March 13, 2019

MEGHAN A. DUFFY, PH.D.
CURRICULUM VITAE

Professor
Department of Ecology and Evolutionary Biology
University of Michigan

Educational Background:

B.S.	Biological Sciences, *cum laude* Mentor: Nelson Hairston, Jr.	2000	Cornell University
Ph.D.	Zoology; Ecology, Evolutionary Biology, & Behavior Advisors: Alan Tessier and Jeff Conner	2006	Michigan State University

Employment History:

2018-	Professor, Department of Ecology & Evolutionary Biology, University of Michigan
2014-2018	Associate Professor, Department of Ecology & Evolutionary Biology, University of Michigan
2012-2014	Assistant Professor, Department of Ecology & Evolutionary Biology, University of Michigan
2012-2013	Adjunct Faculty, School of Biology, Georgia Institute of Technology
2008-2012	Assistant Professor, School of Biology, Georgia Institute of Technology
2006-2007	Postdoctoral Fellow, University of Wisconsin-Madison (Mentor: Anthony Ives)

Teaching Experience:

At Michigan:

Fall 2017	Bio 171: Introductory Biology: Ecology & Evolution - co-taught with Dr. Patricia Wittkopp	540 students
Winter 2017	Bio 800: Seminar: Theory of Ecological Communities	4 students
Fall 2015	Bio 171: Introductory Biology: Ecology & Evolution - co-taught with Dr. Patricia Wittkopp	524 students
Fall 2014	Bio 171: Introductory Biology: Ecology & Evolution - co-taught with Dr. Patricia Wittkopp	592 students
Winter 2014	BIO 120: First Year Seminar: Ecological and Evolutionary Medicine (new course designed by Duffy)	20 students
Fall 2012	BIO 171: Introductory Biology: Ecology & Evolution	208 students

At Georgia Tech:

Spring 2012	BIOL 4450: Senior Seminar	14 students
Fall 2011	BIOL 4803/8803: Special Topics: Ecology and Evolution of Infectious Diseases (new course designed by Duffy)	25 students
Fall 2010	BIOL 2335: General Ecology	82 students
Spring 2010	BIOL 8802 Special Topics: Graduate Seminar in Ecology and	6 students

	Evolution (new course designed by Duffy)	
Spring 2009	BIOL 4803/8803 Special Topics: Population and Evolutionary Ecology (new course designed by Duffy)	17 students
Fall 2008	BIOL 2335 General Ecology (co-taught with Dr. Lin Jiang)	94 students

Honors, Awards, and Recognition:

2019	Henry Russel Award, University of Michigan (given to early-mid career faculty who "have demonstrated an extraordinary record of accomplishment in scholarly research and/or creativity, as well as an excellent record of contributions as a teacher")
2018-2019	Academic Innovation Sabbatical Fellow and Faculty Innovator-in-Residence
2018	John Dewey Award, University of Michigan (for commitment to undergraduate education)
2017	President's Award for Public Impact, University of Michigan (inaugural award, given to two faculty members at the University)
2017	Speaker on main stage, March for Science, Washington DC
2017	American Association for the Advancement of Science (AAAS) Leshner Leadership Institute Public Engagement Fellow
2017	Association for the Sciences of Limnology and Oceanography (ASLO) Yentsch-Schindler Early Career Award
2013	Ecological Society of America Early Career Fellow
2012	Presidential Early Career Award for Scientists and Engineers (PECASE)
2011	National Science Foundation (NSF) CAREER award
2010	George Mercer Award from the Ecological Society of America, given annually to a researcher under 40 for an outstanding ecological research paper
2010	Georgia Tech Faculty Award for Academic Outreach
2006	National Science Foundation Postdoctoral Fellowship in Biological Informatics
2006	Honorable Mention, Buell Award for the outstanding student oral presentation, Ecological Society of America
2006	Ecological Society of America Aquatic Ecology Section Best Talk Award
2005	P.E.O. Scholar Award
2005	Carolyn E. Conway Endowed Scholar Award, P.E.O. Sisterhood
2005	Michigan State University EEBB Student Speaker Award
2005	Michigan State University Ecology, Evolutionary Biology and Behavior Program Fellowship
2003	EPA STAR Graduate Fellowship (Awarded but did not accept)
2002-2006	National Science Foundation Graduate Research Fellowship
2001-2002	National Science Foundation Research Training Grant Fellowship, Michigan State University
2000-2004	Michigan State University Distinguished Fellowship
2000	Michigan State University College of Natural Sciences Recruiting Fellowship
1999	Howard Hughes Research Fellowship, Cornell University

Publications:
ResearcherID (ISI): http://www.researcherid.com/rid/E-6867-2016
Google Scholar Profile: http://scholar.google.com/citations?user=JBNzgNMAAAAJ
Orcid ID: 0000-0002-8142-0802

Notes on Authorship:
Duffy Lab graduate students/postdocs/technicians are indicated *in italics*
Duffy Lab undergrads are indicated by underlining
***** indicates Duffy or Duffy Lab member corresponding author
Publications from my lab use the first and last author positions as positions of emphasis

Peer-reviewed:
A) Published or in press

69. Emery, N., A. Hund, R. Burks, **M.A. Duffy**, C. Scoffoni, and A. Swei. 2019. Students as ecologists: Strategies for successful mentorship of undergraduate researchers. *Ecology and Evolution,* in press.
68. *McLean, K.D.** and **M.A. Duffy**. 2019. Ecological context influences evolution in host-parasite interactions: insights from the *Daphnia*-parasite model system. *Evolution in Action: Past, Present and Future*, in press. (invited submission)
67. *Sánchez, K.F.**, N. Huntley, **M.A. Duffy**, and M.D. Hunter. 2019. Toxins or medicines? Phytoplankton diets mediate host and parasite fitness in a freshwater system. *Proceedings of the Royal Society, B*, in press. https://doi.org/10.1098/rspb.2018.2231
66. **Duffy, M.A.*** and *K.K. Hunsberger*. 2019. Infectivity is influenced by parasite spore age and exposure to freezing: do shallow waters provide *Daphnia* a refuge from some parasites? *Journal of Plankton Research*, 41(1):12-16. doi: 10.1093/plankt/fby046
65. Clay, P.A., M.H. Cortez, **M.A. Duffy**, and V.H.W. Rudolf. 2019. Priority effects within coinfected hosts can drive unexpected population-scale patterns of parasite prevalence. *Oikos,* in press. doi: 10.1111/oik.05937
64. *Wale, N.*,* M.L. Turrill, and **M.A. Duffy**. 2019. A colorful killer: *Daphnia* infected with the bacterium *Spirobacillus cienkowskii* exhibit unexpected color variation. *Ecology*, 100(3):e02562. https://doi.org/10.1002/ecy.2562
63. Clay, P.A., K.L. Dhir, V.H.W. Rudolf, and **M.A. Duffy**. 2019. Within host priority effects systematically alter pathogen coexistence. *American Naturalist,* 193(2):187-199. https://doi.org/10.1086/701126
62. Duffy, M.A.*, C.E. Cáceres, and S.R. Hall. 2019. Healthy herds or predator spreaders? Insights from the plankton into how predators suppress and spread disease. *Wildlife Disease Ecology: Linking theory to data and application* (eds: Ken Wilson, Andy Fenton, and Dan Tompkins, Cambridge University Press)
61. Bresciani, L., L.N. Lemos, *N. Wale,* J.Y. Lin, A.T. Strauss, **M.A. Duffy**, and J.L.M. Rodrigues. 2018. Draft genome sequence of "*Candidatus* Spirobacillus cienkowskii," a pathogen of freshwater *Daphnia* species, reconstructed from hemolymph metagenomic reads. *Microbiology Resource Announcements,* 7(22):e01175-18.
60. Shocket, M.S., D. Vergara, A.J. Sickbert, J.M. Walsman, J.L. Hite, A.T. Strauss, **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2018. Parasite rearing and infection temperatures jointly influence disease transmission and shape seasonality of epidemics. *Ecology,* 99(9):1975-1987.
59. Strauss, A.T., A.M. Bowling, **M.A. Duffy,** C.E. Cáceres, and S.R. Hall. 2018. Linking host

traits, interactions with competitors and disease: Mechanistic foundations for disease dilution. *Functional Ecology*, 32(5):1271-1279. (recipient of the 2018 Haldane Prize for Early Career Research)

58. Shocket, M.S., A.T. Strauss, J.L. Hite, M. Šlijvar, D.J. Civitello, **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2018. Temperature drives epidemics in a zooplankton-fungus disease system: A trait-driven approach points to transmission via host foraging. *American Naturalist*, 191(4): 435-451. (recipient of the 2018 American Naturalist Student Paper Award)
57. Strauss, A.T., J.L. Hite, M.S. Shocket, **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2017. Rapid evolution rescues hosts from competition and disease but – despite a dilution effect – increases the density of infected hosts. *Proceedings of the Royal Society, B,* 284:20171970.
56. Saunders, Manu E., **M.A. Duffy**, S.B. Heard, M. Kosmala, S.R. Leather, T. McGlynn, J. Ollerton, and A.E. Parachnowitsch. 2017. Bringing ecology blogs into the scientific fold: quantifying reach and impact of science-community blogs. *Royal Society Open Science,* 4:170957.
55. **Duffy, M.A.*** 2017. Last and corresponding authorship practices in ecology. *Ecology and Evolution,* 7:8876-8887. doi: 10.1002/ece3.3435
54. Hite, J.L., *R.M. Penczykowski,* M.S. Shocket, K. Griebel, A.T. Strauss, **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2017. Allocation, not male resistance, increases male frequency during epidemics: A case study in facultatively sexual hosts. *Ecology*, 98(11): 2773-2783.
53. *Auld, S.K.J.R.*, C.L. Searle,* and **M.A. Duffy**. 2017. Parasite transmission in a natural multihost-multiparasite community. *Philosophical Transactions of the Royal Society, B,* 372:20160097.
52. *Rogalski, M.A.*, C.D. Gowler, C.L. Shaw,* R.A. Hufbauer, and **M.A. Duffy**. 2017. Human drivers of ecological and evolutionary dynamics in emerging and disappearing infectious disease systems. *Philosophical Transactions of the Royal Society, B,* 372:20160043.
51. Strauss, A.T., M.S. Shocket, D.J. Civitello, J.L. Hite, *R.M. Penczykowski,* **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2016. Habitat, predators, and hosts regulate disease in *Daphnia* through direct and indirect pathways. *Ecological Monographs,* 86:393-411.
50. *Searle, C.L.**, M.H. Cortez, *K.K. Hunsberger, D.C. Grippi, I.A. Oleksy, C.L. Shaw,* S.B. de la Serna, C.L. Lash, K.L. Dhir, and **M.A. Duffy**. 2016. Population density, not host competence, drives patterns of disease in an invaded community. *American Naturalist,* 188(5):554-566.
49. *Searle, C.L.*, C.L. Shaw, K.K. Hunsberger,* M. Prado, and **M.A. Duffy**. 2016. Salinization decreases population densities of the freshwater crustacean, *Daphnia dentifera*. *Hydrobiologia*, 770:165-172.
48. Hite, J.L., *R.M. Penczykowski,* M.S. Shocket, A.T. Strauss, P.A. Orlando, **M.A. Duffy**, C.E. Cáceres, and S.R. Hall. 2016. Parasites destabilize host populations by shifting stage-structured interactions. *Ecology*, 97:439-449.
47. **Duffy, M.A.***, T.Y. James, and A. Longworth. 2015. Ecology, virulence, and phylogeny of *Blastulidium paedophthorum*, a widespread brood parasite of *Daphnia* spp. *Applied and Environmental Microbiology*, 81(16):5486-5496. (cover article)
46. *Searle, C.L.*, J. Housley Ochs*, C.E. Cáceres, S. Chiang, N.M. Gerardo, S.R. Hall, and **M.A. Duffy**. 2015. Plasticity, not genetic variation, drives infection success of a fungal parasite. *Parasitology,* 142:839-848.

45. Civitello, D.J., A.N. Smith, *R.M. Penczykowski,* M.S. Shocket, **M.A. Duffy**, and S.R. Hall. 2015. Resources, key traits, and the size of fungal epidemics in *Daphnia* populations. *Journal of Animal Ecology,* 84:1010-1017.
44. Lively, C.M., J.C. de Roode, **M.A. Duffy**, A.L. Graham, and B. Koskella. 2014. Interesting open questions in disease ecology and evolution. *American Naturalist,* 18:S1-S8.
43. *Auld, S.K.J.R.**, S.R. Hall, *J.H. Ochs*, M. Sebastian, and **M.A. Duffy**. 2014. Predators and patterns of within-host growth can mediate both among-host competition and the evolution of transmission potential of parasites. *American Naturalist,* 184:S77-S90.
42. *Penczykowski, R.M.**, B.C.P. Lemanski, R.D. Sieg, S.R. Hall, *J.H. Ochs*, J. Kubanek, and **M.A. Duffy**. 2014. Poor resource quality lowers transmission potential by changing foraging behavior. *Functional Ecology,* 28(5): 1245-1255.
41. Cáceres, C.E., A.J. Tessier, **M.A. Duffy**, and S.R. Hall. 2014. Disease in freshwater zooplankton: what have we learned and where are we going? *Journal of Plankton Research,* 36(2): 326-333.
40. *Penczykowski, R.M.**, S.R. Hall, D.J. Civitello, and **M.A. Duffy**. 2014. Habitat structure and ecological drivers of disease. *Limnology and Oceanography*, 59(2):340-348.
39. *Searle, C.L.**, J.R. Mendelson III, L.E. Green, and **M.A. Duffy**. 2013. *Daphnia* predation on the amphibian chytrid fungus and its impacts on disease risk in tadpoles. *Ecology and Evolution,* 3(12):4129-4138. (cover article)
38. *Auld, S.K.J.R., R.M. Penczykowski, J.H. Ochs, D.C. Grippi*, S.R. Hall, and **M.A. Duffy**. 2013. Variation in costs of parasite resistance among natural host populations. *Journal of Evolutionary Biology,* 26(11):2479-2486.
37. Bertram, C.R., M. Pinkowski, S.R. Hall, **M.A. Duffy**, and C.E. Cáceres. 2013. Trait-mediated indirect effects, predators, and disease: test of a size-based model. *Oecologia*, 173(3):1023-1032.
36. Civitello, D.J., S. Pearsall, **M.A. Duffy**, and S.R. Hall. 2013. Parasite consumption and host interference can inhibit disease spread in dense populations. *Ecology Letters,* 16(5):626-634.
35. Civitello, D.J., *R.M. Penczykowski*, J.L. Hite, **M.A. Duffy**, and S.R. Hall. 2013. Potassium stimulates fungal epidemics in a freshwater invertebrate. *Ecology,* 94:380–388.
34. *Auld, S.K.J.R.**, S.R. Hall, and **M.A. Duffy.** 2012. Epidemiology of a *Daphnia*-multiparasite system and its implications for the Red Queen. *PLoS ONE*, 7(6): e39564.
33. **Duffy, M.A.***, *J. Housley Ochs, R.M. Penczykowski*, D.J. Civitello, C.A. Klausmeier, and S.R. Hall. 2012. Ecological context influences epidemic size and parasite-mediated selection. *Science,* 335:1636-1638. (cover article)
32. Hall, S.R., C.R. Becker, **M.A. Duffy**, and C.E. Cáceres. 2012. A power-efficiency tradeoff in resource use alters epidemiological relationships. *Ecology,* 93:645-656.
31. Overholt, E.P., S.R. Hall, C.E. Williamson, C.E. Meikle, **M.A. Duffy**, and C.E. Cáceres. 2012. Solar radiation decreases parasitism in *Daphnia*. *Ecology Letters,* 15(1): 47-54.
30. Prior, N.H., C.N. Washington, *J.M. Housley*, S.R. Hall, **M.A. Duffy,** and C.E. Cáceres. 2011. Maternal effects in a planktonic host-parasite system. *Evolutionary Ecology Research,* 13:401-413.
29. **Duffy, M.A.***, *J.M. Housley, R.M. Penczykowski*, C.E. Cáceres, S.R. Hall. 2011. Unhealthy herds: indirect effects of predators enhance two drivers of disease spread. *Functional Ecology,* 25(5):945-953. (article focus of Spotlight by Welch & Harwood: pages 943-944)

28. *Thomas, S.H.*, C. Bertram, K. van Rensburg, C.E. Cáceres, and **M.A. Duffy***. 2011. Spatiotemporal dynamics of free-living stages of a bacterial parasite of zooplankton. *Aquatic Microbial Ecology,* 63(3):265-272.
27. Hall, S.R., C.R. Becker, **M.A. Duffy**, C.E. Cáceres. 2011. Epidemic size determines population-level effects of parasites. *Oecologia*, 166:833-842.
26. Kestrup, Å.M., *S.H. Thomas*, K. van Rensburg, A. Ricciardi, and **M.A. Duffy***. 2011. Differential infection of exotic and native freshwater amphipods by a parasitic water mold in the St. Lawrence River. *Biological Invasions,* 13(3):769-779.
25. *Thomas, S.H.*, J.M. Housley, A.N. Reynolds, *R.M. Penczykowski*, N. Hardegree, K.H. Kenline, S. Schmidt, and **M.A. Duffy***. 2011. The ecology and phylogeny of oomycete infections in *Asplanchna* rotifers. *Freshwater Biology*, 56:384-394. (cover article)
24. *Penczykowski, R.M.*, Samantha E. Forde and **M.A. Duffy***. 2011. Rapid evolution as a constraint on emerging infectious diseases. *Freshwater Biology,* 56:689-704. (cover article)
23. Hall, S.R., C.R. Becker, **M.A. Duffy**, and C.E. Cáceres. 2010. Variation in resource acquisition and use among hosts can create key epidemiological tradeoffs. *American Naturalist*, 176:557-565.
22. **Duffy, M.A.*,** C.E. Cáceres, S.R. Hall, A.J. Tessier and A.R. Ives. 2010. Temporal, spatial and between-host comparisons of patterns of parasitism in lake zooplankton. *Ecology*, 91(11):3322-3331.
21. Hall, S.R., R. Smyth, C.R. Becker, **M.A. Duffy**, C.M. Knight, S. MacIntyre, A.J. Tessier, and C.E. Cáceres. 2010. Why are some lakes sicker? Disease ecology, habitat structure and the plankton. *BioScience*, 60(5):363-375.
20. **Duffy, M.A.*** 2010. Ecological consequences of intraspecific variation in lake *Daphnia*. *Freshwater Biology*, 55: 995-1004. (cover article)
19. **Duffy, M.A.*** and S.E. Forde. 2009. Ecological feedbacks and the evolution of resistance. *Journal of Animal Ecology,* 78:1106-1112.
18. **Duffy, M.A.*,** S.R. Hall, C.E. Cáceres and A.R. Ives. 2009. Rapid evolution, seasonality, and the termination of parasite epidemics. *Ecology*, 90(6):1441-1448.
17. **Duffy, M.A.*** 2009. Staying alive: the post-consumption fate of parasite spores and its implications for disease dynamics. *Limnology and Oceanography*, 54(3):770-773.
16. Hall, S.R., C.M. Knight, C.R. Becker, **M.A. Duffy**, A.J. Tessier and C.E. Cáceres. 2009. Quality matters: resource quality for hosts and the timing of epidemics. *Ecology Letters*, 12(2):118-128.
15. Hall, S.R., C.R. Becker, J.L. Simonis, **M.A. Duffy**, A.J. Tessier, and C.E. Cáceres. 2009. Friendly competition: evidence for a dilution effect in a planktonic host-parasite system. *Ecology*, 90(3):791-801.
14. **Duffy, M.A.***, C.E. Brassil, S.R. Hall, A.J. Tessier, C.E. Cáceres, and J.K. Conner. 2008. Parasite-mediated disruptive selection in a natural *Daphnia* population. *BMC Evolutionary Biology*, 8:80.
13. Cáceres, C.E., A.J. Tessier, A. Andreou, **M.A. Duffy**. 2008. Stoichiometric relationships in vernal pond plankton communities. *Freshwater Biology*, 53(7):1291-1302.
12. **Duffy, M.A.*** and S.R. Hall. 2008. Selective predation and rapid evolution can jointly dampen effects of virulent parasites on *Daphnia* populations. *American Naturalist*, 171(4): 499-510. (This paper received the Mercer Award from the Ecological Society of America.)

11. Rodrigues, J.L.M., **M.A. Duffy**, A.J. Tessier, D. Ebert, L. Mouton and T.M. Schmidt. 2008. Phylogenetic characterization and prevalence of *Spirobacillus cienkowskii*: a red-pigmented, spiral-shaped bacterial pathogen of freshwater *Daphnia* species. *Applied and Environmental Microbiology*, 74(5):1575-1582. (cover article)
10. **Duffy, M.A.*** 2007. Selective predation, parasitism, and trophic cascades in a bluegill-*Daphnia*-parasite system. *Oecologia* 153(2):453-460.
9. Hall, S.R., L. Sivars-Becker, C. Becker, **M.A. Duffy**, A.J. Tessier and C.E. Cáceres. 2007. Eating yourself sick: transmission of disease as a function of foraging ecology. *Ecology Letters* 10(3):207-218.
8. **Duffy, M.A.*** and L. Sivars-Becker. 2007. Rapid evolution and ecological host-parasite dynamics. *Ecology Letters* 10(1):44-53. (cover article; reviewed by Faculty of 1000)
7. Hall, S.R., A.J. Tessier, **M.A. Duffy,** M. Huebner and C.E. Cáceres. 2006. Warmer does not have to mean sicker: Temperature and predators can jointly drive timing of epidemics. *Ecology* 87(7):1684-1695.
6. Cáceres, C.E., S.R. Hall, **M.A. Duffy**, A.J. Tessier, C. Helmle and S. MacIntyre. 2006. Physical structure of lakes constrains epidemics in *Daphnia* populations. *Ecology* 87(6):1438-1444.
5. Hall, S.R., **M.A. Duffy**, A.J. Tessier and C.E. Cáceres. 2005. Spatial heterogeneity of daphniid parasitism in lakes. *Oecologia* 143(4):635-644.
4. **Duffy, M.A.***, S.R. Hall, A.J. Tessier and M. Huebner. 2005. Selective predators and their parasitized prey: Are epidemics in zooplankton under top-down control? *Limnology and Oceanography* 50:412-420.
3. Hall, S.R., **M.A. Duffy** and C.E. Cáceres. 2005. Selective predation and productivity jointly drive complex behavior in host-parasite systems. *American Naturalist* 165:70-81.
2. **Duffy, M.A.***, A.J. Tessier and M.A. Kosnik. 2004. Testing the ecological relevance of *Daphnia* species designations. *Freshwater Biology* 49(1):55-64.
1. **Duffy, M.A.**, L.J. Perry, C.M. Kearns, L.J. Weider, and N.G. Hairston, Jr. 2000. Paleogenetic evidence for a past invasion of Onondaga Lake, New York, by exotic *Daphnia curvirostris* using mtDNA from dormant eggs. *Limnology and Oceanography* 45(6):1409-1414.

Non-peer-reviewed:

3. Selin, N.E., M.A. Kenney, A.J. Jefferson, J.S. Dukes, T.M. Hill, L. Schmitt Olabisi, and **M.A. Duffy.** 2018. Call for a new AAAS harassment policy. *Science* 361:984-984.
2. Calisi, R.M. and a Working Group of Mothers in Science (45 people, including **M.A. Duffy**). 2018. How to tackle the childcare-conference conundrum. *Proceedings of the National Academy of Sciences* 115(12):2845-2849
1. **Duffy, M.A.** 2014. It helps to be well-connected. (Invited Perspective) *Science,* 344:1229-1230.

Research grants and contracts:

A) Administered

Currently funded:

2018-2021 National Science Foundation. "Collaborative Research: Development and empirical tests of a mechanistic multi-host, multi- pathogen theory." (Lead PI:

Michael Cortez, Utah State University; Duffy UMich PI; Total award: $814,288; Duffy budget: $610,889)

2017-2020 National Science Foundation. "Collaborative Research: How do predators spread disease? Tests of five ecological and eco-evolutionary mechanisms with disease in the plankton." (Lead PI: Spencer Hall, Indiana University; Duffy UMich PI; Illinois PI: Carla Cáceres, University of Illinois; Total award: $1,255,000; Duffy portion: $424,999)

2016-2019 National Science Foundation. "DISSERTATION RESEARCH: Do interactions between ultraviolet radiation and dissolved organic carbon modulate disease in aquatic systems?" (PI; Doctoral Dissertation Improvement Grant for graduate student Clara Shaw; Total award: $20,150)

Previous funding:

2014-2018 National Science Foundation. "Collaborative Research: Friendly Competition: infusing ecology and evolution at the frontiers of the dilution effect in disease ecology." (Lead PI: Spencer Hall, Indiana University; Duffy UMich PI; other PIs: Carla Cáceres and Zoi Rapti, University of Illinois; Total award: $924,269; Duffy portion: $224,080)

2011-2017 National Science Foundation. "PECASE/CAREER: Rapid host-parasite evolution and its effects on host invasions: a resurrection ecology study" (Duffy sole PI; $828,538 including 3 REU supplements and 2 career-life balance supplements)

2009-2013 National Science Foundation. "Collaborative Research: Joint influences of host genetics and community context on eco-evolutionary host-parasite dynamics." (Duffy PI; collaborative with Spencer Hall, Indiana University; Total award: $621,000 including 3 REU supplements; Duffy portion officially transferred to Michael Goodisman prior to Duffy leaving Georgia Tech)

2008-2010 National Science Foundation. "Research Starter Grant: The role of competition among parasites in driving patterns of disease" ($59,625 including RET supplement; Duffy sole PI)

2006-2007 National Science Foundation. Postdoctoral Research Fellowship in Biological Informatics. "Spatiotemporal scaling of the ecological and evolutionary dynamics of host-parasite interactions" ($120,000)

2005-2007 National Science Foundation Doctoral Dissertation Improvement Grant. "Selective predators and the dynamics of host-parasite interactions" ($10,699)

Media and Public Engagement

Talks to public audiences:

2017: University of Michigan Museum of Natural History Science Café; topic: "What Cost, Basic Research"

2017: March for Science, Washington DC (speaker on main stage to >30,000 people on the National Mall [official March for Science attendance estimate: 100,000 people]; video of speech; text of speech)

Writing for general audiences:

5. **Duffy, M.A.**, C. Thanhouser, and D. Eisenberg. What colleges must do to promote mental health for graduate students. *The Conversation*. Publication date: August 3, 2018. https://theconversation.com/what-colleges-must-do-to-promote-mental-health-for-graduate-students-100922
(republished by Salon, San Francisco Chronicle, Seattle Post Intelligencer, and more than a dozen other publications)
4. **Duffy, M.A.** It's a problem for Michigan lakes, too. MLive print edition in Ann Arbor, Bay City, Flint, Grand Rapids, Jackson, Kalamazoo, Muskegon, and Saginaw. Publication date: March 4, 2018. Guest column appeared opposite "Salted: Winter runoff is taking the fresh out of nation's waterways".
3. **Duffy, M.A.** President Trump's proposed budget will stunt American scientific innovation. *Medium*. Publication date: June 6, 2017. https://medium.com/@duffymeg/president-trumps-proposed-budget-will-stunt-american-scientific-innovation-65c191bc73f9
2. **Duffy, M.A.** How I prepared for the biggest talk of my career: Thoughts on speaking at the March for Science in DC. *LearnSpeakAct*. Publication date: May 5, 2017. https://sites.lsa.umich.edu/learn-speak-act/2017/05/05/how-i-prepared-for-the-biggest-talk-of-my-career-thoughts-on-speaking-at-the-march-for-science-in-dc/
1. **Duffy, M.A.** This polluted lake shows why we are all stakeholders when it comes to clean water: when environmental protection gets short shrift, the price we pay can be staggering. *Ensia*. Publication date: March 29, 2017. https://ensia.com/voices/onondaga-protect-environment/
    - *Ensia* is an independent, non-profit magazine focusing on environmental issues

Science-community writing:

2012-present: Writer for *Dynamic Ecology*, distributed online; site has received over 3.8 million page views; some of Duffy's writings that originally appeared at *Dynamic Ecology* have been featured on other websites, including Times Higher Education, ASBMB Today, and SAS Confidential. 13 of Duffy's posts at *Dynamic Ecology* have received over 10,000 page views.

Media interviews (aimed at the general public):

2018: Interview with PBS Newshour for article, "Hundreds say #TimesUp for world's largest scientific organization to address sexual harassment": https://www.pbs.org/newshour/science/hundreds-say-timesup-for-worlds-largest-scientific-organization-to-address-sexual-harassment
2018: Interview with Utah Public Radio: http://upr.org/post/research-water-fleas-yields-possible-anti-fungal-drug
2017: Interview on Michigan Radio's Stateside program: http://michiganradio.org/post/scientist-warns-trump-budget-cuts-basic-research-could-devastate-american-innovation
2017: Appeared (along with Senator Whitehouse, Michael Mann, and others) in a video made by 314 Action, calling on President Trump to appoint a science advisor. https://secure.314action.org/page/s/give-trump-science-advice
2016: Interview with Washington Post for article, "What will President Trump mean for science?": https://www.washingtonpost.com/news/speaking-of-science/wp/2016/11/09/what-will-president-trump-mean-for-science/

Media interviews (related to academia):

2017: Interview with Nature for Career Feature, "Top ten tips to kick-start your career in 2018": https://www.nature.com/articles/d41586-017-08663-x

2017: Interview with Nature Careers for article, "Workplace habits: Full-time is full enough": https://www.nature.com/naturejobs/science/articles/10.1038/nj7656-175a

2016: Interview with Science Careers for article, "Breastfeeding while building a career": http://www.sciencemag.org/careers/2016/02/breastfeeding-while-building-career

2015: Interview with Nature for article, "Scientists offer advice on how best to respond to reviewers" http://www.nature.com/news/scientists-offer-advice-on-how-best-to-respond-to-reviewers-1.17640

2015: Interview with Nature Jobs for article, "Insider knowledge": https://www.nature.com/naturejobs/science/articles/10.1038/nj7561-491a

Work with school groups:

2017-2018: Developed and led activity entitled "Prove It! How to find and use data to answer questions you care about"; this activity reached ~95 scholars in the Wolverine Pathways program each summer, which is a flagship Diversity, Equity, and Inclusion Program at the University of Michigan.

2014-present: FEMMES capstone activity for girls in grades 4-6 from Ann Arbor, Detroit, and Ypsilanti (1-2 capstone events per year)

2008-2011: Outreach presentations with campers at Piedmont Park (1-3 per summer)

Other:

2017: Featured scientist on episode 3 of Season 1 of the How to Science podcast, hosted by Dr. Monica Dus

2017: Curator of @realscientists twitter account (>54K followers) for week of 20 August. The week focused on lakes, animal diversity, infectious diseases, teaching, mental health, and many other topics. According to twitter's statistics, this resulted in >3.8 million engagements (and one trending hashtag, #myworstgrade).

2012-present: Twitter account (@duffy_ma; 10.3K followers); this allows with regular engagements with the general public as well as other academics

Meetings and Symposia:

A) Invited talks:

Invited talks at conferences/symposia:

2019: Evolution 2019, invited speaker in American Society of Naturalist's Vice Presidential Symposium (June 2019)

2019: Biology19, Zurich, Switzerland (sponsored by the Swiss Academy of Natural Sciences), Keynote speaker

2018: Ecological Society of America, New Orleans

2017: Ecological Society of America, Portland, OR

2017: Front Range Student Ecology Symposium, hosted by Colorado State University, Keynote speaker (grad-student invited keynote speaker)

2014: Ecological Society of America, Sacramento, CA

2014: University of Toronto, EEB Colloquium, Plenary Lecture

2013: Aquatic Ecology Symposium, Kellogg Biological Station
2013: Rapid Evolution and Sustainability Workshop at the Mathematical Biosciences Institute (Columbus, OH)
2013: European Society for Evolutionary Biology Invited Symposium Speaker
2013: American Society of Naturalists Vice Presidential Symposium
2012: Association of Southeastern Biologists, Athens, GA (Talk given by grad student Dylan Grippi)
2011: Ecological Society of America, Austin, TX
2010: American Society of Limnology and Oceanography, Sante Fe, NM
2010: Southeastern Ecology and Evolution Conference, Atlanta, GA (Closing address)
2009: "100 Years of Limnology at Cornell" Symposium, Cornell University, Ithaca, NY
2004: Jacques Monod Conference "Evolutionary ecology of host-parasite relationships", Roscoff, France

Invited research seminars:
2020: University of Amsterdam, Institute of Biodiversity and Ecosystem Dynamics (scheduled for May 2020)
2020: University of Oklahoma, Biology Department (grad student-invited speaker; Spring 2020)
2019: Northeastern University Marine Science Center
2018: University of Massachusetts-Amherst
2018: Swiss Federal Institute of Aquatic Science and Technology (EAWAG)
2018: University of Michigan BioStation, Olin Sweall Pettingill Lecture in Natural History
2018: Utah State University, Ecology Center (grad student-invited speaker)
2018: University of Florida, Department of Biology
2016: Eastern Michigan University, Department of Biology
2016: University of Georgia, Odum School of Ecology
2015: University of Maine, School of Biology and Ecology
2015: Queen's University, EEB Seminar Series
2014: Duke University, Program in Ecology
2014: Oregon State University, Department of Zoology
2014: Michigan State University, Department of Microbiology and Molecular Genetics (grad student-invited speaker)
2013: Western Michigan University, Department of Biological Sciences (grad student-invited speaker)
2013: University of Texas-Austin, School of Biological Sciences
2012: University of Alabama, Department of Biological Sciences
2012: Michigan State University, EEBB Program and Kellogg Biological Station
2012: University of West Georgia, Department of Biology
2012: Cornell University, Department of Ecology and Evolutionary Biology
2011: Cary Institute for Ecosystem Studies (New York)
2011: University of Michigan, Department of Ecology and Evolutionary Biology
2011: Emory University, Department of Biology
2010: Oberlin College, Biology Department
2010: Georgia Tech, Integrative BioSystems Institute
2009: Miami University (Ohio), Department of Zoology
2009: McGill University (Montreal), Biology Department

2009: Emory University, Population Biology, Ecology and Evolution Seminar
2009: University of South Carolina, Department of Biological Sciences
2008: Virginia Tech, Department of Biology
2008: Auburn University, Department of Fisheries and Allied Aquacultures
2008: Georgia Tech, Mathematical Biology and Ecology Seminar
2008: University of Georgia, Ecology of Infectious Disease Seminar
2008: University of Nebraska-Lincoln, School of Biological Sciences
2007: University of Michigan, Young Scientists' Symposium
2007: Ohio State University, Department of Evolution, Ecology, and Organismal Biology
2006: Purdue University, Department of Forestry and Natural Resources
2006: Georgia Tech, School of Biology
2006: Rice University, Department of Ecology and Evolutionary Biology
2005: Michigan State University, Ecology, Evolutionary Biology and Behavior Program

B) Contributed research presentations:
# indicates current or former Duffy grad students/postdocs
¶ indicates current or former Duffy undergrad

2018. McLean, K.D., Meng, J., Bilich R., Hunsberger K., Duffy, M.A. Implications of within-host parasite interactions for parasite fitness and virulence. Poster presentation at the 16th Ecology and Evolution of Infectious Disease Conference, Glasgow, UK

2018. Cortez, M. and **M.A. Duffy**. The indirect effects that arise between pathogens that share competing hosts: Competitive vs noncompetitive interactions. Oral presentation at the **Ecological Society of America** meeting, New Orleans, LA.

2018. Sljivar, M., C.E. Cáceres, **M.A. Duffy**, and S.R. Hall. Killing the young: Predation on less susceptible stages of hosts increases epidemic size. Oral presentation at the **Ecological Society of America** meeting, New Orleans, LA.

2018. Sánchez, K.F.[#], N. Huntley[¶], **M.A. Duffy**, and M.D. Hunter. Toxins or medicines? Algal diets mediate parasitism in a freshwater host-parasite system. Oral presentation at the **Ecological Society of America** meeting, New Orleans, LA.

2018. Zamani, H.[¶], K.D. McLean[#], C. Gowler[#], S.R. Hall, and **M.A. Duffy**. Does sexual recombination slow the evolution of resistance? Poster presentation at the **Ecological Society of America** meeting, New Orleans, LA.

2018. Wale, N.[#], M. Turrill[¶], and **M.A. Duffy**. Why does a bacterium blush? The causes & consequences of plastic pigment production in a highly virulent bacterial pathogen. Poster presentation at the **Joint Congress on Evolutionary Biology**, Montpellier, France.

2018. Zamani, H.[¶], K.D. McLean[#], C. Gowler[#], S.R. Hall, and **M.A. Duffy**. Does sexual recombination slow the evolution of resistance? Poster presentation at the **Society for Freshwater Science** meeting, Detroit, MI.

2018. Shaw, C.L.[#], R. Bilich[¶], T.Y. James, S.R. Hall, and **M.A. Duffy**. Spore size as a mechanism of population structuring of a generalist parasite. Oral presentation at the **Midwest Population Genetics Meeting**. St. Paul, MN.

2018. McLean[#], K.D., J. Meng[¶], R. Bilich[¶], K. Hunsberger, and **M.A. Duffy**. Implications of within-host parasite interactions for parasite fitness and virulence. Poster presentation at the **Ecology and Evolution of Infectious Diseases (EEID)** meeting, Glasgow, UK.

2018. Clay, P., **M.A. Duffy**, and V. Rudolf. The impact of within-host priority effects on multi-pathogen epidemics. Oral presentation at the **American Society of Naturalists** meeting, Monterey Bay, CA.

2017. Hall, S.R., A.T. Strauss, J.L. Hite, M.S. Shocket, **M.A. Duffy**, and C.E. Cáceres. Ecological doom and evolutionary rescue during epidemics with dilution and host competition: A perspective via interaction strengths, cryptic dynamics, and rapid trait evolution. Oral presentation at the **Ecological Society of America** Annual Meeting, Portland, Oregon.

2017. McLean[#], K.D., C.D. Gowler[#], S.R. Hall, and **M.A. Duffy**. How is host diversity maintained despite strong selective pressure from parasites? Poster presentation at the **Ecological Society of America** Annual Meeting, Portland, Oregon.

2017. Clay, P., K. Dhir[¶], V. Rudolf, and **M.A. Duffy**. Within-host priority effects alter pathogen co-existence via frequency dependency. Oral presentation at the **Ecological Society of America** Annual Meeting, Portland, Oregon.

2017. Clay, P., K. Dhir[¶], V. Rudolf, and **M.A. Duffy**. Within-host priority effects alter pathogen co-existence via frequency dependency. Oral presentation at the **Ecology and Evolution of Infectious Diseases** meeting, Santa Barbara, CA.

2017. Sanchez[#], K.F., N. Huntley[¶], **M.A. Duffy**, and M.D. Hunter. Pick your poison: Algal resources mediate parasitism in an invertebrate system. Oral presentation at the **Benthic Ecology** Meeting, Myrtle Beach, South Carolina.

2017. Sanchez[#], K.F., N. Huntley[¶], **M.A. Duffy**, and M.D. Hunter. Pick your poison: Algal resources mediate parasitism in an invertebrate system. Poster presentation at the Annual Meeting of the Association of Tropical Biology and Conservation, Merida, Mexico.

2017. Shaw[#], C.L., E. Overholt, C. Williamson, S.R. Hall, and **M.A. Duffy**. Solar radiation influences epidemic dynamics of dominant Daphnia parasites. Oral presentation at the **Ecological Society of America** Annual Meeting, Portland, Oregon.

2017. Gowler[#], C.D., M.A. Rogalski[#], and **M.A. Duffy**. Evidence for a dilution effect in Daphnia communities. Poster presentation at the **Ecology and Evolution of Infectious Diseases (EEID)** meeting, Santa Barbara, California.

2016. Strauss, A.T., A.M. Bowling, M.A. Duffy, C.E. Cáceres, and S.R. Hall. Hosts traits and modular species interactions predict dynamical disease outcomes. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Fort Lauderdale, FL.

2016. Shaw[#], C.L. and M.A. Duffy. Factors that structure parasite populations in an aquatic host-parasite system. Oral presentation at the **Evolution Meeting** in Austin, TX.

2016. Clay, P.A., **M.A. Duffy**, M.H. Cortez, and V.H.W. Rudolf. Scaling parasite interactions: Between host processes as a function of within-host priority effects. Oral presentation at the **Ecology and Evolution of Infectious Diseases (EEID)** meeting, Ithaca, NY.

2015. Shocket, M.S., M.A. Duffy, C.E. Cáceres, and S.R. Hall. Temperature and algal food quality jointly regulate seasonality of epidemics in a zooplankton-fungus disease system. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Baltimore, MD.

2015. Shaw[#], C.L., K. Hunsberger, C.D. Gowler[#], S. de la Serna[¶], K. Dhir[¶], A. Villalba[¶], M. Prado[¶], C.L. Searle[#], and M.A. Duffy. Predator-enhanced parasite transmission: When one threat unleashes another. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Baltimore, MD.

2015. Hite, J.L., S.R. Hall, R.M. Penczykowski[#], M.S. Shocket, A. Strauss, M.A. Duffy, and P. Orlando. Parasites destabilize host populations by shifting stage-structured interactions: An evaluation combining models, experiments, and field data. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Baltimore, MD.

2015. Duffy, M.A., A. Longworth[¶], K. Hunsberger, and I. Oleksy. Impacts of two virulent, sterilizing pathogens on *Daphnia* individuals, populations, and communities. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Baltimore, MD.

2015. Strauss, A.T., M.S. Shocket, J.L. Hite, D.J. Civitello, R.M. Penczykowski[#], C.E. Cáceres, M.A. Duffy. Habitats, hosts, and fungus in the field: Regulators of *Metschnikowia* epidemics in natural zooplankton hosts. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Baltimore, MD.

2014. Shaw[#], C.L., I.A. Oleksy, C.L. Searle[#], D.C. Grippi[#], K. Hunsberger, and M.A. Duffy. Effects of *Chaoborus* predation on size of *Pasteuria ramosa* epidemics in natural *Daphnia* populations. Poster presentation at the Annual Meeting of the **Ecological Society of America**, Sacramento, CA.

2014. Searle[#], C.L., K. Hunsberger, D.C. Grippi[#], I.A. Oleksy, C.L. Shaw[#], S. de la Serna[¶], and M.A. Duffy. Exotic species and native parasites: Biotic resistance versus parasite spillback. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Sacramento, CA.

2014. Hall, S.R., R.M. Penczykowski[#], J.H. Ochs, M.S. Shocket, M.A. Duffy. Trait-mediated indirect effects can explain why parasites increase populatios of zooplankton hosts. Oral presentation at the **Joint Aquatic Sciences Meeting**, Portland, OR.

2013. Penczykowski[#], R.M., J.H. Ochs, H. Sundar[¶], M.S. Shocket, B.C.P. Lemanski[¶], S.R. Hall, and M.A. Duffy. Does infection alter resource consumption by hosts? Trait-mediated indirect effects of disease on resources in a *Daphnia*-yeast host-parasite system. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Minneapolis, MN.

2013. Searle[#], C.L., J.H. Ochs, C.E. Cáceres, S.R. Hall, P. Lee, S.A. Duple, G.C. Davis, and M.A. Duffy. Host genotype determines the future infection success of a virulent parasite. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Minneapolis, MN.

2013. Grippi[#], D.C., S.K.J.R. Auld[#], and M.A. Duffy. Variation in host resistance and tolerance towards parasites with different exploitation strategies. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Minneapolis, MN.

2013. Hall, S.R., K.M. Boatman, Z.A. Brown, D.J. Civitello, R.M. Penczykowski, M.S. Shocket, M.A. Duffy, and C.E. Cáceres. Parasites can stabilize consumer-resource dynamics, but do they? An evaluation using models, an experiment, and field data. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Minneapolis, MN.

2013. Grippi[#], D.C., S.K.J.R. Auld[#], and M.A. Duffy. Variation in host resistance and tolerance towards parasites with different exploitation strategies. Poster presentation at the **Ecology and Evolution of Infectious Diseases** meeting, State College, PA.

2012. Duffy, M.A., S.K.J.R. Auld[#], J. Housley Ochs, D. Grippi[#], R.M. Penczykowski[#], D. Civitello, and S.R. Hall. Do resistance trade-offs differ among populations? Poster presentation at the **Ecology and Evolution of Infectious Diseases** meeting, Ann Arbor, MI.

2010. Hall, S.R., C. Becker, M.A. Duffy and C.E. Cáceres. Resource acquisition traits and trade-offs of hosts create and destroy key epidemiological relationships. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Pittsburgh, PA.

2010. Duffy, M.A., J.M. Housley, R.M. Penczykowski[#], Z. Sims[¶], C.E. Cáceres, and S.R. Hall. Unhealthy herds: trait-mediated indirect effects of predators increase host susceptibility. Oral presentation at the Annual Meeting of the **Ecological Society of America**, Pittsburgh, PA.

2010. Penczykowski[#], R.M., S.R. Hall, and M.A. Duffy. Consequences of variation in disease resistance: Is there a within species dilution effect? Poster presentation at the Summer Meeting of the **American Society of Limnology and Oceanography**.

2009. Duffy, M.A., S.R. Hall, C.A. Klausmeier, and C.E. Cáceres. Resistance trade-offs, community context, and the evolution of host populations. Oral presentation in organized symposium at the Annual Meeting of the **Ecological Society of America**, Albuquerque, NM.

2009. Thomas[#], S.H., K. Van Rensburg[¶], and M.A. Duffy. Turning the tables: Addressing *Daphnia* epidemics from the perspective of parasite ecophysiology. Poster presentation at the Annual Meeting of the **Ecological Society of America**, Albuquerque, NM.

2009. Penczykowski[#], R.M., S.R. Hall and M.A. Duffy. Consequences of variation in disease resistance: Is there a within species dilution effect? Oral presentation at the Annual Meeting of the **Ecological Society of America**, Albuquerque, NM.

2008. Duffy, M.A., C.E. Cáceres, S.R. Hall, C.R. Becker, and A.J. Tessier. Multi-scale patterns of parasitism in lake plankton. Oral presentation, Annual Meeting of the **Ecological Society of America**, Milwaukee, WI.

2008. Hall, S.R., C. Becker, C.J. Knight, M.A. Duffy and A.J. Tessier. Quality matters: Resources and disease dynamics in a planktonic host-parasite system. Oral presentation, Annual Meeting of the **Ecological Society of America**, Milwaukee, WI.

2007. Duffy, M.A., A.R. Ives, and S.R. Hall. Rapid evolution and ecological host-parasite dynamics. Oral presentation, Annual Meeting of the **Ecological Society of America**, San Jose, CA.

2007. Duffy, M.A., C.A. Klausmeier, C.E. Brassil, S.R. Hall, A.J. Tessier, C.E. Cáceres, and J.K. Conner. Parasite-mediated disruptive selection followed by assortative mating in a natural *Daphnia* population. Oral Presentation at the **Fields Workshop** "The Mathematics of Evolution: Adaptive Dynamics in Theory and Practice", Ottawa, Canada

2007. Cáceres, C.E., S.R. Hall, R.L. Smyth, M.A. Duffy, S. MacIntyre, and A.J. Tessier. Regional and local determinants of fungal parasite dynamics in seven populations of *Daphnia*. Poster presentation, Aquatic Sciences Meeting of the **American Society of Limnology and Oceanography**, Santa Fe, NM.

2006. Duffy, M.A. Is the enemy of my enemy really my friend? Selective predators, virulent parasites, and *Daphnia* populations. Oral presentation, Annual Meeting of the **Ecological Society of America**, Memphis, TN. (Talk received the Aquatic Ecology Section Best Talk Award and Honorable Mention for the Buell Award for the outstanding student oral presentation)

2006. Hall, S.R., A.J. Tessier, M.A. Duffy, M. Huebner and C.E. Cáceres. Warmer does not have to mean sicker: Temperature and predators can jointly drive timing of epidemics. Oral presentation, Annual Meeting of the **Ecological Society of America**, Memphis, TN.

2006. Duffy, M.A. Is the enemy of my enemy really my friend? Selective predators, virulent parasites, and *Daphnia* populations. Oral presentation, Summer Meeting of the **American Society of Limnology and Oceanography**, Victoria, British Columbia.

2005. Hall, S.R., L. Sivars-Becker, C. Becker, M.A. Duffy, A.J. Tessier and C.E. Cáceres. Eating yourself sick: transmission of disease as a function of feeding biology of hosts. Oral presentation, Annual Meeting of the **Ecological Society of America**, Montreal.

2005. Duffy, M.A., C.E. Brassil, and S.R. Hall. Disruptive selection during a parasite epidemic in a natural *Daphnia* population. Oral presentation, Joint Meeting of the **Society for the Study of Evolution and American Society of Naturalists**, Fairbanks, AK.

2005. Duffy, M.A. and S.R. Hall. *Daphnia* diseases and dynamics: linking individual- and population-level effects of parasitism. Poster presentation, **Ecology and Evolution of Infectious Diseases Conference**, Fort Collins, CO.

2005. Hall, S.R., A.J. Tessier, M.A. Duffy, and C.E. Cáceres. Temperature, parasites, and predators: interactive drivers of epidemics? Poster presentation, **Cary Conference**: Infectious Disease Ecology, Milbrook, NY.

2005. Cáceres, C.E., S.R. Hall, M.A. Duffy, S.A. MacIntyre, and A.J. Tessier. Spatial and temporal variation in *Metschnikowia* epidemics in 18 populations of *Daphnia dentifera*. Oral presentation, Aquatic Sciences Meeting of the **American Society of Limnology and Oceanography**, Salt Lake City, UT.

2005. MacIntyre, S.A., J.O. Sickman, S.A. Goldthwait, G.W. Kling, C.E. Cáceres, S.R. Hall, M.A. Duffy and A.J. Tessier. Consequences of turbulence at interfaces. Oral presentation, Aquatic Sciences Meeting of the **American Society of Limnology and Oceanography**, Salt Lake City, UT.

2004. Hall, S.R., M.A. Duffy, A.J. Tessier and C.E. Cáceres. Oscillations, Allee effects, and catastrophes: Predators and productivity can strongly shape host-parasite interactions. Oral presentation, Annual Meeting of the **Ecological Society of America**, Portland, OR.

2004. Duffy, M. A., S. R. Hall, A. J. Tessier and M. Huebner. Selective predators and their parasitized prey: Top-down control of epidemics. Oral presentation, Annual Meeting of the **Ecological Society of America**, Portland, OR.

2003. Duffy, M. A. and P. L. Woodruff. The seasonal phenology of parasitism in *Daphnia* lake populations. Oral presentation, Aquatic Sciences Meeting of the **American Society of Limnology and Oceanography**, Salt Lake City, UT.

2002. Duffy, M. A. and A. J. Tessier. The relevance of cryptic *Daphnia* species. Oral presentation, **Society for the Study of Evolution**, Champaign-Urbana, IL.

2001. Duffy, M. A., L. J. Perry, C. M. Kearns, L. J. Weider, and N. G. Hairston, Jr. Paleogenetic evidence for a past invasion of Onondaga Lake, New York, by exotic *Daphnia curvirostris* using mtDNA from dormant eggs. Oral presentation, Aquatic Sciences Meeting of the **American Society of Limnology and Oceanography**, Albuquerque, NM.

2000. Hairston, N.G., Jr., C.M. Kearns, L.J. Perry and M.A. Duffy. Tracing zooplankton response to environmental change using the diapausing egg bank. Oral presentation, Summer Meeting of the **American Society of Limnology and Oceanography**, Copenhagen, Denmark.

1999. Duffy, M. A., L. J. Perry, C. M. Kearns, L. J. Weider, and N. G. Hairston, Jr. Molecular genetic identification of a typically European *Daphnia* in the egg bank of a polluted

North American lake. Oral presentation, **Fifth International Symposium on Cladocera**, Plön, Germany.

University Service – Michigan:

2019-2021	LSA Faculty Advisory Group on Inclusive Teaching
2018-present	Institute for Global Change Biology Steering Committee
2018-2019	"Big Idea" Working Group member, focused on undergraduate education at Michigan
2018	Developed "Introduction to R" activity for M-Sci Academy; led instructor training
2018-2020	Academic Innovation Advisory Committee
2018	ADVANCE Launch Committee for Jena Johnson (Earth & Environmental Sciences)
2017	Foundational Course Initiative Design Group member
2017	Fall Provost's Seminar on Teaching (PSOT): - member of Planning Advisory Committee - lightning talk on representing student learning - discussion facilitator
2017-2020	University Senate Assembly (LSA Representative)
2017-present	Graduate Admissions Committee, Department of Ecology & Evolutionary Biology
2017, 2018	Frontiers Masters Admissions Committee, Department of Ecology & Evolutionary Biology
2016-present	EEB Department mentor for Melissa Duhaime
2016-present	UM Museum of Natural History Faculty Science Advisory Committee
2016	Faculty Search Committee (Ecosystem Ecology)
2016, 2017	Nominating Committee, Department of Ecology & Evolutionary Biology
2015-present	ADVANCE Program *ad hoc* parenting committee
2015-present	UMich Software Carpentry co-Director
2015	EEB Department Liaison to REBUILD "Bridges to Science" orientation for Comprehensive Studies Program students
2015	Faculty Search Committee (Ecology or Evolutionary Biology of Fishes or Birds)
2015	Organized (along with Pat Schloss) a Software Carpentry workshop for Women in Science and Engineering (57 attendees)
2014-2017*	Executive Committee, Department of Ecology and Evolutionary Biology *terms served on Executive Committee: Fall 2014, Fall 2015, Winter 2017
2014-2016	Department mentor for Chelsea Wood (Michigan Fellow)
2014-2015	EEB Department Liaison to M-STEM Academies
2013-2014	Faculty Search Committee (Ecology and Evolutionary Ecology)
2013	Ad hoc Building Committee
2012-2014	Graduate Admissions Committee, Department of Ecology & Evolutionary Biology

University Service – Georgia Tech:

2012	Founded Society for BioDiversity, which focuses on topics of interest to underrepresented minority students in Biology
2011-2012	Undergraduate Committee, School of Biology
2010	Judge for GT Research and Innovation Conference
2010	Aquatic Chemical Ecology REU Site Program Co-director and temporary co-PI
2009-2011	School of Biology Web News Committee
2009	Judge for Undergraduate Research Spring Symposium
2008-2012	Led development of concept assessment to be used in Ecology courses at Georgia Tech; responsible for implementation and analysis of assessment in Ecology courses until 2012
2008	Judge for 2008 Siemens Regional Competition in Math, Science and Technology (held at Georgia Tech)
2008	Judge for Undergraduate Research Spring Symposium

Service Outside University:

Editorial Service:

2016	*American Naturalist* Editor-in-Chief Selection Committee
2015-present	Editorial Board for *American Naturalist*
2013-2016 & 2018-present	Editorial Board for *Ecology and Evolution*

Society-level Service:

2021	Past Vice President, American Society of Naturalists
2020	Vice President, American Society of Naturalists
2019	Vice President-elect, American Society of Naturalists
2017	Organized career workshop for SEEDS students at the Ecological Society of America (SEEDS seeks to diversify ecology)
2016-present	Chair, Mercer Award Subcommittee, Ecological Society of America
2013-2016	Member, Grants and Fellowships Committee, Ecological Society of America
2013-2015	Chair of the Aquatic Ecology Section of the Ecological Society of America
2011-2013	Vice-chair of the Aquatic Ecology Section of the Ecological Society of America
2009	Organized oral session at 2009 Ecological Society of America Meetings on "Evolutionary Ecology of Invertebrate Host-Parasite Interactions" (with N. Gerardo, Emory)
2008-2011	Web page administrator for Ecological Society of America's Aquatic Ecology Section

Grant-review panel Service:

2015	Preproposal Panelist, National Science Foundation, Division of Environmental Biology, Population and Community Ecology
2013	Proposal Review Panelist, National Science Foundation, Division of Environmental Biology, Evolutionary Ecology Panel
2010	Proposal Review Panelist, National Science Foundation, Division of Environmental Biology, Ecology Program, Population and Community Ecology Panel
2009	Proposal Review Panelist, National Science Foundation, Division of Environmental Biology, Ecology Program, DDIG Panel

2008 Proposal Review Panelist, National Science Foundation, Division of Environmental Biology, Ecology Program, DDIG Panel

Advisory Boards:

2017-2018 Advisory Board, 500 Women Scientists, which aims to transform leadership, diversity, and public engagement in science

2013-present External Advisory Board, BEACON Center for the Study of Evolution in Action, Michigan State University

Peer-Reviewing:

Manuscript reviewer for: *American Naturalist; Behavioral Ecology; Biology Letters; BMC Biology; BMC Ecology; BMC Evolutionary Biology; EcoHealth; Ecological Entomology; Ecology; Ecology Letters; Ecosphere; Freshwater Biology; Fundamental and Applied Limnology/Archiv für Hydrobiologie; Heredity; Hydrobiologia; International Review of Hydrobiology; Journal of Animal Ecology; Journal of Evolutionary Biology; Journal of Experimental Biology; Journal of Higher Education; Journal of the Royal Society Interface; Journal of Theoretical Biology; Limnology and Oceanography*; *Nature Climate Change; Oecologia; Oikos*; *Parasitology; Philosophical Transactions of the Royal Society B; PLoS ONE; Proceedings of the Royal Society of London B; Science; Scientific Reports;* and *Trends in Ecology & Evolution*.

Ad hoc grant proposal review for: National Science Foundation (Programs: Biological Oceanography; Ecology; Ecosystem Studies; International Research Fellowship; Population and Community Ecology; Population and Evolutionary Processes), National Geographic, German Research Foundation, Katholieke Universiteit Leuven, and Research Foundation Flanders (Belgian Foundation for Scientific Research).

External examiner for PhD dissertations at the University of Otago (New Zealand; student: Amanda Valois) and at the University of Montpellier (France; student: Eva Lievens)

Other:

Co-creator (along with Gina Baucom) of DiversifyEEB, a resource for highlighting scientists who are women and/or underrepresented minorities.

Co-creator (along with Terry McGlynn) of EEB Mentor Match, a resource for pairing students from underrepresented groups with mentors who can provide feedback on fellowship and graduate school applications.

Membership in Professional Societies:

American Association for the Advancement of Science
American Society of Limnology and Oceanography
American Society of Naturalists
Ecological Society of America
Society for the Study of Evolution

Graduate and Undergraduate Students Supervised:

A) Graduate students:

Graduate students for whom I currently serve as advisor:

Camden Gowler Ph.D. student (2014-present); Rackham Predoctoral Fellow

Katherine McLean	Ph.D. student (2016-present); NSF Graduate Research Fellow; Rackham Merit Fellow
Khadijah Payne	Frontiers Masters student (2018-present)
Kristel Sánchez	Ph.D. student (2017-present); previously Frontiers Masters student (2015-2017; co-advised with Mark Hunter); NSF Graduate Research Fellow; Rackham Merit Fellow
Clara Shaw	Ph.D. student (2013-present); Rackham One Term Fellow

Current graduate students on whose thesis committees I serve:

Anat Belasen	Ph.D. student, University of Michigan EEB
Feng-Shun (Oscar) Chang	Ph.D. student, University of Michigan SEAS
Michelle Fearon	Ph.D. student, University of Michigan EEB
Gordon Fitch	Ph.D. student, University of Michigan EEB
Joanna Larson	Ph.D. student, University of Michigan EEB
Sarah Westrick	Ph.D. student, University of Michigan Psychology
Andrew Wood	Ph.D. student, University of Michigan EEB

Past graduate students for whom I served as advisor:

Dylan Grippi	M.S. 2014, University of Michigan; currently Consumer Safety Officer, US Food & Drug Administration
Rachel Penczykowski	Ph.D. 2013, Georgia Tech Biology; NSF Graduate Research Fellow, GT President's Fellow; currently Assistant Professor at Washington University-St. Louis

Past graduate students on whose thesis committees I served:

Kevin Bakker	Ph.D. 2017, University of Michigan EEB
Clarisse Betancourt	M.S. 2014, University of Michigan EEB
Cindy Bick	Ph.D. 2018, University of Michigan EEB
Tad Dallas	Ph.D. 2016, University of Georgia
Leslie Decker	Ph.D. 2018, University of Michigan EEB
Keri Goodman	M.S. 2011, Georgia Tech Biology
Melanie Heckman	M.S. 2011, Georgia Tech Biology
David Murphy	Ph.D. 2012, Georgia Tech Civil and Environmental Engineering
Xorla Ocloo	M.S. 2018, University of Michigan EEB
Benjamin Parker	Ph.D. 2013, Emory University Population Biology, Ecology and Evolution
Chase Rakowski	M.S. 2015, University of Michigan SNRE
Doug Rasher	Ph.D. 2012, Georgia Tech Biology
Robert Drew Sieg	Ph.D. 2013, Georgia Tech Biology
Byron Smith	Ph.D. 2018, University of Michigan EEB
Jiaqi Tan	Ph.D. 2014, Georgia Tech Biology

B) Undergraduate students who have performed research in my group:

Name	**College, year(s) in Duffy Lab**
Joshua Cohen	U. Michigan, 2019-present
Ellie Simon	U. Michigan, 2019-present

Liberty Woodside	U. Michigan, 2019-present
Catherine Zheng	U. Michigan, 2019-present
Zenani Kettle	U. Michigan, 2018
Alliyah Lusuegro	Doris Duke Conservation Scholar, 2018
Mia McPherson	Doris Duke Conservation Scholar, 2018
Seeta Goyal	U. Michigan, 2018-present
Bruce O'Brien	U. Michigan, 2018-present
Julia Meng	U. Michigan, 2018
Aliruda El-Sayed	U. Michigan, 2017-2018 (UROP)
Haley Essington	U. Michigan, 2017-present
Karana Wickens	U. Michigan, 2017-2018
Claire Freimark	U. Michigan, 2017-present
Justin Ramirez	U. Michigan, 2017-2018 (REU)
Haniyeh Zamani	U. Michigan, 2017-2018; Biology Honors
Blenna Kiros	Doris Duke Conservation Scholar, 2017
Harbria Gardner	Doris Duke Conservation Scholar, 2017
Stephanie Roskowski	U. Michigan, 2016-2017 (UROP)
McKenna Turrill	U. Michigan, 2016-present
Rachel DeCaluwe	U. Michigan, 2016-2017
Morgan Rondinelli	U. Michigan, 2016-present (2017 LSA Honors Summer Fellowship); Biology Honors
Xavier Nelson	Doris Duke Conservation Scholar, 2016
Gabby Vargas	Doris Duke Conservation Scholar, 2016
Naomi Huntley	U. Michigan, 2016
Ruby Siada	U. Michigan, 2015-2016
Natalie Imirzian	U. Michigan, 2015-2016; Biology Honors
Abdurrahman Abdi	U. Michigan, 2015-2016
Magen Prado	Cal State-Dominguez Hills, 2014 (REU)
Alejandra Villalba	Cal State-Dominguez Hills, 2014 (REU)
Rebecca Bilich	U. Michigan, 2013-2017; Biology Honors
Kailash Dhir	U. Michigan, 2013-2016
Alan Longworth	U. Michigan, 2013-2015 (UROP Research Scholar)
Solanus de la Serna	U. Michigan, 2013-2015 (UROP)
Chloe Lash	Valparaiso University, 2013 (REU)
Rebecca Healy	Mercyhurst College, 2013 (REU)
Amanda Bromilow	U. Michigan, 2012-2014
Brian Lemanski	Colgate University, 2012 (REU) Received Best REU Student Poster Award at 2013 ASLO Meeting
Blake Christianson	Georgia Tech, 2012
Katherine Uyesugi	Georgia Tech, 2011-2012
Mathew Sebastian	U. South Carolina, 2011 (REU)
Elisabeth Clark	Spelman College, 2011 (REU)
Kevin Rothstein	Georgia Tech, 2011-2012
Zuri Hudson	Georgia Tech, 2011-2012 (REU summer 2012)
Alison Burger	Georgia Tech, 2011-2012
Sara Snell	Georgia Tech, 2011-2012

	President's Undergraduate Research Award recipient, Research Option, Honors Thesis
Hema Sundar	Georgia Tech, 2011-2012
Stephanie Hernandez	Georgia Tech, 2010-2012 (REU summer 2012) President's Undergraduate Research Award recipient, Research Option, Honors Thesis
Cherise Washington	Spelman College, 2010-2011 (REU and NIH RISE Fellow at Georgia Tech)
Freddie Irizarry Delgado	U. Puerto Rico-Mayaguez, 2010 (REU)
Tamanna Ahmed	Georgia Tech, 2010-2011 President's Undergraduate Research Award recipient, Research Option, Honors Thesis
Seda Grigoryan	Georgia Tech, 2010
Kristine Jansen	Georgia Tech, 2010
Susie Lee	Georgia Tech, 2010
Bonnie Ann Sarrell	Georgia Tech, 2009-2011
Grace Wilkinson	St. Olaf College, 2009 (REU at Georgia Tech)
Zayani Sims	Spelman College, 2009 (REU and Temp at Georgia Tech)
Abigail Reynolds	Georgia Tech, 2009-2010 President's Undergraduate Research Award recipient, Research Option, Honors Thesis
Karla Van Rensburg	Georgia Tech, 2009-2010 Research Option, Honors Thesis
Kathryn Kenline	Georgia Tech, 2009-2010
Jessica Housley	Georgia Tech, 2008-2009
Sierra Schmidt	Georgia Tech, 2008 President's Undergraduate Research Award recipient
Laura Geronimo	Wesleyan University, summer volunteer at Georgia Tech, 2008
Derek DeRaps	Georgia Tech, 2008
Natalie Huch Hardegree	Georgia Tech, 2008 President's Undergraduate Research Award recipient

C) Postdoctoral fellows supervised:

Stuart Auld (Ph.D., 2011, University of Edinburgh): 2011-2012, currently NERC Independent Research Fellow, University of Stirling, Scotland

Laura Lopez (Ph.D., 2017, University of Wollongong): 2018-present

Mary Rogalski (Ph.D., 2015, Yale University): 2015-2018, currently Assistant Professor, Bowdoin College

Catherine Searle (Ph.D., 2011, Oregon State University): 2011-2014, currently Assistant Professor, Purdue University

Sara Thomas (Ph.D., 2009, Georgia Institute of Technology): 2009-2010; recipient of School of Biology's VWR Postdoctoral Award for Scientific Excellence in Experimental Biology; currently teacher, Wheeler High School, Cobb County, GA

Nina Wale (Ph.D., 2016, Penn State University): 2016-present; recipient of Hamilton Award from the Society for the Study of Evolution and the Omenn Prize from the International Society for Evolution, Medicine, and Public Health