PROMOTION RECOMMENDATION The University of Michigan College of Literature, Science, and the Arts

Meghan A. Duffy, assistant professor of ecology and evolutionary biology, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of ecology and evolutionary biology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D. 2006 Michigan State University B.S. 2000 Cornell University

Professional Record:

2012 – present Assistant Professor, Department of Ecology and Evolutionary Biology,

University of Michigan

2012 – present Adjunct Faculty, School of Biology, Georgia Institute of Technology Assistant Professor, School of Biology, Georgia Institute of Technology

2006 – 2007 National Science Foundation Postdoctoral Fellow in Biological

Informatics, University of Wisconsin-Madison

Summary of Evaluation:

Teaching – Professor Duffy began her teaching career at Michigan with a high-enrollment introductory course (232 students), sending a clear signal of her commitment to the undergraduate program in her department. Student evaluations of her courses are favorable and peer reviews of her teaching are very positive. Professor Duffy has served as primary research advisor for 31 undergraduate students. Seven of her undergraduates have been co-authors on publications from her laboratory and three are currently working on publications. Professor Duffy has also served as a primary advisor for three post-doctoral scholars and two graduate students, and served on the committees of an additional ten graduate students. Her CAREER award from the National Science Foundation is a highly prestigious award for emerging researchers who show a strong commitment to integrating their teaching and research endeavors.

<u>Research</u> – Professor Duffy is an internationally recognized researcher who continues to make fundamental contributions to the understanding of host-pathogen interactions in nature. Her impressive research productivity has been published in the top journals in her field as well as in *Science*, one of the most influential science journals in the world. Her research is very well-funded with awards from the National Science Foundation, a Presidential Early Career Award for Scientists and Engineers (PECASE), the Ecological Society of America's Mercer Award for an outstanding ecology paper by a scientist under 40, and an Early Career Fellowship from the Ecological Society of America.

Recent and Significant Publications:

- "Daphnia predation on the amphibian chytrid fungus and its impacts on disease risk in tadpoles," with C. L. Searle, et al., *Ecology and Evolution*, 3(12), 3013, cover article, pp. 4129-4138.
- "Parasite consumption and host interference can inhibit disease spread in dense populations," with D. J. Civitello, et al., *Ecology Letters*, 16(5), 2013, pp. 626-634.

"Ecological context influences epidemic size and parasite-mediated selection," with J. Housley Ochs, et al., *Science*, 335, 2012, cover article, pp. 1636-1638.

"Solar radiation decreases parasitism in *Daphnia*," with E. P. Overholt, et al., *Ecology Letters*, 15(1), 2012, pp. 47-54.

Service – Professor Duffy has provided valuable service to her department by serving on their Admissions Committee (Ph.D. and Masters). She has established an international reputation in service to the scientific community as chair of the aquatic section of the Ecological Society of America and on the board of editors of an important journal in her field. Professor Duffy regularly reviews papers and grants for over 25 journals and for major grant foundations in Europe and America. She has served on four different National Science Foundation review panels, which is a strong endorsement for an assistant professor. She also helped to organize programs at the local community level (e.g., EdQuest-REU), indicating her dedication to disseminating scientific knowledge to people outside of the university.

External Reviewers:

Reviewer (A)

"Her papers are consistently well written, conceptually sophisticated, and convincingly presented. ...Dr. Duffy has developed a vital and intellectually significant research programme, one that promises to bear fruit from [sic] years to come. ...From her vitae, it is evident that she receives high marks for teaching."

Reviewer (B)

"Meghan has received a shower of awards that reflect her ability and standing in the field. For an ecologist to land a career award from NSF is really exceptional and something she, and you, should be very proud of. The Mercer award for an outstanding paper in Ecology is really a sign of her excellence and respect from the community. She has spoken at numerous locations and conferences and her work is well accepted."

Reviewer (C)

"I judge her as one of the few bright stars [of her cohort] in her field. I was expecting that she would already have been awarded tenure. ... Her work addresses big questions in ecology and evolution in a very productive and constructive way. Her work is, and will remain, highly cited. ... I have evaluated several strong cases for promotion but this one must be the strongest I have ever seen."

Reviewer (D)

"Meg is doing everything right...she does superb and important research; she publishes her findings regularly and in top journals; she gives frequent talks at other universities; she has had consistent NSF support; she serves on editorial boards and proposal-review panels...she mentors and advises her own graduate students and serves on many other guidance committees; she provides research opportunities for lots of undergraduates; she teaches important undergraduate courses and she appears to be well-regarded in that respect; and she has received several prestigious awards..."

Reviewer (E)

"...I would put her publications (e.g. numbers 33 and 36 on her CV) on my list of my field's most significant. No book or conference on disease ecology would be complete without considering her work."

Reviewer (F)

"Dr. Duffy's approach to research is very powerful. She and her collaborators combine long-term field observations with laboratory experiments and mathematical models. Dr. Duffy has taken the lead especially on the projects involving rapid evolution by parasites...and on multispecies interactions. The work has been very productive..."

Reviewer (G)

"Her work is exceptional because it examines an extremely tractable natural system of the parasites of zooplankton species... As a result, she has been a true leader in exploring how disease dynamics are influenced by the other species interactions in which the host engages and reciprocally how these interactions are influenced by infections in the host."

Reviewer (H)

"...Dr. Duffy is one of the half dozen best...disease ecologists [of her cohort] in the country. Because disease ecology as a discipline has progressed so rapidly and attracted some of the most talented ecologists [of her cohort] anywhere, this is indeed an extraordinary group within which Dr. Duffy shines."

Summary of Recommendation:

Professor Duffy is an internationally-recognized scholar in evolutionary ecology, an excellent teacher and mentor of undergraduate and graduate students, and an exemplary citizen of the department and her professional community. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Meghan A. Duffy be promoted to the rank of associate professor of ecology and evolutionary biology, with tenure, College of Literature, Science, and the Arts.

Susan A. Gelman

Heinz Werner Distinguished University Professor,

Professor of Psychology and Interim Dean,

College of Literature, Science, and the Arts