

Curriculum Vitae

Richard Matthew McCourt

Professor, Dept. of Biodiversity, Earth & Environmental Science
Curator of Botany
Academy of Natural Sciences of Drexel University
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EDUCATION

Ph.D., University of Arizona, Tucson; Ecology and Evolutionary Biology
M.S., University of Arizona, Tucson; Ecology and Evolutionary Biology
B.A., summa cum laude, Lewis & Clark College, Portland, Oregon; Biological Sciences

PROFESSIONAL EXPERIENCE

Drexel University, Professor, Biodiversity, Earth & Environmental Science. 2012 - present.
Teaching and research in evolution, environmental science, botany, and algal biology.
Classes taught: Tree of Life; Plants, People and Planet; Phylogenetics and Ecology.
Supervise undergraduate and graduate students.

National Science Foundation, Program Director, Division of Graduate Education, August 2010-2012. Coordinating review panels, recruiting scientists, evaluating and recommending proposals for funding in the GK-12 Stem Graduate Fellowships Program (GD-12) and Graduate Research Fellowship Program (GRFP).

Academy of Natural Sciences, Director of Center for Systematic Biology and Evolution, 2017-2020; Curator of Botany, 2017-present; Associate Curator of Botany, 1997-to 2017.
1900 Benjamin Franklin Parkway, Philadelphia, PA 19103.
Curator for plant and algae collection of over 1 million specimens; conducted externally funded research; published peer-reviewed articles and book chapters; publications for the public; consulted on exhibit design for national touring exhibit on Lewis and Clark Bicentennial; lecturing to Women in Natural Science Program for teenage inner-city girls; lectured at Barnes Foundation on molecular systematics of plants.

National Science Foundation, Program Director, Division of Biological Infrastructure 2005-08, Division of Environmental Biology 2008-09. 4201 Wilson Blvd., Arlington, VA 22230. Coordinating review panels, recruiting scientists, evaluating and recommending proposals for funding in numerous programs (Biological Research Collections, Major Research Instrumentation, Interdisciplinary Education and Research Traineeships, Frontiers in Biological Research, Microbial Genome Sequencing, Systematic Biology, Biodiversity Inventories, Assembling the Tree of Life, Partnerships for Enhancing Expertise in Taxonomy, Minority Postdoctoral Fellowships, Living Stocks Collections); Interagency Working Group on Scientific Collections (conducted survey and prepared report for NSF and OSTP); Microbial Systems in the Biosphere working group.

DePaul University, Chicago. 1 E. Jackson Blvd., Chicago, IL 60604; 312-362-8000.

Assistant Professor (1989-96); Associate Professor with tenure (1996-97). Classes taught: Introductory Biology; Ecology; Evolution; Algal Biology; Aquatic Biology; Biology for Non-Majors; supervised Master's graduate student research; conducted externally funded research on molecular systematics and evolution of algae; published articles and chapters on algal research; co-edited book on science writing.

SUMMARY OF EXPERIENCE AND ACHIEVEMENTS

- Director, Center for Systematic Biology and Evolution at Academy of Natural Sciences. Served on Senior Management Team, represented collections staff (Curators and Collection Managers) to Management and Board of Trustees, acted a public liaison for collections and science at Academy.
- Professor, Drexel University. Taught undergraduate and graduate courses in ecology and evolutionary biology, systematics, non-majors courses on science communication, botany. Chair of Graduate Committee, 2012-present, various other administrative duties.
- Program Director in the Directorate of Biological Sciences at the National Science Foundation (Division of Biological Infrastructure; Division of Environmental Biology), and Directorate of Education and Human Resources (Division of Graduate Education); managed programs in research, infrastructure, and education. Administered program budgets up to \$20 million for competitive grants programs; managed panel review, award, and post-award reporting for 10 programs and several hundred proposals at NSF. Served on NSF committees developing new funding initiatives and providing input for policy on NSF programs. Represented NSF on Interagency Working Group on Scientific Collections; conducted survey and prepared report (<http://www.nsf.gov/pubs/2009/nsf09044/nsf09044.pdf>) to the Office of Science and Technology Policy of the White House.
- Authored 60+ peer-reviewed articles and chapters, books.
- Authored numerous articles on science for the public.
- Wrote and was co-PI on numerous grants for basic research (Systematics of green algae), collections (herbarium renovation), instrumentation (DNA sequencer) and education (PEET graduate training award, REU Sites and REU Supplement awards) from NSF and other agencies or sources.
- Taught undergraduate and graduate level courses in Biological Sciences as Assistant and Associate Professor at DePaul University.
- Major advisor for graduate students at DePaul and external committee member for graduate students at the University of Maryland.
- Presented dozens of seminars, lectures, and invited addresses on research.
- Served as President, Membership Director, Newsletter Editor, and Chair of Board of Trustees on national scientific society (Phycological Society of America).
- Award-winning free-lance science reporter for National Public Radio; authored magazine articles, web publications, and book chapters for the public; authored laboratory manuals to accompany introductory college biology textbooks; edited an anthology on science writing for college level courses and the general public. Also covered sports, arts, and history.
- Curation of herbarium of 1.2 million plant specimens at Academy of Natural Sciences; obtained grants for new cabinets, environmental control, computer infrastructure, and

digitization of collection; gave many public outreach lectures on Lewis & Clark Herbarium highlighting science of the expedition.

HONORS, AWARDS AND RECOGNITION

National Science Foundation, 2012. Director's Award for Collaborative Integration on *NSF Graduate Research Fellowship Working Group*
 Lewis and Clark College Distinguished Alumnus Award (2004)
 Sloan Sabbatical Fellowship in Molecular Systematics (1993-94)
 Sloan Foundation Sabbatical Fellow in Molecular Systematics, 1993-94.
 AAAS Westinghouse Award for Science Journalism (1984, two-part series on aquaculture broadcast on "All Things Considered," National Public Radio)
 AAAS Mass Media Science Fellowship. 1980. WGBH Radio, Boston.
 Graduate Research Fellowship, National Science Foundation (1974-79)

PROFESSIONAL SOCIETIES

Botanical Society of America
 Phycological Society of America
 European Phycological Society
 International Phycological Society
 Society for Systematic Biology
 National Association of Science Writers
 Philadelphia Botanical Club

PROFESSIONAL SERVICE (EXTERNAL)

CEDO Intercultural, Board of Trustees Member, 2021-present.
 Phycological Society of America:
 2008 - 2018. Chairman, Board of Trustees
 2000 - 2005. Membership Director
 1997 - 1999. Vice-President, President, Past-President
 1992 - 1997. Newsletter Editor.
 Botanical Society of America
 2010 - 2019. Publications Committee.
 2013 - 2019. Finance Committee; Chair 2016 - present.
 2001-2005. Secretary, Phycological Section of Botanical Society of America
 Curator Search Committee Member, Smithsonian, Department of Botany, 2004, 2013
 Network Integrated Biocollections Alliance, Implementation Working Group, Participant, Nov. 2012.
 Treasurer, Philadelphia Botanical Club (2003-2005)
 Manuscript reviewer for *Journal of Phycology*, *Phycologia*, Royal Society of Edinburgh Rhynie Chert volume, *American Journal of Botany*, *New Zealand Journal of Botany*, *Plant Physiology*, *Molecular Phylogenetics and Evolution*.
 External reviewer for Australian Biological Resources Study program.
 National Science Foundation. Review Panels 2009, 2015, 2018, 2019, Ad Hoc Reviewer (ongoing).

GRANTS

National Science Foundation

- 2022-2025. (Submitted) McCourt, R. M. (PI). Collaborative Research: ARTS: PurSUiT: Phylogenomics and Monography of Charophyceae in North America. National Science Foundation. \$ 305,032. Collaborative Proposal with New York Botanical Garden. PI K. G. Karol.
- 2018-2021. Livshulz, T. (PI), Teisher, J. co-PI, and McCourt R. (co-PI) Digitization TCN: Collaborative Research: Digitizing "Endless forms most beautiful and most wonderful": Facilitating Research on Imperiled Plants with Extreme Morphologies. National Science Foundation, \$94,315.
- 2018-2021. Livshulz, T. (PI), Teisher, J. co-PI, and McCourt R. (co-PI). Digitization TCN: Collaborative Research: The Pteridological Collections Consortium: An integrative approach to pteridophyte diversity over the last 420 million years. National Science Foundation, \$56,794.
- 2015-2020. \$226,625. Graduate Fellowship for Lincoln Rehm. Subcontract from University of Pennsylvania to Drexel University.
- 2012-2017. \$100,280 ANSP award of total, \$694,370. National Science Foundation. Collaborative Research: Digitization TCN: The Macroalgal Herbarium Consortium: Accessing 150 Years of Specimen Data to Understand Changes in the Marine/Aquatic Environment. (co-PI with K.G. Karol, K. Barringer, T. Livshulz; part of larger Collaborative Award through ADBC program).
- 2016-2019. Livshulz, T. (PI) and R. McCourt (co-PI) \$626,928 ANSP award of total \$1.5M. Collaborative Research: Digitization TCN: Mid-Atlantic Megalopolis: Achieving a greater scientific understanding of our urban world. 36 months, Start date Sept. 19, 2016.
- 2016-2018. Livshultz , T. (co-PI) and R. McCourt (co-PI). \$100,200. National Science Foundation. Advancing Digitization of Biodiversity Collections (ADBC) Program. Digitization TCN: Collaborative: The Microfungi Collections Consortium: A Networked Approach to Digitizing Small Fungi with Large Impacts on the Function and Health of Ecosystems.
- 2010-2015. \$518,000. National Science Foundation. ATOL: Collaborative Research: Assembling the Green Algal Tree of Life (GrAToL). (I am the co-Lead PI for this five-institution grant for \$3M; also received Research Experience for Undergraduates and Research Experience for Teachers supplements, \$25,000)
- 2010-2014. \$350,000 (ANSP funding: \$30,000). National Science Foundation. Collaborative Research: Phylogeny and Systematics of the Characeae (Charales). (co-PI with K.G. Karol at the New York Botanical Garden)
- 2004-2007. \$499,972. National Science Foundation "Curation of Aquatic Survey Collections at the Academy of Natural Sciences." Co-PI with Dr. Gary Rosenberg.
- 1999-2004, \$747,169. National Science Foundation. "PEET: A unified approach to systematics of basal streptophytes (Charophycean green algae)." Co-PI with Dr. C. F. Delwiche, University of Maryland.

- 2002-2003. \$462,018. National Science Foundation BRC program, “Behind closed doors: New cabinetry for the Herbarium at the Academy of Natural Sciences, Philadelphia (PH).” Co-PIs Dr. L. A. McDade and J. A. Macklin.
- 1997-2000, 2000-2003; 2004-2009. National Science Foundation \$240,000 for first two, \$355,409 for most recent. REU site awards: “Collections-Based Research Experiences for Undergraduates at The Academy of Natural Sciences.” Co-PI with Dr. D. D. Dagit and Dr. Jon Gelhaus.
- 1994-1997, \$235,000. National Science Foundation. Molecular and morphological phylogenetic systematics of extant and fossil Characeae. (Principal Investigator); 1995-1996, 1996-1997.
- 1991-1995, \$ 259,762. National Science Foundation. Molecular systematics of the Zygnematales.
- National Science Foundation Research Experience for Undergraduates (REU) and Research Experience for Teachers (RET) supplements received for these awards.
- Drexel's 2020 Faculty Scholarly and Creative Activity Award. \$15,847. July 2020-June 2021. For collaboration with artist Josie Iselin to design photographic illustrations for book on the Lewis & Clark plant collection.
- National Park Service-Saving America’s Treasures. \$300,000. Upgrading storage conditions for the Lewis and Clark Herbarium at the Academy of Natural Sciences.
- Sloan Foundation Sabbatical Fellow in Molecular Systematics, 1993-94.
- NSF Graduate Research Fellowship. 1974-1979.

PUBLICATIONS

- (In Press). McCourt, R. M., J. Fry, and E. Benamy. A Flower from Gettysburg. *Bartonia*.
2021. Rehm, Lincoln, Lincy L. Marino, Randa Jonathan, Amanda L. Holt, Richard M. McCourt, and Alison M. Sweeney. 2021. “Population Structure of Giant Clams (Subfamily: Tridacninae) across Palau: Implications for Conservation.” *Aquatic Conservation: Marine and Freshwater Ecosystems*, 2021, pp. 1-16. December. <https://doi.org/10.1002/aqc.3758>.
2021. Balasubramanian, R. and McCourt, R. M. *Volvox barberi* (Chlorophyceae) actively forms two-dimensional flocks in culture. *Journal of Phycology* First published: 01 February 2021. <https://doi-org.ezproxy2.library.drexel.edu/10.1111/jpy.13139>
2020. McCourt, R. M. and J. Iselin. The Other 1940 Expedition to the Sea of Cortez. *Journal of the Southwest* 62 (2):467-489. (Published Sept. 28, 2020)
2020. Hall, J. D. , L. A. Lewis, R. M. McCourt, C. F. Delwiche, B. Mishler and K. G. Karol. Chlorophyta. pp. 183-186. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), .), *Phylonyms: A Companion to the Phylocod*. Boca Raton, FL: CRC Press. (Published June 9, 2020)
2020. Hall, J. D. , R. M. McCourt, C. F. Delwiche, B. D. Mishler and K. G. Karol. Phragmoplastophyta. pp. 195-197. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), .), *Phylonyms: A Companion to the Phylocod*. Boca Raton, FL: CRC Press. (Published June 9, 2020)
2020. Hall, J. D. . R. M. McCourt and K. G. Karol. Zygnematophyceae. pp. 199-201. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), .), *Phylonyms: A Companion to the Phylocod*. Boca Raton, FL: CRC Press. (Published June 9, 2020)

2020. Karol, K. G., McCourt, R. M., Mishler, B. D., Delwiche, C. F. and Hall, J. D. Charophyta. pp. 187-189. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), *Phylonyms: A Companion to the Phylocode*. Boca Raton, FL: CRC Press. (Published June 9, 2020)
2020. Karol, K. G., McCourt, R. M. and Hall, J. D. Charophyceae. pp. 205-207. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), *Phylonyms: A Companion to the Phylocode*. Boca Raton, FL: CRC Press. (Published June 9, 2020)
2020. Mishler, B. D. , J. D. Hall, R. M. McCourt, K. G. Karol, C. F. Delwiche, and L.A. Lewis. Viridiplantae. pp. 179-182. In: de Queiroz, K., Cantino, P. D. and Gauthier, J. A. (Eds.), *Phylonyms: A Companion to the Phylocode*. Boca Raton, FL: CRC Press. (Published June 9, 2020)
2020. McCourt, R., M. Phylogeny Building with Mobiles. In E.A. Lacey (Ed.), *Northeast Algal Society Lab Manual* (1st ed.). Retrieved from <https://northeastalgae.org/labmanual.php>.
2018. Hall, J. D., Sheath, R. G., McCourt, R. M. and Stancheva, R. *Ochlochaete incrustans* sp. nov. a new species of freshwater ulvophycean algae from California, U.S.A. with notes on *Friedaea torrenticola*. *Phycologia* 57 (4), 465–476. Published June 21, 2018. <https://doi.org/10.2216/17-39.1>
2017. Karol, K. G., Skawinski, P. M., McCourt, R. M., Nault, M. E., Evans, R., Barton, M.E., Berg, M. S., Pereleberg, J., and Hall, J. D. First discovery of the charophycean green alga *Lychnothamnus barbatus* (Charophyceae) extant in the New World. *American Journal of Botany*. (Published online 7/2/2017; 10.3732/ajb.1700172)
2017. Hall, J. D. and McCourt, R. M. Zygnematophyta. In: *Handbook of the Protists 2nd Edition*. L. Margulis, J. Archibald, A. Simpson and C. Slamovit. Springer International Publishing. Online: DOI 10.1007/978-3-319-32669-6_41-1 (Published May 1, 2017)
2017. Perez, W., Casanova, M. T., Hall, J.D., McCourt, R.M., and Karol, K. G. Phylogenetic congruence of ribosomal operon and plastid gene sequences for the Characeae with an emphasis on *Tolypella* (Characeae, Charophyceae). *Phycologia* 56:230-237.
2017. McCourt, R. M., Karol, K. G., Hall, J. D., Casanova, M., T., Grant, M. C. Charales. In: *Handbook of the Protists 2nd Edition*. L. Margulis, J. Archibald, A. Simpson and C. Slamovit. Springer International Publishing.
2016. McCourt, R. M. Life Finds a Way: Novel algae in reactor cooling ponds. *Journal of Phycology* 52:687-688.
2016. McCourt, R. M. Archaeplastida: Diversification of Red Algae and the Green Plant Lineage. In: Kliman, R.M. (ed.), *Encyclopedia of Evolutionary Biology*. vol. 1, pp. 101–106. Oxford: Academic Press.
2015. Hall, J. D. and McCourt R. M. Conjugating green algae and desmids. pp. 429-457. In: *Freshwater Algae of North America: Classification and Ecology*, 2nd Edition. Eds.: Wehr, J. D., Sheath, R. G., and Kociolek, R. P. Elsevier, Amsterdam.
2015. Perez, W., Hall, J.D., McCourt, R.M., and Karol, K. G. Oospore dimensions and morphology in North American *Tolypella* (Charophyceae, Charophyta). *Journal of Phycology*. 51:310-320. Article first published online: 11 FEB 2015. DOI: 10.1111/jpy.12275
2014. Perez, W., Hall, J. D., McCourt, R. M., and Karol, K. G. Phylogeny of North American *Tolypella* (Charophyceae, Charophyta) based on plastid DNA sequences with a description of *Tolypella ramosissima* sp. nov. *Published Journal of Phycology*. 50:776-789.

2014. Stancheva, R., Hall, Herberger, K., Lewis, McCourt, Sheath, R. G., and Holzinger, A. Phylogenetic position of *Zygonium ericetorum* Kütz. (Zygnematophyceae, Charophyta) from a high alpine habitat and ultrastructural characterization of unusual aplanospores. *Journal of Phycology* 50:790-803.
2013. Stancheva, R., J. D. Hall, R. M. McCourt, and R. G. Sheath. 2013. Identity and phylogenetic placement of *Spirogyra* species (Zygnematophyceae, Charophyta) from California streams and elsewhere. *Journal of Phycology* 49:588-607.
2010. Hanlon, M.R., Mock, S., Nuthulapati, P., Gonzales, M.B. and 11 others including McCourt, R.M. My-Plant.org: A Phylogenetically structured social network. IEEE Gateway Conference Proceedings.
2010. McCourt, R.M. and Spamer, E.S. The Herbarium of Lewis & Clark (sidebar). In: Peck, W. and Stroud, G. T. *A Glorious Enterprise: The Academy of Natural Sciences of Philadelphia and the Making of American Science*. University of Pennsylvania Press.
2010. McCourt, R. M. A Brief Natural History of Algae in the Gulf of California. In R. C. Brusca, Ed. *Biodiversity and Conservation in the Gulf of California*. University of Arizona Press, Tucson, Arizona.
2009. Skog, J., McCourt, R.M., Corman, J. *The NSF Scientific Collections Survey: A Brief Overview of Findings*. [NSF Report](#)
2008. Hall, J. D., McCourt, R. M., and Delwiche, C. F. Patterns of cell division in the filamentous Desmidiaceae, close green algal relatives of land plants. *Amer. Journal of Botany* 95: 643-654.
2008. Hall, J. D., Karol, K. G., McCourt, R. M., and Delwiche, C. F. Phylogeny of the conjugating green algae based on chloroplast and mitochondrial nucleotide sequence data. *Journal of Phycology* 44:467-477.
2007. Hong Cui, Richard M. McCourt, Monique Feist. Automated concept discovery in corpora of morphological descriptions. Proceedings of the American Society for Information Science and Technology 10/2007; 43(1):1 - 5.
2005. Hausner G, Olson R, Simon D, Johnson I, Sanders ER, Karol KG, McCourt RM, Zimmerly S. Origin and evolution of the chloroplast trnK (matK) intron: A model for evolution of group II intron RNA structures. *Molecular Biology and Evolution*. 23(2):380-391. (<https://academic.oup.com/mbe/article/23/2/380/1119037>)
2006. Cui H., McCourt R. M., Feist, M. Conference Paper: Unsupervised structure discovery for biodiversity information. CM/IEEE Joint Conference on Digital Libraries, JCDL 2006, Chapel Hill, NC, USA, June 11-15, 2006, Proceedings; 01/2006
2005. Drummond CS, Hall J, Karol KG, Delwiche CF, McCourt RM. Phylogeny of *Spirogyra* and *Sirogonium* (Zygnematophyceae) based on *rbcL* sequence data. *Journal of Phycology*. 41(5):1055-1064.
2005. Adl SM, Simpson A. G. B., Farmer M. A., Andersen R. A., Anderson O. R., Barta J. R., Bowser S. S., Brugerolle G., Fensome R. A., Fredericq S., James T. Y., Karpov S., Kugrens P., Krug J., Lane C. E., Lewis L. A., Lodge J., Lynn D. H., Mann D. G., McCourt R. M., Mendoza L., Moestrup Ø., Mozley-Standridge S. E., Nerad T. A., Shearer C. A., Smirnov A. V., Spiegel F. W., Taylor M. F. J. R. The new higher level classification of eukaryotes with emphasis on the taxonomy of protists. *Journal of Eukaryotic Microbiology*. 52(5):399-451.
2005. Feist, M. Grambast-Fessard, N., Guerlesquin M., Karol, K.G., McCourt, R.M, Lu Hui-nan, Zhang Shan-zen & Wang Qi-fei. *Treatise on Invertebrate Palaeontology*, Part B,

- Protista, Vol.1, Charophyta. Geological Society of America & The University of Kansas Press.
2004. McCourt, R. M. and Spamer, E. E. On the paper trail in the Lewis & Clark Herbarium. *Bartonia* 62:1-24.
2004. Spamer, E. E. and McCourt, R. M. The second two hundred years are better: the endearing enduring plants of Lewis and Clark. *Bartonia* 62:93-100.
2004. McCourt RM, Delwiche CF, Karol KG. Charophyte algae and land plant origins. *Trends in Ecology and Evolution*. 19(12):661-666.
2004. Lewis LA, McCourt RM. Green algae and the origin of land plants. *American Journal of Botany* 91(10):1535-1556.2005.
2004. Delwiche, C. F., Andersen, R.A. Bhattacharya, D. Mishler, B. D., and McCourt, R. M. 2004. Algal evolution and the early radiation of green plants. Pp. 121-137. IN: Cracraft, J. and Donoghue, M. J. *Assembling the Tree of Life*. Academic Press. New York.
2003. Sanders, E. R., Karol, K. G., and McCourt, R. M. Occurrence of *matK* in a *trnK* group II intron in charophyte green algae, and phylogeny of the Characeae. *American Journal of Botany*. 90:628-633.
2002. Spamer, E. E., and McCourt, R. M. 2002. *The Lewis and Clark Herbarium, Academy of Natural Sciences of Philadelphia (PH-LC): Digital imagery study set*. Academy of Natural Sciences of Philadelphia, Special Publication 19, CD-ROM.
2002. Spamer, E. E., and McCourt, R. M. 2002. The Lewis and Clark Herbarium of the Academy of Natural Sciences. Part 1. History. *Notulae Naturae*, no. 475, 46 pp.
2002. McCourt, Richard M., Catharine Hawks, and Earle E. Spamer. 2002. The Lewis and Clark Herbarium of the Academy of Natural Sciences. Part 2. Saving an American Treasure: Preservation of the herbarium on the bicentennial of the expedition. *Notulae Naturae*, no. 476, 16 pp.
2002. Teece, M. A., Fogel, M. L., Tuross, N., McCourt, R. M., and Spamer, E. E.. 2002. The Lewis and Clark Herbarium of the Academy of Natural Sciences. Part 3. Modern environmental applications of a historic nineteenth century botanical collection. *Notulae Naturae*, no. 477, 20 pp.
2001. Karol, K. G., McCourt, R. M., Cimino, M. T., Delwiche, C. F. The closest living relatives of land plants. *Science* 294: 2351-2353
2000. McCourt, R. M., Karol, K. G., Bell, J., Helm-Bychowski, K., Grajewska, A., Wojciechowski, M. F., and Hoshaw, R. W. Phylogeny of the conjugating green algae (Zygnemophyceae: Desmidiiales, Zygnematales) based on *rbcL* sequences. *Journal of Phycology* 36:747-758.
2000. Spamer, E. E., McCourt, R. M., Middleton, R., Gilmore, E., Duran, S. B. A national treasure: Accounting for the natural history specimens from the Lewis and Clark Expedition (western North America 1803-1806) in the Academy of Natural Sciences of Philadelphia. *Proc. Acad. Nat. Sci. Phil.* 150:47-58.
1999. McCourt, R.M., Karol, K.G., Casanova, M.T., and Feist, M. Monophyly of genera and species of Characeae based on *rbcL* sequences, with special reference to Australian and European *Lychnothamnus barbatus* (Characeae: Charophyceae). *Australian Journal of Botany* 47 (1):361-369.
1998. Chapman R.L., Buchheim M.A., Delwiche C.F., Friedl T., Huss V.A.R., Karol K.G., Lewis L.A., Manhart J., McCourt R.M., Olsen J.L., and Waters D.A. 1998. Molecular

- systematics of the green algae. pp. 508-540. *In* Soltis P., Soltis D., & Doyle, J.J. (Eds.) *Molecular Systematics of Plants II*. Chapman and Hall.
1998. Alverson, W., K. Karol, D. Baum, M. Chase, S. Swensen, R. McCourt and K. Sytsma. Circumscription of the Malvales and relationships to other Rosidae: evidence from *rbcL* sequence data. *American Journal of Botany* 85(6): 876–887.
1996. Park, N.E., Karol, K.G., Hoshaw, R.W., and McCourt, R.M. Phylogeny of *Gonatozygon* and *Genicularia* (Gonatozygaceae, Desmidiiales) based on *rbcL* sequences. *European Journal of Phycology* 31:309-313.
1996. McCourt R.M., Karol K.G., Guerlisquine M., and Feist M. Phylogeny of extant genera in the Family Characeae (Division Charophyta) based on *rbcL* sequences and morphology. *American Journal of Botany* 83(1): 125-131.
1996. McCourt, R.M., Meiers S., Karol K.G., and Chapman, R.L. Molecular systematics of the Charales. pp. 323-336. *In* Chaudhary B.R. and Agrawal S.B. [Eds.] *Cytology, Genetics and Molecular Biology of Algae*. SPB Publishing, Amsterdam.
1996. McCourt R.M. Robert W. Hoshaw. pp. 318-326. *In* Garbary D. and Wynne M. [Eds.] *Prominent Phycologists of the 20th Century*. Phycological Society of America. Lawrence, KS.
1995. McCourt R. M., Karol K., Kaplan S., and Hoshaw R.W. Using *rbcL* sequences to test hypotheses of chloroplast and thallus evolution in conjugating green algae (Zygnematales, Charophyceae). *Journal of Phycology* 31:989-995.
1995. McCourt, Richard M. Green algal phylogeny. *Trends in Ecology and Evolution* 10: 159-163.
1993. Clayton K.L., Hoshaw R.W. & McCourt R.M. Effects of acidic growth conditions on systematic characters in the conjugating green algae (Zygnemataceae, Chlorophyta). pp. 119-127. *In*: W.G. Landis, J.S. Hughes & M.A. Lewis [eds.] *Environmental Toxicology and Risk Assessment*, ASTM STP1179, American Society for Testing and Materials, Philadelphia.
1992. Manhart J.R. & McCourt R.M. Molecular data and species concepts in the algae. *Journal of Phycology* 28:730-737.
1990. McCourt R. M. & Hoshaw R.W. Noncorrespondence of morphology, breeding groups, and monophyly in *Spirogyra* and the application of species concepts. *Systematic Botany* 15:69-78.
1990. Hoshaw R.W., McCourt R.M., & Wang J.C. Conjugaphyta. pp. 119-131. *In*: L. Margulis, J. O. Corliss, M. Melkonian, & D. Chapman [Eds] *Handbook of Protoctista*. Jones and Bartlett Publishers, Inc., Boston, MA.
1990. McCourt R.M. Algal cladistics: A report on the 1989 Willi Hennig Meeting. *Phycological Newsletter*: 4:8-9.
1989. Wang J.C., McCourt R.M. & Hoshaw R.W. Diversity of *Spirogyra* (Chlorophyta) morphotypes on an elevational gradient in a southern Arizona stream. *British Phycological Journal* 24:367-373.
1988. Hoshaw R.W. & McCourt R.M. The Zygnemataceae (Chlorophyta): A twenty-year update of research. *Phycologia* 27:511-548.
1987. Hoshaw R.W., Wells C.V. and McCourt R.M. A polyploid species complex in *Spirogyra maxima* (Chlorophyta, Zygnemataceae), a species with large chromosomes. *Journal of Phycology* 23:267-273.

1986. McCourt R.M., Hoshaw R.W. & Wang J.C. Distribution, morphological diversity and evidence for polyploidy in North American Zygnemataceae (Chlorophyta). *Journal of Phycology* 22:307-313.
1986. Wang J.C., Hoshaw R.W. & McCourt R.M. A polyploid species complex of *Spirogyra communis* (Chlorophyta) occurring in nature. *Journal of Phycology* 22:102-107.
1985. McCourt R.M. Biomass allocation patterns in three species of intertidal *Sargassum*. *Oecologia* 67:113-117.
1984. McCourt R.M. Niche differences between sympatric *Sargassum* species in the northern Gulf of California. *Marine Ecology Progress Series* 18:139-148.
1984. McCourt R.M. Seasonal patterns of abundance, distributions, and phenology in relation to growth strategies of three *Sargassum* species. *Journal of Experimental Marine Biology and Ecology* 74:141-156.
1984. McCourt R.M., Michaels A.F. and Hoshaw R.W. Seasonality of symbiotic *Prochloron* (Prochlorophyta) and its Didemnid host in the northern Gulf of California. *Phycologia* 23:95-101.
1984. McCourt R.M. and Thomson D.A. Cleaning behavior of the juvenile Panamic sergeant major, *Abudefduf troschelii* (Gill), with a résumé of cleaning associations in the Gulf of California and adjacent waters. *Calif. Fish and Game* 70: 234-239.
1979. McCourt R.M. and Kerstitch A.N. Mating behavior and sexual dimorphism in dentition in the stingray *Urolophus concentricus* from the Gulf of California. *Copeia* 1980:900-901.

BOOKS AND CHAPTERS

2006. Readdie, M.D, M. Ranalletti and R.M. McCourt. 2006. Common Seaweeds of the Gulf of California/Algas Comunales del Golfo de California. Sea Challengers Press, California. 105 p.
2004. McCourt, R.M. and Spamer, E.E. *Jefferson's Botanists: Lewis & Clark Discover the Plants of the West*. Academy of Natural Sciences.
2004. Woo, H., Glenn, E., Brusca, R. C., and McCourt, R. M. Algae. In: *Seashore Guide to the Northern Gulf of California*. R. C. Brusca, E. Kimrey, and W. Moore, Eds. Arizona-Sonora Desert Museum, Tucson, AZ.
1995. Anton, T. and McCourt, R.M. *The New Science Journalists*. Ballantine Books.
1990. McCourt, R.M. *Laboratory Manual to Accompany Biology by Wessels and Hopson*. 2nd. Edition. McGraw-Hill Co., New York.

SCIENCE JOURNALISM AND NEWS

2021. McCourt, R. M. Book Review of *Photosynthesis in Algae: Biochemical and Physiological Mechanisms*. Edited by Anthony W. D. Larkum, Arthur R. Grossmann, and John Raven. (Springer). *Quarterly Review of Biology*. 96 (1):44-45. (March 2021)
2021. Ruth Hoshaw Celebrates 100th Birthday with PSA. *Phycological Newsletter*. Spring Issue.
2020. McCourt, R. M. Surprising discovery of civil war plant. *The 33rd*. (Drexel Anthology of Student and Faculty Writing)

2020. McCourt, R. M. High School PSA member is named one of top 300 U.S. STEM students of 2020 for research on Volvox. *Phycological Newsletter* 56 (1): 9-10.
2019. McCourt, R. M. Philadelphia Inquirer: Op-Ed. Brazil Fires Impact Philadelphia and the World. August 28, 2019.
<https://www.inquirer.com/opinion/commentary/brazil-fire-amazon-climate-change-20190828.html>
2018. McCourt, R. M. Surprising discovery of Civil War plant. [Academy of Natural Sciences Blog](#)
2016. McCourt, R. M. Life Finds a Way: Novel algae in reactor cooling ponds. *The 33rd*. (Drexel Anthology of Student and Faculty Writing)
2016. McCourt, R. M. Academy keeping tabs on Earth's biodiversity. Philadelphia Inquirer, http://www.philly.com/philly/opinion/commentary/20160921_Commentary_Academy_keeping_tabs_on_Earth_s_biodiversity.html
2016. McCourt, R. M. PSA Honors Norma J. Lang and Launches Legacy Society at the 2016 Annual Meeting. *Phycological Newsletter* 52(2):4-5.
2014. McCourt, R.M. Intel Algae (Intel Science Talent Search Winner Sara Volz). *AlgaeZine*, Issue 2: 3-7.
2012. McCourt, R.M. The NSF Graduate Research Fellowship. *Phycological Newsletter*, vol. 48, no. 2, pp. 12-13.
2011. McCourt, R.M. PSA Outreach [USA Science and Engineering Festival 2012]. *Phycological Newsletter*, vol. 47. no. 2, p. 15.
2011. McCourt, R.M. A Brief History of the PSA Endowment. *Phycological Newsletter*, vol. 47, no. 2, pp. 21-23.
2010. Spamer, E. E. and McCourt, R. M. Pycnogonids rising: The answer to sea-level rise and water on Mars. *Annals of Improbable Research*. 7:19-22.
<https://doi.org/10.3142/107951401782383524>.
2006. McCourt, R.M. and Spamer, E.E. Pressing Matters: the Plant Collections of Lewis and Clark. pp. 24-28. *In* Catalog to Corcoran Galley of Art Exhibition, "Botanical Treasures of Lewis & Clark: New Art for the Bicentennial." Eds. L. Exton, J. Denton, and W. Cortesi. Corcoran Gallery of Art, Washington, D.C.
2006. Spamer, E.S. and McCourt, R. M. *Lewis and Clark's Lost World: Paleontology and the Expedition*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. (<http://www.lewis-clark.org/content/content-channel.asp?ChannelID=372>).
2006. Spamer, E. S. and McCourt, R. M. *Lewis and Clark at Big Bone Lick*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2737>
2006. Spamer, E. S. and McCourt, R. M. *Georges Cuvier*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2750>
2006. Spamer, E. S. and McCourt, R. M. *Jefferson's Megalonyx*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2742>
2006. Spamer, E. S. and McCourt, R. M. *Richard Harlan*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2751>

2006. Spamer, E. S. and McCourt, R. M. *New Thoughts on Extinction*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2743>
2006. Spamer, E. S. and McCourt, R. M. *Fossils and Geology*. Discovering Lewis and Clark Web Site. Joseph Mussulman, Founding Producer and Editor. <http://www.lewis-clark.org/article/2741>
2002. Spamer, E.S. and McCourt, R. M. *The Lewis and Clark Herbarium, The Academy of Natural Sciences (PH-LC): Digital Imagery Study Set*. CD-ROM. Academy of Natural Sciences.
2004. McCourt, R.M. and Spamer, E.E. The Botanical Legacy of Lewis and Clark: The Most Famous Collection (You've Never Heard Of). *The Pennsylvania Horticultural Society Green Scene*, October 2004: 28-33.
2003. McCourt, R. M. and Spamer, E. E. The botanical legacy of Lewis and Clark: The most famous collection you never heard of. *Plant Science Bulletin*, December, pp. 126-130. (<http://www.botany.org/bsa/psb/2003/psb49-4.html#Lewis>)
- 1997-2004. McCourt, R.M. "Lichen," Microsoft® Encarta Online Encyclopedia 2004 <http://encarta.msn.com>. Microsoft Corporation. All Rights Reserved. <http://autocww2.colorado.edu/~toldy2/E64ContentFiles/AlgaeAndFungi/Lichen.html>
1991. McCourt, R.M. "Some Like it Hot." *Discover Magazine*. August 1991.
1990. McCourt, R.M. "Model Patients." *Discover Magazine*. August 1990.

NEWS COVERAGE

2020. Interviewed by online gaming magazine about museums in *Animal Crossings*. Published May 22, 2020. <https://kotaku.com/museum-experts-weigh-in-on-animal-crossing-new-horizons-1843613946>
2018. Interview on National Public Radio for nationally broadcast news story on Mid-Atlantic Megalopolis project. Sept. 2, 2018. <https://www.npr.org/2018/09/02/641310268/centuries-old-plant-collection-now-online-a-treasure-trove-for-researchers>
2018. Surprising discovery of Civil War plant.. August 20, 2018.
2017. Seaweed: The New Superfood. Academy of Natural Sciences Blog ([Text](#) by Carolyn Belardo)
2017. Dinosaur-Era Plant Found Alive. Academy of Natural Sciences Blog ([Text](#) by Frank Otto)
2017. Dinosaur-era plant found growing in Wisconsin lakes. UPI ([Text](#) by Boorke Hays)
2006. Secrets of Sulphur Spring. Discovering Lewis & Clark. <http://www.lewis-clark.org/article/3001>
2001. Stonewort algae called ancestor of land plants. Faye Flam, *The Baltimore Sun*. December 30, 2001 [Refers to RM as "an international expert on algae and pond scum."] <https://www.baltimoresun.com/news/bs-xpm-2001-12-30-0112300306-story.html>

CONTRIBUTIONS TO NSF PUBLICATIONS:

2013. Stoll, K., and S. Ortega, editors. *The Power of Partnerships: A Guide from the NSF Graduate STEM Fellows in K-12 Education (GK-12) Program*. AAAS, Washington, D.C.

2009. Brewer, C., and D. Smith. *Vision and change in undergraduate biology education: A call to action*. American Association for the Advancement of Science, Washington, DC

RECENT PRESENTATIONS (ORAL AND POSTER)

2021. Mori, T., Arsenault, J. R., Callomon, P., Delwiche, C. F., Karol, K. G., and McCourt, R. M. 15,000-year-old Charophyte Oospores in New Jersey Sediment. Northeast Algal Symposium (Virtual) April, 2021. Poster.
2020. McCourt, R. M. and Iselin, J. The marine botanical counterpart to Steinbeck and Rickett's cruise to the Sea of Cortez: E. Yale Dawson and marine algae in the Gulf of California. Annual Meeting (Virtual) of Botanical Society of America, July 27-31, 2020. <http://botanyconference.org/>
2019. Rehm, L.*, McCourt, R.M., and Sweeney, A. Unravelling spatial patterns of algal arrangement in giant clams. Annual Meeting of the Phycological Society of America, Ft. Lauderdale, June 23-27, 2019. Poster.
2019. Botanical Society of American Annual Meeting, Tucson, AZ, July 27-31, 2019: A flower from Gettysburg. R. McCourt, J. Fry, and E. Benamy. Paper in preparation. Presentation.
2019. Symposium Organizer: Botanical Society of American Annual Meeting, Tucson, AZ, July 27-31, 2019. Green Land: Multiple Perspectives on Green Algal Evolution and the Earliest Land Plants. 6 speakers, funded by BSA and PSA. Paper in preparation.
2018. The Kew Connection: The Lewis and Clark Herbarium and the fate of Pursh's Purloined Plants. R. M. McCourt, Teisher, J., Spamer, E.E. Botanical Society of America Annual Meeting, Minneapolis, MN. July 21-26, 2018. Presentation.
2018. Phylogeny of Characeae with particular reference to Tribe Chareae (Charophyceae, Charales, Characeae) based on three plastid gene sequences. Phycological Society of America Annual Meeting, Vancouver, BC. JULY 29-AUG.2, 2018. Presentaton.
2017. American Malacological Society, Wilmington, DE. Poster: Giant clam mantle color is correlated to the reef environment. Rehm L., Gannon M., McCourt R. M., and Sweeney, A. S. June 2017. Poster.
2017. GrAToL: Progress and challenges in the charophytic green algae. Karol, Hall, Perez, Delwiche, and R. M. McCourt (McCourt presented). Annual Meeting of the Phycological Society of America, Monterey, CA, June 3-9, 2017. Presentation.
2016. Phycological Society of America Annual Meeting, Cleveland OH, July 23-38, 2016. Oral presentation: PHYLOGENY OF THE POLYPHYLETIC GENUS CYLINDROCYSTIS (ZYGNEMATOPHYCEAE) AND ITS RELATION TO FILAMENTOUS ZYGNEMATALEANS, R. M. McCourt, J. Adair, and J. D. Hall
2016. Phycological Society of America Annual Meeting, Cleveland OH, July 23-38, 2016. Oral presentation: REVISING CHARA SUBSECTION WILLDENOWIA. S. Gottschalk, R. M. McCourt, and K. G. Karol.
2015. John Hall, Rosalina Hristova Stancheva, Klaus Herburger, Louise Lewis, Richard McCourt Robert Sheath and Andreas Holzinger. A REVIEW OF ZYGOGONIUM: ITS MORPHOLOGY, ECOLOGY AND OCCURRENCE IN NORTH AMERICA. Northeast Algal Symposium. Syracuse, NY.
2015. Kenneth G. Karol, John D. Hall, William Pérez and Richard M. McCourt. Evolution of organellar genomes in charophytic green algae. Symposium presentation, invited. Phycological Society of America Annual Meeting, August 8-13, 2015. Philadelphia PA

2015. Gottschalk, S., R. M. McCourt & K. G. Karol. SMALL, GREEN, AND PARAPHYLETIC: A REVIEW OF THE GENOMIC AND PHYLOGENETIC RELATIONSHIPS OF PRASINOPHYTE GREEN ALGAE. Symposium presentation, invited. Phycological Society of America Annual Meeting, August 8-13, 2015. Philadelphia PA
2015. K. G. Karol, P. M. Skawinski, R. Evans, M. E. Barton, M. E. Nault, and R. M. McCourt. LYCHNOTHAMNUS BARBATUSIN THE NEW WORLD. Poster at Phycological Society of America Annual Meeting, August 8-13, 2015. Philadelphia PA
2015. Maria Pappas, John D. Hall, and Richard M. McCourt. Spirogyra, Mougeotia, and Zygnema: A multiscale comparison of genetic variation and geographical distance. Northeast Algal Society Meeting, April 26, 2014, Newport, RI.
2014. Christine N. Brown, John D. Hall, and Richard M. McCourt. Phylogenetic comparison of RUBISCO large subunit (rbcL) gene in Spirogyra species: Geography, morphology and DNA sequence comparisons. Northeast Algal Society Meeting, April 26, 2014, Newport, RI.
2014. Sleith, R., Hall, J.D., McCourt, R.M. & Karol, K.G. The invasive macroalga *Nitellopsis obtusa* (N. A. Desvaux) J. Groves (Characeae, Charophyceae) in New York state. Northeast Algal Society Meeting, April 26, 2014, Newport, RI.
2013. Hall, J. D., Adair, J. C., and R. M. McCourt. Phylogeny and systematics of the unicellular green alga *Cylindrocystis* (Zygnematophyceae, Charophyta). Phycological Society of America Annual Meeting with International Phycological Congress, Orlando, FL. August 2013.
2013. McCourt, R. M., Hall, J. D., Stancheva, R., and R. G. Sheath. Diversity and species of spirogyra (zygnematophyceae, charophyta) in california in a molecular phylogenetic context. Phycological Society of America Annual Meeting with International Phycological Congress, Orlando, FL. August 2013.
2013. Perez, W., Hall, J.D., McCourt, R.M., Karol, K.G. Analyses of the mitochondrial and plastid genomes in *Tolypella* A. Braun (Characeae, Charophyceae). Phycological Society of America Annual Meeting with International Phycological Congress, Orlando, FL. August 2013.
2013. Allen, Jessica, McCourt, Richard, Karol, Kenneth. Structural evolution of mitochondrial genomes in early diverging algal lineages. Botanical Society of America Annual Meeting, New Orleans, LA. July 2013.

TEACHING

Drexel University, Tree of Life (required core course); Plants People and the Planet; Phylogenetics and Ecology, Phylogenetics and Ecology, Phylogenetic Methods and Applications, Rivers of Discovery, Super Seaweeds and Ocean Sustainability.

DePaul University, Introductory Biology, Ecology, Aquatic Biology, Phycology, Evolution, Biology for Nonmajors.

Drexel University, course in Phycology, spring 2002.

University of Pennsylvania, invited lecturer in environmental studies, 1999.

Millersville University, invited lecturer in phycology and plant biology courses, 2002-03

Barnes Foundation, invited lectures on plant molecular systematics, 2001-04.

Swarthmore College, invited lecture on molecular systematics and the origin of angiosperms.

Panel discussion participant, Harvard University, "Plants in the historic landscape," 2002.

INVITED PRESENTATIONS AND INVITED SEMINARS

Pennsylvania Botanical Symposium
 Fort Clatsop National Memorial, Astoria, Oregon
 Germantown Friends School, Philadelphia (K-12)
 Harvard University
 Lewis and Clark College, Portland Oregon
 Lexington Gardening Society
 Millersville University, Lancaster, PA
 Missouri Historical Society
 Monticello Center for Historic Plants
 Philadelphia University
 Royal Botanical Gardens at Kew
 Smithsonian Institution, Molecular Systematics Laboratory
 Smithsonian Lecture Series on the Heritage of the Lewis and Clark Expedition
 Springside Girl's School (K-12)
 Stockton State College
 University Alabama
 University of California at Berkeley, CA
 University of Connecticut
 University of Kentucky Arboretum
 University of Maryland
 University of Pennsylvania (Depts. Of Biology and Geosciences)
 W. Saul High School for Agricultural Sciences
 Women in Natural Sciences Program at Academy of Natural Sciences

PROFESSIONAL SERVICE (INTERNAL TO DREXEL AND ANSP)

Local organizer for a national scientific meeting of the Psychological Society of America, held at Drexel University in 2015; >200 attendees; organized plenary and scientific sessions, arranged for housing and meeting space logistics, field trips, and workshops.
 K-12 Education, invited lecture and laboratory at Germantown Friends School
 Public Science - BioBus lesson plans and participation at 2012 USA Science & Engineering Festival, Washington, DC
 Psychological Society of America, participation at 2012 USA Science & Engineering Festival, Washington, DC
 Udall Fellowship Advisory Committee, Drexel
 Goldwater Fellowship Advisory Committee, Drexel
 Botany Month at ANSP, January 2013
 ANSP Lewis and Clark Bicentennial
 Academy-wide Coordinating Committee
 Education Department—Lectures, writing and committee work to develop lesson plans for national education curriculum ([Missouri Historical Society Educator Site](#))
 Coordinate Save America's Treasures grant
 Behind the Scenes Tours of the Botany Department and Lewis and Clark Herbarium (40-50 per year)

Exhibit Design: Assist in design of exhibits for Republican National Convention, 2002 on Jefferson's Scientific Legacy; Curator's Corner; Genome; Biodiversity 911; Biodiversity Road Show; Philadelphia International Airport Lewis and Clark exhibit, 2004-2005.

Public speeches for groups visiting Academy from Lewis and Clark College, Ohio Wesleyan University, miscellaneous groups of students, etc.

Work with ANSP gift shop to develop pins, posters, hats, etc. with Academy connection to Lewis and Clark

Committee Work

Lewis and Clark Bicentennial preparation committee.

Chair, Ichthyology Search Committee

Chair, Internal Review Committee for Dr. Dominique Dagit; Member of Internal Review Committee for Dr. Theodore Daeschler

Strategic Planning Committees (Public Affairs, Databasing Infrastructure, Education)

Safety Committee

Information Committee, Center for Systematic Biology and Evolution

Organizing Committee, Symposium 300th Anniversary of John Bartram's Birth, May 1999, Academy of Natural Sciences.

Provide text and image information for venues exhibiting Lewis and Clark specimens, botany specimens.

Interviewed by reporters for stories on green algal research, Lewis and Clark, and miscellaneous natural history subjects.

SCIENCE COMMUNICATION AND JOURNALISM

Free-lance science reporter, National Public Radio, 1980-1996.

AAAS Mass Media Science Fellowship. 1980. WGBH Radio, Boston.

AAAS Westinghouse Award for Science Journalism, 1984. National award for Best Radio Reporting; a two-part series on aquaculture broadcast on "All Things Considered," National Public Radio)

Writer and radio producer, NSF Office of Legislative and Public Affairs. Podcasts for *Science* 360, host and interviewer for online news conferences with NSF award recipients.