

ANNE PRINGLE

Vilas Distinguished Achievement Professor
University of Wisconsin-Madison
Departments of Botany and Bacteriology
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Education

Ph.D. Department of Botany and University Program in Genetics, Duke University. 2001.
Advised by Drs. Janis Antonovics and Rytas Vilgalys.
A.B. Honors Biology, University of Chicago, with General Honors. 1993.

Employment

Vilas Distinguished Achievement Professor, Botany, University of Wisconsin-Madison. 2017-present.
Professor, Botany and Bacteriology, University of Wisconsin-Madison. 2017-present.
Associate Professor, Botany and Bacteriology, University of Wisconsin-Madison. 2015-2017.
Associate Professor, Organismic and Evolutionary Biology, Harvard University. 2008-2014.
Assistant Professor, Organismic and Evolutionary Biology, Harvard University. 2005-2008.

Fellowships

Charles Bullard Fellowship in Forest Research, Harvard Forest. 2014-2015.
Radcliffe Institute for Advanced Study Fellowship, Harvard University. 2011-2012.
Miller Institute for Basic Research in Science Research Fellowship, U.C. Berkeley. 2001-2004.
National Institutes of Health Graduate Fellowship in Genetics, Duke University. 1995-1997.

Awards and Honors

Fellow, Mycological Society of America. Awarded for contributions to mycology. 2018.
Phi Kappa Phi Honor Society, UW-Madison. Nominated by an undergraduate student. 2017.
Professeur Invité, Université de Nice Sophia Antipolis. Winter 2015.
Fannie Cox Prize for Excellence in Science Teaching, Harvard University. 2013.
Mendelsohn Excellence in Mentoring Award, Harvard University Graduate Student Council. 2011.
Alexopoulos Prize for a Distinguished Early Career Mycologist, Mycological Society of America. 2010.
Perry Prize for Dissertation of Greatest Distinction, Department of Botany, Duke University. 2001.
Best Student Paper, Soil Ecology Section, Ecological Society of America Annual Meeting. 2000.

Elected

President, Mycological Society of America. Four-year term runs as Vice-President,
President-Elect, President (in 2019-2020), Past-President.

Manuscripts

Lopez-Nieves, S., **A. Pringle**, H.A. Maeda. In review. Biochemical characterization of the TyrA dehydrogenases from *Saccharomyces cerevisiae* (Ascomycota) and *Pleurotus ostreatus* (Basidiomycota). Archives of Biochemistry and Biophysics.
Boynton, P.J., C.N. Peterson, **A. Pringle**. In revision. Superior dispersal ability leads to persistent ecological dominance by *Candida pseudoglebosa* in the *Sarracenia purpurea* fungal metacommunity. Applied and Environmental Microbiology.

Morrison, E.W., **A. Pringle**, L.T.A. van Diepen, A.S. Grandy, J.M. Melillo, S.D. Frey. In revision. Warming alters fungal communities and litter chemistry with implications for soil carbon stocks. *Soil Biology and Biogeochemistry*.

Vargas- Estupiñán N., S. Gonçalves, A.E. Franco-Molano, S. Restrepo, **A. Pringle**. In revision. In Colombia the Eurasian fungus *Amanita muscaria* (Amanitaceae) is expanding its range into native, tropical *Quercus humboldtii* forests. *Mycologia*.

Publications (available from pringlelab.botany.wisc.edu)

Hess J., I. Skrede, M. Chaib de Mares, M. Hainault, B. Henrissat, **A. Pringle**. 2018. Rapid divergence of genome architectures following the origin of an ectomycorrhizal symbiosis in the genus *Amanita*. *Molecular Biology and Evolution* 35:2786-2804.

Bittleston L.S., C. Wolock*, E.Y. Bakhtiar, X.Y. Chan, K.G. Chan, N.E. Pierce, **A. Pringle**. 2018. Convergence between the microcosms of Southeast Asian and North American pitcher plants. *eLife* 2018;7:e36741.

*undergraduate

Morrison, E.W., S.D. Frey, L.T.A. van Diepen, **A. Pringle**. 2018. Simulated nitrogen deposition favors stress-tolerant fungi with low potential for decomposition. *Soil Biology and Biogeochemistry* 125:75-85.

Hoeksema J.D., J.D. Bever, S. Chakraborty, V.B. Chaudhary, M. Gardes, C.A. Gehring, M.M. Hart, E.A. Housworth, W. Kaonongbua, J. Klironomos, M.J. Lajeunesse, J.F. Meadow, B. Milligan, B. Piculell, **A. Pringle**, M.A. Rúa, J. Umbanhowar, W. Viechtbauer, Y.W. Wang, G.W.T. Wilson, P.C. Zee. 2018. Evolutionary history of plant hosts and fungal symbionts predicts the strength of mycorrhizal mutualism. *Communications Biology* 1, Article number 116.

Seminara A., J. Fritz, M.P. Brenner, **A. Pringle**. 2018. A universal growth limit for circular lichens. *Journal of the Royal Society Interface* 15: 20180063.

Dickie I., J. Bufford, R. Cobb, M.-L. Desprez-Loustau, G. Grelet, P. Hulme, J. Klironomos, A. Makiola, M.A. Nuñez, **A. Pringle**, P. Thrall, L. Waller, N. Williams. 2017. The emerging science of linked plant-fungal invasions. *New Phytologist* 215:1314-1332.

Golan, J., **A. Pringle**. 2017. Long-distance dispersal of fungi. *Microbiology Spectrum* 5(4):FUNK-0047-2016. (Will also be bound for publication in: *The Fungal Kingdom*, ed. N.A.R. Gow and J. Heitman. ASM: Washington D.C.)

Liu F., R.L. Chavez, S.N. Patek, **A. Pringle**, J.J. Feng, C.H. Chen. 2017. Asymmetric drop coalescence launches fungal ballistospores with directionality. *Journal of the Royal Society Interface* 14:20170083.

Pringle A. 2017. Establishing new worlds: The lichens of Petersham. In *Arts of Living on a Damaged Planet*, eds. A. Tsing, H.A. Swanson, E. Gan, N. Bubandt. University of Minnesota Press.

Levitis D., K. Zimmerman, **A. Pringle**. 2017. Is meiosis a fundamental cause of inviability among sexual and asexual plants and animals? *Proceedings of the Royal Society B* 284:20170939.

Alim K., N. Andrew, **A. Pringle**, M.P. Brenner. 2017. Mechanism of signal propagation in *Physarum polycephalum*. *Proceedings of the National Academy of Sciences (PNAS)* 114:5136-5141.

- Levitis D., J. Golan, **A. Pringle**, J. Taylor. 2017. A century later, resolving Joseph Grinnell's "Striking Case of Adventitious Coloration". *The Auk: Ornithological Advances* 134:551-552.
- Baker C.C.M., D.J. Martins, J.N. Pelaez, J.P.J. Billen, **A. Pringle**, M.E. Frederickson, N.E. Pierce. 2017. Distinctive fungal communities in an obligate African ant plant mutualism. *Proceedings of the Royal Society B* 284:20162501.
- Hobbie E.A., B.A. Schubert, J.M. Craine, E. Linder, **A. Pringle**. 2017. Carbon isotopes in the saprotrophic fungus *Amanita thiersii* reveal increased C₃ productivity of Midwestern lawns since 1982. *Journal of Geophysical Research: Biogeosciences* 122:280-288.
- Pringle A.**, M. Brenner, J. Fritz, M. Roper, A. Seminara. 2017. Reaching the wind: Boundary layer escape as a constraint on ascomycete spore shooting. In *The Fungal Community: Its Organization and Role in the Ecosystem (Fourth Edition)*, ed. J. Dighton and J.F. White. Taylor & Francis: Oxford.
- van Diepen L.T.A., S.D. Frey, E.A. Landis, E.W. Morrison, **A. Pringle**. 2017. Fungi exposed to chronic nitrogen enrichment are less able to decay leaf litter. *Ecology* 98:5-11.
- Marbach S., K. Alim, N. Andrew, **A. Pringle**, M.P. Brenner. 2016. Pruning to increase efficiency of particle spread through *Physarum polycephalum* networks. *Physical Review Letters* 117:178103.
- Tulloss R.E., T.W. Kuyper, E.C. Vellinga, Z.L. Yang, R.E. Halling, J. Geml, S. Sánchez-Ramírez, S. C. Gonçalves, J. Hess, **A. Pringle**. 2016. The genus *Amanita* should not be split. *Amanitaceae* 1:1-16.
- Dickie I.A., M.A. Nuñez, **A. Pringle**, T. Lebel, S. Tourtellot, P.R. Johnston. 2016. Towards management of invasive ectomycorrhizal fungi. *Biological Invasions* 18:3383-3395.
- Morrison E.W., S.D. Frey, J.J. Sadowsky, L.T.A. van Diepen, W.K. Thomas, **A. Pringle**. 2016. Chronic nitrogen additions fundamentally restructure the soil fungal community in a temperate forest. *Fungal Ecology* 23:48-57.
- Zimmerman K., D. Levitis, **A. Pringle**. 2016. Beyond animals and plants: dynamic maternal effects in the fungus *Neurospora crassa*. *Journal of Evolutionary Biology* 29:1379-1393.
- Bittleston L.S., N.E. Pierce, A.M. Ellison, **A. Pringle**. 2016. Convergence in multispecies interactions. *Trends in Ecology & Evolution (TREE)* 31:269-280.
- Zimmerman K., D. Levitis, E. Addicott*, **A. Pringle**. 2015. Selection of pairings reaching evenly across the data (SPREAD): a simple algorithm to design maximally informative fully crossed mating experiments. *Heredity* 116:182-189.
- van Diepen L.T.A., S.D. Frey, C.M. Sthultz, E.W. Morrison, R. Minocha, **A. Pringle**. 2015. Litter quality affects the suppression of litter decay by simulated nitrogen deposition. *Ecosphere* 6:art205.
- Bittleston L.S., C.C.M. Baker, L.B. Strominger*, **A. Pringle**, N.E. Pierce. 2015. Metabarcoding as a tool for investigating arthropod diversity in *Nepenthes* pitcher plants. *Austral Ecology* 41:120-132.
- Barron E.S., C. Sthultz, D. Hurley, **A. Pringle**. 2015. Names matter: Interdisciplinary research on taxonomy and nomenclature for ecosystem management. *Progress in Physical Geography* 39:640-660.

- Pringle, A.**, E. Vellinga, K. Peay. 2015. The shape of fungal ecology: Does spore morphology give clues to a species' niche? *Fungal Ecology* 17:213-216. (Commentary.)
- Kohler, Kuo, Nagy, Morin, Barry, Buscot, Canbäck, Choi, Cichocki, Clum, Colpaert, Copeland, Costa, Doré, Floudas, Gay, Girlanda, Henrissat, Herrmann, Hess, Högberg, Johansson, Khouja, LaButti, Lahrmann, Lévasseur, Lindquist, Lipzen, Marmeisse, Martino, Murat, Ngan, Nehls, Plett, **Pringle**, Ohm, Perotto, Peter, Riley, Rineau, Ruytinx, Salamov, Shah, Sun, Tarkka, Tritt, Veneault-Fourrey, Zuccaro, MGIC, Tunlid, Grigoriev, Hibbett, Martin. 2015. Convergent losses of decay mechanisms and rapid turnover of symbiosis genes in mycorrhizal mutualists. *Nature Genetics* 47:410-415.
- Chaib de Mares M., J. Hess, D. Floudas, A. Lipzen, C. Choi, M. Kennedy, I.V. Grigoriev, **A. Pringle**. 2014. Horizontal transfer of carbohydrate metabolism genes into ectomycorrhizal *Amanita*. *New Phytologist* 205:1552-1564.
- Hess J., I. Skrede, B.E. Wolfe, K. LaButti, R. Ohm, I. Grigoriev, **A. Pringle**. 2014. Transposable element dynamics among asymbiotic and ectomycorrhizal *Amanita* fungi. *Genome Biology and Evolution* 6:1564-1578.
- Hess J., **A. Pringle**. 2014. The natural histories of species and their genomes: Asymbiotic and ectomycorrhizal *Amanita*. Pages 235-257 in *Fungi (Advances in Botanical Research)*, ed. F. Martin. Academic Press: San Diego.
- Alim K., N. Andrew, **A. Pringle**. 2013. Quick Guide: *Physarum polycephalum*. *Current Biology* 23:R1082-R1083.
- Alim K., G. Amselem, F. Peudecerf, M. Brenner, **A. Pringle**. 2013. Random network peristalsis in *Physarum polycephalum* organizes fluid flows across an individual. *Proceedings of the National Academy of Sciences (PNAS)* 110:13306-13311.
- Fritz J., A. Seminara, M. Roper, **A. Pringle**, M. Brenner. 2013. A natural O-ring optimizes the dispersal of fungal spores. *Journal of the Royal Society Interface* 10:20130187.
- Pringle A.** 2013. Asthma and the Diversity of Fungal Spores in Air. *PloS Pathogens* 9(6):e1003371.
- Marmeisse R., U. Nehls, M. Öpik, M.-A. Selosse, **A. Pringle**. 2013. Bridging mycorrhizal genomics, metagenomics and forest ecology. *New Phytologist* 198:343-346. (Meeting report.)
- Wolfe B.E., R.E. Tulloss, **A. Pringle**. 2012. The irreversible loss of a decomposition pathway marks the single origin of an ectomycorrhizal symbiosis. *PLoS ONE* 7(7):e39597.
- Richard F., L. Glass, **A. Pringle**. 2012. Cooperation among germinating spores facilitates the growth of the fungus *Neurospora crassa*. *Biology Letters* 8:419-422.
- Wolfe B.E., M. Kuo, **A. Pringle**. 2012. *Amanita thiersii* is a saprotrophic fungus expanding its range in the United States. *Mycologia* 104:22-33.
- Wolfe B.E., **A. Pringle**. 2011. Geographically structured host specificity is caused by the range expansions and host shifts of a symbiotic fungus. *The ISME Journal* 4:745-755.
- Mushegian A.A.*, C.N. Peterson, C.C.M. Baker, **A. Pringle**. 2011. Bacterial diversity across individual lichens. *Applied and Environmental Microbiology* 77:4249-4252.
- Iannone R., D.I. Chernoff, **A. Pringle**, S.T. Martin, A.K. Bertram. 2011. The ice nucleation ability of one of the most abundant types of fungal spores found in the atmosphere. *Atmospheric Chemistry and Physics* 11:1191-1201.

- Pringle A.**, E. Barron, K. Sartor, J. Wares. 2011. Fungi and the Anthropocene: Biodiversity discovery in an epoch of loss. *Fungal Ecology* 4:121-123. (Introduction to a special issue: "Conservation Underground: Fungi in a Changing World".)
- Pringle A.**, B.E. Wolfe, E.C. Vellinga. 2011. Mycorrhizae. Entry for the *Encyclopedia of Invasive Species*. University of California Press.
- Roper M., A. Seminara, M.M. Bandi, A. Cobb, H.R. Dillard, **A. Pringle**. 2010. Dispersal of fungal spores on a cooperatively generated wind. *Proceedings of the National Academy of Sciences (PNAS)* 41:17474-17479.
 -News & Views: *Nature* 467:669
 -Editors' Choice: *Science* 330:429
- Wolfe B.E., F. Richard, H.B. Cross, **A. Pringle**. 2010. Distribution and abundance of the introduced ectomycorrhizal fungus, *Amanita phalloides*, in North America. *New Phytologist* 185:803-816.
- Shapiro J.*, **A. Pringle**. 2010. Anthropogenic influences on the diversity of fungi isolated from caves in Kentucky and Tennessee. *American Midland Naturalist* 163:76-86.
- Hoeksema, J.D., V.B. Chaudhary, C.A. Gehring, N.C. Johnson, J. Karst, R.T. Koide, **A. Pringle**, C. Zabinski, J.D. Bever, J.C. Moore, G.W.T. Wilson, J.N. Klironomos, J. Umbanhowar. 2010. A meta-analysis of context-dependency in plant response to inoculation with mycorrhizal fungi. *Ecology Letters* 13:394-407.
- Pringle A.**, J.D. Bever, M. Gardes, J.L. Parrent, M.C. Rillig, J.N. Klironomos. 2009. Mycorrhizal symbioses and plant invasions. *Annual Review of Ecology, Evolution and Systematics* 40:699-715.
- Pringle A.** 2009. A quick guide to mycorrhizal networks. *Current Biology* 19:R838-R839.
- Johnson N.C., V.B. Chaudhary, J.D. Hoeksema, J.C. Moore, **A. Pringle**, J.A. Umbanhowar, G.W.T. Wilson. 2009. Mysterious mycorrhizae? A field trip and classroom experiment to demystify the symbioses formed between plants and fungi. *American Biology Teacher* 71:424-429.
- Pringle A.**, R.I. Adams, H.B. Cross, T.D. Bruns. 2009. The ectomycorrhizal fungus *Amanita phalloides* was introduced and is expanding its range on the West Coast of North America. *Molecular Ecology* 18:817-833.
- Vellinga E.C., B.E. Wolfe, **A. Pringle**. 2009. Global patterns of ectomycorrhizal introductions. *New Phytologist*. 181:960-973.
- Roper M., R. Pepper, M.P. Brenner, **A. Pringle**. 2008. Explosively launched spores of ascomycete fungi have drag minimizing shapes. *Proceedings of the National Academy of Sciences (PNAS)* 105:20583-20588.
- Pringle A.**, J.D. Bever. 2008. Analogous effects of arbuscular mycorrhizal fungi in the laboratory and a North Carolina field. *New Phytologist* 180:162-175.
 -Subject of lead commentary; *New Phytologist* 180:1-2
- Wolfe B.E., V.L. Rodgers, K.A. Stinson, **A. Pringle**. 2008. The invasive plant *Alliaria petiolata* (garlic mustard) inhibits ectomycorrhizal fungi in its introduced range. *Journal of Ecology* 96:777-783.
- Peterson C., S. Day*, B.E. Wolfe, A. Ellison, R. Kolter, **A. Pringle**. 2008. A keystone predator controls bacterial diversity in the pitcher-plant (*Sarracenia purpurea*) microecosystem. *Environmental Microbiology* 10:2257-2266.

- Taylor J.W., E. Turner, **A. Pringle**, J. Dettman, H. Johannesson. 2007. Fungal species: thoughts on their recognition, maintenance and selection. Pp. 313-339 in *Fungi in the Environment* (British Mycological Society Symposia No. 25) eds. G.M. Gadd, S.C. Watkinson and P.S. Dyer. Cambridge: Cambridge University Press.
- Pringle A.**, E.C. Vellinga. 2006. Last chance to know? Using literature to explore the biogeography and invasion biology of the death cap mushroom *Amanita phalloides* (Vaill. Ex Fr. :Fr.) Link. *Biological Invasions* 8:1131-1144.
- Gilchrist M.A., D.L. Sulsky, **A. Pringle**. 2006. Identifying fitness and optimal life history strategies in an asexual filamentous fungus. *Evolution* 60:970-979.
- Schwartz M.W., J.D. Hoeksema, C.A. Gehring, N.C. Johnson, J.N. Klironomos, L.K. Abbott, **A. Pringle**. 2006. The promise and the potential consequences of the global transport of mycorrhizal fungal inoculum. *Ecology Letters* 9:601-616.
- Adams R.I., H.E. Hallen, **A. Pringle**. 2006. Using the incomplete genome of the ectomycorrhizal fungus *Amanita bisporigera* to identify molecular polymorphisms in the related *A. phalloides*. *Molecular Ecology Primer Notes* 6:218-220.
- Pringle A.**, D.M. Baker, J.L. Platt, J.P. Wares, J.P. Latge, J.W. Taylor. 2005. Cryptic speciation in the cosmopolitan and clonal human pathogenic fungus *Aspergillus fumigatus*. *Evolution* 59:1886-1899.
- Pringle A.**, S.N. Patek, M. Fischer, J. Stolze, N.P. Money. 2005. The captured launch of a ballistospore. *Mycologia* 97:866-871.
- Rowe A.R. *, **A. Pringle**. 2005. Morphological and molecular evidence of arbuscular mycorrhizal fungal associations in Costa Rican epiphytic bromeliads. *Biotropica* 37:245-250.
- Pringle A.**, J.M. Moncalvo, R. Vilgalys. 2003. Revisiting the rDNA sequence diversity of a natural population of the arbuscular mycorrhizal fungus *Acaulospora colossica*. *Mycorrhiza* 13:227-231.
- Dettman J.R., D.J. Jacobson, E. Turner, **A. Pringle**, J.W. Taylor. 2003. Reproductive isolation and phylogenetic divergence in *Neurospora*: comparing methods of species recognition in a model eukaryote. *Evolution* 57:2721-2741.
- Pringle A.**, D. Chen*, J.W. Taylor. 2003. Sexual fecundity is correlated to size in the lichenized fungus *Xanthoparmelia cumberlandia*. *The Bryologist* 106:221-225.
- Pringle A.**, J.W. Taylor. 2002. Understanding the fitness of filamentous fungi. *Trends in Microbiology* 10:474-481.
- Pringle A.**, J.D. Bever. 2002. Divergent phenologies may facilitate the coexistence of arbuscular mycorrhizal fungi in a North Carolina grassland. *American Journal of Botany* 89:1439-1446.
- Bever J.D., **A. Pringle**, P.A. Schultz. 2002. Dynamics within the plant-arbuscular mycorrhizal fungal mutualism: testing the nature of community feedback. Pages 267-292 in *Mycorrhizal Ecology*, ed. M. van der Heijden and I. Sanders. Springer-Verlag: Heidelberg.
- Pringle A.** 2001. The ecology and genetics of arbuscular mycorrhizal fungi. Ph.D. Thesis, Duke University.
- Bever J.D., P.A. Schultz, **A. Pringle**, J.B. Morton. 2001. Arbuscular mycorrhizal fungi: more diverse than meets the eye, and the ecological tale of why. *BioScience* 51:923-931.

Pringle A., J.M. Moncalvo, R. Vilgalys. 2000. High levels of variation in ribosomal DNA sequences within and among spores of a natural population of the arbuscular mycorrhizal fungus *Acaulospora colossica*. *Mycologia* 92:259-268.

Sniegowski P.D., **A. Pringle**, K. Hughes. 1994. Effects of autosomal inversions on meiotic exchange in distal and proximal regions of the X-chromosomes in a natural population of *D. melanogaster*. *Genetical Research* 63:57-62.

Forwards, Essays, Book Reviews and Popular Articles, etc.

Arthur, E., L. Keller, **A. Pringle**. In press. The Destroying Angel. In: *becoming-Botanicals: a post-modern liber herbalis*, Eds. J. Armstrong, A. Lakind, C. Adsit-Morris. Royal Conservatoire of Scotland.

Pringle A. 2012. The Christmas Fungus on Christmas Island. In: *Microbes and Evolution: The World Darwin Never Saw*, Eds. S. Maloy and R. Kolter. ASM Press, Washington, D.C.

Pringle A., D. Hibbett, A. Rossman. 2008. Encyclopedia of Life & the Fungi. White paper published in *Inoculum* 60:2-3, and *Mycological Research* 113:402-403.

Pringle A., R.E. Tulloss, F. Richard, B.E. Wolfe, E.C. Vellinga. 2008. Exemplar page for *Amanita phalloides* (Vaill. ex Fr. :Fr.) Link. Encyclopedia of Life.

Pringle A. 2008. Forward to *The Fungi of Serbia*, written by Branislav Uzelac and members of the Mycologists' Association of Serbia.

Friesen M.S., **A. Pringle**, B. Callan, A. Leathem. 2005. *Amanita phalloides* heads north. Conference Proceedings of the North American Congress of Clinical Toxicologists. (Case study of death cap poisoning in British Columbia, Canada.)

Pringle A. 2005. Immortal Fungi. *Mycena News* 56:01. (A popular science article for the newsletter of the Mycological Society of San Francisco.)

Pringle A., L.C. Moyle, J. MacLachlan, J. HilleRisLambers. 2000. Philosophy and biology: a review of the book Sex and Death. *Complexity* 5:44-45.

Grants (Grants of less than 10K not listed)

National Geographic Society. \$120,110. Soil microbiome transplants: A dirt simple method to enable urban forestry. 2018-2020.

Hatch Act Formula Fund/USDA. \$96,810. Spore mortality and environmental stochasticity: Understanding the long distance dispersal of plant pathogenic fungi. 2017-2020.

Human Frontier Science Program. \$900,000 (\$300,000 to Pringle). Fluid flows and resource integration across fungal networks (HFSP #RGP0053/2012). 2012-2016. With Mark Fricker (Oxford) and Michael Brenner (SEAS, Harvard).

National Science Foundation Division of Integrative Organismal Systems. \$485,191. The single origin of mycorrhizas among the *Amanita*: A model for elucidating the genetic architecture of symbiosis (NSF#1021606). 2010-2015.

Joint Genomes Institute/Department of Energy. Contract to sequence transcriptomes of closely related saprotrophic and ectomycorrhizal *Amanita* species. Ongoing. With Benjamin Wolfe (Pringle Laboratory), and Jason Stajich (U.C. Riverside).

National Science Foundation Division of Environmental Biology. \$747,005 (\$388,817 to Pringle). The changing diversity and evolution of decomposer fungi in response to anthropogenic change (NSF#1021079). 2010-2015. With Serita Frey (UNH).

National Science Foundation Division of Social and Economic Sciences. \$120,000. STS post-doctoral fellowship: Metagenomics and its impacts on species-based conservation science and policy (NSF #1127269). 2011-2013. To Elizabeth Barron (Pringle Laboratory).

Joint Genomes Institute/Department of Energy. Contract to sequence the genome of the basidiomycete fungus *Amanita thiersii*, a cellulose degrading fungus in an ectomycorrhizal genus. Ongoing. With Benjamin Wolfe (Pringle Laboratory).

National Science Foundation Doctoral Dissertation Improvement Grant. \$15,000. Yeast dispersal among pitcher plants and fungal metacommunity processes (NSF#0808404). 2008-2010. To Primrose Boynton (Pringle Laboratory).

National Science Foundation Doctoral Dissertation Improvement Grant. \$12,000. The genus *Amanita* as a model for the evolution of symbiosis (NSF#0808404). 2008-2010. To Benjamin Wolfe (Pringle Laboratory).

Research Enabling Grant, Office of the Provost, Harvard University. \$53,997. To support research on *Amanita phalloides*. 2007-2008.

Anonymous Gift (from an amateur mycologist). \$22,000. For work with *Amanita* species. 2007.

William F. Milton Fund of the Harvard Medical School. \$35,000. Aging in lichen species. 2006.

Miller Institute for Basic Research in Science Research Award. \$45,000. To support basic ecological and evolutionary research. 2001-2004.

National Science Foundation Doctoral Dissertation Improvement Grant. \$10,367. Asexuality and parasitism in arbuscular mycorrhizal fungi. 1998-2000.

Grants: Co-PI

National Science Foundation Doctoral Dissertation Improvement Grant. \$21,970. Exploring convergence within pitcher plant microcosms (NSF#1400982). 2014-2016. To Leonora Bittleston (Pringle and Pierce Laboratories).

Templeton Foundation Foundational Questions in Evolutionary Biology (FQEB) Research Grant. \$197,692. Cooperative species networks. 2012- 2014. Co-PI with Naomi Pierce (OEB, Harvard) and Megan Frederickson (U. Toronto).

National Science Foundation Improvement in Facilities, Communications and Equipment at Biological Field Stations and Marine Laboratories (FSML). \$348,259. Infrastructure for molecular and microbial ecology at the Harvard Forest (NSF#0930516). 2009-2011. Co-PI with David Foster and Aaron Ellison (Harvard Forest), and Serita Frey (UNH).

Collaborative International Grants

Portuguese Foundation for Science and Technology (FCT). EUR 179,508. “What makes *Amanita phalloides* a successful invader? Insights from its native range”. 2012-2015. With Susana Gonçalves, Universidade de Coimbra, Portugal.

Swedish Foundation for International Cooperation in Research and Higher Education. SEK 900,000. Systems Biology of *Neurospora*. 2008-2010. With Hanna Johanneson, Uppsala Universitet, Sweden.

Invited Talks (Academic Audiences)

1. 1999 Society for the Study of Evolution "Evolutionary Biology of Host-Parasite Systems"
2. 2000 Elon College
3. 2000 Carleton College
4. 2000 University of California, Berkeley
5. 2002 University of California, Davis
6. 2002 University of Toulouse (France)
7. 2003 Fungal Genetics Conference
8. 2003 University of Toronto (Canada)
9. 2003 Indiana University
10. 2004 Harvard University
11. 2004 Max Planck Institute for Demographic Research (Germany)
12. 2005 University of Guelph (Canada)
13. 2005 University of Maine
14. 2005 Uppsala University (Sweden)
15. 2006 Harvard Forest
16. 2006 University of New Hampshire
17. 2006 "Mycorrhiza: systems research from genes to communities" Conference (Switzerland)
18. 2006 Harvard University Microbial Sciences Initiative Symposium
19. 2007 Duke University
20. 2007 University of Toulouse (France)
21. 2007 University of Montpellier (France)
22. 2007 University of Massachusetts, Boston
23. 2007 Brown University
24. 2007 University of Virginia
25. 2008 University of Texas, Austin
26. 2008 Ecological Society of America "Frontiers in Fungal Ecology"
27. 2008 Mycological Society of America "Fungal Biodiversity Informatics"
28. 2008 China Agricultural University (Beijing)
29. 2009 AAAS Annual Meeting "Microbes in a Changing World"
30. 2009 Fungal Genetics Conference
31. 2009 American Society of Microbiology "Microbes in a Changing World"
32. 2009 Max Planck Institute for Demographic Research (Germany)
33. 2010 University of Georgia, Department of Ecology
34. 2010 University of Georgia, Department of Genetics
35. 2010 University of Wisconsin, Madison
36. 2010 International Mycological Congress "Invasive and Threatened Fungi" (Scotland)
37. 2010 EMBL/EMBO "Experimental Approaches to Evolution and Ecology" (Germany)
38. 2010 California Institute of Technology
39. 2010 Marine Biological Laboratory, Woods Hole
40. 2011 Boston University
41. 2011 Joint Genome Institute "Basidiomycetes Jamboree" (via Skype)
42. 2011 Oregon State University, Bonnie Templeton Lecture
43. 2011 Jacques Monod CNRS, Roscoff (France) "Emerging Fungal Diseases and Global Change"
44. 2011 University of Pennsylvania
45. 2011 University of Massachusetts, Amherst
46. 2011 Cold Spring Harbor "Plant Genomes: From Genes to Networks"
47. 2012 Max Planck Institute for Demographic Research (Germany)

48. 2012 Ecological Society of America “Universal Senescence?”
49. 2013 University of British Columbia
50. 2013 Northern Arizona University
51. 2013 University of Minnesota
52. 2013 Fungal Genetics Conference
53. 2013 Swedish Agricultural University (Sweden)
54. 2013 University of Georgia
55. 2013 Princeton University
56. 2013 Pennsylvania State University
57. 2013 Rockefeller University
58. 2013 Rutgers University
59. 2013 University of California, Berkeley
60. 2014 National Science Foundation
61. 2014 University of Pennsylvania
62. 2014 University of California, Los Angeles
63. 2014 University of Wisconsin, Madison
64. 2014 University of California, Santa Cruz “Anthropocene: Arts of Living on a Damaged Planet”
65. 2014 Max Planck Institute for Developmental Biology (Germany)
66. 2014 International Mycological Congress, “Diversity of Ectomycorrhizal Systems” (Thailand)
67. 2014 Harvard Forest
68. 2014 DARPA
69. 2014 Universidad de los Andes (Colombia)
70. 2015 Université de Nice Sophia Antipolis (lecture series; France)
71. 2015 ETH Zurich (Switzerland)
72. 2015 Wisconsin Discovery Institute
73. 2016 The Field Museum
74. 2016 Chicago Botanic Garden
75. 2016 EMBL/EMBO “New Model Systems for Linking Evolution and Ecology” (Germany)
76. 2016 New Phytologist Workshop “Emerging Science of Plant/Fungal Invasions” (New Zealand)
77. 2016 HFSP Annual Meeting (Singapore)
78. 2016 Mycological Society of America “Fungal Invasions”
79. 2016 University of Wisconsin-Green Bay
80. 2016 Lawrence University
81. 2017 Drexel University
82. 2017 Uppsala University (Sweden)
83. 2017 Chulalongkorn University (Thailand)
84. 2017 Michigan State University
85. 2017 Kellogg Biological Station
86. 2018 University of Miami
87. 2018 Max Planck Institute for Evolutionary Biology (Germany)
88. 2018 University of Colorado, Boulder
89. 2018 University of Dar Es Salaam (Tanzania)
90. 2018 Mexican Mycological Congress Keynote (via teleconference)
91. 2018 University of Michigan
92. 2019 Fungal Genetics Conference

Invited Talks (Popular Audiences/Science Outreach)

1. 2005 Mycological Society of San Francisco
2. 2005 Los Angeles Mycological Society

3. 2005 Davis, CA Mycological Society
4. 2006 Friends of the Farlow Herbarium (Harvard University)
5. 2006 Boston Mycological Club
6. 2006 Mycological Association of Washington, D.C.
7. 2006 Radcliffe Trust (Harvard University)
8. 2006 “Paths of Professorship” Workshop (MIT)
9. 2007 Derek Bok Center for Teaching and Learning Career Panel (Harvard University)
10. 2007 Harvard Museum of Natural History Family Program
11. 2009 New England Mycological Foray
12. 2010 New England Botanical Club
13. 2010 Harvard Life Sciences High School Teacher Outreach Program
14. 2012 Radcliffe Institute Outreach Events “Crossroads of Science and Art”, San Francisco
15. 2013 Cambridge Science Week
16. 2015 NOVA’s CafeSci, Boston
17. 2016 University of Wisconsin-Madison Botany Club
18. 2016 University of Wisconsin-Madison Microbio Club
19. 2017 iBiology (www.ibiology.org) (three lectures)
20. 2018 Inaugural Meeting of the Madison Mycological Society
21. 2018 Wisconsin Mycological Society (twice)
22. 2019 Milwaukee Public Museum

Contributed Talks

1. 1996 National Association of Biology Teachers National Convention
2. 1998 Duke University
3. 1998 Society for the Study of Evolution
4. 1998 Ecological Society of America
5. 2000 Ecological Society of America
6. 2004 Society for the Study of Evolution
7. 2004 Mycological Society of America
8. 2007 Fungal Genetics Conference
9. 2007 Ecological Society of America
10. 2011 Mycological Society of America
11. 2012 Mycological Society of America
12. 2014 VII Congreso Latinoamericano de Micología (Colombia)

Member of the Following Collaborative Groups:

National Center for Ecological Synthesis Working Group “Narrowing the Gap Between Theory and Practice in Mycorrhizal Management”. 2006-2007.

FESIN/ “Fungal Environmental Sampling and Informatics Network”, a National Science Foundation Research Coordination Network. 2008-2014.

Select Publicity

[Pringle Laboratory at the Smith Foray](#). November 2018.

How can you tell if mushrooms are poisonous? [The Wisconsin State Journal](#). December 2017.

Evolution of decomposition in [The Wisconsin State Journal](#). May 2017.

Ballistospores in the [New York Times](#) and elsewhere. July 2017.

Global change research in [The Atlantic](#). June 2017.

Featured in Scholastic MATH Magazine’s 2017 Earth Day Issue, for distribution to middle and high school classrooms.

Work with invasive death caps filmed for [KQED's "Deep Look"](#). February 2016.

New York Times. "Another Danger in a Perilous Journey: Poisonous Mushrooms". September 18, 2015.

Featured on National Public Radio's "You're The Expert" (theexpertshow.com). Aired April 2015.

Appalachian Mountain Club magazine, AMC Outdoors. "Wild Wisdom" column. April 2015.

Slate. "The Most Dangerous Mushroom". February 10, 2014.

New York Times. "In a Place for the Dead, Studying a Seemingly Immortal Species". January 1, 2013.

Filmed for NOVA's "scienceNOW". "What Are Animals Thinking?" Aired November 2012.

Research featured in Polish newspaper Gazeta; "Grzyby: jak wykorzystac podziemne imperium". May 2012.

Research on lichen microbiomes featured on National Public Radio's "Living on Earth". March 2011.

Mycology class featured in the Harvard, MA town newspaper; "Students find life in the cemetery". October 2010.

Research on cooperative spore dispersal featured in The Scientist, Wired, Muy Interesante (Mexico), New Scientist (UK), Der Spiegel (Germany), Noorderlicht (Netherlands), among others. October 2010.

Research on *Amanita phalloides*, lichens, cooperative spore dispersal featured in multiple articles of the Harvard Gazette: news.harvard.edu/gazette/. Various dates.

Work on invasive fungi featured in Microbe: The News Magazine of the American Society for Microbiology 4: 213-214. May 2009.

Featured in *Yes Mag, the Science Magazine for Adventurous Minds* article "Fairy Tale" (about fungal fairy rings). July/August 2007.

Research on *Amanita phalloides* featured on National Public Radio's "All Things Considered". NPR's "Story of the Day"; subsequently picked up by fungal and other blogs. February 2007.

Teaching

COURSES AT HARVARD

Biology of Fungi (OEB 54), 2006, 2007, 2008, 2009, 2010, 2012
 Ecological Genetics (OEB 278), 2007, 2008, 2013
 Evolution of Aging (Freshman Seminar 23o), 2009, 2010, 2011, 2013

COURSES AT MADISON

General Botany (Botany 130), 2016
 Foundations of Evolution (Botany 820), 2016, 2017, 2018
 Fungi (Botany 332), 2017, 2018, 2019
 Land Use Change in Wisconsin (Botany 211), 2017, 2018, 2019
 Plant Ecology Graduate Seminar (Botany 950), 2017, 2018

GUEST LECTURES AT HARVARD AND MADISON (PARTIAL LIST)

BIOS S-165 (Study Abroad in Malaysia: The Biodiversity of Borneo), Microbiology 210 (A Microbial World), MCB 205 (Genetics and Genomics), OEB 202 (Individuality and Form in Biology), Microbiology 655 (Biology and Genetics of Filamentous Fungi), Microbiology 375 (Microbiomes)

ELEMENTARY, MIDDLE AND HIGH SCHOOL SCIENCE TEACHER

Introductory Biology, Botany (including Mycology), Chemistry, Physics, Independent Science Research for High School students. Saint Ann's School, Brooklyn NY. 1993-1995.

Undergraduate Mentoring and Advising

UNDERGRADUATE RESEARCH (SINCE 2005)

Rachel Stahr	2005	Harvard Forest REU
K. Fenstermacher	2005-2008	Independent research, PRISE/MSI summer fellow, senior thesis
J. Soon Ok Worl	2006-2008	Paid assistant, HUCE research assistantship
Julie Shapiro	2005-2009	Independent research, MCZ GUR grant
Kate Farley	2008-2009	Independent research, Harvard Forest REU
R. Compton	2008-2009	Independent research, MCZ GUR grant, senior thesis
A. Mushegian	2008-2010	Independent research, senior thesis
Samuel Pérez	2008-2011	Independent research, PRISE summer fellow, Harvard Forest REU, HHMI IDEAS fellow
Rachel Hawkins	2010-2011	Paid assistant, independent research, MSI summer fellow
Serena Zhao	2010-2012	Independent research, MSI summer fellow, MCZ GUR grant, senior thesis
C. Anderson	2011-2012	Independent research
David Jaramillo	2011-2012	Radcliffe Research Partnership
Lila Strominger	2011-2013	Independent research, senior thesis
Ethan Addicott	2011-2014	Radcliffe Research Partnership, MSI summer fellow, senior thesis
Tristan Wang	2012-2014	Paid assistant
Charlie Wolock	2012-2015	Independent research, senior thesis
Carrie Chapek	2016-2018	Research for credit
Jason Gill	2017-2018	Capstone research; Botany major
Lauren Cleary	2017	Research for credit
John Zuber	2017-present	Research for credit
Elizabeth Buchholz	2017-present	Research for credit

ACADEMIC ADVISING AT HARVARD

- Organismic and Evolutionary Biology Concentration Advisor, 2005-2014
- Board of Freshman Advisors, 2006-2009
- Environmental Science and Public Policy Concentration Advisor, 2007-2014

ACADEMIC ADVISING AT MADISON

- Evolution Option Representative at Biology Majors Program Committee, 2017-2018

Graduate Student Mentoring and Advising

PRINGLE LABORATORY GRADUATE STUDENTS: PH.D.

Benjamin Wolfe ^{1,2}	2005-2010	The evolution of symbiosis within the genus <i>Amanita</i> (currently Assistant Professor, Tufts University)
Primrose Boynton ²	2006-2012	Community assembly of pitcher plant yeasts (currently Group Leader, Max Planck Institute for Evol. Biol.)
Kolea Zimmerman ¹	2010-2016	The evolution of life histories among the fungi (currently Engineer, Ginkgo Bioworks)
Leonora Bittleston ^{1,2}	2010-2016	Multi-species interactions, co-advised by N. Pierce (currently McDonnell Foundation Postdoctoral Fellow, MIT)
Jacob Golan ¹	2015-present	Dispersal

Nora C. Dunkirk	2016-present	Evolution of fungi in global change contexts
Yen-Wen Wang	2016-present	Amanita phylogenomics and metabolomics
Savannah Gentry	2017-present	Emerging fungal diseases
Samantha Harrow	2018-present	Chemical ecology

¹These individuals supported by NSF Graduate Research Fellowships.

²These individuals awarded NSF Doctoral Dissertation Improvement Grants.

PRINGLE LABORATORY GRADUATE STUDENTS: MASTERS

Catherine Adams ¹	2012-2014	Invasion biology (currently Ph.D candidate, U.C. Berkeley)
Anne Kakouridis	2013-2014	Fungal biodiversity in contexts of global change (currently Ph.D. candidate, U.C. Berkeley)

PRINGLE LABORATORY GRADUATE STUDENTS: ROTATIONS AND INTERNSHIPS

Martha H. Elmore	2013-2014	Harvard University
Maryam C. De Mares	2013	Erasmus Mundus Master Programme in Evolution
Natalia Vargas	2015	Universidad de los Andes, Bogotá, Colombia
Martina Iapichino	2016, 2017	Université de Nice Sophia Antipolis, France
Tomás Rush	2017	UW-Madison Plant Pathology
Bastien Bennetot	2017	École Normale Supérieure de Lyon, France
Rodolfo A. Argáiz	2018	UNAM (National Autonomous University of Mexico)

COMMITTEE MEMBER FOR 21 GRADUATE STUDENTS AT HARVARD; ESPECIALLY INVOLVED IN THE COMMITTEES OF:

Joerg Fritz	(Brenner Group, School of Engineering and Applied Sciences, graduated 2013)
Austin Booth	(Department of Philosophy, graduated 2014)
Chris Baker	(Pierce Lab, Organismic and Evolutionary Biology, until 2014)
Martha H. Elmore	(Haig Lab, Organismic and Evolutionary Biology, 2015-present)

FACULTY ADVISOR: Harvard Graduate Women in Science and Engineering (HGWISE). 2005-2014.

MADISON COMMITTEES:

Quinn Langdon	(Hittinger Lab, Genetics, 2015-present)
Michelle Keller-Pearson	(Silva & Ané Labs, CMB, 2015-present)
Joseph Spraker	(Keller Lab, MMI, 2016)
Kahoua Yang	(Keller Lab, MMI, 2016-2017)
Karen Vanderwolf	(Goldberg Lab, Veterinary School, 2016-present)
Sachin Jain	(Kabbage Lab, Plant Pathology, 2016-2018)
William Grant Morton	(Cameron Lab, Botany, 2017-present)
Tomás Rush	(Ané Lab, Plant Pathology, 2017-present)
Melody Sain	(Baum Lab, Botany, 2017-present)
Kelsey Huisman	(Cameron Lab, Botany, 2017-2018)
Jill Hautaniemi	(Stanosz Lab, Forestry, 2017-present)
Shelby Petersen	(Keller Lab, X, 2018)
Alden Dirks	(Jackson Lab, Agroecology, 2018-present)
Dianiris Luciano-Rosario	(Keller Lab, Plant Pathology, 2018-present)

TRAINER for Plant Pathology (UW College of Agriculture and Life Sciences)
TRAINER for Comparative Biomedical Sciences Program (School of Veterinary Medicine)

EXTERNAL EXAMINER/OPPONENT:

Elisabet Ottosson (Stenlid Group, Swedish University of Agricultural Sciences, 2013)
Ioana Onut Brännström (Johannesson Group, Uppsala University, 2017)

Post-Doctoral Associates

Franck Richard. 2006. Now Maître de Conférences, CNRS, Montpellier, France.
Celeste Peterson. 2006-2007. MSI Fellow. Joint with Roberto Kolter, HMS. Now Assistant Professor, Suffolk University.
Marcus Roper. 2006-2007. Farlow Fellow. Now Associate Professor, UCLA
Gabriel Amselem. 2010-2012. Joint with Michael Brenner, SEAS. Now at LadHyX laboratory, École Polytechnique, Paris.
Agnese Seminara, 2008-2012. Marie Curie Fellow. Joint with Michael Brenner, SEAS. Now Chargé de Recherche de première classe, CNRS, Nice, France.
Elizabeth Barron. 2010-2013. Now Assistant Professor, University of Wisconsin, Osh Kosh.
Jaqueline Hess. 2011-2014. Now Senior Scientist, University of Vienna.
Karen Alim. 2010-2015. Joint with Michael Brenner, SEAS. Now Group Leader, Max Planck Institute for Dynamics and Self-Organization.
Daniel Levitis. 2016-2018. Currently on medical leave.

Sabbatical and Other Visitors

Louise Glass. Sabbatical. From University of California, Berkeley. Spring 2006.
Jim Bever. Sabbatical. From Indiana University. Fall 2007.
Inger Skrede. Fulbright Scholar. From Universitetet I Oslo. Fall 2011.
Erik Hobbie. Sabbatical. From University of New Hampshire. 2011-2012.
Gwen Grelet. Marie Curie Fellow. From Landcare Research, New Zealand. 2013.
Monique Gardes. Sabbatical. From Université de Toulouse. 2013
Mary Berbee. Sabbatical. From University of British Columbia. 2019.

Service

HARVARD COMMITTEES

Life Sciences Evolutionary Biology Strategic Planning Committee (FAS). 2006.
Committee to Evaluate the Movement of the Harvard University Herbaria (FAS). 2006.
Search Committee for Plant Evolutionary Biologist (OEB). 2006-2007.
Search Committee for Plant Ecology and Global Climate Change Biologist (OEB). 2007-2008.
Harvard Task Force on Greenhouse Gas Emissions (University Committee). 2008.
OEB Undergraduate Curriculum Committee. 2009-2010.
University Hearing Committee (University Committee). 2007-2014.
Microbial Sciences Initiative Steering Committee (involved multiple schools). 2008-2014.

HARVARD BOARD OF TUTORS: Environmental Science and Public Policy Concentration. 2007-2014.

SCIENTIFIC ADVISOR: for displays on fungi housed within a new, permanent exhibit on “New England Forests”; Harvard Museum of Natural History. 2010-2012.

UNIVERSITY OF WISCONSIN-MADISON COMMITTEES

Alternate, Faculty Senate. 2015-2016.
Senator, Faculty Senate. 2016-present.
Biology Colloquium Committee. 2015-2016.
Ad hoc Committee on Botany and its Future within the College of Letters & Sciences. 2016.
Botany Graduate Committee. 2015-2017.
Botany Merit Committee. 2016-present.
Crow Institute for the Study of Evolution, Coordinating Committee. 2017-2018.
(Led Evolution Undergraduate Education Committee)
Global Health Institute Advisory Committee. 2017-2018.
Tenure Committee: Assistant Professor Kate McCulloch. 2017-present.
Ad hoc Committee to Hire a New Building Manager. 2018
Ad hoc Committee to Identify Promising Candidates as Targets of Opportunity. 2018-2019.
Ad hoc Committee to Create a Botany Code of Conduct. 2018-present

N.B.: Although I serve on many committees, the bulk of my time is devoted to two:

Botany Department Liaison for Sexual Harassment Concerns, 2016-present.
College of Letters & Science Equity and Diversity Committee. 2016-present.
(Chair: 2017-present.)

MUSHROOM OBSERVER

Founding board member of a Federal 510(c)3 organized to develop digital resources for fungi. 2009-present. Currently serve as Vice-President.

ELECTED: Councilor for Ecology/Pathology, Mycological Society of America. 2010-2012.

MYCOLOGICAL SOCIETY OF AMERICA COMMITTEES

Karling Lecture Committee. 2011-2014.
Symposium Committee. 2015-2017.
Distinctions Committee. 2016-present.

PROGRAM CHAIR: Mycological Society of America Annual Meeting, Berkeley. 2016.

EDITORIAL BOARDS

Journal of Experimental Zoology Part B: Molecular and Developmental Evolution (Wiley-Blackwell). 2005-2011.
Fungal Ecology (Elsevier). 2008-present. (Directing Editor for Special Issue on “Conservation Underground: Fungi in a Changing World”, 2010-2011.)
Oecologia (Springer). 2018-present.

CONFERENCES & SYMPOSIA, ETC., ORGANIZED

Radcliffe Institute for Advanced Study/ Harvard University Center for the Environment Symposium “Biodiversity in the Anthropocene”. March 2006.
Radcliffe Institute Advanced Seminar “From Promise to Reality: Appropriate Contexts for the use of Mycorrhizal Fungi as Organic Fertilizers”. March 2008.
Mycological Society of America Symposium “Fungal Biodiversity Informatics”. August 2008
Encyclopedia of Life Workshop “Fungi & the Encyclopedia of Life”. August 2008.
Harvard Plant Biology Symposium “Interactions”. May 2009.

Mycological Society of America Symposium “The Conservation Biology of Fungi”. July 2009.
American Academy of Microbiology Colloquium on Microbial Evolution. August 2009.
Association for Tropical Biology and Conservation Symposium “The Underexplored Diversity of Fungi”. July 2010.
International Mycological Congress Symposium “Invasive and Threatened Fungal Species”. August 2010.
FESIN Workshop “Metagenomics and More: Teaching Mycology in the 21st Century”. August 2011.
Radcliffe Institute Advanced Seminar “Mechanisms of Transport Across Adaptive Biological Networks in the Face of Global Change”. March 2012.
Fungal Genetics Symposium "The Spore". March 2019.

REVIEWER for African Journal of Agricultural Research, Biological Invasions, BMC Genomics, Botany, Cell Reports, Central European Journal of Biology, Current Biology, Ecology, Ecology Letters, Estonian Science Foundation, Eukaryotic Cell, Evolution, Fungal Genetics and Biology, Genetics, Israel Science Foundation, ISME Journal, Journal of Applied Ecology, Journal of Ecology, FEMS Microbiology Ecology, Functional Ecology, Fungal Ecology, Microbial Ecology, Molecular Biology and Evolution, Molecular Ecology, Mycologia, Mycorrhiza, National Geographic, National Science Foundation, Natural Sciences and Engineering Research Council of Canada, National Environment Research Council (NERC; U.K.), National Geographic Society, Nature, New Phytologist, Oikos, Proceedings of the National Academy of Science USA, Proceedings of the Royal Society B, Sloan Foundation, Springer-Verlag (book proposal), Trends in Ecology and Evolution, others.

Primary Professional Affiliations

Mycological Society of America, International Society for Fungal Conservation (founding member)