Emma E. Goldberg

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Education —	
University of California, San Diego Ph.D., Division of Biological Sciences advisor: Russ Lande	2002 - 2007
University of California, Berkeley Graduate courses in physics and biology	2000 - 2002
California Institute of Technology Bachelor of Science in physics, with honors	1995 - 1999
Employment —	
University of Minnesota Assistant Professor	2014 - present
University of Illinois at Chicago Visiting research assistant professor Postdoctoral research associate sponsor/supervisor: Boris Igić	2010 - 2013 2008 - 2010
University of Maryland at College Park Postdoctoral research associate supervisor: Bill Fagan	2007 - 2009
United States Forest Service Biological science technician, amphibian surveys	2002
Funding Awards	
Binational Science Foundation, 2013286 "Interacting Effects of Polyploidy and Breeding Systems on Rates of Evolution" Itay Mayrose and I are P.I.s	2014 - 2016
National Science Foundation, DEB-1120279 "Phylogenetic Models of Macroevolution" I am P.I.; Boris Igić is co-P.I.	2011 - 2014
National Science Foundation, DEB-0919089 "The History and Consequences of Self-Incompatibility" Boris Igić is P.I.; I co-wrote the sections supporting my research	2009 - 2013
National Science Foundation, Graduate Research Fellowship Support for graduate work	2003 - 2006
Dept. of Education Fellowship Support for graduate work	2000 - 2001

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Peer-reviewed articles

- Huang, D., E.E. Goldberg, and K. Roy. (in press). Fossils, phylogenies, and the challenge of preserving evolutionary history in the face of anthropogenic extinctions. *Proceedings of the National Academy of Sciences USA*.
- Rabosky, D.L.* and E.E. Goldberg.* 2015. Model inadequacy and mistaken inferences of trait-dependent speciation. Systematic Biology 64:340–355.
- Servedio, M.R., Y. Brandvain, S. Dhole, C.L. Fitzpatrick, E.E. Goldberg, C.A. Stern, J. Van Cleve,
 D.J. Yeh. 2014. Not just a theory: The utility of mathematical models in evolutionary biology.
 PLOS Biology 12:e1002017.
- The Tree of Sex Consortium: T.-L. Ashman, D. Bachtrog, H. Blackmon, E.E. Goldberg, M.W. Hahn, M. Kirkpatrick, J. Kitano, J.E. Mank, I. Mayrose, R. Ming, S.P. Otto, C.L. Peichel, M.W. Pennell, N. Perrin, L. Ross, N. Valenzuela, J.C. Vamosi. 2014. Tree of sex: A database of sexual systems. Scientific Data 1:140015.
- Fagan, W.F, Y.E. Pearson, E.A. Larsen, H.J. Lynch, J.B. Turner, H. Staver, A.E. Noble, S. Bewick, and E.E. Goldberg. 2013. Phylogenetic prediction of the maximum per capita rate of population growth. *Proceedings of the Royal Society B* 280:20130523.
- Goldberg, E.E. and B. Igić. 2012. Tempo and mode in plant breeding system evolution. *Evolution* 66: 3701–3709.
- Goldberg, E.E., R. Lande, and T.D. Price. 2012. Population regulation and character displacement in a seasonal environment. *The American Naturalist* 179:693–705.
- Goldberg, E.E., L.T. Lancaster, and R.H. Ree. 2011. Phylogenetic inference of reciprocal effects between geographic range evolution and diversification. Systematic Biology 60:451–465.
- Anacker, B.L.*, J.B. Whittall, E.E. Goldberg, and S.P. Harrison. 2011. Origins and consequences of serpentine endemism in the California flora. *Evolution* 65:365–376.
- Robertson, K.A., E.E. Goldberg, and B. Igić. 2011. Comparative evidence for the correlated evolution of polyploidy and self-compatibility in Solanaceae. *Evolution* 65:139–155.
- Goldberg, E.E., J.R. Kohn, R. Lande, K.A. Robertson, S.A. Smith, and B. Igić. 2010. Species selection maintains self-incompatibility. *Science* 330: 493–495.
- Goldberg, E.E., H.J. Lynch, M.G. Neubert, and W.F. Fagan. 2010. Effects of branching spatial structure and life history on the asymptotic growth rate of a population. *Theoretical Ecology* 3:137–152.
- Goldberg, E.E.* and B. Igić.* 2008. On phylogenetic tests of irreversible evolution. Evolution 62: 2727–2741.
- Goldberg, E.E. and R. Lande. 2007. Species' borders and dispersal barriers. The American Naturalist 170: 297–304.
- Roy, K^{*}. and E.E. Goldberg^{*}. 2007. Origination, extinction and dispersal: integrative models for understanding present-day diversity gradients. *The American Naturalist* 170: S71–S85.
- Goldberg, E.E. and R. Lande. 2006. Ecological and reproductive character displacement on an environmental gradient. *Evolution* 60:1344–1357.

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Goldberg, E.E., K. Roy, R. Lande, and D. Jablonski. 2005. Diversity, endemism, and age distributions in macroevolutionary sources and sinks. *The American Naturalist* 165: 623–633.

Book chapter

Goldberg, E.E. 2013. Species selection. In J. Losos, ed. *The Princeton Guide to Evolution*. Princeton University Press.

PEER REVIEWING

The American Naturalist, Biological Journal of the Linnean Society, Ecography, Ecological Modelling, Ecology and Evolution, Ecology Letters, Evolution, Evolutionary Biology, Global Ecology and Biogeography, International Journal of Plant Sciences, Journal of Biogeography, Journal of Evolutionary Biology, Journal of the Royal Society Interface, Molecular Biology and Evolution, Nature, Nature Communications, New Phytologist, PLoS Biology, PLoS ONE, Proceedings of the National Academy of Sciences USA, Proceedings of the Royal Society of London Series B, Systematic Biology; National Science Foundation: Evolutionary Genetics, Phylogenetic Systematics, Population & Community Ecology.

TEACHING -

Professor, Univ. Minnesota Evolution.	spring 2015
Instructor, Nature of Life Spatial ecology module at the UMN freshman retreat.	summer 2014
Graduate Teaching Assistant, UC San Diego Quantitative Ecology and Conservation. Biometry. Introductory Ecology.	2004 - 2005
Graduate Student Assistant, UC Berkeley Thermodynamics. Electricity & Magnetism.	2000 - 2002

Invited Participation

Conference talks

Society for the Study of Evolution / American Society of Naturalists / Society of Systematic Biologists

- "The Biology of Extinction 2" (Okazaki, Japan)

 "Reuniting fossil and extant approaches to macroevolution" SSE symposium (Raleigh, North Carolina) 	2014
 "Unified approaches for understanding patterns of character evolution and diversification" SSB symposium (Norman, Oklahoma) 	2011
 "The future of historical biogeography: conceptual and methodological challenges" SSB symposium (Portland, Oregon) 	2010
European Society for Evolutionary Biology	
— "Predicting macroevolution from microevolution" symposium (Tübingen, Germany)	2011
Okazaki Biology Conference	

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2006

^{*} equal contributions

Workshops

National Evolutionary Synthesis Center

 "Linking self-fertilization, dispersal and distribution traits of species: Is Baker's 	0010 0015
law an exception to the rule?"	2013 - 2015
 "Integrating approaches to macroevolution: combining fossils and phylogenies" 	2013
 "The tree of sex: A comprehensive synthesis of sex determination systems in eukaryotes" 	2012 - 2014
National Socio-Environmental Synthesis Center	
- "Macroevolution of ecosystem services"	2012
Silvood Park, Imperial College, London	
"Evolution, ecology and spatial biology"	2008
National Center for Ecological Analysis and Synthesis	
- "Conservation priorities: can we have our biodiversity and ecosystem services to	oo?" 2006

Departmental seminars

Univ. Oxford (2013). Univ. Edinburgh (2013). Univ. North Carolina (2013). Univ. Idaho (2013). Univ. Minnesota (2012). Univ. California, San Diego (2012). Univ. Chicago (2012). Univ. Oregon (2012). Stanford University (2012). Univ. New Mexico (2011). Univ. Illinois at Chicago (2011). Univ. British Columbia (2009). New Mexico Institute of Mining and Technology (2009). Univ. Western Australia (2008). Univ. Virginia (2008).

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