins)
- 2015 Guest presentation/instructor: "EDAMAME course: Explorations in Data Analysis for Metagenomic Advances in Microbial Ecology", Michigan State University, Hickory Corners, USA
- 2015 Introductory speaker and Guest Instructor: Summer Soil Institute at Colorado State University. Fort Collins, USA
- 2015 Special Session: "Rewetting dry soil: the century's unifying problem in soil microbial ecology". Ecological Society of America, Baltimore, Maryland, USA
- 2014 Special Session entitled "Seeing the trees for the forest: deciphering the biodiversity of soils" International Society for Microbiology, Seoul, Korea
- 2014 Rouge roundtable panelist "Sleeping beauties: dormancy of bacteria in nature" International Society for Microbiology, Seoul, Korea
- 2014 Special symposium: "Communities writ small: Integrating microbial systems into community ecology", Ecological Society of America, Sacramento, California, USA
- 2014 Guest presentation/instructor: "EDAMAME course: Explorations in Data Analysis for Metagenomic Advances in Microbial Ecology", Michigan State University, Hickory Corners, USA
- 2013 Keynote speaker, Argonne Soil Metagenomics Meeting, Argonne National Laboratory, Bloomingdale, Illinois, USA

- 2013 Keynote speaker, XIII Symposium on Aquatic Microbial Ecology, Stresa, Italy
- 2013 Special session: “Impact of bacteriophage in the environment”. Society for General Microbiology (SGM) Sussex University, East Sussex, United Kingdom
- 2013 Special session: “Ecological theory in microbial ecology”, Ecological Society of America, Minneapolis, Minnesota, USA
- 2013 Special symposium: “Integrating soil biodiversity into discussions of global sustainability: the time is now”. Ecological Society of America, Minneapolis, Minnesota, USA
- 2013 Special symposium: “The plant microbiome”, Canadian Society for Ecology and Evolution, Kelowna, British Columbia, Canada (declined)
- 2013 Keynote speaker, “Understanding, managing and protecting microbial communities in aquatic and terrestrial ecosystems: “Exploring the trait-based functional biodiversity approach”. ESF Eurocores Ecological and Evolutionary Functional Genomics (EuroEEFG) workshop. Wageningen, The Netherlands
- 2013 Special session on “Microbial mediated retention/transformation of organic and inorganic materials in freshwater and marine ecosystems”. Association for the Sciences of Limnology and Oceanography, New Orleans, Louisiana, USA
- 2012 Aarhus University, Denmark, “Microbial life under extreme energy limitation”
- 2012 Introductory talk for special session on “Global browning of inland waters: implications of changing terrestrial dissolved organic carbon concentrations for aquatic ecosystems”. Ecological Society of America, Portland, Oregon, USA
- 2010 Gordon Research Conference, Speaker, Marine Microbes, Tilton, New Hampshire, USA
- 2010 Argonne Soil Metagenomics Meeting, Argonne National Laboratory, Lemont, Illinois, USA
- 2009 SCOR Viral Ecology Meeting, University of Delaware, Newark, Delaware, USA
- 2009 Plant Virus Ecology Network, Ca'Tron di Roncade, Italy
- 2009 Tutorial for special session on “Increased supply of external organic carbon: effects on food web structure and efficiency of carbon transfer” Association for the Sciences of Limnology and Oceanography, Nice, France
- 2008 Special Session entitled "Have microbes read the book? Testing ecological theory in microbial communities". Ecological Society of America, Milwaukee, Wisconsin, USA
- 2006 Special session on “Ecological Principles in Microbial Communities”, International Society for Microbial Ecology, Vienna, Austria
- 2007 High latitude terrestrial and freshwater ecosystems: interactions and response to environmental change, Abisko, Sweden

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#### INVITED SEMINARS:

- 2018 University of Wisconsin, Distinguished Lecture in Microbiology, Department of Bacteriology

2018 Pennsylvania State University, Plant Pathology and Environmental Microbiology

2018 Purdue University, Department of Food and Nutrition, Microbiome Seminar Series

2017 Yale University, Department of Ecology and Evolutionary Biology

2017 University of Georgia, Odum School of Ecology

2017 German Centre for Integrative Biodiversity Research (iDiv)

2017 University of Tennessee, Department of Microbiology

2017 University of Idaho, Department of Biological Sciences

2016 Massachusetts Institute of Technology (MIT), Civil and Environmental Engineering

2016 University of Minnesota, Department of Ecology, Evolution, and Behavior

2016 University of British Columbia, BioDiversity Research Centre Seminar Series

2016 Michigan State University, Department of Plant, Soil and Microbial Sciences

2016 Uppsala University, Department of Ecology and Genetics

2016 Hope College, Department of Biology

2016 University of Montana, Flathead Lake Biological Station

2016 University of Montana, Program in Cell, Molecular and Microbial Biology

2016 Montana State University, Department of Microbiology and Immunology

2015 Duke University, University Program in Ecology

2015 East Carolina University, Department of Biology

2015 Hobart and William Smith Colleges (web-based seminar)

2015 Indiana University, Center for the Integrative Study of Animal Behavior (CISAB)

2015 Indiana University, Advance College Project

2015 Vietnam National University, Department of Microbiology

2014 University of Tennessee, Department of Ecology & Evolutionary Biology

2014 University of Louisville, Department of Biology

2014 University of Illinois, Program in Ecology, Evolution and Conservation Biology

2014 Indiana University East and Earlham College, School of Natural Science and Mathematics

2014 University of Kentucky, Department of Plant & Soil Sciences

2014 Loyola University Chicago, Department of Biology

2014 Miami University, Ecology, Evolution, and Environmental Biology

2014 Purdue University, Department of Biological Sciences, Ecology and Evolutionary Biology

2013 University of Texas at Austin, Section of Integrative Biology

2013	University of Oregon, Institute of Ecology and Evolutionary Biology
2013	University of California Santa Barbara, Department of Ecology, Evolution, and Marine Biology
2013	The Netherlands Institute of Ecology (NIOO-KNAW),
2013	University of Michigan, Department of Ecology and Evolutionary Biology
2012	Virginia Tech, Department of Biological Sciences
2012	Northwestern University, Biological Sciences
2012	University of Jyväskylä, Finland, Department of Biological and Environmental Science
2012	University of Quebec at Montreal, Canada, Department of Biological Sciences
2011	Indiana University, Department of Biology
2011	University of Massachusetts, Amherst, Department of Microbiology
2011	Oregon State University, Center for Genome Research and Biocomputing (CGRB)
2011	California Academy of Sciences
2010	Michigan Technological University, School of Forest Resources and Environmental Science.
2010	Michigan State University, Ecosystems Biogeochemistry seminar series
2010	Wright State University, Biology and Earth & Environmental Sciences
2009	University of Illinois, Program in Ecology, Evolution and Conservation Biology
2008	University of Illinois at Springfield, Merck Science Seminar
2008	Western Michigan University, Department of Biological Sciences
2007	University of Tennessee, Knoxville, Haines-Morris Microbiology series
2007	Grand Valley State University, Annis Water Resources Institute
2005	Michigan State University, Microbiology and Molecular Genetics Department
2005	Kellogg Biological Station, Michigan State University
2005	Dartmouth College, Earth Science Department
2004	University of California, Berkeley, Division of Ecosystem Sciences
2004	Brown University, Department of Ecology & Evolutionary Biology
2002	Colby-Sawyer College, Biology Program

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#### **ORGANIZER FOR SYMPOSIA, WORKSHOPS, AND CONFERENCES:**

2019	Plenary organizer. "Evolution in the wild" Microbe meeting, American Society of Microbiology, San Francisco, California, USA
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2018	Symposium co-organizer. "Assembly and function of microbial communities: a trait-based approach" Microbe meeting, American Society of Microbiology, Atlanta, Georgia, USA
2017	Retreat co-organizer. Microbial Ecology and Evolution Track. American Society of Microbiology, Washington, DC, USA
2017	Special symposium co-author. "Eco-evo feedbacks in microbial communities". Microbe meeting, American Society of Microbiology, New Orleans, Louisiana, USA
2015	Special session co-organizer. "Trait-based ecology at the microscale". Ecological Society of America. Baltimore, Maryland, USA
2014	Special session co-organizer: Microbially mediated ecosystem services: The good, the bad and the ugly. Joint Aquatic Sciences Meeting. Portland, Oregon, USA
2013	Organizing committee: First Israel-U.S. Kavli Frontiers of Science symposium, Israel Academy of Sciences, U.S. National Academy of Sciences, and the Kavli Foundation, Irvine, California
2013	Special symposium organizer: "Next generation of ecological indicators: defining which microbial properties matter most to ecosystem function and how to measure them". Ecological Society of America, Minneapolis, Minnesota, USA
2012-2015	Co-investigator: John Wesley Powell Center for Analysis and Synthesis, "Next generation of ecological indicators: defining which microbial properties matter most to ecosystem function and how to measure them". Fort Collins, Colorado, USA
2012	Round table co-organizer: "Frontiers in microbial ecosystem science: energizing the research agenda". International Society for Microbial Ecology, Copenhagen, Denmark
2012	Invited co-convenor: "The unknowns: rare ones and unculturables". International Society for Microbial Ecology. Copenhagen, Denmark
2012	Workshop co-organizer: "Answering ecological questions with metagenomic sequencing". Ecological Society of America, Portland, Oregon, USA
2011	Special symposium organizer: "Micro-managing the planet: the role of microbial ecology in earth stewardship". Ecological Society of America, Austin, Texas, USA
2010	Special session co-organizer: "Micro-managing the planet: the role of microbial ecology in earth stewardship". Ecological Society of America, Pittsburgh, Pennsylvania, USA
2002	Special session co-organizer: "Ecological implications of terrestrial inputs into lakes and ponds". Association for the Sciences of Limnology and Oceanography, Victoria, British Columbia, USA

#### **INVITED PARTICIPANT: WORKSHOPS, ROUNDTABLES, SYNTHESIS GROUPS**

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2017	Invited workshop participant: Patterns of microbial and macrobial diversity. German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig
2017	Invited workshop participant: "Continuum of Persistence" – Ecology and Function of Persistent Virus Infections, Cascais, Portugal

- 2016 Invited workshop participant: PRO-MICROBES: Vision Theme meeting on the Microbiome, Marine Biological Laboratory (MBL), Woods Hole, Massachusetts, USA
- 2016 Invited working group participant: NSF Research Coordination Network, "Utilizing ongoing experiments to understand terrestrial ecosystem sensitivity to precipitation change and drought" Sevilleta National Wildlife Refuge, Socorro, New Mexico, USA
- 2015 Invited workshop participant: "Biocomplexity" Defense Advanced Research Projects Agency (DARPA), Arlington, Virginia, USA
- 2014 Invited workshop participant: "Advanced analysis of genomic data in microbial ecology research", National Ecological Observatory Network (NEON), Boulder, Colorado, USA
- 2014 Invited workshop participant: NSF workshop on the "Ecological implications of synthetic biology", MIT Center for International Studies and the Woodrow Wilson Center, Emeryville, California, USA
- 2012 Invited workshop participant: National Academy of Sciences, German-American Kavli Frontiers of Science, Potsdam, Germany
- 2012 Invited roundtable participant: "Frontiers in ecosystem science: energizing the research agenda". Ecological Society of America, Portland, Oregon, USA
- 2011-2014 Invited working group participant: "Modeling viral effects on global carbon and biogeochemical cycles". National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville, Tennessee, USA
- 2011 Invited technical expert: "Comprehensive Environmental Assessment (CEA) of potential ecological impacts of synthetic biology". Woodrow Wilson International Center for Scholars, Washington, District of Columbia, USA
- 2010 Invited roundtable participant: "Resilience in microbial communities: towards prediction and cross-system comparisons". International Society for Microbial Ecology, Seattle, Washington, USA
- 2010 Invited workshop participant: "A synthesis of the importance of allochthonous and autochthonous support of consumers in aquatic ecosystems". Association for the Sciences of Limnology and Oceanography, Santa Fe, New Mexico, USA
- 2009 Invited workshop participant: "Scientific Committee on Oceanographic Research (SCOR), role of viruses in marine ecosystems". University of Delaware, Newark, Delaware, USA
- 2009 Invited workshop participant: Plant Virus Ecology Network (PVEN), Ca' Tron di Roncade, Italy
- 2008 Invited workshop participant: SoilCritZone, Early Stage Researcher (ESR), Chania, Crete, Greece
- 2008 Invited workshop participant: DOE Joint Genome Institute (JGI), Microbial Genomics & Metagenomics, Walnut Creek, California, USA
- 2007 Invited workshop participant: LTER genomics: "Catalyzing cross-site comparisons of microbial diversity and function". East Lansing, Michigan, USA



- 2007 Invited workshop participant: DOE Joint Genome Institute (JGI) undergraduate research program in microbial genome annotation, Walnut Creek, CA.
- 2007 Invited workshop participant: Microscale approaches to macroscale issues in ecology, Washington, District of Columbia, USA
- 2007 Invited workshop participant: Early career faculty in ecoinformatics, science environment for ecological knowledge (SEEK), Albuquerque, New Mexico, USA
- 2005 Invited workshop participant: DIALOG VII, Dissertation Initiative for Advancement of Limnology & Oceanography, Dauphin Island Sea Lab, Alabama, USA

### **CONTRIBUTED PRESENTATIONS:**

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- Shoemaker WR, Lennon JT (2017) Dormancy constrains the rate and direction of adaptive evolution. Population, Evolutionary, and Quantitative Genetics Conference Madison, Wisconsin, USA
- Shoemaker WR, Locey KJ, Lennon JT (2018) Reproducing global biodiversity estimates through evolutionary and biophysical theory. Theory in Biology Meeting, Boston, Massachusetts, USA
- Wisnoski NI, Lennon JT (2018) Dispersal and dormancy across ecosystems boundaries: bacterial diversity and function along a reservoir transect. Association for the Sciences of Limnology and Oceanography, Victoria, British Columbia, Canada
- Wisnoski NI, Lennon JT (2018) Contribution of “seed banks” to bacterioplankton community dynamics. Society for Freshwater Science, Detroit, Michigan, USA
- Shoemaker WR, Lennon JT (2017) The contribution of dormancy to microbial evolution. Society for Molecular Biology and Evolution, Austin, Texas, USA
- Benavidez MK, Milton K, Lennon JT, Wasserman M (2017) Interactions between gut microbial diversity and the endocrine system in wild howler monkeys (*Alouatta palliata*). Midwest Primate Interest Group, Evanston, Illinois, USA
- Lennon JT, Jones SE (2017) Energy limitation in bacteria: a trait-based approach. Ecological Society of America, Portland, Oregon, USA
- Wisnoski NI, Lennon JT (2017) Dendritic metacommunities: a test of assembly using stream microbial communities. Ecological Society of America, Portland, Oregon, USA
- Salazar A, Lennon JT, Dukes JS (2017) Microbial activity is a better predictor of soil respiration than microbial biomass or composition. Ecological Society of America, Portland, Oregon, USA
- Fisk MC, Goswami S, Shan S, Lennon JT, See C, Yanai RD, Fahey TJ (2017) Processes mediating interactions of N and P availability in northern hardwood forests. Ecological Society of America, Portland, Oregon, USA
- Lilleskov E, Kane E, Chimner R, Koka R, Lennon JT, Lamit J, Ontl T, Romanowicz K, Wiedermann L, Veverica T, Daniels A (2017) Hydrology and plant functional groups alter carbon cycling in Sphagnum peatlands: the PEATcosm experiment. Society of Wetland Scientists, San Juan, Puerto Rico
- Lennon JT, Aanderud ZT (2016) A trait-based approach to understanding the microbial moisture niche. Third International Workshop on Biological Soil Crusts (BioCrust 3), Moab, Utah, USA

- Webster KD, Schimmelmann A, Lennon JT (2016) Diversity and function of methanotrophic bacteria in caves. American Geophysical Union, San Francisco, California, USA
- Thomas P, Kuo V, Bray SR, Lehmkuhl BK, Lennon JT. The effects of a resuscitation promoting factor (Rpf) on bacterial activity and plant biomass. Kentucky Academy of Science, Louisville, Kentucky, USA
- Beatty J, Wisnoski NI, Bray SR, Lennon JT. Residence time as driver of abundance, activity, and resource-use in complex microbial communities. Kentucky Academy of Science, Louisville, Kentucky, USA
- Lilleskov EA, Lamit JL, Lennon JT, Romanowicz KR, Tringe S, Kane ES, Potvin LR, Wiedermann L, Chimner R, Kolka R (2016). Fungal community response to water table and plant functional group manipulations in the PEATcosm experiment: evidence for the Gadgil effect? Mycological Society of America, Berkeley, California, USA
- Wisnoski NI, Lennon JT (2016) Community assembly processes differ between surface water and sediment-associated communities in stream networks. Ecological Society of America, Fort Lauderdale, Florida, USA
- Schimmelmann A, JT Lennon, D Nguyen-Thuy, P Ta Hoa, A Drobniak, KD Webster, M Schimmelmann (2016) Vietnam's tropical karst is a sink for atmospheric methane greenhouse gas. 5th International Conference on Earth Science & Climate Change, Bangkok, Thailand
- Locey KE, Lennon JT (2016) Scaling laws predict global microbial diversity. International Society of Microbial Ecology, Montreal, Canada
- Lennon JT, Cummins S, Miller KI, Schoolmaster DK (2016) Metabolic activity of the skin microbiome: is our first line of defense sleeping on the job? International Society of Microbial Ecology, Montreal, Canada
- Wisnoski NI, Lennon JT (2016) Local and regional processes in stream microbial community assembly. International Society of Microbial Ecology, Montreal, Canada
- Shoemaker WR, Lennon JT (2016) Microbial population-genomics under extreme starvation. International Society of Microbial Ecology, Montreal, Canada
- Lennon JT, SE Jones (2015) Ecological and evolutionary insight into the persistence of soil bacteria. Argonne Soil Metagenomics Workshop, Argonne National Laboratory, Lisle, Illinois, USA
- Lamit LJ, Lennon JT, Lilleskov EA (2015) Peatland microbial community responses to plant functional group, water table and depth. Argonne Soil Metagenomics Workshop, Lisle, Illinois, USA
- Wisnoski NI, Ward AS, Lennon JT (2015) Bacterial metacommunity structure across a stream network. Long-Term Ecological Research (LTER) All Scientist Meeting, Estes Park, Colorado, USA

- Lilleskov E, Kane E, Chmner R, Koka R, Lennon JT, Potvin L, Ontl T, Romanowicz K, Lamit JL, Daniels A (2015) PEATcosm: experimental insights into climate change effects on peatland carbon cycling and trace gas flux. Soil Science Society of America, Minneapolis, Minnesota, USA
- Peralta, AP, Sun Y, Lennon JT (2015) Effects of crop diversity on plant-soil-microbial interactions. AFRI NIFA Fellows Program. Washington, District of Columbia, USA
- Peralta, AP, Sun Y, Lennon JT (2015) Effects of crop diversity on plant-soil-microbial interactions. Long-Term Ecological Research (LTER) All Scientist Meeting, Estes Park, Colorado, USA
- Lau JA, Lennon JT, terHorst CP (2015) The interplay of ecology and evolution in aboveground-belowground response to environmental change. Ecological Society of America, Baltimore, Maryland, USA
- Aanderud ZT, Jones SE, Fierer N, Lennon JT (2015) Resuscitation of the rare biosphere contributes to pulses of ecosystem activity following soil rewetting. Ecological Society of America, Baltimore, Maryland, USA
- terHorst CP, Lennon JT, Lau JA (2015) Plant evolution in response to drought alters the structure and function of soil microbial communities. Ecological Society of America, Baltimore, Maryland, USA
- Martiny JBH, Jones SE, Lennon JT, Martiny AC (2015) Microbiomes in light of traits: a phylogenetic perspective. Ecological Society of America, Baltimore, Maryland, USA
- Lennon JT, Jones SE (2015) A trait-based approach to microbial dormancy. Ecological Society of America, Baltimore, Maryland, USA
- Locey KJ, Lennon JT (2015) Residence time: An overlooked constraint on community assembly and structure. Ecological Society of America, Baltimore, Maryland, USA
- Treseder KK, Lennon JT (2015) Fungal traits that drive ecosystem dynamics. Ecological Society of America, Baltimore, Maryland, USA
- Muscarella ME, Lennon JT (2015) Bacterial growth efficiency: do consumer and resource diversity influence the fate of carbon in aquatic ecosystems? Ecological Society of America, Baltimore, Maryland, USA
- Hall EK, Schoolmaster DK, Amado AM, Stets EG, Lennon JT, Domine L, Cotner JB (2015) Controls on aquatic respiration from the smallest to the largest freshwater ecosystems. Association for the Sciences of Limnology and Oceanography, Granada, Spain.
- Larsen ML, Barrick JE, Lennon JT (2015) Rapid evolution in marine cyanobacteria: genetic and physiological responses to phage predation and resource stoichiometry. American Society of Microbiology, New Orleans, Louisiana, USA

- Lennon JT, Jones SE (2015) Bacterial persistence during starvation: dormancy, cannibalism, and adaptation. American Society of Microbiology, New Orleans, Louisiana, USA
- Cummins S, Miller KI, Lennon JT (2015) Metabolic activity of the skin microbiome: is our first line of defense sleeping on the job? American Society of Microbiology, New Orleans, Louisiana, USA
- Skelton J, Geyer K, Lennon JT, Brown (2015) Effects of multi-level controls and symbiont interactions on the crayfish microbiome. Society for Freshwater Science. Milwaukee, Wisconsin, USA
- Webster KD, Rosales-Lagarde L, Sauer PE, Schimmelmman A, Lennon JT, Boston PJ (2014) Hydrogen and carbon stable isotopic compositions and concentrations of methane in cave air of Cueva de Villa Luz, Tabasco, Mexico. American Geophysical Union, San Francisco, California, USA
- Elsenbroek KF, Miller KI, Lennon JT, Reynolds HL (2014) Roots of diversity: do soil microbes drive the success of prairie restoration? The Science, Practice & Art of Restoring Native Ecosystems. East Lansing, Michigan, USA
- Lennon JT (2014) Dormancy, dispersal, and the assembly of microbial communities. International Symposium on Microbial Ecology. Seoul, South Korea
- Lennon JT, Miller KI, Locey KJ (2014) Can dormancy account for patterns of microbial biogeography? Ecological Society of America, Sacramento, California, USA
- Muscarella ME, Locey KJ, Nevo E, Raz S, Lennon JT (2014) Microbial community assembly at Evolution Canyon: Does dormancy dilute the effects of dispersal and filtering? Ecological Society of America, Sacramento, California, USA
- Locey KJ, Lennon JT (2014) A macroecological investigation of the microbial “rare biosphere”. Ecological Society of America, Sacramento, California, USA
- Muscarella ME, Bird KC, Larsen ML, Placella SA, Lennon JT (2014) Phosphorus resource heterogeneity affects the structure and function of microbial food webs. Joint Aquatic Sciences Meeting, Portland, Oregon, USA
- Lennon JT, Stuart D, Kent A, Peralta AL (2014) A social-ecological framework for micromanaging microbial services. Joint Aquatic Sciences Meeting, Portland, Oregon, USA
- Wetiz JS, Stock CA, Wilhelm SW, Bourouiba L, Buchan A, Coleman ML, Follows MJ, Fuhrman JA, Lennon JT, Middelboe M, Soderegger DL, Suttle CA, Thingstad TF, Wilson WH, Wommack EK (2013) A multitrophic model to quantify the effects of marine viruses on microbial food webs and ecosystem processes. Aquatic Virus Workshop 7. St. Petersburg, Florida, USA
- Wilhelm SW, Soderegger DL, Stock CA, Weitz JS, Suttle CA, Bourouiba L, Buchan A, Middelboe M, Coleman ML, Follows MJ, Fuhrman JA, Lennon JT, Thingstad TF, Wilson WH, Wommack KE (2013) Mapping global distributions and activity of marine viruses. Aquatic Virus Workshop 7. St. Petersburg, Florida, USA
- Webster KD, Schimmelmman A, Drobnik A, Mastalerz M, Etiope G, Lennon JT (2013) Methane dynamics in limestone caves. Geological Society of America, Denver, Colorado, USA

- terHorst CP, Lau JA, Lennon JT (2013) The relative importance of rapid evolution in plant-soil feedbacks depends on ecological context. Ecological Society of America, Minneapolis, Minnesota, USA
- Peralta AL, Lennon JT (2013) Legacy effects on soil microbial communities in human-dominated ecosystems. Ecological Society of America, Minneapolis, Minnesota, USA
- Muscarella ME, Jones SE, Lennon JT (2013) Species sorting along a subsidy gradient affects community stability. Ecological Society of America, Minneapolis, Minnesota, USA
- Larsen ML, Wilhelm SW, Lennon JT (2013) Nutrient stoichiometry drives eco-evolutionary feedbacks. Midwest Ecology and Evolution Conference, South Bend, Indiana, USA
- Lennon JT, Muscarella ME, Jones SE (2013) Bacteria and browning: implications of terrestrial carbon subsidies for aquatic ecosystems. Association for the Sciences of Limnology and Oceanography, New Orleans, Louisiana, USA
- Muscarella ME, Jones SE, Lennon JT (2013) Life in brown waters: Aquatic bacterial responses to increased terrestrial carbon loading. Association for the Sciences of Limnology and Oceanography, New Orleans, Louisiana, USA
- Romanowicz KJ, Tringe SJ, Lennon JT, Lilleskov EA (2012) Do plant functional groups alter microbial communities and soil carbon cycling in peatlands? Argonne Soils Workshop, Argonne National Laboratory, Bloomingdale, Illinois, USA
- Lennon JT (2012) Can dormancy theory help us retrieve rare and uncultured microbes? International Symposium on Microbial Ecology, Copenhagen, Denmark
- Muscarella ME, Jones SE, Lennon JT (2012) Life in brown waters: aquatic microbial community response to increased terrestrial carbon. LTER All Scientists Meeting, Estes Park, Colorado, USA
- Placella SA, Brodie EL, Firestone MK, Lennon JT (2012) Soil water fluctuations: microbial community responses and CO<sub>2</sub> production. American Geophysical Union, San Francisco, California, USA
- Placella SA, Lennon JT (2012) Microbes, moisture, and metabolic activity: Is there a soil moisture threshold for microbial activity? Long-Term Ecological Research (LTER) All Scientists Meeting, Estes Park, Colorado, USA
- Hall EK, Pepe-Ranney CC, Lennon JT (2012) The effect of carbon subsidies on planktonic niche partitioning and recruitment of bacteria to marine biofilms. International Symposium on Microbial Ecology, Copenhagen, Denmark
- Larsen ML, Wilhelm SW, Lennon JT (2012) Nutrient stoichiometry influences rapid eco-evolutionary feedbacks in marine cyanobacteria and phage. International Symposium on Microbial Ecology, Copenhagen, Denmark
- Lennon JT (2012) Browning of freshwater ecosystems: culprits and consequences of global change. Ecological Society of America. Portland, Oregon, USA

- Peralta AL, Culman SW, Sprunger S, Lennon JT, Snapp SS (2012) Microbial contributions to carbon sequestration potential in response to perenniality. Soil Science Society of America, Cincinnati, Ohio, USA
- Campbell CE, Larsen ML, Lennon JT, Wilhelm SW (2011) The roles of inorganic nutrients and cyanophage in shaping heterotrophic microbial diversity. Aquatic Virus Workshop, Texel, Netherlands
- Larsen ML, Wilhelm SW, Lennon JT (2011) Nutrient stoichiometry generates rapid eco-evolutionary feedbacks between marine cyanobacteria and their phage. Aquatic Virus Workshop, Texel, Netherlands
- Lennon JT, Jones SE (2011) Metagenomics of dormancy: implications for microbial biodiversity. Ecological Society of America, Austin, Texas, USA
- Larsen ML, Wilhelm SW, Lennon JT (2011) Eco-evolutionary dynamics of bacteria and phage in contrasting resource environments. Ecological Society of America, Austin, Texas, USA
- Bird KC, Lennon JT (2011) Specialist and generalist utilization of phosphorus forms by aquatic microbes: a mechanism for maintaining microbial diversity? Association for the Sciences of Limnology and Oceanography, San Juan, Puerto Rico
- Lennon JT (2011) Rapid response of rare microbes linked to pulses of ecosystem activity. National Cooperative Soil Survey Conference. Asheville, North Carolina, USA
- Larsen ML, Wilhelm SW, Lennon JT (2011) Eco-evolutionary dynamics of bacteria and virus in nitrogen- and phosphorus-limited environments. Midwest Ecology and Evolution Conference. Southern Illinois University, Carbondale, Illinois, USA
- Lennon JT, Jones SE, Fierer N, Aanderud ZT (2010) Rapid response of rare microbes linked to pulses of ecosystem activity. International Symposium on Microbial Ecology, Seattle, Washington, USA
- Jones SE, Lennon JT (2010) Microbial dormancy: theoretical expectations and a cross-ecosystem comparison. International Symposium on Microbial Ecology, Seattle, Washington, USA
- Suwa, T, Lennon JT, Lau JA (2011) Ecological and evolutionary effects of herbicide on plant-microbe interactions. Midwest Ecology and Evolution Conference, Carbondale, Illinois, USA
- Lennon JT, Jones SE (2010) Browning of the waters: Do terrestrial carbon subsidies alter aquatic ecosystem stability? Ecological Society of America, Pittsburgh, Pennsylvania, USA
- Lau JA, Lennon JT (2010) Belowground microbial community structure influences plant evolution. Ecological Society of America, Pittsburgh, Pennsylvania, USA
- Bird KC, Lennon JT (2010) Specialist and generalist utilization of phosphorus forms by aquatic microbes: a mechanism for maintaining microbial diversity? Ecological Society of America, Pittsburgh, Pennsylvania, USA
- Lennon JT (2010) A traits-based approach for mapping the soil microbial niche. USDA Soil Processes Meeting, Washington, District of Columbia, USA

- Suwa T, Lennon JT, Lau JA (2010) Mutualisms in novel environments: ecological and evolutionary implications of herbicide on plant-rhizobia interactions. Ecological Society of America, Pittsburgh, Pennsylvania, USA
- O'Brien JM, Hamilton SK, Kinsman LE, Ostrom N, Lennon JT (2010) Mechanisms of N retention and export in a through-flow wetland. Association for the Sciences of Limnology and Oceanography, Santa Fe, New Mexico, USA
- Lennon JT, Jones SE (2010) Do terrestrial carbon subsidies really stabilize aquatic ecosystem functioning? Association for the Sciences of Limnology and Oceanography, Santa Fe, New Mexico, USA
- Jones SE, Lennon JT (2010) Dormancy maintains diversity and structures composition of microbial communities (2010) Association for the Sciences of Limnology and Oceanography, Santa Fe, New Mexico, USA
- Lennon JT, Jones SE (2009) Does Presence Equal Activity?: Contrasting RNA- and DNA-based Measures of Aquatic Microbial Communities. Ecological Society of America, Albuquerque, New Mexico, USA
- Lennon JT (2009) Moisture as a “master variable” of microbial diversity and function in soils. USDA Soil Processes Meeting, East Lansing, Michigan, USA
- Suwa T, Lau JA, Lennon JT (2009) Ecological and evolutionary effects of herbicide on plant-rhizobia mutualisms. Ecological Society of America, Albuquerque, New Mexico, USA
- Aanderud ZT, Lennon JT (2009) Linking soil moisture variability, metabolically active bacteria, and CO<sub>2</sub> pulses through <sup>18</sup>O DNA stable-isotope probing. Soil Science Society of America, Pittsburgh, Pennsylvania, USA
- Lennon JT, Schoolmaster DR, Lehmkuhl B, Aanderud ZT (2009) Mapping the niche space of diverse microbial populations along an environmental gradient. American Society of Microbiology, Philadelphia, Pennsylvania, USA
- Jones SE, Lennon JT (2009) Does Presence Equal Activity?: Contrasting RNA- and DNA-based Measures of Aquatic Microbial Communities. American Society of Microbiology, Philadelphia, Pennsylvania, USA
- Suwa T, Lau JA, Lennon JT (2009) Effects of herbicide on rhizobia: how rapid evolutionary change may influence the outcome of plant-rhizobia mutualisms. Canadian Society of Ecology and Evolution, Halifax, Nova Scotia, Canada
- Burgin AJ, Hamilton SK, Lennon JT, Jones SE (2009) Nitrate use by sulfur bacteria in a stratified lake. North American Benthological Society, Grand Rapids, Michigan, USA
- Suwa T, Lau JA, Lennon JT (2009). Rapid evolution of rhizobia in response to glyphosate application. Midwest Ecology and Evolution Conference. Lincoln, Nebraska, USA
- Lennon JT (2009) The browning of freshwater ecosystems: implications for food webs and function. Association for the Sciences of Limnology and Oceanography, Nice, France

- Kinsman LE, O'Brien J, Lennon JT, Hamilton SK (2009) High total phosphorus concentrations. in organic flocculent sediments of shallow freshwater ecosystems. Association for the Sciences of Limnology and Oceanography, Nice, France
- Lennon JT, Aanderud ZT, Klausmeier CA (2008) Maintenance of microbial diversity in soils: assessing the importance of habitat heterogeneity and physiological stress with theory and experiments. Ecological Society of America. Milwaukee, Wisconsin, USA
- Aanderud ZT, Schoolmaster DR, Lennon JT (2008) Precipitation variability decreases the responsiveness of soil CO<sub>2</sub> evolution. Ecological Society of America. Milwaukee, Wisconsin, USA
- Lennon JT, Schoolmaster DR, Aanderud ZT (2008) Soil moisture variability: a “master variable” of microbial activity and diversity. SoilCritZone Workshop, Chania, Crete, Greece
- Lennon JT, Schoolmaster DR, Aanderud ZT (2008) Plants mediate the effects of soil moisture variability on soil CO<sub>2</sub> dynamics. USDA Soil Processes Meeting, Menlo Park, California, USA
- Lennon JT, Cottingham KL (2007) Microbial productivity in variable resource environments. Ecological Society of America, San Jose, California, USA
- Lennon JT, Marston MF, Martiny JH (2006) Direct and indirect effects of viruses on the ecology and evolution of marine microbial food webs. International Symposium on Microbial Ecology, Vienna, Austria
- Lennon JT, Luna GM (2006) Diversity and metabolism of DNA consuming marine bacteria. International Symposium on Microbial Ecology, Vienna, Austria
- Lennon JT, Marston MF, Martiny JH (2006) Direct and indirect effects of viruses on the ecology and evolution of microbial food webs. Ecological Society of America, Memphis, Tennessee, USA
- Lennon JT, Marston MF, Hughes JB (2005) Ecological and evolutionary implications of viruses in marine microbial food. Gordon Research Conference in Applied and Environmental Microbiology. New London, Connecticut, USA
- Lennon JT, Marston MF, Hughes JB (2005) Marine viruses influence evolution, population dynamics, and nutrient cycling in experimental microbial food webs. Ecological Society of America, Montreal, Quebec, Canada
- Campbell E, Dawson A, Conner K, Lennon J, Faiia A, Feng X, Cottingham K (2005) Shifts in the relative importance of terrestrially versus aquatically produced carbon in lake ecosystems during the summer-to-fall transition. Ecological Society of America, Montreal, Quebec, Canada
- Thum RA, Lennon JT (2005) Ecological genetics of a milfoil invasion. Ecological Society of America. Montreal, Quebec, Canada
- Lennon JT (2005) Terrestrial DOM supply modifies carbon flow in lakes: evidence from stable isotopes and the composition of microbial communities. Association for the Sciences of Limnology and Oceanography, Salt Lake City, Utah, USA
- Thum RA, Lennon JT (2004) Does hybridization confer aggressive growth in the invasive milfoil, *Myriophyllum heterophyllum*? Evolution. Fort Collins, Colorado, USA



- Lennon JT (2003) Trophic state and plankton nutrition along a terrestrial DOM gradient in New England lakes. North American Lake Management Society. Mashantucket, Connecticut, USA  
Recipient: Best student presentation award
- Thum RA, Lennon JT, Smagula A, Connor J (2003) Genetic identification of native, exotic and hybrid water milfoils in northern New England. North American Lake Management Society. Mashantucket, Connecticut, USA
- Lennon JT, Pfaff LE (2003) Microbial constraints on the flow of terrestrial subsidies in lake ecosystems. Ecological Society of America, Savannah, Georgia, USA
- Lennon JT (2003) Terrestrial subsidies in aquatic ecosystems: is carbon flow to higher trophic levels regulated by microbial metabolism? Cary Conference, Institute of Ecosystem Studies, Millbrook, New York, USA
- Lennon JT (2002) Experimental evidence that terrestrial organic matter modifies plankton metabolism. Association for the Sciences of Limnology and Oceanography, Victoria, British Columbia, Canada
- Saraidaridis J, Lennon JT (2002) Terrestrial carbon in lakes: bacterial production of phenol oxidase. Dartmouth College Women in Science Annual Meeting, Hanover, New Hampshire, USA
- Lennon JT, Smith VH, Dzialowski AR (2000) Community resistance to an invasion attempt by *Daphnia lumholtzi*. Ecological Society of America, Snowbird, Utah, USA
- Lennon JT, Peterson BJ, Wollheim W (1999) Storage and transport of fine particulate organic matter in a phosphorus enriched river. Association for the Sciences of Limnology and Oceanography, Santa Fe, New Mexico, USA
- deNoyelles FJ, Wang SH, Meyer JO, Huggins DG, Lennon JT, Kolln WS, Randtke SJ (1999) Water quality issues in reservoirs: some considerations from a study of a large reservoir in Kansas. Proceedings of the 49<sup>th</sup> Annual Environmental Engineering Conference, University of Kansas, Lawrence, Kansas, USA
- Lennon JT, Dzialowski AR, O'Brien WJ, Smith VH (1998) Morphological plasticity and life history characteristics of *Daphnia lumholtzi* in the presence of invertebrate and vertebrate predators. 1998 Joint meeting between the Association for the Sciences of Limnology and Oceanography and the Ecological Society of America, St. Louis, Missouri, USA
- Lennon, J.T., and K. Williams (1998) Temperature and the invasion of an exotic cladoceran, *Daphnia lumholtzi*. Great Plains Limnological Society, Pittsburgh, Kansas, USA
- Lennon JT, Dzialowski AR (1998) The invasion of *Daphnia lumholtzi* into Kansas reservoirs. Kansas Academy of Sciences, Wichita, Kansas, USA
- Lennon JT, Boyer GL (1995) Toxin production by a cyanobacterium, *Aphanizomenon flos-aquae*, under different sources and supply of nitrogen. Northeastern Algal Symposium, Woods Hole, Massachusetts, USA

#### **NON-DEGREE EDUCATION:**

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|------|---|
| 2004 | Microbial Diversity summer course, Marine Biological Laboratory (MBL), Woods Hole, Massachusetts, USA |
| 2001 | Fundamentals of Ecosystem Ecology, Institute of Ecosystem Studies (IES), Millbrook, New York, USA     |

- 1998      Advanced Zooplankton Ecology, Southwest Missouri State University, Springfield, Missouri, USA
- 1995      Research Experience for Undergraduates (REU) at Toolik Lake LTER (Alaska) through the Marine Biological Laboratory (MBL), Woods Hole, Massachusetts, USA
- 1994      Stream Ecology and Algal Ecology, University of Montana, Flathead Lake Biological Station, Yellow Bay, Montana, USA

## **SERVICE:**

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### **Science Advisor**

- Shedd Aquarium, Aquarium Microbiome Project, Chicago, Illinois, USA (2015- current)

### **Executive Board Member**

- Biogeochemistry Environmental Research Initiative (BERI), Michigan State University (2006-2009)

### **Ad hoc grant reviewer:**

- Austrian Science Fund (FWF)
- Czech Science Foundation (GA ĆR)
- Chilean National Commission for Scientific and Technological Research (CONICYT), National Foundation of Science and Technology (FONDECYT)
- Human Frontier Science Program (HFSP)
- International Institute for Applied Systems Analysis (IIASA), Austria
- Israel Science Foundation
- National Environmental Research Council (NERC), UK
- Netherlands Organisation for Scientific Research (NWO)
- NSF Antarctic Organisms and Ecology Program
- NSF Biological Oceanography
- NSF Chemical Oceanography
- NSF Earth Cube
- NSF Ecology
- NSF Ecosystem Studies
- NSF Integrative Organismal Systems
- NSF Marine Geology and Geophysics
- NSF Microbial Genome Sequencing Program
- NSF Microbial Processes and Interactions/Microbial Observatories
- NSF Office of International Science and Engineering
- NSF Population and Evolutionary Processes
- NSF Research Coordination Networks in Biological Sciences
- MIT Sea Grant Program
- University of Wisconsin-Milwaukee, Research Growth Initiative (RGI)
- USGS National Institutes of Water Resources

- US Army Research Office (ARO)
- US Civilian Research and Development Foundation (CART)
- Woods Hole Sea Grant

**Grant review panels:**

- DOE Foundational Scientific Focus Area (FSFA)
- NASA Exobiology, 2016 (declined)
- NSF Dimensions of Biodiversity, 2015
- NSF Ecology and Evolution of Infectious Disease, 2014 (declined)
- NSF Ecosystems, 2013 (declined)
- NSF Ecosystems, 2012 (declined)
- NSF Antarctic Organisms and Ecosystems, 2012 (declined)
- NSF Science and Technology Center, 2011
- USDA NIFA Plant-Associated Microorganisms, 2011
- NSF Ecosystems, 2009
- NSF Ecosystems, 2008
- NSF Ecosystems, Doctoral Dissertation Improvement Grants (DDIG), 2007
- NSF Ecology and Ecosystems, Doctoral Dissertation Improvement Grants (DDIG), 2006

**Journal reviewer:**

*American Naturalist, Applied and Environmental Microbiology, Applied Soil Ecology, Aquatic Microbial Ecology, Aquatic Sciences, Biogeochemistry, Biology Letters, Canadian Journal of Fisheries and Aquatic Sciences, Computational and Structural Biotechnology Journal, Current Microbiology, Ecography, Ecology, Ecological Applications, Ecology Letters, Ecoscience, Ecosystems, Eco-DAS Symposium Proceedings, eLife, Environmental Engineering Science, Environmental Microbiology, Evolution, FEMS Microbiology Ecology, Frontiers in Microbiology, Fundamental and Applied Limnology (Archiv für Hydrobiologie), Functional Ecology, Global Ecology and Biogeography, Hydrobiologia, Interface Focus, International Journal Of Environmental Health Research, Journal of Arid Environments, Journal of Biogeography, Journal of Eukaryotic Microbiology, Journal of Plankton Research, Limnology & Oceanography, Limnology & Oceanography Methods, mBio, Microbial Ecology, Microbes and Environments, Nature, Nature Communications, Nature Geoscience, Nature Microbiology, Oecologia, Oikos, PeerJ, PLOS Genetics, PLOS ONE, Proceeding of the National Academy of Sciences, Proceeding of the Royal Society B, Science, Royal Society Open Science, Science of the Total Environment, Soil Biology & Biochemistry, Soil Science Society of America Journal, The ISME Journal, Trends in Microbiology, Viruses*

**Promotion and Tenure Letter-Writer:** Ben-Gurion University of the Negev, University of Arizona, University of California Irvine, University of Colorado Boulder, University of Hawaii, University of Tennessee, University of Maryland

**Editorial service:**

- Editor, *Environmental Microbiology* and *Environmental Microbiology Reports* (Society for Applied Microbiology)
- Associate Editor, *Frontiers in Terrestrial Microbiology*
- Editorial Board, *Frontiers in Systems Microbiology*

**Society:**

- Track Leader; Ecology, Evolution, and Biodiversity (EEB); American Society of Microbiology (2018 -)
- Member, Council on Microbial Sciences (COMS), American Society of Microbiology (2017 - 2019)
- Program Committee, American Society of Microbiology, Representative for Ecological and Evolutionary Science (2017 -)
- Chair, Microbial Ecology (N) Division, American Society of Microbiology (2017 -)
- Chair-Elect, Microbial Ecology (N) Division, American Society of Microbiology (2016 - 2017)
- Member, American Society of Microbiology, Committee for K-12 Outreach (2016 - 2018)
- Member, American Society for Microbiology, Communication Committee's Environmental Microbiology Taskforce (2015 - 2016)
- Abstract Reviewer, American Society for Microbiology General Meeting, Ecological and Evolutionary Science Track (2016)
- Chair, Microbial Ecology Section, Ecological Society of America (2010-2011)
- Vice Chair, Microbial Ecology Section, Ecological Society of America (2009-2010)
- Secretary, Microbial Ecology Section, Ecological Society of America (2008-2009)
- Tom Frost Award Committee, Ecological Society of America (2011)

**University:**

- Section Chair; Evolution, Ecology, and Behavior (EEB) (2018-2019)
- Interim EEB Graduate Program Director (2017)
- Advisory Committee, Center for Genomics and Bioinformatics (2014 - 2020)
- Executive Committee Member, IU Research and Training Preserve (2013 - )
- Member, Departmental Planning Committee (2013 - )
- Faculty Advisor, Ecolunch (2014 - )
- Member, Biology Graduate Admissions Committee (2014)
- Member, Biology Graduate Recruiting Weekend (2012 - 2014)
- Site representative, LTER Science Council meeting, Jekyll Island, Georgia, USA (2011)
- Executive board Member, Biogeochemistry Environmental Research Initiative (BERI), Michigan State University (2006-2009)

**TEACHING & MENTORSHIP:**

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2012 -	Instructor: Microbial Ecology (BIO L472), Microbiomes (Z620), Quantitative Biodiversity (Z620) at Indiana University
2009 - 2012	Co-Director: summer course in Microbial Metagenomics at Michigan State University
2007 - 2012	Instructor: Microbial Ecology (MMG 425), Biogeochemistry (MMG426) at Michigan State University

Junior Faculty Mentoring Team: Ariane Peralta, East Carolina University

Graduate committee member for Michigan State University students: Zarraz May-Ping Lee (MMG), Molly Conlin (Plant Biology), Brian Campbell (MMG), Amy Burin (Zoology), Jason Martina (Plant Biology), Lauren Kinsman (Zoology), Micaleila Dell Desotelle (Zoology), Mridul K. Thomas (Zoology), Tomomi Suwa (Plant Biology), Stephanie Miller (Zoology), Ben Roller (MMG), Keara Towery (MMG)

External graduate committee member: Karl Romanowicz (Michigan Tech), Deborah Dila (Grand Valley State University)

- 2006 - International Dissertation Opponent: Sari Peura (University of Jyväskylä, Finland), Monica Ricoa (Uppsala University, Sweden)
- Graduate committee member for IU students: Freddy Lee (Microbiology), Melissa Horton (Microbiology), Elise Morton (Microbiology), Geoffrey House (EEB), Elizabeth Czerwinski (Molecular and Cellular Biochemistry), Brian Steidinger (EEB), Kimberly Elsenbroek (EEB), Kevin Webster (Geology), Maja Šljivar (EEB), Steve Kannenberg (EEB), Ali McCully (Microbiology), Ryan Fritts (Microbiology), Brianna Whittaker (EEB), Maureen Onyeziri (Microbiology), Natalie Christian (EEB), Alex Strauss (EEB), Erik Parker (EEB), Savannah Bennett (EEB), Ian Barton (Microbiology), Jeffrey Mazny (Microbiology), Michelle Benavidez (Anthropology), Katie Biedel (EEB)
- 2004-2005 Teaching Certificate Program, Harriet W. Sheridan Center for teaching and learning, Brown University.
- 2003 Teaching assistant, Foreign Studies Program, Ecology of Tropical Ecosystems, 10-week course in Costa Rica and Jamaica, Dartmouth College
- 2002 Women in Science Program (WISP) mentor, Dartmouth College
- 1997- Trained dozens of undergraduate students in ecological and microbiological research

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#### **PROFESSIONAL SOCIETY MEMBERSHIP:**

Ecological Society of America (ESA)

International Society for Microbial Ecology (ISME)

American Society of Microbiology (ASM)

Indiana Academy of Sciences (IAS)

International Society for the Viruses of Microorganisms (ISVM)

Society for the Study of Evolution (SSE)

American Society for the Advancement of Science (AAAS)

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#### **ACADEMIC ADVISORS:**

Jennifer B. Hughes Martiny, Brown University (Postdoc)

Kathryn L. Cottingham, Dartmouth College (Ph.D.)

Val H. Smith, University of Kansas (Masters)

Charles A. S. Hall, SUNY College of Environmental Science and Forestry (BS)

## **ACADEMIC ADVISEES:**

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### Postdocs:

- Zachary Aanderud (Associate Professor, Brigham Young University)
- Ed Hall (Assistant Professor starting Fall 2016, Colorado State University)
- Evan Kane (Research Assistant Professor, Michigan Technological University)
- Stuart Jones (Associate Professor, University of Notre Dame)
- Sarah Placella (Postdoc, Servident, Inc.)
- Ariane Peralta (Assistant Professor, East Carolina University)
- Ken Locey (Assistant Professor, Diné College)
- Megan Behringer (current; co-advised with Michael Lynch)
- Daniel Schwartz (current)
- Jordan Bird (current; co-advised with Jake McKinlay)

### Graduate students:

- Kali Bird (MS, Microbiology and Molecular Genetics, Michigan State University, 2012)
- Megan Larsen (Ph.D., Biology, Indiana University, 2016)
- Mario Muscarella (Ph.D., Biology, Indiana University, 2016)
- Kevin Webster (Ph.D., Geology, Indiana University, 2016; co-advisor)
- Nathan Wisnoski (Ph.D., Biology, Indiana University, current)
- William Shoemaker (Ph.D., Biology, Indiana University, current)
- Venus Kuo (Ph.D., Biology, Indiana University, current)
- Roy Moger-Reischer (Ph.D., Biology, Indiana University, current)
- Emmi Mueller (Ph.D., Biology, Indiana University, current)