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EMPLOYMENT

Georgia Institute of Technology, Atlanta, GA 2008-present
Assistant Professor, School of Biology

University of Wisconsin, Madison, WI 2006-2007
NSF Postdoctoral Fellow in Biological Informatics
Advisor: Anthony Ives

EDUCATION

Michigan State University, East Lansing, MI Ph.D., 2006
Ph.D. Dissertation title: Evolutionary and community ecology of parasitism in lake *Daphnia*
populations
Advisors: Alan Tessier and Jeffrey Conner

Cornell University, Ithaca, NY B.S., *cum laude*, 2000
Major: Biological Sciences
Research Advisor: Nelson Hairston, Jr.

RESEARCH GRANTS

2009-2012: 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; Duffy portion: \$370,000, total award: \$606,000)
2008-2010: National Science Foundation. “Research Starter Grant: The role of competition among parasites in driving patterns of disease” (\$59,625; includes RET supplement)
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)

FELLOWSHIPS

2005: Michigan State University Ecology, Evolutionary Biology and Behavior Program Fellowship
2003: EPA STAR Graduate Fellowship (Awarded but did not accept)
2002-2003, 2004-2006: National Science Foundation Graduate Research Fellowship
2001-2002: National Science Foundation Research Training Grant Fellowship, Michigan State University

2000-2001, 2003-2004: Michigan State University Distinguished Fellowship
2000: Michigan State University College of Natural Sciences Recruiting Fellowship
1999: Howard Hughes Research Fellowship, Cornell University

HONORS AND AWARDS

2010: Mercer Award, Ecological Society of America
2010: Georgia Tech Faculty Academic Outreach Award
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 (\$10,000)
2005: Carolyn E. Conway Endowed Scholar Award, P.E.O. Sisterhood
2005: Michigan State University EEBB Student Speaker Award

PUBLICATIONS

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*, in press.
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.** Ecological consequences of intraspecific variation in lake *Daphnia*. 2010. *Freshwater Biology*, 55: 995-1004.
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 2010 George 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.
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. *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.

PRESENTATIONS (first-authored only)

Invited

2010: American Society of Limnology and Oceanography, Santa Fe, NM

2010: Southeastern Ecology and Evolution Conference, Atlanta, GA (Closing address)

2010: Oberlin College, Biology Department

2010: Georgia Tech, IBSI chalk talk

2009: Miami University (Ohio), Department of Zoology

2009: McGill University, Biology Department

2009: Emory University, Population Biology, Ecology and Evolution Seminar

2009: Cornell University, "100 Years of Limnology at Cornell" Symposium

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
2004: Jacques Monod Conference "Evolutionary ecology of host-parasite relationships",
Roscoff, France

Contributed

2009: Ecological Society of America, Annual Meeting, Albuquerque, NM
2008: Ecological Society of America, Annual Meeting, Milwaukee, WI
2007: Ecological Society of America, Annual Meeting, San Jose, CA
2007: Fields Workshop "The Mathematics of Evolution: Adaptive Dynamics in Theory and Practice", Ottawa, Canada
2006: Ecological Society of America, Annual Meeting, Memphis, TN
2006: American Society of Limnology and Oceanography, Summer Meeting, Victoria, British Columbia
2005: Joint Meeting of the Society for the Study of Evolution and American Society of Naturalists, Fairbanks, AK.
2005: Ecology and Evolution of Infectious Diseases Conference, Fort Collins, CO. (poster)
2004: Ecological Society of America, Annual Meeting, Portland, OR.
2003: Aquatic Sciences Meeting of the American Society of Limnology and Oceanography, Salt Lake City, UT.
2002: Society for the Study of Evolution, Champaign-Urbana, IL.
2001: American Society of Limnology and Oceanography, Aquatic Sciences Meeting, Albuquerque, NM.
1999: Fifth International Symposium on Cladocera, Plön, Germany.

PROFESSIONAL SERVICE

Co-director, Aquatic Chemical Ecology site REU program, Georgia Tech (2010)
Panelist for National Science Foundation Panels (2008-2010)
Reviewer for *American Naturalist*, *Biology Letters*, *EcoHealth*, *Ecological Entomology*, *Ecology*, *Ecology Letters*, *Freshwater Biology*, *Fundamental and Applied Limnology/Archiv für Hydrobiologie*, the German Research Foundation, *Heredity*, *Hydrobiologia*, *International Review of Hydrobiology*, *Journal of Evolutionary Biology*, *Journal of the Royal Society Interface*, Katholieke Universiteit Leuven, *Limnology and Oceanography*, the National Science Foundation (Biological Oceanography, Ecology, Ecosystem Studies, International Research Fellowship, Population and Community Ecology, Population and Evolutionary Processes), *Oecologia*, *Oikos*, *Parasitology*,

Proceedings of the Royal Society of London, Series B, and Trends in Ecology & Evolution.

Web page administrator for Ecological Society of America's Aquatic Ecology Section
Web News committee, Georgia Tech School of Biology
Judge for 2008 Siemens Regional Competition in Math, Science, and Technology
Organized oral session at 2009 Ecological Society of America Meetings on "Evolutionary Ecology of Invertebrate Host-Parasite Interactions" (with N. Gerardo, Emory)

TEACHING EXPERIENCE

Spring 2010: Biol 8802 Special Topics: Graduate seminar in Ecology and Evolution (new course designed by Duffy; 6 students)
Spring 2009: Biol 4803/8803 Special Topics: Population and Evolutionary Ecology (new course designed by Duffy; name later changed to Population Biology; 17 students)
Fall 2008: Biol 2335 General Ecology (co-taught; 94 students)

POSTDOCTORAL FELLOW SUPERVISED

Sara Henry Thomas (2009-present)

GRADUATE STUDENTS SUPERVISED

Dylan Grippi (beginning August 2010)
Rachel Penczykowski (2008-present; NSF Graduate Research Fellow, Georgia Tech President's Fellow)

GRADUATE STUDENT THESIS COMMITTEES

Keri Goodman (2008-present)
Melanie Heckman (2009-present)
Doug Rasher (2008-present)
Robert Drew Sieg (2008-present)
Jiaqi Tan (2009-present)

UNDERGRADUATE RESEARCH STUDENTS

Tamanna Ahmed (2010-present)	Kathryn Kenline (2009-present)
Derek DeRaps (2008)	Susie Lee (2010-present)
Laura Geronimo (2008)	Abigail Reynolds (2009-present)
Seda Grigoryan (2010-present)	Bonnie Ann Sarrell (2009-present)
Stephanie Hernandez (2010-present)	Sierra Schmidt (2008)
Jessica Housley (2008-2009)	Zayani Sims (2009)
Natalie Huch Hardegree (2008)	Karla Van Rensburg (2009-present)
Freddie Irizarry Delgado (2010; REU)	Cherise Washington (2010; REU)
Kristine Jansen (2010-present)	Grace Wilkinson (2009; REU)

PROFESSIONAL SOCIETIES

American Society of Limnology and Oceanography
American Society of Naturalists
Ecological Society of America

Society for the Study of Evolution

PROFESSIONAL DEVELOPMENT

2006: Selected participant for NSF-funded ADVANCE workshop at Rice University

2006: Workshop: “Innovative teaching and active learning in the biological sciences”