

CURRICULUM VITAE

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EDUCATION

Years	Degree	Institution	Advisor(s)
2003-2004	Postdoctoral Fellow	University of California at Davis	Dr. Michael Turelli Dr. Peter Wainwright
1998-2003	PhD in Population Biology	University of California at Davis	Dr. Peter Wainwright
1992-1996	B.A. Magna Cum Laude with Highest Honors in Biology, Minor in Environmental Studies	Williams College	Dr. Colin Orians Dr. Ted Floyd

APPOINTMENTS

Years	Position	Department	Institution
2018-	Professor	Department of Ecology and Evolutionary Biology; Institute for System Genomics	University of Connecticut
2018-22	Editor-in-Chief	The American Naturalist	University of Chicago Press
2016-18	Faculty Member	Graduate Program in Cellular and Molecular Biology	University of Texas at Austin
2014-18	Chair	Graduate Program in Evolution Ecology & Behavior	University of Texas at Austin
2013-18	Professor	Department of Integrative Biology	University of Texas at Austin
2009-15	Early Career Scientist		Howard Hughes Medical Institute
2009-15	Adjunct Associate Professor,	Department of Microbiology and Immunology	University of Texas Medical Branch, Galveston
2009-13	Associate Professor	Department of Integrative Biology	University of Texas at Austin
2004-09	Assistant Professor	Department of Integrative Biology	University of Texas at Austin
2004-	Faculty Affiliate	UTeach Program	University of Texas at Austin
1996-98	A-level Biology and Math Teacher	Same Secondary School, Tanzania	U.S. Peace Corps
1995	Emergency Medical Technician (volunteer)		Williamstown Ambulance Service

CURRENT SOCIETY MEMBERSHIPS

American Society of Naturalists (Lifetime member)
(Secretary of ASN, 2010-2012, Past Secretary 2013-2015, Editor-In-Chief 2018-2022)
Society for the Study of Evolution (Lifetime member)
American Association for the Advancement of Science
Professional Member, New York Academy of Sciences

PREVIOUS SOCIETY MEMBERSHIPS

Society for Molecular Biology and Evolution; American Association of Immunology; Ecological Society of America ; Sigma Xi; Phi Beta Kappa

RESEARCH INTERESTS

Evolutionary immunology: the genetic and immunological basis of host adaptation to complex helminth communities, landscape genetics of immune genes, evolution and plasticity of immune gene expression, genetic and environmental regulation of gut microbiota.

Evolutionary ecology: the ecological and selective forces maintaining trait variation within populations, ecological consequences of trait variation within populations, adaptive divergence between populations, and speciation.

PUBLICATIONS

ORCID code: 0000-0003-3148-6296

Citation data: <https://scholar.google.com/citations?user=cfwxm0AAAAAJ&hl=en>

Undergraduate or K-12 teacher authors marked in **blue**

Manuscripts in preparation (*I only list papers with a complete draft at a minimum*)

Bolnick, D.I. and T. Ingram. Manuscript. Eco-evolutionary dynamics of variance. Intended for: *Ecology Letters*

Brock, C.D., M. Cummings, and D.I. Bolnick. Manuscript. To be seen, or to hide: environmental heterogeneity and the evolution of male color in *Gasterosteus aculeatus*. Intended for: *Ecology Letters*

Fuess, L., and D.I. Bolnick. Manuscript. Single-cell RNAseq analysis of stickleback immune organs identify immune cell populations and their diagnostic genes. Intended for: *Immunology*.

Kenney, M., J. Weber, and D.I. Bolnick. Manuscript. Genetic cline strength varies across the genome in replicate lake-stream stickleback populations. Intended for: *Evolution*.

Parent, C.E., **J. Heiling**, and D.I. Bolnick. Manuscript. Effect of prior selection history on the probability of population extinction. *Evolution*.

Peng, F., and D.I. Bolnick. Manuscript. Gene non-functionalization in stickleback. Intended for: *Molecular Biology and Evolution*

Peng, F., and D.I. Bolnick. Manuscript. So you found the gene, now what? Intended for: *Molecular Ecology*

Poore, HA, YE Stuart, DJ Rennison, M Roesti, AP Hendry, DI Bolnick, CL Peichel. Manuscript. Repeated genetic divergence does not underlie repeated phenotypic divergence of lake-stream stickleback. Intended for: *Evolution*

Rolshausen, G., C. Eckert, and D.I. Bolnick. Manuscript. Asymmetry of (mal)adaptation. Intended for: *Evolution*.

Shim, K.C., C. Peterson, and D.I. Bolnick. Manuscript. Testing host-specificity and local adaptation to intermediate hosts in a parasite with a complex life cycle. Intended for: *Biology Letters*

Steinel, N.C., J. Weber, and D.I. Bolnick. Manuscript. Genetic variation in stickleback melano-macrophage germinal centers and their response to infection.

Stuart, Y.E., and D.I. Bolnick. Manuscript. Semi-parallel evolution of phenotypic variance-covariances in replicate parapatric lake and stream stickleback. Intended for: *Evolution*

Stuart, Y.E., J. Peterson, and D.I. Bolnick. Manuscript. Non-parallel sexual dimorphism in parapatric lake and stream stickleback. Intended for: *Evolution*

Stuart, Y.E. Varela, B., D.J. Rennison, and D.I. Bolnick. Inconsistent divergence in parasite communities between replicate parapatric lake and stream stickleback.

In review/revision

162. Braat, M., Grunberg, R., and **DI. Bolnick**. In review. Ecological stoichiometry of parasitism in threespine stickleback. *Oecologia*

161. Rodgers, M., and **DI Bolnick**. Facilitation and inhibition of co-infection across a host meta-population. *Ecology*
160. **Bolnick, D.I.** S. Subramanian, F. Peng, A. Hund, J. Wolf, P. Nosil, R. Yukelivech. Submitted. Speciation isn't a continuum, it's a hypervolume. *Evolution*
159. Fuess, L., and **D.I. Bolnick**. In review. Single-cell RNA sequencing reveals microevolution of the stickleback immune system. *Current Biology*. BioRxiv preprint: <https://www.biorxiv.org/content/10.1101/2021.12.20.473470v1>
158. Roesti, M., Groh, J.S., S. Blain, M. Huss, P. Rassias, **D.I. Bolnick**, Y.E. Stuart, C.L. Peichel, and D. Schluter. In revision. Direct and indirect interactions explain divergence in two ecologically similar species. *Evolution*
157. Weber*, J., N.C. Steinel*, F. Peng*, K. S. Shim, B. Lohman, L. Fuess, Y.E. Stuart, and **D.I. Bolnick**. 2021 In review. An evolutionary Pyrrhic victory: adaptive evolution of a protective but costly immune response to a helminth parasite. *Science*. BioRxiv preprint: <https://www.biorxiv.org/content/10.1101/2021.08.04.455160v1>
156. **Rangel, R., D.I. Bolnick**, and T. Ingram. In review (revised). Rates of alloparental care by male stickleback in natural lake populations. *Ichthyology and Herpetology*
155. Smith, R.W.A., **S. Saboowala**, A. Non, **D.I. Bolnick**, T. Tung, D.A. Bolnick. In review. Changes in global methylation of ancient DNA across the reign and decline of Wari imperialism in the central Peruvian Andes. Intended for: *Journal of Archaeological Sciences*.
154. Brock, C.D., M.C. Cummings, **D.I. Bolnick**. In review. Adaptive plasticity generates microclines in threespine stickleback male nuptial color. *Animal Behavior*. Preprint on BioRxiv. doi: <https://doi.org/10.1101/236943>

In press

153. De Lisle, S., S. Schreiber, and **D.I. Bolnick**. In press. Consumer sexual dimorphism promotes coexistence among competing resources. *Journal of Animal Ecology*. BioRxiv Preprint: doi: <https://doi.org/10.1101/634782>
152. Hund, A.K., L. Fuess, M. Kenney, M. Maciejewski, J. Marini, K.C. Shim, and D.I. Bolnick. In press. Parasite Recognition and Timing of Host Response Underlies Population-Level Variation in Parasite Resistance. *Evolution Letters* <https://www.biorxiv.org/content/10.1101/2020.07.03.186569v1.article-info>

2022

151. De Lisle, S., A.J. Moore, D.I. Bolnick, E.D. Brodie III, J.W. McGlothlin. 2022. Interacting phenotypes and the coevolutionary process: interspecific indirect genetic effects alter coevolutionary dynamics *Evolution*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/evo.14427>

2021

150. Fuess, L., J. Weber, S. den Haan, K.C. Shim, N.C. Steinel, **D.I. Bolnick**. 2021. Between-population differences in constitutive and infection-induced gene expression in threespine stickleback. *Molecular Ecology*. 30:6791-6805.
149. Fleischer, S., **D.I. Bolnick**, S. Schreiber. 2021. Sick of eating: eco-evo-immuno dynamics of predators and their trophically acquired parasites. *Evolution*. 75:2842-2856.
148. Akram, A., M. Rais, **D.I. Bolnick**, D. Cannatella, K. Lopez, R. Tarvin, M. Saeed. 2021. An insight into molecular taxonomy of bufonids, microhylids and microglossid frogs: first genetic records from Pakistan. *Ecology and Evolution*. 11:14175-14216.
147. Ishikawa, A., Y.E. Stuart, **D.I. Bolnick**, and J. Kitano. 2021. Copy number variation of a fatty acid desaturase gene *Fads2* associated with ecological divergence in freshwater stickleback populations. *Biology Letters*. 17:2021024.

146. Vrtillek, M. K. Lewkowitz, and **D.I. Bolnick**. 2021. Macroevolutionary origins of a recently-evolved innate immune response. *Evolution*. 75:2600-2612.
145. deLisle, S. and **D.I. Bolnick**. 2021. Male and female reproductive fitness costs of an immune response in natural populations. *Evolution*. 75:2509-2523.
144. Fuess, L. F. Ling, J. Weber, S. den Haan, K.C. Shim, N.C. Steinel, **D.I. Bolnick**. 2021. Covariance between immune gene expression and gut microbiota in threespine stickleback. *mBio*. mBio.00145-21
143. Peng, F., K. Ballare, H. Woodard, S. den Haan, and **D.I. Bolnick**. 2021. What processes maintain MHCIIb diversity within and among stickleback populations? *Molecular Ecology*. 30:1659–1671
142. Reiskind, M.O.B., M. Moody, **D.I. Bolnick**, C. Hanifin, C. Farrior. 2021. Nothing in evolution makes sense except in the light of biology. *BioScience*, biaa170.
141. Stockmaier, S., N. Stroeymeyt, E.C. Shattuck, D.M. Hawley, L.A. Meyers, **D.I. Bolnick**. 2021. Infectious diseases and social distancing in nature. *Science* 371:eabc8881.

2020

140. Haerer, A., **D.I. Bolnick**, D.J. Rennison. 2020. The genomic signature of trophic divergence along the benthic-limnetic axis in allopatric and sympatric threespine stickleback. *Molecular Ecology*. 30: 451-463
139. Grant E. Haines, Yoel E. Stuart, Dieta Hanson, Tania Tasneem, **Daniel I. Bolnick**, Hans C.E. Larsson, Andrew P. Hendry. 2020. Adding the third dimension to parallel evolution of morphology and function: an exploration based on parapatric lake-stream stickleback. *Ecology and Evolution*. 10: 13297-13311.
138. Smocovitis, V.B., and **D.I. Bolnick**, 2020. Trends and Transitions in 150 years of The American Naturalist. *American Naturalist*. 196:663-678.
137. **Bolnick, D.I.**, E.J. Resetarits, K. Ballare, Y.E. Stuart, W.E. Stutz. 2020. Scale-dependent effects of host patch traits on species composition in a stickleback parasite metacommunity. *Ecology*. 101:e03181.
136. Stockmaier, S., **D.I. Bolnick**, R.A. Page, D. Josic, G.G. Carter. 2020. An immune challenge reduces contact calling in vampire bats. *Biology Letters*. 16:0272.
135. De Lisle, S., and **D.I. Bolnick**. 2020. A multivariate view of parallel evolution. *Evolution*. 74:1466-1481.
134. Li, G., Yin, B., Li, J., Wei, W., **Bolnick, D.I.**, Wan, X., Zhu, B., Zhang, Z. 2020. Host-microbiota interaction helps to explain the bottom-up effects of climate change on a small rodent species. *ISME J*. 14:1795-1808.
133. **Bolnick, D.I.**, E.J. Resetarits, K. Ballare, Y.E. Stuart, W.E. Stutz. 2020. Scale-dependent effects of geography, host ecology, and host heterozygosity on species richness in a stickleback parasite metacommunity. *Ecography*. 43:990-1002.
132. Stockmaier, S., **D.I. Bolnick**, R.A. Page, and G.G. Carter. 2020. Sickness effects on social interactions depend on the type of behavior and relationship. *Journal of Animal Ecology*. 89:1387-1394.
131. Maciejewski, M., C. Jiang, Y.E. Stuart, and **D.I. Bolnick**. 2020. Microhabitat variation contributes to microgeographic divergence in morphology within lake and stream stickleback. *Evolution*. 74: 749-763.
130. Ling, F., **D.I. Bolnick***, N.C. Steinel, J. Weber, L. Ma, C. Smith, D. Correa, B. Zhu, G. Wang. 2020. The gut microbiome response to helminth infection depends on host sex and genotype. *ISME Journal* 14:1141-1153 *Co-first author.
129. **Bolnick, D.I.**, K. Ballare, 2020. Resource diversity promotes among-individual diet variation, but not genomic diversity, in lake stickleback. *Ecology Letters*. 3:495-505.

2019

128. Paccard, A., D. Hanson, Y.E. Stuart, D. Berner, F.A. von Hippel, M. Kalbe, T. Klepaker, S. Skulason, B. K. Kristjansso, **D.I. Bolnick**, A.P. Hendry, and R.D.H. Barrett. 2019. Repeatability of adaptive radiation depends on spatial scale: regional versus global replicates of stickleback in lake versus stream habitats. *Journal of Heredity*; 2019:1-14.
127. Edelaar, P., A. Baños-Villalba, D. Quevedo-Colmeda, G. Escudero, **D.I. Bolnick**, and A. Andrade. 2019. Biased movement drives local cryptic coloration on distinct urban pavements. *Proceedings of the Royal Society of London Ser. B*. 286: 20191343.
126. Brady, S.P., **DI Bolnick**, A.A. Angert, A. Gonzalez, RDH Barrett, E. Crispo, A. Derry, C.G. Eckert, D.J. Fraser, G.F. Fussmann, F. Guichard, T. Lamy, A. McAdam, A.E.M. Newman, A. Paccard, G. Rolshausen, A.M. Simons, A.P. Hendry. 2019. The causes of maladaptation. *Evolutionary Applications*. 12:1229-1242.
125. Brady, S. P., **D. I. Bolnick**, R. D. H. Barrett, L. J. Chapman, E. Crispo, A. M. Derry, C. G. Eckert, D. J. Fraser, G. F. Fussmann, A. Gonzalez, F. Guichard, T. Lamy, J. E. Lane, A. G. McAdam, A. E. M. Newman, A. Paccard, B. A. Robertson, G. Rolshausen, P. M. Schulte, A. M. Simons, M. Vellend, and A. P. Hendry. 2019. Understanding maladaptation by uniting ecological and evolutionary perspectives. *The American Naturalist*. 194:1-21.
124. **Maciejewski, M., C.Hernandez, and D.I. Bolnick**. 2019. Investigating the association between armour coverage and parasite infection in an estuarine population of stickleback. *Evolutionary Ecology Research* 20: 69-82.
123. Rennison, D.J., Y.E. Stuart, **D.I. Bolnick**, and C.L. Peichel. 2019. Ecological factors and morphological traits are associated with repeated genomic differentiation between lake and stream stickleback. *Philosophical Transactions of the Royal Society, Series B* 384: 20180241.
122. Dagilis, A., M. Kirkpatrick, and **D.I. Bolnick**. 2019. Evolution of hybrid fitness during speciation. *PLoS Genetics* 15: e1008125.
121. Edelaar, P., **D.I. Bolnick**. 2019. Appreciating the multiple processes increasing individual or population fitness. *Trends in Ecology and Evolution*. 34:435-446.
120. Svanbäck, R., and **D.I. Bolnick**. 2019. Behavioral ecology: Food specialization in The Encyclopedia of Ecology, Brian Fath (Ed) pp 204-211

2018

119. Bronstein, J. and **D.I. Bolnick** 2018. "Her joyous enthusiasm for her life-work ..." Early women authors in The American Naturalist. *American Naturalist*. 192: 655-663.
118. **Bolnick, D.I.**, R. Barrett, K. Oke, D. Rennison, Y.E. Stuart. 2018. (Non)Parallel Evolution. *Annual Reviews of Ecology Evolution and Systematics* 49: 303-330
117. Brock, C.D., D. Rennison, T. Veen, and **D.I. Bolnick**. 2018. Opsin expression predicts male nuptial color in threespine stickleback. *Ecology and Evolution*. 2018:1-9.
116. Stockmaier, S., **D.I. Bolnick**, R.A. Page, and G.G. Carter. 2018. Lipopolysaccharide induced sickness reduces allogrooming efforts in vampire bats. *Animal Behavior*. 140:141-149.
115. **French, C.**, T. Ingram, and **D. I. Bolnick**. 2018. Geographical variation in color of female of threespine stickleback (*Gasterosteus aculeatus*). *PeerJ*. **6: French, C.**, T. Ingram, and **D. I. Bolnick**. In revision. Geographical variation in color of female of threespine stickleback (*Gasterosteus aculeatus*). *PeerJ* **6:e4807**
114. E. Kuzmin, B. VanderSluis, W. Wang, G. Tan, R. Deshpande, Y. Chen, M. Usaj, A. Balint, M. Usaj-Matiazzi, E. Koch, C. Pons, M. Prysizlak, A.J. Dagilis, Z. Wang, J. van Leeuwen, B.J. San Luis, E. Shuteriqi, H. Zhu, N. Van Dyk, S. Sharifpoor, K. Xu, H. Heydari, M. Costanzo, **D.I. Bolnick**, G. Brown, B.J. Andrews, C.L. Myers, C. Boone. Systematic analysis of complex genetic interactions. *Science* 360:eaa01729

2017

113. **Thompson, C. Y.** Stuart, T. Veen, **N.A. Ahmed**, K. Peichel, A. Hendry, and **D.I. Bolnick**. 2017. More complex biomechanical traits exhibit weaker trait-function relationships and correspondingly weaker parallel evolution. *Evolution*. 71:2738-2749.
112. Lohman B.K., N.C. Steinel, J.N. Weber and **D.I. Bolnick**. 2017 Gene expression contributes to the recent evolution of host resistance in a model host parasite system. *Frontiers in Immunology*. 8:1071.
111. Steinel, N.C. and **D.I. Bolnick**. 2017. Melanomacrophage centers as a histological indicator of immune function in fish and other poikilotherms. *Frontiers in Immunology*. 8:827.
110. Dheilly, N.M., **D.I. Bolnick**, S.Bordenstein, P. Brindley, C. Figueres, E.C. Holmes, J. Martinez, A.J. Phillips, R. Poulin, K. Rosario. 2017. The Parasite Microbiome Project (PMP): systematic investigation of microbiome dynamics within and across parasite-host interactions. *mSystems*. 2: e00050-17
109. Lohman, B., J.N. Weber, N. Steinel, K.C. Shim, and **D.I. Bolnick**. 2017. Gene expression stasis and plasticity following migration into a novel environment. *Molecular Ecology* 26: 4657–4670.
108. Veen, T., D. Rennison, C.D. Brock, and **D.I. Bolnick**. 2017. Plasticity contributes to microgeographic gradients in stickleback opsin expression. *Molecular Ecology*. 16: 4339-4350.
107. Brock, C.D., M. Cummings, and **D.I. Bolnick**. 2017. Phenotypic plasticity drives a depth gradient in male conspicuousness in threespine stickleback, *Gasterosteus aculeatus*. *Evolution*. 8: 2022-2036.
106. Weber, J. N. Steinel, **W. Shim, L. Ma**, and **D.I. Bolnick**. 2017. Recent evolution of extreme cestode growth suppression by a vertebrate host. *Proceedings of the National Academy of Sciences*. 114: 6575-6580.
105. **D.I. Bolnick** and W.E. Stutz. 2017. Frequency-dependence limits divergent evolution by favouring rare immigrants over residents. *Nature* **546**: 285–288.
Interview about this work during National Public Radio's All Things Considered on KUT radio, Austin TX. Articles: <http://www.mystatesman.com/news/research-transplanted-fish-can-thrive-offer-hope-for-restoration/gh9GBTA0TscZycEkfcZ8VM/>
104. Stuart, Y.E., T. Veen, **C. Thompson, T. Tasneem, N. Ahmed, R. Izen, B. Doggett**, D. Hanson, B. Lohman, K. Peichel, A.P. Hendry, and **D.I. Bolnick**. 2017. Contrasting effects of environment and genetics generate a predictable continuum of parallel evolution. *Nature Ecology & Evolution*. 1, 0158.
Blog posts about the article:
<https://natureecoevoecommunity.nature.com/users/39291-yoel-stuart/posts/16614-parallel-evolution>
<http://ecoevoeco.blogspot.ca/2017/05/the-zombie-grant.html>
103. Stutz, W.E., and **D.I. Bolnick**. 2017. Natural selection on MHC IIb in parapatric lake and stream stickleback: balancing, divergent, both, or neither? *Molecular Ecology*. 26: 4772-4786.
102. Stuart, Y.E., A. Inkpen, R. Hopkins, **D.I. Bolnick**. 2017. Character displacement is an evolutionary pattern. So what causes it? *Biological Journal of the Linnean Society*. 121:711-715.
101. **Ahmed, N., C. Thompson**, D.I. Bolnick, Y. Stuart. 2017 Brain morphology of the threespine stickleback (*Gasterosteus aculeatus*) varies inconsistently with respect to habitat complexity: A test of the Clever Foraging Hypothesis. *Ecology and Evolution* 7: 3372-3380.
100. Lohman, B., D.E. Berner, and **D.I. Bolnick**. 2017. Clines arc through multivariate morphospace. *American Naturalist*. 189. 354-367
99. **Bolnick, D.I.**, N. Steinel, A. Reynolds, D.A. Bolnick. 2017. Learning objectives for weaving evolutionary thinking into medical education. *Medical Science Educator*. 27: 137-145.
98. Jiang, Y., C.L. Peichel, **L. Torrance, U. Bui, Z. Rizvi, V. Palivela, H. Pham, S. Thompson**, L. Fei, and **D.I. Bolnick**. 2017. Sensory trait variation contributes to biased dispersal of threespine stickleback in flowing water. *Journal of Evolutionary Biology* 30: 681-695. (Cover image).

97. Weber, J., G. Bradburd, Y.E. Stuart, W.E. Stutz, and D.I. Bolnick. 2017. Partitioning the effects of isolation by distance, environment, and physical barriers on genomic divergence between parapatric threespine stickleback *Evolution* 71: 342-356.
96. Weber, J., M. Kalbe, N. Steinel, W. Shim, L. Ma, and **D.I. Bolnick**. 2017. Resist globally, infect locally: a trans-continental test of adaptation by stickleback and their tapeworm parasite. *American Naturalist* 189:43-57.

2016

95. Pruitt, J.N., A. Sih, **D.I. Bolnick**, and N. Pinter-Wollman. 2016. Behavioral hypervolumes of spider communities predict community performance and disbandment. *Proceedings of the Royal Society of London Ser. B*. 283: 2016409. **RETRACTED**
94. **Bolnick, D.I., K. Hendrix**, A. Jordan, T. Veen, C.D. Brock. 2016. Intruder color and light environment jointly determine how nesting male stickleback respond to simulated territorial intrusions. *Biology Letters* 12: 20160467.
93. **Izen, R.** Y.E. Stuart, Y. Jiang and **D.I. Bolnick**. 2016. Coarse- and fine-scale phenotypic variation in three-spine stickleback inhabiting an alternating series of lake and stream habitats. *Evolutionary Ecology Research* 17: 437-457.
92. Lohman, B., J. Weber, and **D.I. Bolnick**. 2016. Evaluation of TagSeq, a reliable low-cost alternative for RNAseq. *Molecular Ecology Resources*. 16: 1315-1321.
91. Oke, K.B., **M. Bukhari**, R. Kaeuffer, G. Rolshausen, K. Räsänen, **D.I. Bolnick**, C.L. Peichel, and A.P. Hendry. 2016. Does plasticity enhance or dampen phenotypic parallelism? A test with three lake-stream stickleback pairs. *Journal of Evolutionary Biology*. 29:126-43

2015

90. Ingram, T.E., Y. Jiang, **R. Rangel**, and **D.I. Bolnick**. 2015. How widespread is assortative mating by diet within lacustrine stickleback populations? *Ecology and Evolution* 5:3352-3363.
89. Stutz, W.E., **J. Coates**, M. Schmerer, and **D.I. Bolnick***. 2015 Among-population divergence in stickleback immune gene expression is predominantly environmentally-induced, rather than heritable. *Molecular Ecology* 24: 4629-4646. DOI: 10.1111/mec.13295 *I wrote the paper, Stutz conducted the lab and field work.
88. Jiang, Y., **L. Torrance**, C.L. Peichel, and **D.I. Bolnick**. 2015. Divergent rheotaxis contributes to divergent habitat preferences between lake and stream threespine stickleback. *Evolution* 69: 2517-2524. DOI: 10.1111/evo.12740
87. **Bolnick, D.I.**, C.D. Brock, K. Shim, and M. Schmerer. 2015. Population-specific covariation between immune function, color, and microhabitat of nesting male threespine stickleback. *PLoS One* 10:e0126000. Doi:10.1371/journal.pone/0126000
86. **Bolnick, D.I.**, K.C. Shim, C.D. Brock. 2015. Female stickleback prefer shallow males: sexual selection on nest microhabitat. *Evolution*. 69:1643-1653. DOI: 10.1111/evo.12682
85. **Smith, C.**, L.K. Snowberg, J.G. Caporaso, R. Knight, and **D.I. Bolnick**. 2015. Dietary input of microbes and host genetic variation shape among-population differences in stickleback gut microbiota. *ISME Journal* 9:2515-2526 doi:10.1038/ismej.2015.64
84. Snowberg, L.K., **K. Hendrix**, and **D.I. Bolnick**. 2015. Covarying variances: more morphologically variable populations also exhibit more diet variation. *Oecologia* 178:89-101. Doi: 10.1007/s00442-014-3200-7

2014

83. Puritz, J.B., M.V. Matz, R.J. Toonen, J.N. Weber, **D.I. Bolnick**, and C.E. Bird. 2014. Demystifying the RAD fad. *Molecular Ecology*. DOI: 10.1111/mec.12965
82. Parent, C., D. Agashe, and **D.I. Bolnick**. 2014. Intraspecific competition reduces niche width in experimental populations. *Ecology and Evolution*. 4:3978-3990 DOI: 10.1002/ece3.1254

81. Warren, D.L., M. Cardillo, D.F. Rosauer, and D.I. Bolnick. 2014. Geography, ecology, and evolution: disentangling pattern and process. *Trends in Ecology and Evolution*. 29:572-580. PMID: 25172405
80. Stutz, W.E., and **D.I. Bolnick**. 2014 A Stepwise Threshold Clustering (STC) method to infer genotypes from error-prone next-generation sequencing of multi-allele genes such as the Major Histocompatibility Complex (MHC). *PLoS One* 9: e100587 DOI: 10.1371/journal.pone.0100587 PMID: 25036866
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Posts on Ecoevoevoeco blog.

Collectively these posts have been read by over 50,000 visitors as of January 2022

2018

- “What’s the worst that could happen?” <https://ecoevoevoeco.blogspot.com/2018/12/whats-worst-that-could-happen.html> A call for first aid training for field researchers
- “Abiding in the midst of ignorance” <https://ecoevoevoeco.blogspot.com/2018/12/abiding-in-midst-of-ignorance.html> A data analysis of the impact of double blind peer review on publication outcomes and sex bias in *The American Naturalist* (hint: not much).
- “I spent WHAT?” <https://ecoevoevoeco.blogspot.com/2018/11/publication-charges.html> The cumulative costs of publication in science
- “Why’d you do it?” <https://ecoevoevoeco.blogspot.com/2018/11/whyd-you-do-it.html> Why be an Editor of a journal?
- “Mistakes were made” <https://ecoevoevoeco.blogspot.com/2018/09/mistakes-were-made.html> On mistakes, large and small, in science. Only by acknowledging our own mistakes, as well-known members of the community, can we help trainees learn to handle fear of their own mistakes.
- “Science and Le Chateau” <https://ecoevoevoeco.blogspot.com/2018/08/science-and-le-chateau.html> An examination of some of the benefits of travel in academia
- “On second thought” <https://ecoevoevoeco.blogspot.com/2018/08/on-second-thought.html> When an Editor questions his own judgement, and revisits a manuscript
- “Do certain subdisciplines have higher H-indices?” <https://ecoevoevoeco.blogspot.com/2018/08/do-certain-subdisciplines-lead-to.html> Yes.
- “A really moving blog post” <https://ecoevoevoeco.blogspot.com/2018/06/a-really-moving-blog-post.html> How to, why, and why not move as a faculty member
- “Undergrad the impaler” <https://ecoevoevoeco.blogspot.com/2018/04/undergrad-impaler.html> An undergrad NSF-REU student reflects on his experience.
- “Why have a gate-keeper and who should it be” <https://ecoevoevoeco.blogspot.com/2018/02/why-have-gatekeeper-and-who-should-it-be.html> I respond to eLife’s new policy on editing and decision-making
- “Self plagiarism” <https://ecoevoevoeco.blogspot.com/2018/01/i-cant-steal-text-from-myself-can-i.html>

2017

- “Check your (taxonomic) biases at the door:” <https://ecoevoevoeco.blogspot.com/2017/12/check-your-taxonomic-biases-at-door.html> Why do some general ideas get stuck within the taxonomic area they are first published in?
- “Incoming EIC” <https://ecoevoevoeco.blogspot.com/2017/11/a-cross-post.html> Comments as incoming Editor In Chief of The American Naturalist
- “Phases of the RET experience” <https://ecoevoevoeco.blogspot.com/2017/11/phases-of-ret-experience.html> A middle-school teacher reflects on her NSF-funded research experience.
- “Are you experienced?” <https://ecoevoevoeco.blogspot.com/2017/11/are-you-experienced-thats-research.html> A middle-school teacher reflects on his NSF-funded research experience.
- “The secret lives of manuscripts” <https://ecoevoevoeco.blogspot.com/2017/10/the-secret-lives-of-manuscripts.html> What happens behind the scenes at an editorial office? Why do papers cost money to publish?
- “The zombie grant” <http://ecoevoevoeco.blogspot.com/2017/05/the-zombie-grant.html> 2017 A description of the decade-long process between an idea, funding, data, and finally publication.

2016

- “Wrong a lot?” <http://ecoevoevoeco.blogspot.ca> An essay on retraction and error
- “On Failure” <http://ecoevoevoeco.blogspot.com/2016/08/on-failure.html> A meditation on the importance of risk-taking in scientific research.

2015

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Brock et al, 2017, Data from: Phenotypic plasticity drives a depth gradient in male conspicuousness in threespine stickleback, *Gasterosteus aculeatus*.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.5r0q8>

De Lisle and Bolnick 2020. Data from: Male and Female reproductive fitness costs of an immune response in natural populations <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.5tb2rbp3w>

Edelaar et al 2019. Data from: Biased movement drives local cryptic coloration on distinct urban pavements. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.58bb05p>

Haines et al 2021: Data from: Adding the third dimension to studies of parallel evolution of morphology and function: an exploration based on parapatric lake-stream stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.pg4f4qrmk>

Harer et al 2020. Data from: The genomic signature of ecological divergence along the benthic-limnetic axis in allopatric and sympatric threespine stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.6djh9w0zc>

Hendry et al 2013. Data from: Evolutionary inferences from the analysis of exchangeability.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.7r682>

Ingram et al 2016, Data from: Widespread but weak assortative mating by diet within stickleback populations. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.ns11g>

Jiang et al 2015. Data from: Assortative mating in animals.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.r706v>

Jiang et al 2015. Data from: Differences in rheotactic responses contribute to divergent habitat use between parapatric lake and stream threespine stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.k3836>

Jiang et al 2016. Data from: Sensory trait variation contributes to biased dispersal of threespine stickleback in flowing water. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.t79r4>

Kaeuffer et al 2011, Data from: Convergence and non-convergence in ecological, phenotypic, and genetic divergence across replicate population pairs of lake and stream stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.k987h>

Kuzmin et al 2019. Data from: Systematic analysis of complex genetic interactions.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.tt367>

Lohman et al 2015: Data from, Clines arc through multivariate morphospace

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.25h9d>

Lohman et al, 2016, Data from: Evaluation of TagSeq, a reliable low-cost alternative for RNAseq

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.vq275>

Lohman et al 2017, Data from: Gene expression stasis and plasticity following migration into a foreign environment. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.mk8ns>

Maciejewski et al 2020. Data from: Partitioning the effects of spatial isolation, nest habitat, and individual diet in causing assortative mating within a population of threespine stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.5sq45>

Oke et al 2015. Data from: Does plasticity enhance or dampen phenotypic parallelism? A test with three lake-stream stickleback pairs. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.1mr07>

Paccard et al 2019. Data from: Repeatability of adaptive radiation depends on spatial scale: regional versus global replicates of stickleback in lake versus stream habitats.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.sq0tp3s>

Peng et al 2021. Data from: What evolutionary processes maintain MHCIIb diversity within and among populations of stickleback? <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.1rn8pk0sk>

Rennison et al 2019. Data from: Ecological factors and morphological traits are associated with repeated genomic differentiation between lake and stream stickleback

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.pj8c6g2>

Stutz et al. 2014. Data from: Contrasting patterns of phenotype-dependent parasitism within and among populations of threespine stickleback.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.653c9>

Stutz and Bolnick 2015 Data from: Stepwise Threshold Clustering: a new method for genotyping MHC loci using next-generation sequencing technology.

<https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.4fn4g>

Stutz et al, Data for 2015 Among-lake reciprocal transplants induce convergent expression of immune genes in threespine stickleback. <https://datadryad.org/stash/dataset/doi:10.5061/dryad.38nd7>

Stutz and Bolnick, 2016 Data for Natural selection on MHC IIb in parapatric lake and stream stickleback: balancing, divergent, both or neither? <https://datadryad.org/stash/dataset/doi:10.5061/dryad.qc10g>

Thompson et al 2017. Data from: Many-to-one form-to-function mapping weakens parallel morphological evolution. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.5b1k0>

Veen et al. 2017. Data from: Plasticity contributes to a fine-scale depth gradient in sticklebacks' visual system <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.45k67>

Vrtilek and Bolnick 2020. Data from: Macroevolutionary foundations of a recently-evolved innate immune defense. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.d2547d83c>

Weber et al, 2016 Data for: Partitioning the effects of isolation by distance, environment, and physical barriers on genomic divergence between parapatric threespine stickleback

<https://datadryad.org/stash/dataset/doi:10.5061/dryad.q8c13>

Weber et al, 2016. Data from: Resist globally, infect locally: a transcontinental test of adaptation by stickleback and their tapeworm parasite. <https://datadryad.org/stash/dataset/doi:10.5061%2Fdryad.mv5c0>

AWARDS AND HONORS

Year	Award	Institution	Description
2019, 2020	SET Teaching Excellence Award	University of Connecticut	For excellence in teaching, as measured by student evaluations. Fall 2019 Evolutionary Medicine course
2017	Edith and Peter O'Donnell Award in Science	The Academy of Medicine, Engineering & Science of Texas	"Recognize rising Texas researchers who are addressing the essential role that science and technology play in society, and whose work meets the highest standards of exemplary professional performance, creativity, and resourcefulness" \$25,000 prize
2014	David Starr Jordan Prize	Indiana University, Cornell University, Stanford University	"For innovative contributions to the study of evolution, ecology, population, or organismal biology". Awarded every 3 to 8 years to a scientist under 40 years old. \$20,000 prize. Note, this award was discontinued in 2020 due to D.S. Jordan's pro-eugenics opinions.
2014	UT Austin nominee for Blavatnik Award	University of Texas at Austin	
2013&14	UT Austin nominee for Waterman Prize from NSF	University of Texas at Austin	Finalist at NSF in 2013, UT was asked to resubmit nomination in 2014.
2011	College of Biological Sciences Young Alumni Award	University of California at Davis	
2009	Stand Up for Science Award	Texas Freedom Network	In recognition of efforts to keep creationism out of the Texas K-12 science curriculum.
2009	Early Career Scientist	Howard Hughes Medical Institute	
2007	Fellowship in Science and Engineering	David and Lucille Packard Foundation	
2006	College of Natural Sciences Teaching Excellence Award	University of Texas at Austin	
2005	George Mercer Award	Ecological Society of America	For "an outstanding ecological research paper...by a younger researcher (less than 40)" \$2,000 prize split 5-ways
2005	Theodosius Dobzhansky Prize	Society for the Study of Evolution	"In recognition of the accomplishments and future promise of an outstanding young evolutionary biologist." \$5,000 prize
2005	Jasper Loftus-Hills Young Investigator Prize	American Society of Naturalists	to "recognize outstanding and promising work by investigators who have received their doctorates in the three years preceding the application

			deadline or who are in their final year of graduate school. ” \$2,000 prize
2004	Merton Love Award	University of California at Davis	“for an outstanding dissertation in Evolution and Ecology”
1996	Henry A. Dwight 1829 Botanical Prize	Williams College	
1996	Thomas G. Hardie III Prize in Environmental Studies	Williams College	
1996	Elected to Phi Beta Kappa	Williams College	
1996	Elected to Sigma Xi	Williams College	
1996	Fulbright Grant (Malawi)		Declined, to teach for the US Peace Corps

GRANTS

Total current and past external grants > \$20,000,000

Applications Pending

Funding Agency	Title	Amount	Expected duration	PIs co-PIs
National Science Foundation	RUI: Linking Ecology, Behavior, and Immunology to Spatio-Temporal Variation in Helminth Transmission	\$3,000,000	2022-2027	Hund, <i>Bolnick</i> <i>Hite</i> <i>Schreiber</i>

Current Funding

Funding Agency	Title	Amount	Period	PIs co-PIs
Moore Foundation	Stickleback-symbiont stock center	\$525,000	2022-2024	Milligan-Myhre <i>Bolnick</i>
NSF	Rules of Life Emerging Networks: Does ecological restoration lead to re-wiring of gene expression and species interaction networks? (FAIN-2133740)	\$3,000,000	2022-2026	<i>Bolnick</i> <i>Eliassi-Rad</i> <i>Wang</i>
Moore Foundation	Using gut-on-a-chip technology to study host-microbiome evolution in the wild (GBMF9323)	\$530,000	2020-2023	<i>Bolnick</i> <i>Carrier</i> <i>Milligan-Myhre</i> <i>Scarpino</i> <i>Steinel</i>
NIH - NIAID	“Reciprocal genetics of recently-evolved vertebrate immunity and helminth counter-adaptation” 1R01AI123659-01A1	\$1,912,514 total	2017-2022	<i>Bolnick</i>
NSF-IOS	“IOS-EDGE: Expanding the toolkit for functional genetics in threespine stickleback to place genomics into its natural context” IOS-1645170	\$1,700,000 total, \$450,000 to DIB	2017-2020	<i>Bolnick</i> <i>Bell, White,</i> <i>Miller,</i> <i>Milligan-Myhre</i>

Past Funding

Funding Agency	Title	Amount	Period	PIs co-PIs
NSF- Math Biol.	COLLABORATIVE RESEARCH: Evolutionary resilience and species coexistence in disturbed habitats DMS-1716803	\$650,000 total, \$200,000 to DIB	2018-2020	<i>Schreiber</i> <i>Bolnick</i> <i>Schoener</i>
NSF	Research Coordination Network: Evolution in Changing Seas OCE-1764316	\$600,000	2018-2021	<i>Lotterhos,</i> <i>Trussell, M.</i> <i>Kelly, J.</i>

				<i>Kelley, Bolnick</i>
NIH-NIGMS	Sexually antagonistic selection in the genome (2R01GM116853-05)	\$1,900,000 \$70,985 to DIB	2020-2025; 2020-2021 for Bolnick	Kirkpatrick <i>Bolnick Matz Ryan Schartl</i>
NSF	Conference: IOS-EDGE Principal Investigators meeting	\$72,082	2019-2020	Bolnick <i>Gallant</i>
American Association of Immunology	Intersect Fellowship for Computational Scientists and Immunologists	\$51,000	2019-2020	Fuess <i>Bolnick Wegrzyn</i>
Ministerio de Economía Y Competitividad, Spain	“Causes and consequences of Matching Habitat Choice, an alternative mechanism of evolutionary adaptation”	€1,984,093	2017-2020	Edelaar <i>Bolnick Bonte Prado</i>
NSF	“Does (non)parallel phenotypic evolution indicate (non)parallel selection in the wild?” DEB-1456462	\$1,050,604	2015-19	Bolnick Stuart* <i>Peichel</i> *PI 2018-2019
Marzden Fund, New Zealand	“The genetics of multidimensional niche variation in a natural population”	NZ \$24,950	2015-16	Ingram <i>Bolnick Veen</i>
NSF	“Behavioral and evolutionary causes of within-population assortative mating in threespine stickleback” IOS-1145468	\$559,174	2012-15 with no-cost extension to 2016	Bolnick
NSF	“Collaborative Research: Parallel and non-parallel evolution at multiple levels: environment, selection, phenotype, and genotype” DEB-1144773	\$900,000 \$450,000 for UT \$32,525 for REU RET supplements:	2012-15 with no-cost extension to 2016	Bolnick <i>Peichel Hendry</i>
HHMI	Howard Hughes Medical Institute Early Career Scientist	~\$3,600,000 total: \$1,500,000 research ~\$1,000,000 salary and benefits \$654,083 equipment * \$400,000 space rental	2009-15	Bolnick
David and Lucille Packard Foundation	Fellowship in Science and Engineering	\$825,000 Total \$762,500 DC	2007-14	Bolnick
Biodiversidad (CGL-BOS) Area, Ciencias	Invasión biológica, selección, selección de hábitat, variación individual, diferenciación de	€295,477	2013-14	Edelaar <i>Bolnick Dingemans</i>

de la Vida, Ministerio de Economia Y Competitividad de Espana	poblaciones, cambio global, biodiversidad			<i>Escobedo Muller Sanchez</i>
National Institute for Mathematical and Biological Synthesis	Working Group: Ecological consequences of intraspecific niche variation	≈ \$80,000 (No exact budget, covers traveling and lodging for 15 participants over 3 meetings)	2009-11	<i>Bolnick McCann Rudolf</i>
NSF	Dissertation Research: The roles of genetic variation and competition in resource niche expansion DEB 0808356	\$12,000	2008-09	<i>Bolnick Agashe</i>
National Center for Ecological Analysis and Synthesis	Working Group: When, and how much, does fear matter? Quantitatively assessing the impact of predator intimidation of prey on community dynamics	\$56,160	2005-06	<i>Preisser Bolnick</i>
NSF	“A comparative study of fitness landscapes: testing competitive disruptive selection in sticklebacks” DEB-0412802	\$320,000	2004-07	<i>Bolnick</i>
NSF	Dissertation Research: Does intraspecific competition drive disruptive selection?	\$10,000	2001-02	<i>Wainwright Bolnick</i>
NSF	Graduate Research Fellowship	≈ \$100,000 for salary and tuition	1998-2001	<i>Bolnick</i>

*** HHMI Equipment supplements:**

- \$98,000 for mobile immunology laboratory (28’ RV trailer with Accuri C6 flow cytometer, cell culture incubator, and related equipment). Fall 2010
- \$20,400 for 3 Eppendorf gradient thermocyclers. Fall 2010
- \$15,000 for Pippin Prep DNA Size Selection System. Winter 2011.
- \$35,000 for Chevrolet 2500 field research vehicle. Spring 2011
- \$101,499 for Tecan Evo75 Liquid Handling Robot with integrated M200 Pro fluorescence plate reader. Fall 2011
- \$26,914 for Accuri CSampler Automated Sampler for C6 Flow Cytometer. Winter 2012.
- \$84,950 for AutoGenprep 245T Nucleic Acid Extraction System. Fall 2012.
- \$16,344 for three Eppendorf PCR Machines. Winter 2013
- \$15,003 for Eppendorf chilled centrifuge, Fall 2013
- \$240,973 for a 460-tank aquaculture facility installed at the Bamfield Marine Science Center on Vancouver Island, British Columbia Canada, Spring 2015.

Small Grants, Fellowships, & Institutional Funding

Year	Source	Amount
2017-18	Diversity Mentoring Fellowship, UT Austin	\$50,000
2017	Faculty travel grant, UT Austin	\$1200

2016-2019	Dwight W. and Blanche Faye Reeder Centennial Fellowship in Systematic and Evolutionary Biology (UT Austin)	\$30,000
2016	Faculty travel grant, UT Austin	\$1200
2016	Undergraduate Research Fellowship (Arthur Lee)	\$1000
2015	Faculty travel grant, UT Austin	\$1200
2015	Undergraduate Research Fellowship (Newaz Ahmed)	\$1000
2014	Undergraduate Research Fellowship (Cole Thompson)	\$1000
2014	Faculty travel grant, UT Austin	\$1200
2013	Faculty travel grant, UT Austin	\$1200
2012	Faculty travel grant, UT Austin	\$1200
2011	Undergraduate Research Fellowship (Gonzalo Hernandez)	\$1000
2011	Faculty travel grant, UT Austin	\$1200
2010	Faculty travel grant, UT Austin	\$1200
2009	Faculty travel grant, UT Austin	\$1200
2008	Faculty travel grant, UT Austin	\$1200
2008-9	Dwight W. and Blanche Faye Reeder Centennial Fellowship in Ecology (UT Austin)	\$10,000
2008-9	Dwight W. and Blanche Faye Reeder Centennial Fellowship in Systematic and Evolutionary Biology (UT Austin)	\$10,000
2007	Faculty travel grant, UT Austin	\$1000
2006-7	Dwight W. and Blanche Faye Reeder Centennial Fellowship in Systematic and Evolutionary Biology (UT Austin)	\$10,000
2006-7	University of Texas Faculty Research Grant	\$6,000
2006	Summer Research Assignment, UT Austin	\$15,000
2006	Research Experience for Undergraduates (REU) supplement to NSF DEB-0412802	\$6,000
2005	Small Grants for Research on Private Land in Central Texas, UT Environmental Science Institute	\$2,000
2005	Rom Rhome International Professional Development Fund (UT Austin)	\$1,000
2005	Faculty travel grant, UT Austin	\$350
2004	Start-up Research Funding, UT Austin	\$250,000
2003	Summer Research Fellowship, UC Davis	\$4,000
2003	ARCS Foundation Scholar	\$5,000
2003	Dissertation Year Fellowship, UC Davis	\$25,000
2003	Center for Population Biology Travel Grant, UC Davis	\$1,000
2002	Center for Population Biology Research Grant, UC Davis	\$850
2002	ARCS Foundation Scholar	\$5,000
2002	Summer Research Fellowship, UC Davis	\$4,000
2002	Shirley Ashton Scholarship, UC Davis	\$10,000
2001	UC Davis Humanities Research Grant	\$3,000
2001	Sigma Xi Research Grant	\$1,000
2001	Phi Beta Kappa Scholarship	\$3,500
2001	Daphne and Ted Pengelley Research Grant	\$1,500
2000	Center for Biosystematics Grant, UC Davis	\$1,000
2000	Center for Population Biology Research Grant, UC Davis	\$850
1999	Daphne and Ted Pengelley Research Grant, UC Davis	\$1,500
1999	Jastro-Shields Research Grant, UC Davis	\$1,500
1995	HHMI Undergraduate Research Fellowship, Williams College	\$3,000
1994	Mullen Research Grant in Envi. Studies, Williams College	\$3,000

1993	HHMI Undergraduate Research Fellowship, Williams College	\$3,000
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Unfunded applications

Funding Agency	Title	Amount	Expected duration	PIs <i>co-PIs</i>
ERC	FITNESS: Forward-In-Time Natural EcoEvolutionary Selection Study	~€11,395,296 € 3,219,123 to UConn	2021-2027	Peichel Bolnick Hermisson Matthews
NFRF, Canada	Deep ecosystem restoration	~C\$25,000,000	2021-2026	Hendry Bolnick Derry Milligan-Myhre Barett, Peichel, Weber, Chan, Matthews, Reid, Terre, Gregory-Eaves, Delormier

TEACHING

Courses Taught

Year	Semester	Course Title	Course Number
2022	Spring	Evolutionary Ecology (co-taught with Mark Urban)	
2021	Fall	Statistical Analysis of Network Data	Informal peer-to-peer course
2021	Fall	Evolutionary Medicine	
2021	Spring	Data Visualization	
2020	Fall	Evolutionary Medicine	
2020	Spring	Evolutionary Ecology (co-taught with Mark Urban)	
2019	Fall	Evolutionary Medicine	
2019	Spring	Ecology and Evolution of Hosts and Parasites	
2017	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2017	Spring	Advanced Topics in Biological Statistics; Bayesian Hierarchical Linear Modeling for Biologists	Bio384K
2016	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2016	Spring	Host-parasite coevolution	BIO384K
2015	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2015	Fall	Fundamentals of Evolution	BIO390C
2015	Spring	Introduction to Ecology Evolution and Behavior II	BIO384D
2014	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2013	Fall	Introduction to Ecology Evolution and Behavior I	BIO384C
2013	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2012	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2012	Summer	Helsinki Summer School on Mathematical Ecology and Evolution: Theory of Speciation, Turko, Finland. Delivered 6 lectures on the interface of theory and data in speciation.	
2011	Fall	Introduction to Ecology Evolution and Behavior I	BIO384C
2011	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2010	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2009	Spring	Introduction to Ecology Evolution and Behavior II	BIO384D
2009	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2008	Spring	Teaching Evolution	
2008	Spring	Muddyboots Statistics	BIO387D
2008	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2007	Spring	Teaching Evolution	
2007	Spring	Ecology of Speciation	BIO387D
2007	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2006	Spring	Speciation	BIO387D
2006	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2005	Fall	UTeach Research Methods	Bio337/CH368/PHY341

2005	Fall	UTeach Research Methods	Bio337/CH368/PHY341
2003	Summer	Introduction to Ecology (UC Davis)	EVE101
1996-98	Advanced Level Applied Maths, Same Secondary School, Tanzania		
1996-98	Advanced Level Biology, Same Secondary School, Tanzania		

MENTORING

***bold font denotes Underrepresented Minority (URM) trainee**

Sabbatical visitors hosted

Years	Name	Institution	Funding source
2016-17	Dr. Ling Fei	Northwest A&F University, Yangling, Shaanxi, China	Chinese Government Scholarship

Current Postdoctoral Researchers

Years	Name	PhD Institution	Funding source
2022-3	Dr. Muhammad Tayyub	University of Punjab	Fulbright Foundation, Pakistan
2022-25	Dr. Andis Arietta	Yale University	NSF Rules of Life
2021-23	Dr. Arshad Padhiar	National University of Science and Technology, Pakistan	NIH R01
2020- 2023	Dr. Maria Rodgers	University of Southern Mississippi	Gordon and Betty Moore Foundation
2018-22	Dr. Amanda Hund	University of Colorado	James F McDonnell Foundation Complexity Scholars Fellowship

Former Postdoctoral Researchers

Years	Name	PhD Institution	Current Position	Funding source
2018-22	Dr. Foen Peng	Univ. of Washington	Assistant Professor, Haverford College	NIH R01
2018-20	Dr. Lauren Fuess	University of Texas at Arlington	Assistant Professor, Texas State University	AAI fellowship; NSF IOS-EDGE grant
2019-21	Dr. Stephen de Lisle	University of Toronto	Researcher, Lund University	UConn Start-up
2019	Dr. Milan Vrtilik	University of Prague	Czech Academy of Sciences, Institute of Vertebrate Zoology	Fulbright Fellowship
2013-19	Dr. Yoel Stuart	Harvard	Assistant Professor, Loyola University	NSF DEB-1456462 & DEB-1144773 (co-written)
2013-2018	Dr. Natalie Steinel	Univ. of Penn. Medical School	Assistant Professor, Univ. Massachusetts Lowell	HHMI, NSF
2014-16	Dr. Thor Veen	Univ. Groningen	Associate Professor, Quest University	NSF IOS-1145468
2012-15, 2018	Dr. Jesse Weber	Harvard	Assistant Professor, University of Wisconsin	HHMI, NIH grant
2013-15	Dr. Alex Jordan	Australia National University	PI, Max Planck for Dispersal, Konstanz	HHMI & BEACON Co-advised with

				Mike Ryan and Hans Hoffman
2013-14	Dr. William Stutz	UT Austin	Western Michigan University	HHMI
2013	Dr. Travis Ingram	U. British Columbia	Associate Prof. Univ. Otago, NZ	NSF IOS-1145468
2012-13	Dr. Hollis Woodard	U Illinois, C-U	Associate Prof, Univ. Riverside	HHMI
2013	Dr. Lisa Snowberg	UT Austin	NA	Packard
2008-11	Dr. Christine Parent	Simon Frasier	Associate Professor, Univ Idaho	Packard & NSERC
2009-11	Dr. Daniel Warren	UC Davis	Assistant Professor, Okinawa Institute of Technology	NSF Fellowship
2010-11	Dr. Matthew Schmerer	Albert Einstein	Researcher, Rice University	HHMI
2008-9	Dr. Marcio Araujo	UNICAMP, Brazil	Associate Prof. Universidade Estadual Paulista, Brazil	Packard
2008-10	Dr. Rose Carlson	UC Davis	Physician	NSF Fellowship
2005-6	Dr. Richard Svanback	Univ Uppsala	Associate Prof. Univ Uppsala	Swedish Fellowship; co-advisor. Advised by Dolph Schluter and Michael Doebeli
2005-6	Dr. Hernan Lopez-Fernandez	Texas A&M	Prof & Ichthyology Curator, Univ Michigan	UT Start-up

Current Graduate Students

Years (estimated)	Name	Prior Institution	Awards
2015 – (21)	Kum (Will) Shim	U. Toronto (MS)	NSERC
2016-(22)	Christopher Peterson	U. Tennessee Knoxville (MS)	Integrative Biology 5-Summer Fellowship
2017-(22)	Briana Booker	U. Arizona	Diversity Mentoring Fellowship
2019-(24)	Christian Polonia	University of Central Florida	
2020 – (25)	Swapna Subramanian	University of Pittsburgh	
2021- (26)	Anni Wang	University of Florida	

Former Graduate Students

Years	Name	Current Position	Awards
2015 – 20	Sebastian Stockmeier	MPI for Ornithology (MS)	SSE Rosemary Grant Research Award
2013-19 [Joined my lab in 2016]	Emlyn Resetarits	Postdoctoral Researcher, University of Georgia	NSF Graduate Research Fellowship
2017-18	Ayesha Akram	University of Rawalpindi	Pakistan

			International Research Support Initiative
2012 – 17	Brian Lohman	Postdoc, U Utah (Aaron Quinan, human genomics)	NSF EAPSI; UT Austin Continuing Fellowship
2009 – 15	Chad Brock (PhD)	Postdoc, U Wyoming (Catherine Wagner, cichlid genomics)	UT Austin Continuing Fellowship
2008-14	Yuxin Jiang (PhD)	Data Scientist, Air B&B	
2006-13	Lisa Snowberg (PhD)	Parent	NSF GRF
2006-13	William Stutz (PhD)	Data Scientist, U. Western Michigan	
2004-09	Deepa Agashe (PhD)	Assoc. Prof. Institute for Biological Sciences, Bangalore	ASN Editor's Award
2005-2006	Marcio Araujo (PhD, Unicamp,)	Assoc Prof, Univ. Estadual, BR	CAPES fellowship to visit UT for 9 months
2009-10	Anna Siwertsson (PhD, Univ Tromso)	Postdoc, Norwegian Arctic Research Center	Fellowship to visit UT for 6 months
2009	Kimberly Hendrix (MS, Science Education)	High School Biology Teacher	

PhD Committee member for:

Jelena Pantel, Samraat Pawar, Jeremy Brown, Frank Stearns, Stephen Goodyear, Amanda Kenney, Christian Rabeling, Pam Willis, Allison Gainesbury, Luis Bonachea, Chad Smith, **Simone Cappellari**, Joanne Clavel (INRES, Universite' Madame-Curie, Paris, France), Chad Smith, Carly Kenkel, Evan Economo, Zach Gompert (M.Sc, Texas State University), Eben Gering, Laura Crothers, **Roger Shaw**, Genevieve Smith, Rhiannon West (University of New Mexico), Preston Bean (Texas State University), Chelsea Weitekamp, Kelly Pierce, Groves Dixon, Rachael Wright, Austin Reynolds, **Sofia Rodriguez, Mariana Vasconcellos**, Felipe Perez-Jvostov (McGill), Andrius Daigilis, **Lucia Piaz** (Nicaraguan, PhD at the International Max Planck Research School for Organismal Biology) Emlyn Resetarits, Devon Humphries, **Serena Zhao, Sharkhari Subramani, Deccio Correa, Dipanjana Dalui**, Christina Ballentine, Grace Vaziri, Dipanjana Dalui, Grace Vaziri, Todd Testerman (MCB Uconn), Meghan Hahn (SUNY SB), Lucas Rodrigues de Freitas (Univ Sao Paulo), Stephanie Nordmeyer (University of Texas Health, Molecular Immunology and Microbiology)

Lab technicians

On Lee Lau (2005-2008), **Eric Caldera** (2005), Jeff Paull (2008-2009), Julie Day (2009-2010), Kimberly Ballare (2010-2012), Jay Falk (2010-2011), **Will Shim** (2012-2015), **Racine Rangel** (2013-2014), **Lei Ma** (2013-2014), Andrew Gerhart (2014), **Jessica Casillas** (2014-2015), Cole Thompson (2016), Jordann Young (2017-2018), Stijn den Haan (2017-2018), Brandon Varela (2017-2018), Åsa Lind (2017-2018), Meghan Maciejewski (2018-2020), Mariah Kenney (2018-2020), Andrea Roth (2020-).

Undergraduate students

Bold font indicates minority

*** denotes a recipient of an Undergraduate Research Fellowship**

(H) denotes an honors student

Directly supervised by me

Katherine Buck (Dartmouth College; Summer 2002), Kate Schneider (Williams College, Summer 2004), Zach Lanfear (Spring 2005-Spring 2006), Molly Hartzler (UTeach, Summer-Fall 2005), **Divya Balakrishnan** (UTeach, Fall 2005), Randy Schurr (Fall 2006-Summer 2007), **Tania Tasneem** (UTeach; REU student, Summer 2006), Jessica Conover (Spring 2006-Fall 2007), **Angela Chen** (Spring 2006-Fall 2007), **Claire Patenia** (REU student, Fall 2006 - Fall 2009), **Joyce Valera** (REU student from King's College, Summer 2007), **Todasporn Rodbumrung** (UTeach; Summer 2009-Spring 2010), Chris Harrison (Summer 2009-Fall 2010); Dale Jacques (University of Wisconsin, Summer 2010); **Lenny Felps** (REU student, Spring 2007 - Fall 2008); **Surabhi Tyagi** (Summer 2011-13); **Jessica Coates** (HHMI EXROP student, Summer 2011); **Hernando Gonzalo** (Summer 2011-12), **Cathy Hernandez** (HHMI EXROP student, summer 2012; HHMI Capstone summer 2013), Samuel Thompson (2011-), Rebecca Izen (2011-2014, **H**), Cole Thompson* (summer 2013, **H**), **Racine Rangel** (summer 2013, University of Nebraska student), **Amy Doan** (summer 2013), Maureen Carey (HHMI EXROP student summer 2013), **Dyna Poch** (summer & fall 2013) Connor French (summer & fall 2013, **H**), **Mahmoud Irannezhad** (spring 2014), Jacob McPherson (spring-fall 2014), **Kevin Quinteros** (HHMI EXROP student summer 2014), **Mohammad Jhavanmardi** (fall 2014-spring 2015). **Arthur Lee*** (fall 2015 – spring 2017, **H**), **Gabrielle Le** (2017-18, **H**), **Jacqueline Salguero** (2017-19, **H**), **Ernesto Rojas** (HHMI EXROP student summer 2017), **Shreya Uppala** (summer 2017), Sara Tsruro (Fall 2018-2021, **H**), Megan Braat (2020-21, **H**), **Sophia Arruda** (2020-21, **H**), **Mita Kale** (2020-21, **H**), Lauren Simonse (2021-22, **H**).

Supervised by a PhD student or postdoc in my laboratory

Prerna Bhat (Harvard undergraduate; summer 2013), **Uyen Bui** (fall 2010-fall 2011), Jason Clu (spring 2011-fall 2012), **Jay Falk*** (Fall 2008 - Spring 2010; won the College of Natural Sciences Distinguished Undergraduate award); **Kushbu Patel** (Fall 2008); Jacob Heiling (Spring 2009-Fall 2011); Amar Patel (Fall 2009); **Kristine Vong** (Fall 2009 - Summer 2010); Melissa Zoller (Fall 2009 - Fall 2010); **Kirang Patel** (Fall 2010-Spring 2012); **Angel Vergara** (Fall 2010); Robert Arthur (Fall 2007-Spring 2009); Gina Calabrese (Spring 2007-Summer 2011); Matthew George; Sagar Patel; Frederick Pegna (Spring 2007); Rajiv Penmetcha (Spring 2007); Elisabeth Seigel; Robert Sullivan; **Elsa Yueng** (Fall 2006-Spring 2008); **Hau Pham** (Fall 2010); **Kavin Cho** (Spring - Fall 2010); Jeremy Benedik (Summer 2010); **Hussein Kha** (Spring 2008); **Trang Huynh** (Spring 2008); **Uyen Bui** (Fall-Spring 2010-11); Graeme Segal (Spring 2011-2012); Chris Smith (Summer 2010-Fall 2012); **Angel Vergara** (Fall 2011); **Jessica Coates** (Summer 2011); Michael Goldstein (high-school student, spring 2010); **Cecilia Cavillo** (high-school student, Fall 2008); Emily Parham (Fall 2010), **Newaz Ahmed*** (fall 2013 – summer 2014), Samantha Killian (fall 2013 – summer 2014), Zack Shaffer (spring 2014), Lindy Cain (spring 2014), Sara Wofford (spring – summer 2014), Ahmad Tabbarcls (spring 2014), Samantha Killian (spring & summer 2014), Haley Barber (summer 2014), Haley Cartwright (summer 2014), **Oluwaseun Banjoko** (spring 2015), **Lina Mahmood** (spring 2015), **Jose Luis Escarcega** (spring 2015), **Ramiro Pascual Rodriguez** (spring 2015), Stefanie Hurt (spring 2015), Bradley Dweck (spring 2015), **Carol Abousaab** (spring 2015), Brianna Flynn (2016-2017), Lexi Roberts (2016-2017), **Cindy Lee** (2016-2017), **Kevin Pan** (2015-2017, **H**), Amy Starzack (2016-2018), **Andy Wang** (2015-2018), **Cindy Jiang** (2017-2018, **H**), **Gabrielle Le** (2017-18), **Nikita Gupta** (2018), Breanna Takacs (2018), Nicole Butler (2018), **Quanit Ali** (2018), **John Gregory** (2018), Madison Schumm (2018), Gilian McNeill (2019-20, **H**), Mita Kale (2019-21), Collin Krzyzaniak (2019-2020), Megan Hale (2019-20), Julia Meenan (2019-2020), Gregory Aniolek (2021-), Pranav Sriramulu (2021-), Saif Quashiri (2021-)

K-12 Teachers

Louisa Torrence (8th grade biology teacher, 2013 field research), **Tania Tasneem** (7th grade biology teacher, 2013 field research, 2014 NSF RET laboratory research), Kim Hendrix (highschool biology teacher, summer field research in 2009, 2013, 2014), Andrew Doggett (2013 field research, high

school biology teacher), **Jasmine Rodriguez** (2018 NSF RET from Paredes Middle School, Austin), **Randy Paul** (2018 NSF RET from Gus Garcia Middle School, Austin), Julia Julian (2018 NSF RET from Leander High School)

High-School researchers

Chase Howell, Alicia Armstrong, Abby Tobleman (8th grader, Ace Academy). Catherine Ormon (2016-18, St Stephens High School), **Devang Deepak** (2017, LASA High School)

DIVERSITY EQUITY AND INCLUSIVITY ACTIVITIES

As an individual who experienced comparative privilege, I believe it is incumbent on me to contribute to rectifying historical inequalities within science and academia. Below, I briefly summarize a sample of the activities I have engaged in to promote diversity, equity, and inclusivity (DEI)

- As a new faculty in EEB at UConn I instigated the start of a departmental DEI committee, and was one of the two UConn-Storrs EEB faculty on this committee for its first three years. We designed and implemented an anonymous survey of the department (students, postdocs, staff, and faculty) to identify priority problem areas in need of action . We initiated DEI and bias awareness training within the department, and now use at least one seminar series per semester to bring in outside speakers to address DEI and related issues.
- I wrote the first draft of, and edited to create a final draft of, the UConn EEB Values and Mission Statement, which seeks to articulate the value of DEI for a successful department. The statement's final version is found here: <https://eeb.uconn.edu/eeb-values-and-mission-statement/>
- As EEB Graduate Program Chair at the University of Texas, I initiated a DEI committee to help receive and address concerns about harassment and bias within the department.
- At UT Austin I proposed a program to the Dean's Office to provide an informational weekend about graduate school for students from under-represented groups, with a focus on students from Historically Black Colleges and Universities, and predominantly Hispanic-serving universities within Texas. Initially conceived of as a EEB event, this became a College of Natural Sciences-wide event spanning a full weekend of poster presentations by the visiting students, informational sessions about how to prepare for and apply to and what to expect in graduate school, and opportunities to meet and network with prospective mentors before the application process begins.
- As Editor-In-Chief of The American Naturalist I proactively sought to expand representation on the board of Associate Editors. I made a point of increasing the proportion of female, LGBTQ, and minority AEs, and increasing representation from non-North American and non-European nations. I recruited the journal's first (to my knowledge, ever) Associate Editors in Latin America, south Asia, and east Asia.
- As Editor-In-Chief of The American Naturalist I oversaw editing of a Special Feature on Colonialism, Power dynamics, and related perspectives in ecology and evolution (due for publication in early winter 2023).
- In 2017 the SSE, ASN, and SSB founded the Evo-Ally program to train a cadre of faculty and students to help receive and address concerns about harassment or bullying, sexual or racial or otherwise, at the Evolution meetings. I have served as an Evo-Ally at four meetings to date.
- To help raise awareness of the role of women in the history of my field, I wrote and published a History of Science article on the women who were publishing in The American Naturalist in its first fifty years (1867-1917). I delivered a lecture on this topic that also

highlighted some of the early non-white authors in the journal
(<https://www.youtube.com/watch?v=2eTPRGhQj88>)

- While I was an HHMI Early Career Scientist I mentored six EXROP Students. The HHMI EXROP program pairs students from underserved backgrounds and underrepresented groups, with faculty in HHMI for well-paid summer research internships. Five of the six students were URM, all of whom have since completed PhDs or MD-PhDs.
- I served on the Howard Hughes Medical Institute Undergraduate Science Education Program Panel for two years. This panel seeks to disburse tens of millions of dollars to universities to fund initiatives to increase under-represented minority students' entry to, and retention in, STEM fields as undergraduates and beyond.
- My lab jointly developed a Lab Values Statement (<https://bolnicklab.wordpress.com/2015/10/01/labvalues/>) which has been extensively used as a model for similar statements by other research groups at other universities.
- I have an established track record of effectively mentoring undergraduates and graduate students and postdoctoral researchers from under-represented groups in EEB including minorities, women, and first-generation college students.

SERVICE

Departmental Service

- 2020 Faculty search committee
- 2020- Chair's Advisory Committee
- 2019- Department Diversity Equity and Inclusivity Committee
 - Drafted and conducted a departmental survey
 - Drafted and edited a departmental Values Statement
- 2017 Promotion Committee for Christine Hawkes
- 2017 Integrative Biology Merit Review Committee, Chair
- 2016 Integrative Biology Merit Review Committee, Chair
- 2016 Promotion Committee for Shalene Jha
- 2015-18 Integrative Biology Merit Review Committee
- 2015-18 Parental Accommodation Contact for Graduate Students
- 2014-18 Chair, Graduate Program in Evolution, Ecology and Behavior
 - Oversaw graduate curriculum revision, 2014
 - Rewrote student handbook, 2014
 - Initiated a standardized recruitment weekend, 2014-
 - Wrote self-study documents for external review, 2015
 - Website redesign, 2015
 - Graduate course offering update, 2015
 - Reform of graduate student funding, 2015
 - Led evening workshop for EEB Postdocs on job applications
 - Rebudgeted graduate student support, spring 2016
 - Ran Prospective Student Recruitment Visit weekend, 2016
 - Designed EEB logo
 - Designed outreach flyers for prospective students and donors
 - Initiated EEB Social Media outreach & visibility
 - Initiated a diversity recruitment drive to coach URM students on how to navigate graduate school selection, applications, and studies.
 - Redesigned Qualifying Exam format again in 2017
 - Initiated a senior-junior student graduate student mentoring program
- 2013-18 UTeach Certificate Committee
- 2011-18 UTeach Budget Council
- 2012 Integrative Biology Postdoctoral Fellow Search Committee, Chair
- 2011 Integrative Biology Postdoctoral Fellow Search Committee, Chair
- 2010 Integrative Biology Postdoctoral Fellow Search Committee, Chair
- 2008-09 Evolution Ecology & Behavior Graduate Group Grant Committee
- 2008 Marine Science Institute Fish Biology faculty search committee
- 2007- 09 UTeach Steering Committee
- 2006 Ecosystem Ecologist faculty search committee

College/University Service

- 2021-22 College of Liberal Arts and Sciences, Graduate Student Funding Committee

- 2021-22 Undergraduate Lab Safety Working Group, University of Connecticut
- 2019-20 Courses and Curriculum Committee, College of Liberal Arts and Sciences, University of Connecticut
- 2019-20 Graduate Faculty Council, University of Connecticut
- 2019 Undergraduate grant proposal evaluation, University of Connecticut
- 2018 Internal grant proposal evaluation for Vice President of Research, UT Austin
- 2017 Judge, Symposium for Undergraduate Research Exploration. I helped initiate this program, which brings minority undergraduates from around the US to UT Austin to present their research and learn about graduate school and the application process.
- 2017 Review Panel, Vice President for Research Faculty Development Grants
- 2017 David & Lucille Packard Foundation Fellowship, Internal review panel.
- 2016 David & Lucille Packard Foundation Fellowship, Internal review panel.
- 2016 College of Natural Sciences Undergraduate Research Fellowship review committee.
- 2014 College of Natural Sciences Undergraduate Research Fellowship review committee.
- 2014 Chair, Applied Evolutionary Medicine Curriculum Theme Taskforce at the UT Austin Dell Medical School
- 2014-18 University Budget Council member
- 2013-14 University of Texas Dell Medical School Pre-clinical Training Committee
- 2013 University of Texas Dell Medical School Pre-clinical Educational Objectives and Competencies Committee
- 2010 – 13 Presenter, UTeach Institute Research Methods Workshop
- 2008-09 Planning Committee for Environmental Science B.S. Degree Plan
- 2008 Presenter, UT Austin College of Natural Sciences Teaching Strategies Workshop.
- 2006 Presenter, College of Natural Sciences Discover Learning Luncheon (“Teaching Evolution”)
- 2005-09 International Science Opportunities Committee, UT Austin
- 2005 Presenter, College of Natural Sciences Discover Learning Luncheon (“UTeach Research Methods”)
- 2004 Presenter, UT Austin College of Natural Sciences Teaching Strategies Workshop.

Professional Services: Editorial Boards

- 2017-23 Editor-in-Chief, American Naturalist.
- 2016-17 Associate Editor, Evolution (ended early to begin Editor In Chief position)
- 2014-16 Guest Editor, Annual Reviews of Ecology Evolution and Systematics
- 2008-16 Associate Editor, American Naturalist
- 2004-8 Ad Hoc Editor, Ecology
- 2014 Guest Editor, PLoS Genetics

Professional Services: Society Service

- 2022-24 Society for the Study of Evolution, Council member
- 2020 Asilomar Postdoc Talk Award Committee, American Society of Naturalists
- 2019-2022 Dryad Representative, American Society of Naturalists

- 2018-2023 Editor In Chief, American Naturalist, published for the American Society of Naturalists
- 2015 Ruth Patrick Award Committee, American Society of Naturalists
- 2013 Ruth Patrick Award Committee, American Society of Naturalists
- 2012-15 Past Secretary, American Society of Naturalists
- 2010-12 Secretary, American Society of Naturalists
- 2006-09 Ecological Society of America Mercer Award Committee

Professional Services: Advisory Boards

- 2020- Big Biology Podcast Advisory Board
- 2021- FORCE11 Research Data Publishing Ethics Working Group (w. Dryad and COPE).

Professional Services: Conference and Workshop Organizer

- 2023 Co-Chair, Gordon Research Conference on Speciation, Italy
- 2021 Co-Chair, Gordon Research Conference on Speciation, Italy (cancelled)
- 2020 Moderator, NSF EDGE Workshop, Plant and Animal Genome Conference, San Diego CA
- 2019 Subject Guide (Moderator), NSF Reintegrating Biology Workshop, Austin TX
- 2019 Co-Organizer, “NSF Research Coordination Network: Evolution in Changing Seas” working group meeting, August 2019, Shoals Marine Laboratory, Maine.
- 2019 Organizer, “NSF IOS-EDGE PI meeting:”, National Science Foundation, Washington DC. April 28-29.
- 2018 Co-organizer of symposium, “Maladaptation”. European Society for Evolutionary Biology. Montpellier, France.
- 2018 Co-organizer of symposium, “Gene Regulatory Evolution in Natural Populations”. European Society for Evolutionary Biology. Montpellier, France.
- 2018 Co-organizer of symposium, “A continuum of parallel evolution”. European Society for Evolutionary Biology. Montpellier, France.
- 2018 Organizer (with Judith Bronstein) “Editor’s panel”. American Society of Naturalists meeting, Asilomar CA, January 2018. Opening event of the conference.
- 2018 Organizer (with Judith Bronstein) “The American Naturalist: past and future”. American Society of Naturalists meeting, Asilomar CA, January 2018.
- 2017 Organizer, Symposium on “Host-Parasite Co-Evolution”, Society for Molecular Biology and Evolution meeting, Austin TX July 2017
- 2016, 2018 Member, Committee for the Asilomar Conference of the American Society of Naturalists
- 2014 Organizer, Symposium on Microbial communities and metagenomics, University of Texas at Austin
- 2011-14 Chair, Committee for the 2014 Asilomar Conference of the American Society of Naturalists
- 2011 Co-Organizer, Symposium on the Ecological Effects of Intraspecific Trait Variation, Ecological Society of America Meeting, Austin TX. (Lead Organizer, Mark Novak)
- 2009-11 Organizer, Working group on the Ecological effects of intraspecific niche variation, National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville TN, 2009-2011; 3 meetings. (Co-organizers, Volker Rudolf and Kevin McCann)

- 2005-07 Co-Organizer, Working group on the Ecology of Fear, National Center for Ecological Analysis and Synthesis (NCEAS) 2005-2007; 3 meetings. (Lead organizer, Evan Preisser)
- 2005 Co-Organizer, Symposium on the Evolution of Centrarchid Fishes. Society for Ichthyology and Herpetology. Tampa FL 2005.

Professional Services: Manuscript Reviewing

- 2001 Journal of Fish Biology
- 2002 Frontiers in Ecology and the Environment; Journal of Fish Biology; Nature
- 2003 Ecology; Evolution; Oecologia
- 2004 American Naturalist; Ethology; Evolution (3); Journal of Fish Biology; Proceedings of the National Academy of Sciences
- 2005 Biological Journal of the Linnean Society; Behaviour; Behavior Ecology and Sociobiology; Ecology Letters; Ecology; Evolution (4); Journal of Theoretical Biology; Oecologia; Proceedings of the National Academy of Sciences; Science; Transactions of the American Fisheries Society (2); 1 textbook chapter; 1 book chapter
- 2006 American Naturalist; Behavioral Ecology (2); Behavior Ecology and Sociobiology; Ecology Letters; Evolution (3); Marine Ecology Progress Series; Nature; Proceedings of the National Academy of Sciences; Proceedings of the Royal Society of London; Oikos
- 2007 American Naturalist; Behavioral Ecology (3); Biology Letters (2); Ecology (2); Ecology Letters (2); Evolution (2); Evolutionary Applications; Evolutionary Ecology; Frontiers in Zoology; Journal of Animal Ecology; Journal of Theoretical Biology; Nature; Proceedings of the National Academy of Sciences; Proceedings of the Royal Society of London (3); Trends in Ecology and Evolution
- 2008 Behavioral Ecology; Biological Journal of the Linnean Society; Biology Letters; BMC Evolutionary Biology (2); Ecology (2); Ecology Letters; Evolutionary Ecology; Evolution (3); Genetica; Molecular Ecology; Proceedings of the Royal Society of London Quarterly Review of Biology
- 2009 American Naturalist; Animal Behavior; Behavioral Ecology; Biology Letters (2); Copeia (2); Ecology; Ecology Letters; Evolution (4); Evolutionary Ecology Research; Journal of Animal Ecology; Molecular Ecology; Oikos; PLOS One; Proceedings of the Royal Society of London Ser. B (3); Science; Trends in Ecology and Evolution
- 2010 BMC Evolutionary Biology; Ecology Letters; Evolution (5); Functional Ecology; Heredity; Journal of Animal Ecology; Journal of Evolutionary Biology (2); Journal of Fish Biology; Marine Ecology Progress Series; Oikos (3); Proceedings of the National Academy of Sciences; Proceedings of the Royal Society of London Series B (3)
- 2011 Biological Journal of the Linnean Society; Current Zoology; Ecology Letters; Evolution (6); Functional Ecology; Journal of Animal Ecology; Molecular Ecology (2); Nucleic Acids Research; Organisms Diversity and Evolution; Proceedings of the National Academy of Sciences; Trends in Ecology and Evolution
- 2012 Annales Zoologica Fennici; Biology Letters; Ecology; Ecology Letters; Evolutionary Ecology Research (2); Evolution (3); Freshwater Biology; Journal of Animal Ecology; Journal of Evolutionary Biology; Molecular Ecology (2), Proceedings of the Royal Society of London Series B; PLoS Computational Biology; Science (4)
- 2013 BMC Evolutionary Biology; Evolutionary Ecology Research; Evolution (2); Molecular Ecology (2); Journal of Evolutionary Biology (2); Nature Communications; Proceedings of the Royal Society Ser B (3)

- 2014 Ecography, Ecology Letters, Evolution Medicine and Public Health (2); Functional Ecology, Molecular Ecology, Nature Communications (5); Oecologia; Oikos; Parasites & Vectors; Proceedings of the Royal Society Ser B, Science.
- 2015 Biology Letters; Current Biology (3); Disease Models & Mechanisms; Ecology; Ecology and Evolution; Ecology Letters; Evolution (3); Evolutionary Ecology Research; Molecular Ecology (4); Oikos; Nature Communications, Proceedings of the National Academy of Sciences.
- 2016 Axios (2); Current Biology; Ecology; Evolutionary Applications; Genetics; Genome Biology and Evolution; PNAS (3), Proceedings of the Royal Society of London Series B; Oikos; Oxford University Press book review (On 3 editorial boards this year, so declined most review requests)
- 2017 Current Biology (2); Ecology Letters, Evolutionary Applications, Functional Ecology (2), Genome Biology and Evolution (2), Journal of Animal Ecology, Molecular Ecology (2), Nature Ecology & Evolution (2), Oikos, TREE
- Reduced reviewing while Editor-In-Chief of The American Naturalist (~300 papers per year)*
- 2019 Science
- 2020 Current Biology
- 2021 Parasites & Vectors; Annals of Medicine (2)

Professional Services: Grant Proposal Reviewing

- 2004 National Science Foundation (2)
- 2005 National Science Foundation; Netherlands Organization for Scientific Research
- 2006 National Science Foundation
- 2007 Austrian Science Fund; Netherlands Innovational Research Incentives Scheme; National Science Foundation
- 2008 Czech Science Foundation; National Science Foundation; University of Texas Faculty Research Grants;
- 2010 National Science Foundation, Swiss Science Foundation
- 2011 Netherlands Organization for Scientific Research, National Science Foundation, National Science and Engineering Research Council of Canada, Natural Environment Research Council of the United Kingdom, European Research Council Advanced Grants.
- 2012 National Geographic; National Science Foundation (3), Icelandic Research Fund for Graduate Students
- 2013 European Research Council, National Science Foundation (3)
- 2014 Marzden Fund, New Zealand; National Science Foundation (3); Danish Council for Independent Research, National Geographic Society
- 2015 National Science Foundation (2); Swedish Wallenberg Academy Fellow Program, Icelandic Research Fund
- 2016 National Science Foundation (4); Research Foundation Flanders, National Geographic
- 2017 National Science Foundation (2); European Research Council; Swiss Science Foundation
- 2019 National Science Foundation Excellence in Research Track of the Historically Black Colleges and Universities Undergraduate Program (2); Genome Canada Reviewer; NSERC Canada Discovery Grant; Swiss National Science Foundation.
- 2020 European Research Council; National Science Foundation
- 2021 United Kingdom Biotechnology and Biological Sciences Research Council

Professional Services: Grant Panel Participation

- 2009 National Science Foundation, Division of Environmental Biology Doctoral Dissertation Improvement Grant Panel
- 2010 Howard Hughes Medical Institute Undergraduate Science Education Program Panel
- 2011 Howard Hughes Medical Institute Pre-doctoral Fellowship Panel
- 2011 Howard Hughes Medical Institute EXROP Panel
- 2012 Howard Hughes Medical Institute Pre-doctoral Fellowship Review Panel
- 2013 Howard Hughes Medical Institute Undergraduate Science Education Program Panel
- 2014 Howard Hughes Medical Institute Undergraduate Science Education Program Panel
- 2015 Howard Hughes Medical Institute International Student Research Fellowships Panel
- 2018 Howard Hughes Medical Institute EXROP Panel
- 2018-21 European Science Foundation College of Expert Reviewers
- 2020 Blavatnik Regional Awards for Young Scientists Review Panel
- 2021 Blavatnik Regional Awards for Young Scientists Review Panel

Professional Services: Promotion Reviews & External Reviews

- Habilitation review for 3 German universities
- Tenure review letters for faculty at 21 U.S. universities and 2 U.K. universities.

Community Service

- 2019-21 Coach, First Lego League Robotics Team, Glastonbury CT (six 6th grade girls)
- 2014 Center for Excellence in Education, Teacher Enrichment Program, “Bite of Science” Instructor at the Austin Independent School District Science and Health Resource Center. Dinner speaker to ~30 high school STEM teachers from AISD and surrounding school districts. Talked about my research and career skills needed to enter research.
- 2014-18 Science Fair judge, Brykerwoods Elementary School.
- 2014 Science Monday, Brykerwoods Elementary School. Hands-on demonstration comparing ape, human, and Hominid fossil cranial anatomy.
- 2014 Visiting speaker, Brykerwoods Elementary School, “Wild Science”, for Marine Systems unit.
- 2009 Testified before State Board of Education regarding revisions to Texas Essential Knowledge and Skills requirements for coverage of evolution.
- 2009 Lecture for Evolution Weekend, a national event where scientists speak to religious congregations. Congregation Beth Shalom, Corpus Christi, Texas
- 2008 Wrote open letter to Texas Education Commissioner Robert Scott, protesting the forced resignation of Chris Comer, Texas Science Curriculum Director, over her public support of evolution education. Collected >200 signatures on the letter.
- 2008 Guest Lecture, Austin Journal Club (group of area physicians), “The evolution of creationism, teaching evolution, and why it matters”
- 2008 Led discussion with a religious group of Austin-area physicians regarding evolution and religion.

- 2008 Instructor, SoundVision Science Literacy Training, a science journalism training program for mid-career National Public Radio reporters. Lectured on current topics in evolutionary biology.
- 2008 Co-founder, 21st Century Science Coalition (www.texasscientists.org) to put pressure on the State Board of Education to improve evolution education in the state curriculum.
- 2008 Op-Ed Published in Waco Tribune and Austin American Statesman supporting Evolution Education in Texas
- 2007 Lead Judge, Southwest Regional Siemens Competition in Science Math and Technology
- 2006 Guest Lecture, Kealing Middle School, Austin TX
- 2006 Panelist for public debate on Intelligent Design
- 2005 Judge, Southwest Regional Siemens Competition in Science Math and Technology

LECTURES AND PRESENTATIONS

Invited Departmental Seminars

- 2021 Dartmouth College “An evolutionary Phyrrie Victory”
- 2021 Living Norway Seminar, Norsk Institutt for Naturforskning, “An editorial perspective on data archiving”
- 2021 International Research School in Applied Ecology, Norway “Individual variation in evolutionary ecology”
- 2021 Boston University (Zoom) “An evolutionary Phyrrie Victory”
- 2021 Universite de Montpellier, France (Zoom), “An evolutionary Phyrrie Victory”
- 2021 University of California Berkeley (Zoom), “Dobzhansky-Muller Revisited”
- 2020 University de Laval, Quebec (Zoom), “An evolutionary Phyrrie Victory”
- 2020 EcoEvoSeminars Youtube Lecture (Zoom), “A co-evolutionary Phyrrie Victory” (<https://www.youtube.com/watch?v=SAgYQeTHS94&t=16s>)
- 2020 Yale University (Feb 5) “A co-evolutionary Phyrrie Victory”
- 2019 von Hofsten lecture, University of Uppsala (Oct 3-5) “A co-evolutionary Phyrrie Victory”
- 2019 University of Bern, Switzerland (Oct 2-3) “A co-evolutionary Phyrrie Victory”
- 2019 Chinese Academy of Sciences, Beijing , China (upcoming, Nov 2-3)
- 2019 University of Massachusetts, Amherst “A co-evolutionary Phyrrie Victory”
- 2019 University of Calgary “Variation within populations: why does it persist, why does it matter?” Darwin Day Public Lecture
- 2018 Williams College “Variation within populations: why does it persist, why does it matter?”
- 2018 Okinawa Institute of Science and Technology, “Evolution of a costly immune defense”
- 2018 National Institute of Genetics, Mishima, Japan, “Evolution of a costly immune defense”
- 2017 University of Wyoming. “Honey, I Shrunk the Tapeworms!”
- 2017 University of Rochester “Honey, I Shrunk the Tapeworms!”
- 2016 University of Connecticut. Title: “The evolutionary ecology of a host and its missing parasite”
- 2016 University of California San Diego. “Evolutionary Déjà vu?”
- 2016 Cornell University. . “The Things Unseen: the evolutionary ecology of a host and its missing parasite”
- 2015 Princeton University. “The Things Unseen: the evolutionary ecology of a host and its missing parasite”
- 2015 University of Indiana, Bloomington. David Starr Jordan Prize Lecture
- 2015 University of Leipzig “Variation within populations: where does it come from and why should we care?”
- 2014 University of Texas at Austin, Population Biology Seminar: “Evolutionary immunology of threespine stickleback”
- 2014 Alcohol and Addiction Seminar Series, University of Texas at Austin “Environmental and genetic control of the gut microbiota of a wild vertebrate”
- 2014 University of North Carolina, Chapel Hill “Wild immunology” (postponed)
- 2013 University of Indiana, “Evolutionary perspectives on immunology”
- 2012 University of Texas (Promotion Seminar), “The evolutionary ecology of within population variation”

- 2012 University of Oregon, "Evolutionary immunology of threespine stickleback"
- 2012 University of California at Davis "Habitat choice drives adaptation"
- 2011 University of Pittsburgh "Habitat choice drives adaptation"
- 2010 Tulane University, New Orleans LA "Sympatric speciation in threespine stickleback: why NOT?"
- 2010 Max Planck Institute for Evolutionary Biology, Ploen, Germany. "Sympatric speciation in threespine stickleback: why NOT?"
- 2010 University of Chicago, "Sympatric speciation in stickleback: all dressed up and nowhere to go?"
- 2009 EAWAG, Switzerland "Between-population variation in threespine stickleback"
- 2009 University of Bern, Switzerland, "Causes and consequences of niche variation within populations"
- 2009 University of British Columbia "Yes, we are all individuals: Causes and consequences of niche variation"
- 2009 Michigan State University "Yes, we are all individuals: Causes and consequences of niche variation"
- 2008 Guest lecture, UT Austin College of Education, "The Evolution of Creationism"
- 2008 Promotion Seminar, Section of Integrative Biology, University of Texas at Austin, "Diversifying effect of intraspecific competition"
- 2007 Rice University "Yes, we are all individuals: the ecology and evolution of within-population niche variation"
- 2007 McGill University "Does intraspecific competition promote genetic and phenotypic variation?"
- 2007 Texas A&M University "Diversifying effect of intraspecific competition"
- 2007 University of Calgary "Diversifying effect of intraspecific competition"
- 2007 University of Guelph "Diversifying effect of intraspecific competition"
- 2006 National Center for Ecological Synthesis and Analysis "A rose is a rose is a rose, but is a stickleback a stickleback?"
- 2006 State University of New York, Stony Brook "Niche variation in stickleback populations"
- 2005 Texas State University, San Marcos "Evolution of post-mating isolation in sunfish"
- 2005 Population Biology Seminar Series, UT Austin. "Evolution of post-mating isolation in sunfish"
- 2005 Speciation seminar, University of Uppsala, Sweden "Diversifying effect of intraspecific competition"
- 2004 University of Tennessee at Knoxville "Diversifying effect of intraspecific competition"
- 2004 University of California at Davis. Merton Love Award Talk "Multiple perspectives on the evolution of biodiversity: species richness, ecological variation, and morphological diversity"
- 2004 University of New Mexico, "Diversifying effect of intraspecific competition"
- 2003 Department of Integrative Biology, University of Texas at Austin. "Diversifying effect of intraspecific competition"
- 2003 Center for Population Biology Seminar, University of California at Davis. "Diversifying effect of intraspecific competition"

- 2001 Center for Population Biology Seminar, University of California at Davis. “Diversifying effect of intraspecific competition”

Colloquia and Workshop Talks (all invited)

- 2021 Keynote speaker: International Research School for Applied Ecology, Oslo, August
- 2021 Plenary speaker, Council of Scientific Editors, May, debate with Dr. Elizabeth Bik about editorial approaches to handling whistleblower complaints
- 2019 Evolution in Changing Seas Research Coordination Network Conference, Shoals Marine Lab, “CRISPR Cas9 and non-model organism genetics”
- 2019 Gordon Research Conference on Speciation, Ventura CA. Organizer, session on the speciation continuum.
- 2018 Institute for Systems Genomics, University of Connecticut
- 2018 Ecology and Evolution of Antagonistic and Mutualistic Interactions. Castle Ebernberg, Germany
- 2018 American Society of Naturalists 150th Anniversary, Asilomar CA. **YE Stuart, DI Bolnick** “Parallel evolution through 100 years of The American Naturalist” in Symposium on American Naturalist at 150.
- 2018 American Society of Naturalists 150th Anniversary, Asilomar CA. **DI Bolnick** “The Anna Karinena Principle and maladaptation” in Symposium on Maladaptation
- 2015 Workshop on Maladaptation, Galt Nature Preserve, Quebec. **D.I. Bolnick** “The Anna Karinena Principle of Maladaptation”
- 2015 Eco-Evolutionary Dynamics Workshop, Yale University. **D.I. Bolnick** “The evolutionary ecology of trait variance”
- 2014 Jacques Monod Conference: Infectious diseases as drivers of evolution: the challenges ahead. Brest, France. “MHC Class II jointly regulates helminth parasites and gut microbial symbionts”
- 2014 Ecoimmunology Research Coordination Network Conference. Woods Hole, MA. **Bolnick, DI.**, “Local adaptation as a tool for finding immunologically relevant genetic diversity”
- 2014 Center for Computational Biology Symposium on Microbiota and Metagenomics, Austin TX. “Gut Microbiota depend on multi-way interactions between host genotype, sex, and environment in a wild vertebrate population”
- 2014 American Society of Naturalists, Asilomar CA. “Deep matters: habitat choice and depth gradients in phenotypes of threespine stickleback” in symposium on “Microgeographic adaptation”
- 2011 Graduate Student Symposium keynote speaker, University of Toronto system. "Adaptation without natural selection?"
- 2010 Society for the Study of Evolution, Portland OR. Symposium on sexual dimorphism and natural selection. "Sexual dimorphism and disruptive selection in threespine stickleback"
- 2007 European Society for Evolutionary Biology, Uppsala, Sweden, “Habitat choice and adaptive divergence at multiple spatial scales in threespine stickleback”, in the symposium on “Phenotype-dependent habitat choice”.
- 2006 Workshop on Genetic and Evolutionary Diversification, Erwin Schrodinger Institute for Mathematical Physics, Vienna. “Diet variation in natural populations: implications for frequency-dependent selection”

- 2006 University of Michigan, Young Scientists' Symposium "Diversifying effect of intraspecific competition"
- 2005 Symposium on the "Evolutionary biology of Centrarchidae" at the meeting of the American Society of Ichthyology and Herpetology, Tampa, FL. **D.I. Bolnick** "Tempo of reproductive isolation in sunfish" (co-organizer of Symposium, with Tom Near and Peter Wainwright).
- 2005 European Society for Evolutionary Biology, Krakow, Poland. Invited speaker for symposium titled: "Genetic diversification by frequency-dependent selection: theoretical approaches and empirical facts". Talk title: "Empirical tests of frequency-dependence and disruptive selection"

Conference Speaker Presentations (Bold indicates speaker)

- 2021 Satellite SMBE genetics of vertebrate immune evolution, D. Bolnick. "Evolution of fibrosis in stickleback as a costly immune defense against cestode infection"
- 2021 virtual Evolution **Lauren Fuess** and D. Bolnick. "Single cell transcriptomics reveal microevolution of immune cells across populations of three-spined stickleback (*Gasterosteus aculeatus*)"
- 2021 virtual Evolution **Amanda Hund** and D. Bolnick. "Exploring the evolution of parasite resistance and coinfection in stickleback using gene expression"
- 2021 virtual Evolution **D. Bolnick**. "The free-rider problem and the evolution of parasite immune suppression"
- 2021 virtual SICB **Lauren Fuess** and D. Bolnick. "Single cell transcriptomics reveal microevolution of immune cells across populations of three-spined stickleback (*Gasterosteus aculeatus*)"
- 2021 American Society of Naturalists Virtual Asilomar Conference. **Lauren Fuess** and D. Bolnick. "Immune gene expression covaries with gut microbiome in stickleback"
- 2020 American Society of Naturalists Asilomar Conference, D. Bolnick. "Eco-evolutionary dynamics of trait variances"
- 2020 American Society of Naturalists Asilomar Conference, **Amanda Hund**, D. Bolnick. "Evolution of fibrosis"
- 2020 American Society of Naturalists Asilomar Conference, **Jesse Weber**, D. Bolnick. "Genetics of resistance to stickleback tapeworms"
- 2020 American Society of Naturalists Asilomar Conference, **Stephen deLisle**, Sebastian Schreiber, D. Bolnick. "Ecological effects of sexual dimorphism"
- 2020 American Society of Naturalists Asilomar Conference, **Samuel Fleischer**, Sebastian Schreiber, D. Bolnick. "Eco-evo-immuno dynamics"
- 2019 Evolution Meeting, Providence RI, **L. Fuess**, J. Weber, N. Steinel, S. den Haan, and **D.I. Bolnick**. "Transcriptional analysis of the effects of genetic variation on response of *Gasterosteus aculeatus* (three spined stickleback) to a cestode parasite"
- 2019 Ecological Society of America meeting, Louisville KY, **DI Bolnick**. "Scale-dependent effects of host traits on parasite metacommunity structure"
- 2019 Evolution meeting, Providence RI **DI Bolnick**. "Goldilocks effect: intermediate-sized lakes promote ecological diversity"
- 2019 NSF EDGE PI Meeting 2019, Washington DC **DI Bolnick**. "Bringing genetics into eco-evolutionary dynamics"
- 2019 Gordon Conference on Speciation, Ventura CA. **DI Bolnick** and A. Dagilis. "Speciation continuum?"
- 2018 Evolution 2018, Montpellier **D. Rennison**, Y.E. Stuart, **DI Bolnick**, and K. Pichel "Ecological factors and genome structure contribute to repeatable patterns of genomic

- divergence in threespine stickleback “
- 2018 Evolution 2018, Montpellier **C.E. Parent**, J. Heiling, DI Bolnick “Effect of prior selection history on the probability of population extinction”
- 2018 Evolution 2018, Montpellier. **D.I. Bolnick**, J. Weber, and N. Steinel “Parallel evolution of fibrosis in stickleback confers resistance to tapeworms at a severe cost to female fecundity”
- 2018 Evolution 2018, Montpellier **Y.E. Stuart**, A.P. Hendry, K. Peichel, D.I. Bolnick, “Parallel and non-parallel evolution of stickleback”
- 2018 American Association for Immunology. **N.Steinel**, and D.I. Bolnick.
- 2018 American Society of Naturalists, Asilomar. **D.I. Bolnick**. 150 Years of The American Naturalist.
- 2018 American Society of Naturalists, Asilomar. **D.I. Bolnick**. The Anna Karenina Principle of maladaptation.
- 2018 American Society of Naturalists, Asilomar. **Y.E. Stuart**, and D.I. Bolnick “Along the historical continuum of parallel evolution”
- 2017 Society for Molecular Biology and Evolution, Austin. **DI Bolnick**, YE Stuart, “Genomic and phenotypic repeatability of divergence between 16 pairs of lake and stream stickleback”
- 2017 Society for Molecular Biology and Evolution, Austin. **Dagilis, A.**, and DI Bolnick. The Spectrum of Epistasis and its Consequences for Hybrid Fitness and Speciation
- 2017 Asociacion Espanola de Ecologia Terrestre, Seville. A. **Edelaar**, P. Banos-Villalha, D. Quevedo-Colmeda, D. Bolnick, and G. Escudero. “A novel conceptual framework to understand adaptive evolution in its ecological and historical contexts”
- 2016 Evolution Meeting, Austin TX. **Shanfelter, A.F.**, L.A. Nell, Y.E.Stuart, J.Weber, D.I. Bolnick, M.A. White “The evolution of fine-scale recombination across the threespine stickleback genome”
- 2016 Evolution Meeting, Austin TX. **Steinel, N.**, J. Weber, W. Shim, and D. Bolnick. “Evolution of teleost adaptive immunity: characterization of the melano-macrophage center and parasite-induced immunoregulation”
- 2016 Evolution Meeting, Austin TX, **Weber, J.** N Steinel W Shim, and D Bolnick. “How a fish lost its worm: tapeworm prevalence in threespine stickleback linked to heritable immune variation and parasite growth”
- 2016 Evolution Meeting, Austin TX, **Stuart, YE**, C. Peichel, A. P. Hendry, D.I. Bolnick “Contrasting effects of ecology and genetics generate a continuum of parallel evolution in threespine stickleback”
- 2016 Evolution Meeting, Austin TX, **Bolnick, DI** “Triangulating the genetic basis of host-parasite coevolution through genetic mapping, population genomics, and transcriptomics”
- 2016 American Society of Naturalists, Asilomar CA, **C.D. Brock**, Bolnick D.I., “The visual ecology of microclines in male stickleback color”
- 2016 American Society of Naturalists, Asilomar CA, **Bolnick D.I.**, “The ecological and genetic factors shaping a stickleback parasite metacommunity”
- 2015 Stickleback meeting 2015, Stonybrook NY, **Bolnick, D.I.** “Deep matters: microclines in male traits across a surprisingly narrow gradient of nest depths”
- 2015 Evolution meeting 2015, Guaruja, Brazil **Travis Ingram**, Bolnick, D.I. “How strong is assortative mating within stickleback populations?”
- 2015 Evolution meeting 2015, Guaruja, Brazil **Bolnick, D.I.** “Evolution of generalized host resistance and specialized parasite immune escape”

- 2015 Howard Hughes Medical Institute Science Meeting, **Bolnick, D.I.** “Geographic variation in vertebrate immune function” (INVITED)
- 2014 American Society of Naturalists, Asilomar CA, **Bolnick, DI** “Deep matters: microgeographic phenotypic variation in stickleback” (INVITED)
- 2013 Howard Hughes Medical Institute Science Meeting, **Bolnick, D.I.** “Wild immunology” (INVITED)
- 2013 Society for the Study of Evolution, Snowbird Utah, **Bolnick D.I.,** W.E. Stutz, L.K. Snowberg. “Does genetic variation in the Major Histocompatibility Complex (MHC) of stickleback influence gut microbiota composition?”
- 2013 Society for the Study of Evolution, Snowbird Utah, **Jiang, Y.,** D.I. Bolnick, M. Kirkpatrick. “Assortative mating in animals”
- 2013 Society for the Study of Evolution, Snowbird Utah, **Weber, J.,** and D.I. Bolnick. “Is ecological speciation accompanied by genetic divergence in immune function?”
- 2012 David and Lucille Packard Foundation, Monterey CA, **Bolnick, D.I.** “Adaptation by choice” (INVITED)
- 2012 Society for the Study of Evolution, Ottawa Canada, **Bolnick, D.I.** “Diet effects on the stickleback microbiome”
- 2012 Society for the Study of Evolution, Ottawa Canada, Falk, J., **C.E. Parent,** and D.I. Bolnick “Does unequal selection regime lead to asymmetrical reproductive isolation? An experimental test using *Tribolium castaneum* flour beetles”
- 2012 Society for the Study of Evolution, Ottawa Canada, **Snowberg, L.K.** and D.I. Bolnick “Partitioning the effects of spatial isolation, nest habitat, and individual diet in causing assortative mating within a population of threespine stickleback”
- 2012 Society for the Study of Evolution, Ottawa Canada, **Stutz, W.E.** and D.I. Bolnick “Local adaptation to parasites in parapatric populations of threespine stickleback”
- 2012 Society for the Study of Evolution, Ottawa Canada, **Jiang, Y.** and D.I. Bolnick “Divergent habitat preference mediated by divergence in rheotactic behavior between parapatric lake and stream threespine stickleback (*Gasterosteus aculeatus*)”
- 2011 Ecological Society of America, Austin, TX. **Bolnick, D.I.,** P. Amarasekare, M.S. Arauho, R. Burger, J. Levine, M. Novak, V. Rudolf, S. Schreiber, MC. Urban, D.A. Vasseur. "Why does intraspecific trait variation matter in ecology?"
- 2011 Ecological Society of America, Austin, TX. **S. Schreiber,** R. Burger, D.I. Bolnick. "The community effects of phenotypic and genetic variation within a predator population."
- 2011 Ecological Society of America, Austin, TX. Snowberg, L.K. K. Hendrix, **D.I. Bolnick.** Evidence for population level variability in individual ecological specialization in the threespine stickleback (*Gasterosteus aculeatus*)"
- 2011 Society for the Study of Evolution, Norman, OK. **Warren, D.,** M. Brandley, D.I. Bolnick. "The Where and Why of Caribbean Reef Fish Distributions: Citizen Science in the Sea"
- 2011 Howard Hughes Medical Institute Science Meeting **Bolnick, D.I.** "Host immune evolution in complex parasite communities" (INVITED)
- 2010 First European Conference on Speciation, International Institute for Applied Systems Analysis (IIASA), Laxenburg Austria **Bolnick, D.I.** "Sympatric speciation in threespine stickleback: why NOT?" (INVITED)

- 2010 Society for the Study of Evolution, Portland OR. **Parent, C.E.**, D. Agashe, DI Bolnick "Contrary to expectations, intraspecific competition suppresses niche width in flour beetles".
- 2010 Society for the Study of Evolution, Portland OR. **Berner, D.**, W.E. Stutz, D.I. Bolnick. Foraging trait (co)variances in stickleback evolve deterministically and do not predict trajectories of adaptive diversification".
- 2009 Association for the Study of Animal Behavior Winter Conference, London, UK **Bolnick, D.I.** "Causes and consequences of niche variation within populations" (INVITED)
- 2009 Howard Hughes Medical Institute, **Bolnick, D.I.** "Maintenance of genetic diversity within populations" (INVITED)
- 2008 David and Lucille Packard Foundation, Annual Meeting for Packard Fellows, Park City Utah. **Bolnick, D.I.** "Incorporating within-population variation into ecology". (INVITED)
- 2008 University of Koln, Germany, keynote speaker at the Graduate Meeting of the Ecology Section of the German Zoological Society, on The ecology of specialized individuals in populations: prerequisites, constraints, development, relevance. **Bolnick, D.I.** "“Yes, we are all individuals: the ecology and evolution of within-population niche variation” (INVITED)
- 2008 Society for the Study of Evolution, Minneapolis MN. **D.I. Bolnick**, "Predictable patterns of disruptive selection in three-spine stickleback"
- 2008 Society for the Study of Evolution, Minneapolis MN. **Agashe, D** and D.I. Bolnick, "Does genetic variation facilitate niche expansion?"
- 2007 Society for Integrative and Comparative Biology, San Antonio, TX. **D.Agashe**, and DI Bolnick, "Genetic variation facilitates niche width expansion"
- 2007 Ecological Society of America Meeting, San Jose, CA. **Bolnick, D.I.** "Quantitative patterns of niche variation: more generalized populations are also more variable"
- 2007 Society for Integrative and Comparative Biology, San Antonio, TX. **L. Snowberg** and DI Bolnick, "Assortative mating by diet in threespine stickleback".
- 2006 Ecological Society of America. **E.L. Preisser** and D.I. Bolnick. "Multifarious mechanisms of non-consumptive effects in predator-prey interactions"
- 2005 Dobzhansky Award / ASN Young Investigator Award address, Fairbanks AK **Bolnick, D.I.** "Diversifying effect of intraspecific competition" (INVITED)
- 2005 Society for Study of Evolution / American Society of Naturalists meeting, Fairbanks AK **D.I. Bolnick** "Tempo of reproductive isolation in sunfish"
- 2004 Ecological Society of America meeting, Portland, OR **D.I. Bolnick** "Using optimal foraging theory to explain how population density affects the degree of individual specialization"
- 2004 Society for Integrative and Comparative Biology, New Orleans, LA **D.I. Bolnick** "Comparative approaches to intra-population niche variation"
- 2003 Society for Study of Evolution, Chico, CA **D.I. Bolnick** "Does intraspecific competition generate disruptive selection?"
- 2003 Society for Study of Evolution, Chico, CA. **Tom Near**, DI Bolnick and PC Wainwright, "Strategies for fossil calibration of molecular clocks in sunfish and basses (Perciformes: Centrarchidae), a multi-gene approach"
- 2003 Society for Study of Evolution, Chico, CA. **M. Alfaro**, DI Bolnick, PC Wainwright, "Many-to-one mapping in the 4-bar linkage of wrasses"

- 2002 American Society of Naturalists. Banff, Canada. **D.I. Bolnick** “Does intraspecific competition generate disruptive selection?”
- 2001 Society for Study of Evolution. Knoxville, TN. **D.I. Bolnick** “Intraspecific competition and niche width evolution”
- 2000 California Population and Evolutionary Genetics Meeting, Santa Cruz, CA. **D.I. Bolnick** “Intraspecific competition drives niche expansion in *Drosophila*”

Contributed Conference Posters (Bold indicates presenting author)

- 2019 Evolution Meeting, Providence RI. **Meghan Maciejewski** and D.I. Bolnick. “Microgeographic variation within stickleback populations”
- 2019 Evolution Meeting, Providence RI. **Mariah Kenney** and D.I. Bolnick. “ Emergence of highly-divergent SNPs along clines from lake to stream stickleback”
- 2019 Evolution Meeting, Providence RI. **Foen Peng** and D.I. Bolnick. “The genetic basis of phenotypical variation in Stickleback's resistance to tapeworm parasite”
- 2019 NSF IOS-EDGE PI Meeting. **Lauren Fuess**, and D.I. Bolnick “Fibroblast culture for experimental genetics in stickleback.”
- 2017 Society for Molecular Biology and Evolution, Austin TX. **Natalie Steinel**, Daniel Bolnick. Melanomacrophage germinal centers: a primitive B-cell germinal center?
- 2017 Society for Molecular Biology and Evolution, Austin TX. **Jesse Weber**, D.I. Bolnick. Dramatic growth suppression of a helminth parasite.
- 2016 Society for the Study of Evolution, Austin TX. **Rebecca Izen**, Y.E. Stuart, D.I. Bolnick. Coarse and Fine-scale phenotypic variation in threespine stickleback.
- 2013 Society for the Study of Evolution, Snowbird Utah, **Coates, J.** (minority undergraduate), Schmerer, M., and D.I. Bolnick
- 2013 David and Lucille Packard Foundation conference, Denver, CO. **Bolnick, D.I.** “Evolutionary perspectives on immunology”
- 2011 Ecological Society of America, Austin, TX. **J.M. Heiling**, C.E. Parent, D.I. Bolnick. "Ecological history and adaptive future: A study of adaptation to stress in *Tribolium castaneum*".
- 2011 Howard Hughes Medical Institute, Jaenalia Farm, VA. **Stutz, W.E.**, and D.I. Bolnick. “Bioinformatic analysis of amplicon sequences of a gene family (MHC)”
- 2011 Ecological Society of America, Austin, TX. **Falk, J.J.**, C.E. Parent, D.A. Agashe, D.I. Bolnick. Poster: "Adaptation to a novel food resource fails to initiate reproductive isolation in laboratory populations of *Tribolium castaneum*"
- 2011 Society for the Study of Evolution, Norman, OK, **Snowberg, L.K.**, and D.I. Bolnick. Poster: "Partitioning the effects of nest habitat and ecological variation on assortative mating within a population of threespine stickleback".
- 2010 David and Lucille Packard Foundation Meeting, **Bolnick, D.I.** "Adaptive evolution of genetic (co)variances" , Monterey CA
- 2009 David and Lucille Packard Foundation Meeting, **Bolnick, D.I.** "Ecological effects of intraspecific variation" , Monterey CA
- 1996 Ecological Society of America, Providence, RI. **D.I. Bolnick** “Drought mediates introgression between two species of willows”

Grant Proposal Applications (not funded) Listing only ones where I was PI or equal partner

DoD (SERDP)	Parsing high-dimensional interactions and exposure regimes of multiple stressors to build predictive capacity for managing natural populations	\$3,600,000	2021-2027	Brady <i>Bolnick</i> <i>Calsbeek</i>
NSF	When is Ecological Speciation possible and when does it fail?	470,400	2008-2010	Bolnick <i>Hendry</i>
NSF	Collaborative research: The tempo of post-mating reproductive isolation in centrarchids	461,440	2008-2010	Bolnick <i>Near</i>
NSF	CAREER: Ecology of individual specialization	\$600,000	2009-2014	Bolnick
NSF	Diet-dependent assortative mating in stickleback	\$350,000	2010-2012	Bolnick
Keck Foundation	Comparative analysis of immune evolution in fishes	\$1,000,000	2014-2018	Bolnick
NIH	Evolution of melano-macrophages in fish	\$2,000,000	2016-2020	Bolnick <i>Steinel*</i>
NSF	Melanopsin in visual signaling in stickleback	\$600,000	2017-2020	Bolnick <i>Larson</i> <i>Brock</i>
NSF	Evolution of trans-species gene regulation in stickleback and their cestode parasite	\$500,000	2017-2019	Bolnick <i>Lohman</i>
NSF	Evolution of trans-species gene regulation in stickleback and their cestode parasite	\$500,000	2016-2018	Bolnick <i>Lohman</i>
NSF	EEID: Ecological and immunological controls of a parasite with a complex lifecycle	\$3,000,000	2017-2021	Bolnick <i>Frank</i> <i>Schreiber</i>
NSF	Collaborative research: Frequency-dependent selection on immigrants	\$1,500,000	2018-2021	Bolnick <i>Urban</i> <i>10 other co-PIs</i>
NSF	Ecological stoichiometry of parasitism in a fish and its cestode	\$700,000	2020-2022	Bolnick <i>Grunberg</i>
European Research Council	Synergy Grant: FITNESS: Forward-in-time natural eco-evolutionary selection study	\$15,000,000	2021-2027	Peichel Bolnick
Moore Foundation	Aquatic symbioses: host-parasite coevolution in a metacommunity	\$1,500,000	2021-2024	Bolnick

*** Resubmitted and funded for Dr. Steinel as PI in her first year as independent faculty**