CURRICULUM VITAE

DANIEL I. BOLNICK

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**EDUCATION**

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| --- | --- | --- | --- |
| **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**

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| **Years** | **Position** | **Department** | **Institution** |
| 2018- | Professor | Department of Ecology and Evolutionary Biology; Institute for System Genomics | University of Connecticut |
| 2018-21 | 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 |

**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.

**CURRENT SOCIETY MEMBERSHIP**

American Society of Naturalists (Secretary of ASN, 2010-2012, Past Secretary 2013-2015, Editor-In-Chief 2018-2021)

Society for the Study of Evolution (Lifetime member)

American Association for the Advancement of Science

Society for Molecular Biology and Evolution

American Association of Immunology

## AWARDS AND HONORS

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| --- | --- | --- | --- |
| **Year** | **Award** | **Institution** | **Description** |
| 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 |
| 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 |

**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, submission expected this fall)*

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*

Fleischer, S., D.I. Bolnick, S.Schreiber. Manuscript. Sick of eating: eco-evo-immuno dynamics of predators and their trophically acquired parasites. Intended for: *Journal of Theoretical Biology*

Haines, G., Y.E. Stuart, D.I. Bolnick, A.P Hendry. Manuscript. Dimensionality of morphometric landmarks influences interpretations of parallelism in lake-stream population pairs of threespine stickleback., Intended for *Functional Ecology.*

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. So you found the gene, now what? Intended for: Molecular Ecology

**Rangel, R.,** D.I. Bolnick, and T. Ingram. Manuscript. Ecological and phenotypic covariates of alloparenting in stickleback.

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

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

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., and D.I. Bolnick. Manuscript. Rapid behavioral diet displacement by threespine stickleback in the presence of competing sculpin. Intended for: Biology Letters

Weber, J., N.C. Steinel, K. S. Shim, B. Lohman, D. Rennison, Y.E. Stuart, and **D.I. Bolnick.** Manuscript. Pathological fibrosis evolved in parallel as an anti-helminthic adaptation in threespine stickleback. Intended for: *Science*.

**In review/revision**

139. 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.*

138. Li, G., Yin, B., Li, J., Wei, W., Bolnick, D.I., Wan, X., Zhu, B., Zhang, Z. In review. Meta-omics analysis brings insights into the bottom-up effects of climate on a small rodent species. *Nature Communications*

137. Maciejewski, M., C. Jiang, Y.E. Stuart, and D.I Bolnick. In review. Microhabitat variation contributes to microgeographic divergence in morphology within lake and stream stickleback. Intended for *Evolution*

136. **Bolnick, D.I.,** K. Ballare, Y.E. Stuart. In review. The Goldilocks effect of lake size on within-population diversity in stickleback. *Ecology Letters*. BioRxiv Preprint: <http://biorxiv.org/cgi/content/short/678276v1>

135. **Bolnick, D.I.,** E.J. Resetarits, K. Ballare, Y.E. Stuart, W.E. Stutz. In review. Scale-dependent effects of geography, host ecology, and host genotype in a stickleback parasite metacommunity. I. species composition and co-occurrence. Intended for: *Ecology. BioRxiv Preprint:* <https://www.biorxiv.org/content/10.1101/672410v1>

134. **Bolnick, D.I.,** E.J. Resetarits, K. Ballare, Y.E. Stuart, W.E. Stutz. In review. Scale-dependent effects of geography, host ecology, and host heterozygosity in a stickleback parasite metacommunity. II. species richness. Intended for: *Ecology. BioRxiv Preprint:* [http://biorxiv.org/cgi/content/short/677161v1](https://nam01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fbiorxiv.org%2Fcgi%2Fcontent%2Fshort%2F677161v1&data=02%7C01%7Cdaniel.bolnick%40uconn.edu%7C660f4ea1b87643c2c38e08d6f64add12%7C17f1a87e2a254eaab9df9d439034b080%7C0%7C0%7C636967198738023541&sdata=d055T0Y1%2B%2BSSRvHBTj2TPIB%2FAOuiT95HduCk6cdMJKk%3D&reserved=0)

133. De Lisle, S., H. Gonzalo, and D.I. Bolnick. In review. Consumer sexual dimorphism promotes coexistence among competing resources. *Ecology*. BioRxiv Preprint: **doi:** <https://doi.org/10.1101/634782>

132. Stockmaier, S., D.I. Bolnick, R.A. Page, and G.G. Carter. In revision. Sickness alters social interactions in a highly social mammal. *Journal of Animal Ecology*

131. Ling, F., **D.I. Bolnick**\*, N.C. Steinel, J. Weber, L. Ma, C. Smith, D. Correa, B. Zhu, G. Wang. In review (revised). The gut microbiome response to helminth infection depends on host sex and genotype. *ISME J \*Co-first author. BioRxiv preprint: doi:* [*https://doi.org/10.1101/608638*](https://doi.org/10.1101/608638)

130. Smocovitis, V.B., and **D.I. Bolnick**, In revision. Trends and Transitions in 150 years of *The American Naturalist.* American Naturalist

129. Edelaar, P., A. Baños-Villalba, D. Quevedo-Colmeda, G. Escudero, **D.I. Bolnick**, and A. Andrade. In review (revised). Adaptation to novel urban habitats via biased dispersal. *Proceedings of the Royal Society of London Ser. B*

128. 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**

127. 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. Accepted pending minor revision. (Non)parallel evolution in lake-stream threespine stickleback at local versus global scales. *Journal of Heredity; BioRxiv:* [*https://www.biorxiv.org/content/biorxiv/early/2019/02/28/564005.full.pdf*](https://www.biorxiv.org/content/biorxiv/early/2019/02/28/564005.full.pdf)

**2019**

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*. <https://dx.doi.org/10.1086/705020>

124. Maciejewski, M., C.Hernandez, and **D.I. Bolnick**. 2019. Greater armor coverage is correlated with higher infection rates in an estuarine population of stickleback. *Evolutionary Ecology Research*

123. Rennison, D.J., Y.E. Stuart, **D.I. Bolnick**, and C.L. Peichel. 2019. Identification of ecological and morphological traits associated with regions of 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. Predictive genomics of speciation via hybrid inviability. *PLoS Genetics* 15: e1008125.

121. Edelaar, P., **D.I. Bolnick**. 2019. Organizing the multiple paths to increased individual and 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. Pryszlak, 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:eaao1729

**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 favoruring 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/qh9GBTA0TscZycEkfcZ8VM/*](http://www.mystatesman.com/news/research-transplanted-fish-can-thrive-offer-hope-for-restoration/qh9GBTA0TscZycEkfcZ8VM/)

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://natureecoevocommunity.nature.com/users/39291-yoel-stuart/posts/16614-parallel-evolution*](https://natureecoevocommunity.nature.com/users/39291-yoel-stuart/posts/16614-parallel-evolution)

[*http://ecoevoevoeco.blogspot.ca/2017/05/the-zombie-grant.html*](http://ecoevoevoeco.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 morphosmace. *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.

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. Demistifying 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

79. **Bolnick, D.I.**, R. Svanback, L.K. Snowberg, P. Hirsch, C. Lauber, G. Caporaso, and R. Knight. 2014. Individual diet has a sex-dependent effect on gut microbiota in wild vertebrates. *Nature Communications*. 5:4500 DOI: 10.1038/ncomms5500DOI: 10.1038/ncomms5500

78. **Bolnick, D.I**., L.K. Snowberg, G. Caporaso, C. Lauber, R. Knight, and W.E. Stutz. 2014. Major Histocompatibility Complex IIB polymorphism influences gut microbiota composition and diversity. *Molecular Ecology* 23:4831-4845.doi: 10.1111/mec.12846 PMID: 24975397

77. **Bolnick, D.I.**, R. Svanback, L.K. Snowberg, P. Hirsch, C. Lauber, G. Caporaso, and R. Knight. 2014. Individuals’ diet diversity influences gut microbial diversity in two freshwater fish (threespine stickleback and Eurasian perch). *Ecology Letters*. 17:979-987. DOI: 10.1111/ele.12301 PMID: 24847735

76. Stutz, W.E., O.L. Lau, and **D.I. Bolnick**. 2014. Contrasting patterns of phenotype-dependent parasitism within and among populations of threespine stickleback. *American Naturalist*. 183:810-825. doi: 10.1086/676005 PMID: 24823824

75. Richardson, J.L., M.C. Urban, **D.I. Bolnick**, and D.K. Skelly. 2014. Microgeographic adaptation and the spatial scale of evolution. *Trends in Ecology and Evolution.* 29: 165-176. doi: 10.1016/j.tree.2014.01.002. PMID: 24560373

**2013**

74. Stuart, Y.E., **D.I. Bolnick**, R. Hopkins. 2013. The unifying wedge. *Evolution.* 68:614-616

73. **Bolnick, D.I.** and S. Otto.2013. The magnitude of local adaptation under genotype-dependent dispersal. *Ecology and Evolution.* 3:4733-4735. doi: 10.1002/ece3.850. PMID: 24363900

72. Zaccarelli, N., **D.I. Bolnick**, and G. Mancinelli. 2013. RInsp: an R package for the analysis of individual specialization in resource use. *Methods in Ecology and Evolution.* 4:1018-1023.

71. Urban, M.C. R. Burger, and **D.I. Bolnick**. 2013. Asymmetric selection and the evolution of extraordinary defences. *Nature Communications.* 4. Article # 2085. doi: 10.1038/ncomms3085. PMCID: PMC3710097.

70. A.P. Hendry, A.P., R.E. Kaeuffer, E. Crispo, C.L. Peichel, **D.I. Bolnick**. 2013. Evolutionary inferences from the analysis of exchangeability. *Evolution*. 67: 3429-3441. doi: 10.1111/evo.12160 PMID: 24299398

69. Jiang, Y., **D.I. Bolnick**, and M. Kirkpatrick. 2013. Assortative mating in animals. *American Naturalist*. 181: E125-E138 doi: 10.1086/670160. PMID: 23669548 (Most-viewed paper published in The American Naturalist in 2013; Also, in 2013 this was among the top 10 most-downloaded papers ever published in the journal).

**2012**

68. **Falk, J.,** C. E. Parent, D. Agashe, and **D.I. Bolnick.** 2012. Drift and selection entwined: asymmetric reproductive isolation in an experimental niche shift. *Evolutionary Ecology Research.* 14:403-423.

67. Edelaar, P. and **D.I. Bolnick**. 2012. Non-random gene flow: an underappreciated force in evolution and ecology. *Trends in Evolution and Ecology.* 27: 659-665. doi: 10.1016/j.tree.2012.07.009. PMID: 22884295

66. Snowberg , L.S., and **D.I. Bolnick.** 2012. Partitioning the effects of spatial isolation, nest habitat, and individual diet in causing assortative mating within a population of threespine stickleback. *Evolution*. 66: 3582-3594. doi: 10.1111/j.1558-5646.2012.01701.x PMID: 23106720

65. Dall, S.R.X., A.M. Bell, **D.I. Bolnick**, and F.L.W. Ratnieks. 2012. An evolutionary ecology of individual differences*. Ecology Letters.* 15: 1189–1198 doi: 10.1111/j.1461-0248.2012.01846.x. PMID: 22897772

64. **Bolnick, D.I.,** and M. Kirkpatrick. 2012. The relationship between intraspecific assortative mating and reproductive isolation between divergent populations. *Current Zoology*. 58: 481-489.

63. Kaeuffler, R., **D.I. Bolnick**, A. Hendry, and C. Peichel. 2012. Parallel and non-parallel aspects of ecological, phenotypic, and genetic divergence across replicate population pairs of lake and stream stickleback. *Evolution*66:402-418. doi: 10.1111/j.1558-5646.2011.01440.x PMID: 22276537

62. Agashe, D., and **D.I. Bolnick.**2012. Dietary niche and population dynamic feedbacks in a novel habitat. *Oikos***.** 121:347-356.

**2011**

61. **D.I. Bolnick** and M.S. Áraujo. 2011. Partitioning the relative fitness effects of diet and trophic morphology in the threespine stickleback. *Evolutionary Ecology Research.*13:439-459.

60. **Bolnick, D.I**. 2011 Sympatric speciation in threespine stickleback: why not? *International Journal of Ecology.*2011: Article ID 942847. *Faculty of 1000 “must read”, FFA = 8*

59. Áraujo, M.A., C. Layman, and **D.I. Bolnick.** 2011. The ecological causes of individual specialization. *Ecology Letters*14:948-958. doi: 10.1111/j.1461-0248.2011.01662.x PMID: 21790933 *Faculty of 1000 “must read”, FFA = 9*

58. Agashe, D., J. Falk, and **D.I. Bolnick*.*** 2011. Effects of founding genetic variation on adaptation to a novel resource. *Evolution*65: 2481–2491. doi: 10.1111/j.1558-5646.2011.01307.x. PMID: 21884051.

57. Ingram, T., W.E. Stutz, **D.I. Bolnick**. 2011. Does intraspecific size variation in a predator affect its diet diversity and top-down control of prey? *PLOS One.* 6:e20782 doi: 10.1371/journal.pone.0020782. PMID: 21687670

56. Schreiber, S.J., R. Bürger, **D.I. Bolnick**. 2011. The community effects of phenotypic and genetic variation within a predator population. *Ecology*. 92: 1582-1593. PMID: 21905425.

55. **Bolnick, D.I.,** P. Amarasekare, M. Áraujo, R. Bürger, J. Levine, M. Novak, V. Rudolf, S. Schreiber, M. Urban, D. Vasseur, 2011. Why intraspecific trait variation matters in community ecology. *Trends In Ecology and Evolution.* 26:183-192. doi: 10.1016/j.tree.2011.01.009. PMCID: 3088364.

**2010**

54. Agashe, D., and **D.I. Bolnick*.*** 2010. Intraspecific genetic variation and competition interact to facilitate niche expansion. *Proceedings of the Royal Society of London, Ser. B.* 277: 2915-2924. doi: 10.1098/rspb.2010.0232. PMID: 20462902

53. Mathews, B., K.B. Marchinko, **D.I. Bolnick,** A. Mazumder. 2010 Specialization of trophic position and habitat use by sticklebacks in an adaptive radiation. *Ecology***.** 91: 1025-1034. PMID: 20462117

52. Berner, D., W.E. Stutz, and **D.I. Bolnick.** 2010. Foraging trait (co)variances in stickleback evolve deterministically and do not predict trajectories of adaptive divergence. *Evolution*. 64:2265-2277. doi: 10.1111/j.1558-5646.2010.00982.x PMID: 20199566

51. Sih, A. **D. I. Bolnick**, B. Luttbeg, J.L. Orrock, S.D. Peacor, L.M. Pintor, E. Preisser, J.S. Rehage, J.R. Vonesh. 2010. Predator-prey naïveté, antipredator behavior, and the ecology of predator invasions. *Oikos***.** 119:610-621.

50. **Bolnick, D.I., T.** Ingram, L.K. Snowberg, W.E. Stutz, O.L. Lau, and **J.S. Paull.** 2010 Ecological release from interspecific competition leads to decoupled changes in population and individual niche width. *Proceedings of the Royal Society of London, Ser. B.* 277: 1789–1797. doi: 10.1098/rspb.2010.0018. PMCID: 20164100.

**2009**

**49. Bolnick, D. I.** 2009 Hybridization and speciation in centrarchids. In Cooke, S., and D. Phillip (eds.), Biology of the Centrarchids.Oxford University Press. Pgs 39-69.

48. Hendry, A., D.I. Bolnick, D. Berner, and C.L. Peichel. 2009 Along the speciation continuum in sticklebacks. *Journal of Fish Biology.* 75: 2000-2036. doi: 10.1111/j.1095-8649.2009.02419.x. PMID: 20738669

47. **Bolnick, D.I.,** and **J. Paull**. 2009. Morphological and dietary differences between individuals are weakly but positively correlated within a population of threespine stickleback. *Evolutionary Ecology Research*. 11:1217-1233. **RETRACTED due to R statistical programming error**

46. **Bolnick**,**D.I.** L. Snowberg, **C. Patenia,** O. L. Lau, W. E. Stutz, and T. Ingram. 2009. Phenotype-dependent native habitat preference facilitates divergence between parapatric lake and stream stickleback. *Evolution*63:2004-2016 doi: 10.1111/j.1558-5646.2009.00699.x. PMID: 19473386. *Faculty of 1000 “recommended”, FFA = 6*

45. Áraujo, M.S., **D.I. Bolnick,** L. A. Martinelli, A.A. Giaretta, and S.F. dos Reis. 2009 Individual-level diet variation in four species of Brazilian frogs. *Journal of Animal Ecology.* 78: 848-856. doi: 10.1111/j.1365-2656.2009.01546.x. PMID: 19486381

44. Baptestini, E.M., M.A.M. de Aguiar, **D.I. Bolnick** and M.S. Araujo. 2009 The shape of the competition and carrying capacity kernels affects the likelihood of disruptive selection*. Journal of Theoretical Biology* 259: 5-11. doi: 10.1016/j.jtbi.2009.02.023. PMID: 19285511

43. E.L. Preisser, **D.I. Bolnick,** and J. Grabowski. 2009. Resource dynamics influence the strength of non-consumptive predator effects on prey. *Ecology Letters*. 12:315-323. doi: 10.1111/j.1461-0248.2009.01290.x. PMID: 19243407

**2008**

42. Svänback, R., and **D. I. Bolnick**. 2008. Behavioral ecology: Food specialization in The Encyclopedia of Ecology. Elsevier. 2: 1636-1642.

41. L. K. Snowberg, and **D.I. Bolnick**. 2008. Assortative mating by diet in a phenotypically unimodal but ecologically variable population of stickleback. *American Naturalist*172:733-739. doi: 10.1086/591692. PMID: 18834291

40. Preisser, E.L., **D.I. Bolnick**. 2008. When predators don't eat their prey: nonconsumptive predator effects on prey dynamics. *Ecology* 89: 2414-2415. PMID: 18831162

39. Peckarsky, B. L., P.A. Abrams, **D.I. Bolnick**, L. Dill, J. Grabowski, B. Luttbeg, J. Orrock, S. Peacor, E.L. Preisser, O. Schmitz, G. Trussell, 2008. Revisiting the classics: considering nonconsumptive effects in textbook examples of predator-prey interactions. *Ecology* 89: 2416-2425. PMID: 18831163

38.Áraujo, M., P.R. Guimaraes, R. Svanbäck, A. Pinheiro, P. Guimaraes, S. Reis, and **D.I. Bolnick**. 2008. Network analysis reveals contrasting effects of intraspecific competition on individual vs. population diets. *Ecology*. 89:1981-1993. PMID: 18705384

37.Preisser, E.L., **Bolnick, D.I.** 2008. The many faces of fear: categorizing the pathways and impacts of nonconsumptive predator effects on prey populations. *PLOS One*3: e2465. doi: 10.1371/journal.pone.0002465. PMID: 18560575

36. **Bolnick, D.I.**, and O.L. Lau. 2008. Predictable patterns of disruptive selection in stickleback in postglacial lakes. *American Naturalist*172:1-11. doi: 10.1086/587805. PMID: 18452402

35. **Bolnick, D. I.,** E. J. Caldera, and B. Matthews. 2008. Evidence for asymmetric migration load in a pair of ecologically divergent lacustrine stickleback populations. *Biological Journal of the Linnean Society.* 94:373-387.

34. **Bolnick, D.I.,** M. Turelli, H. López-Fernández, P.C. Wainwright, and T.J. Near. 2008. Accelerated mitochondrial evolution and "Darwin's corollary": asymmetric viability of reciprocal F1 hybrids in Centrarchid fishes. *Genetics*.178:1037-1048. doi: 10.1534/genetics.107.081364. PMCID: PMC2248366.

33. Kitano, J., **D.I. Bolnick,** D.A. Beauchamp, S. Mori, T. Nakano, and C.L. Peichel. 2008. Reverse evolution of armor plates in the threespine stickleback. *Current Biology*18:769-774. doi: 10.1016/j.cub.2008.04.027. PMID: 18485710

32. **Caldera, E. J.,** and **D. I. Bolnick** 2008. Effects of colonization history and landscape structure on genetic variation within and among lacustrine populations of three-spine sticklebacks in a watershed. *Evolutionary Ecology Research*10:1-24. .

**2007**

31. Áraujo, M., G. Machardo, A. Giaretta, S. Reis, and **D.I.Bolnick**. 2007Intrapopulation diet variation in four frogs (Leptodactylidae) of the Brazilian savannah. *Copeia.*2007: 855-865.

30. H. López-Fernández, and **D.I. Bolnick.** 2007. What causes partial F1 hybrid viability? Incomplete penetrance versus genetic variation *PLOS One*2007 (12): e1294. PMID: 18074018

29. **Bolnick, D.I.** and P. Nosil. 2007. Natural selection in populations subject to a migration load. *Evolution*.61:2229-2243. PMID: 17767592 *Faculty of 1000 “Recommended”*

28. **Bolnick, D.I.**, 2007. Behavioral Genetics: Evolutionary fingerprint of the ‘Invisible Hand’. *Current Biology.* 17:596-597. PMID: 17686430

27. **Bolnick, D. I.,** and B. Fitzpatrick. 2007. Sympatric speciation: models and empirical evidence. *Annual Review of Ecology Evolution and Systematics.* 38:459-487. DOI: 10.1146/annurev.ecolsys.38.091206.095804

26. **Bolnick, D.I.,** R. Svänback, M. Araujo, L. Persson. 2007. Comparative support for the niche variation hypothesis that more generalized populations also are more heterogeneous. *Proceedings of the National Academy of Sciences.*104:10075-10079. PMCID: PMC1891261.

25. Áraujo, M.S., **D.I.Bolnick**, G. Machardo, A. Giaretta, and S. Reis. 2007. Using δ13C stable isotopes to quantify individual-level diet variation*. Oecologia.*152:643-654. PMID: 17356809

24. Svänback, R., and **D. I. Bolnick**. 2007. Intraspecific competition drives increased resource use diversity within a natural population. *Proceedings of the Royal Society of London, Ser. B.*274:839-844. PMID: 17251094

23. **Bolnick, D. I.** 2007. ANOPA: ‘statistical’ systematics for young earth creationists. *Reports of the National Center for Science Education.*26:22-31. (Critique of a paper published by a young-earth creationist in a peer-reviewed scientific journal. Not peer-reviewed).

**2006**

22. **Bolnick, D. I.,** T J. Near, and P. C. Wainwright. 2006. Body size divergence promotes post-zygotic reproductive isolation in centrarchids. *Evolutionary Ecology Research*. 8:903-913.

21. **Bolnick, D. I.** 2006. Multi-species outcomes in a common model of sympatric speciation. *Journal of Theoretical Biology* 241: 734-744. PMID: 16483610

20. **Bolnick, D. I.** and C. E. Miller. 2006. Intergeneric spawning between the Sacramento Perch (*Archoplites interruptus*) and the Rock Bass (*Ambloplites rupestrus*), Teleostei: Centrarchidae. *American Midland Naturalist.* 156: 299-304.

19. Bolnick, D. A., **D. I. Bolnick,** and D. G. Smith. 2006. Asymmetric male and female genetic histories among Native Americans from Eastern North America. *Molecular Biology and Evolution,*23: 2161-2174. PMID: 16916941

**2005**

18. **Bolnick, D. I.** and E. L. Preisser. 2005. Resource competition modifies the strength of trait-mediated predator-prey interactions: a meta-analysis. *Ecology*86:2771-2779.

17. **Bolnick, D. I.**, and T. J. Near. 2005. Tempo of hybrid inviability in centrarchid fishes (Teleostei: Centrarchidae). *Evolution***.** 59:1754-1767. PMID: 16329245 *Faculty of 1000 “Recommended”*

16. Near, T.J., **D. I. Bolnick**, and P. C. Wainwright. 2005. Fossil calibrations and molecular divergence time estimates in centrarchid fishes (Teleostei: Centrarchidae) . *Evolution*.59:1768-1782. PMID: 16329246

15. Svanbäck, R. and **D. I. Bolnick**. 2005. Intraspecific competition affects the strength of individual specialization: an optimal diet theory method. *Evolutionary Ecology Research*. 7: 993-1012.

14. Preisser, E., **D. I. Bolnick**, and M. F. Benard. 2005. Scared to death? The effects of intimidation and consumption in predator-prey interactions. *Ecology***. 86**: 501-509.

13. Alfaro, M.A., **D.I. Bolnick**, and P.C. Wainwright. 2005. Evolutionary consequences of many-to-one mapping of jaw morphology to mechanics in Labrid fishes. *American Naturalist.* 165: e140 – e154. PMID: 15937739

12. Wainwright, P. C., M. E. Alfaro, **D. I. Bolnick**, and C. D. Hulsey. 2005. Many-to-one mapping of form to function: a general principle of organismal design? *Integrative and Comparative Biology*. 45: 256-262. doi: 10.1093/icb/45.2.256. PMID: 21676769

**2004**

11. **Bolnick, D.I.** 2004. Can intraspecific competition drive disruptive selection? An experimental test in natural populations of sticklebacks. *Evolution*. 58:608-618**.** PMID: 15119444.

10. **Bolnick, D. I.**2004. Waiting for sympatric speciation. *Evolution***.** 58:895-899. PMID: 15154564

9. Near, T.J., **D.I. Bolnick**, and P.C. Wainwright. 2004. Investigating phylogenetic relationships of the Centrarchidae (Actinopterygii: Perciformes) using DNA sequences from mitochondrial and nuclear genes. *Molecular Phylogenetics and Evolution.* 32:344-357. PMID: 15186819

8. Alfaro, M.A., **D.I. Bolnick**, and P.C. Wainwright. 2004. The evolutionary dynamics of complex biomechanical systems: an example using the four-bar mechanism. *Evolution*. 58:495-503. PMID: 15119434

**2003**

7. **Bolnick, D.I.**, R. Svanbäck, J.A. Fordyce, L.H. Yang, J.M. Davis, C.D. Hulsey, and M.L. Forister. 2003. The ecology of individuals: incidence and implications of individual specialization. *American Naturalist* 161:1-28. PMID: 12650459.

*Winner of the 2005 Mercer Award from the Ecological Society of America*

*Subject of news article in Discover magazine 2003*

*Interview on National Public Radio’s Science Friday*

6. **Bolnick, D.I.**, and M. Doebeli. 2003. Sexual dimorphism and adaptive speciation: two sides of the same ecological coin. *Evolution*. 57: 2433-2449. DOI: 10.1111/j.0014-3820.2003.tb01489.x PMID: 14686521

**2002**

5. **Bolnick, D.I.**, L.H. Yang, J.A. Fordyce, J.M. Davis, and R. Svanbäck. 2002. Measuring individual-level resource specialization. *Ecology* 83:2936–2941.

4. Ferry-Graham, L. **D.I. Bolnick,** and P.C. Wainwright. 2002. Using functional morphology to examine the ecology and evolution of specialization. *Integrative and Comparative Biology* 42:265-278.

3. **Bolnick, D.I.**, and L. Ferry-Graham. 2002. Optimizing prey capture behaviors to maximize expected net benefit. *Evolutionary Ecology Research* 4:843-855.

**2001**

2. **Bolnick, D.I.** 2001. Intraspecific competition favours niche width expansion in *Drosophila melanogaster*. *Nature* 410:463-466. PMID: 11260712.

**1999**

1. Orians, C.M., **D.I. Bolnick,** B.M. Roche, R. S. Fritz, and T. Floyd. 1999. Water availability alters the relative performance of *Salix sericea, Saliz eriocephala*, and their F1 hybrids. *Canadian Journal of Botany* **77**:514-522**.**

**Software**

S3. Zaccarelli, N., G. Mancinelli, and **D.I. Bolnick** 2012. RInsp. An R package for calculating measures of individual specialization. CRAN. http://cran.r-project.org/web/packages/RInSp/RInSp.pdf

S2. Araujo, M.S., and **D.I. Bolnick**. 2006. VarIso: A program for calculating measures of individual specialization from stable isotope data. <https://webspace.utexas.edu/dib73/TheBolnickLab/Programs/Programs.html>

S1. **Bolnick, D.I.** 2002. Indspec1.0 – a windows application for calculating measures of individual specialization. *Ecological Archives* E083-056-S1. <https://webspace.utexas.edu/dib73/TheBolnickLab/Programs/Programs.html>

**Books** (non-academic)

**Ho, JD., D.I. Bolnick, J.C. Cluett, W.S. Morgan, D.A. Beiler, N. Gerhart, and E.B. Grossmann.** 1995. Farms to Forests, a Naturalists Guide to Hopkins Memorial Forest. Williams College Center for Environmental Studies: Williamstown, MA. 169 pp.

Bolnick, B.R., D.J. Bolnick, and **D.I. Bolnick**. 1999. Waterfalls of the White Mountains. Countryman Press: Woodstock, VT. 318 pp.

Third edition, 2019.

Williams Outing Club. 1996. North Berkshire Outdoor Guide. Williams College, Wiliamstown MA. 182 pp.

**Posts on Ecoevoevoeco blog.**

Collectively these posts have been read by over 25,000 visitors as of January 2019

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](http://ecoevoevoeco.blogspot.com/2017/05/the-zombie-grant.html%202017) 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

* “To swim or not to swim” <http://ecoevoevoeco.blogspot.com/2015/11/to-swim-or-not-to-swim.html> An inside look into the role of habitat choice in population divergence.

**GRANTS**

Total current and past external grants ≈ $12,000,000

(excluding grants to other PIs that did not directly provide funds to my group)

**Applications Pending**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding Agency** | **Title** | **Amount** | **Expected duration** | **PIs**  ***co-PIs*** |
| NSF | STC: Food to Phenotype: Science and Technology to Predict Impact of Human Intake on Health | **$25,000,000** | 2020-2025 | Carrier  *Koppes, Goluch, Lewis, Clark, Hiuttenhower, Jensen, Duggan, Scarpino, Bolnick* |
| Moore Foundation | Using gut-on-a-chip technology to study host-microbiome evolution in the wild | **$5,000,000** | 2020-2022 | Bolnick  *Carrier*  *Milligan-Myhre* |
| Moore Foundation | Changing symbioses during fishes marine to freshwater transitions (Full Proposal Stage) | **$2,000,000** | 2020-2024 | Bolnick |
| NSF-DEB | Do helminth parasites alter ecosystem properties by changing host metabolism and stoichiometry? | **$563,664** | 2020-2022 | Bolnick  *Grunberg* |

**Current Funding**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding Agency** | **Title** | **Amount** | **Period** | **PIs**  ***co-PIs*** |
| NIH-NIGMS | Sexually antagonistic selection in the genome | **$1,900,000**  $70,985 to DIB | 2020-2025 | Kirkpatrick  *Bolnick*  *Matz*  *Ryan*  *Schartl* |
| NSF | Conference: IOS-EDGE Principal Investigators meeting | **$72,082** | 2019-2020 | Bolnick  *Gallant* |
| American Association of Immunology | Intersect Fellowship for Computational Scientists and Immunologists | **$51,000** | 2019-2020 | Fuess  *Bolnick*  *Wegrzyn* |
| NSF | Research Coordination Network: Evolution in Changing Seas **OCE-1764316** | **$600,000** | 2018-2021 | Lotterhos, *Trussell, M. Kelly, J. Kelley, Bolnick* |
| NIH - NIAID | “Reciprocal genetics of recently-evolved vertebrate immunity and helminth counter-adaptation” 1R01AI123659-01A1 | **$1,912,514** total | 2017-2022 | Bolnick |
| NSF- Math Biol. | COLLABORATIVE RESEARCH: Evolutionary resilience and species coexistence in disturbed habitats **DMS-1716803** | **$650,000** total,$200,000to DIB | 2018-2020 | Schreiber  *Bolnick Schoener* |
| 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 | Bolnick *Bell, White, Miller, Mulligan-Myhre* |
| Ministerio de Economia Y Competitividad, Spain | “Causes and consequences of Matching Habitat Choice, an alternative mechanism of evolutionary adaptation" | **€1,984,093** | 2017-2020 | Edelaar  *Bolnick Bonte*  *Prado* |
| NSF | “Does (non)parallel phenotypic evolution indicate (non)parallel selection in the wild?” DEB-1456462 | **$1,050,604** | 2015-19 | Bolnick  Stuart\*  *Peichel*  *\*PI 2018-2019* |

**Past Funding**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Funding Agency** | **Title** | **Amount** | **Period** | **PIs**  ***co-PIs*** |
| Marzden Fund, New Zealand | “The genetics of multidimensional niche variation in a natural population” | **NZ $24,950** | 2015-16 | Ingram  *Bolnick*  *Veen* |
| 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  *Peichel*  *Hendry* |
| 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 de la Vida, Ministerio de Economia Y Competitividad de Espana | Invasión biológica, selección, selección de hábitat, variación individual, diferenciación de poblaciones, cambio global, biodiversidad | **€295,477** | 2013-14 | Edelaar  *Bolnick*  *Dingemanse Escobedo*  *Muller*  *Sanchez* |
| 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 | Bolnick  *McCann*  *Rudolf* |
| NSF | Dissertation Research: The roles of genetic variation and competition in resource niche expansion DEB 0808356 | **$12,000** | 2008-09 | Bolnick  *Agashe* |
| 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 | Preisser  *Bolnick* |
| NSF | “A comparative study of fitness landscapes: testing competitive disruptive selection in sticklebacks” DEB-0412802 | **$320,000** | 2004-07 | Bolnick |
| NSF | Dissertation Research: Does intraspecific competition drive disruptive selection? | **$10,000** | 2001-02 | Wainwright  *Bolnick* |
| NSF | Graduate Research Fellowship | ≈ **$100,000 for salary and tuition** | 1998-2001 | Bolnick |

**\* 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 |

**TEACHING**

**Courses Taught**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Semester** | **Course Title** | **Course Number** |
| 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** |
| 2018-20 | Dr. Amanda Hund | University of Colorado | James F McDonnell Foundation Complexity Scholars Fellowship |
| 2019-21 | Dr. Stephen de Lisle | University of Toronto | UConn Start-up |
| 2018-20 | Dr. Lauren Fuess | University of Texas at Arlington | AAI fellowship; NSF IOS-EDGE grant |
| 2018-22 | Dr. **Foen Peng** | Univ. of Washington | NIH R01 |
| 2013-19 | Yoel Stuart | Harvard | NSF DEB-1456462 & DEB-1144773 (co-written) |

**Former Postdoctoral Researchers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Years** | **Name** | **PhD Institution** | **Current Position** | **Funding source** |
| 2013-2018 | Natalie Steinel | Univ. of Penn. Medical School | Assistant Professor, Univ. Massachusetts Lowell | HHMI, NSF |
| 2014-16 | Thor Veen | Univ. Groningen | Assistant Professor, Quest University | NSF IOS-1145468 |
| 2012-15, 2018 | Jesse Weber | Harvard | Assistant Professor, University of Alaska Anchorage | HHMI, NIH grant |
| 2013-15 | Alex Jordan | Australia National University | PI, Max Planck for Dispersal, Konstanz | HHMI & BEACON  Co-advised with Mike Ryan and Hans Hoffman |
| 2013-14 | William Stutz | UT Austin | Western Michigan University | HHMI |
| 2013 | Travis Ingram | U. British Columbia | Assistant Prof. Univ. Otago, NZ | NSF IOS-1145468 |
| 2012-13 | Hollis Woodard | U Illinois, C-U | Assistant Prof, Univ. Riverside | HHMI |
| 2013 | Lisa Snowberg | UT Austin | NA | Packard |
| 2008-11 | Christine Parent | Simon Frasier | Assistant Prof. Univ Idaho | Packard & NSERC |
| 2009-11 | Daniel Warren | UC Davis | Assistant Professor, University of Frankfurt | NSF Fellowship |
| 2010-11 | Matthew Schmerer | Albert Einstein | Researcher, Rice University | HHMI |
| 2008-9 | **Marcio Araujo** | UNICAMP, Brazil | Associate Prof. Universitidad Estadual Paulista, Brazil | Packard |
| 2008-10 | Rose Carlson | UC Davis | Physician | NSF Fellowship |
| 2005-6 | Richard Svanback | Univ Uppsala | Associate Prof. Univ Uppsala | Swedish Fellowship; co-advisor. Advised by Dolph Schluter and Michael Doebeli |
| 2005-6 | **Hernan Lopez-Fernandez** | Texas A&M | Prof & Ichthyology Curator, Univ Michigan | UT Start-up |

**Current Graduate Students**

|  |  |  |  |
| --- | --- | --- | --- |
| **Years (estimated)** | **Name** | **Prior Institution** | **Awards** |
| 2015 – (20) | **Kum (Will) Shim** | U. Toronto (MS) | NSERC |
| 2015 – (20) | Sebastian Stockmeier | MPI for Ornithology (MS) | SSE Rosemary Grant Research Award |
| 2013-(18)  [Joined my lab in 2016] | Emlyn Resetarits |  | NSF Graduate Research Fellowship |
| 2016-(21) | 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 |  |

**Former Graduate Students**

|  |  |  |  |
| --- | --- | --- | --- |
| **Years** | **Name** | **Current Position** | **Awards** |
| 2017-2018 | **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 | **Yuexin 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. Estuadal, BR | CAPES fellowship to visit UT for 9 months |
| 2009-10 | Anna Siwertsson (PhD, Univ Tromso) | Postdoc, Norwegian Artic 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

**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).

**Undergraduate students**

**Bold font indicates minority**

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

*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), Cole Thompson\* (summer 2013), 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), **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), **Gabrielle Le** (2017-18), **Jacqueline Salguero** (2017-19), **Ernesto Rojas** (HHMI EXROP student summer 2017), **Shreya Uppala** (summer 2017), Sara Tsruro (Fall 2018-).

*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), Amy Starzack (2016-2018), **Andy Wang** (2015-2018), **Cindy Jiang** (2017-2018), **Gabrielle Le** (2017-), **Nikita Gupta** (2018), Breanna Takacs (2018), Nicole Butler (2018), **Quanit Ali** (2018), **John Gregory** (2018), Madison Schumm (2018), Gilian McNeill (2019-)

**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)

**SERVICE**

**Departmental Service**

• 2019 Department Climate Survey Committee

• 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**

• 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**

• 2017-21 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**

• 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: Conference and Workshop Organizer**

• 2023 Chair, Gordon Research Conference on Speciation, California

• 2021 Co-Chair, Gordon Research Conference on Speciation, Italy

• 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

**Professional Services: Grant Proposal Reviewing**

2004 National Science Foundation (2)

2005National Science Foundation; Netherlands Organization for Scientific Research

2006National 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

**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

**Professional Services: Promotion Reviews & External Reviews**

* Habilitation review for 2 German universities
* Tenure review letters for faculty at 15 U.S. universities and 1 U.K. university

**Community Service**

• 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**

2020 University de Laval, Quebec (upcoming, April 30)

2020 Boston University (upcoming, March 30)

2020 University of Edinburough, Scotland (upcoming, Feb 26)

2020 Yale University (upcoming, Feb 5)

2019  von Hofsten lecture, University of Uppsala (upcoming, Oct 3-5)

2019 Chinese Academy of Sciences, Beijing (upcoming, Nov 2-3)

2019 University of Massachusetts, Amherst “A co-evolutionary Phyrric 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)**

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 Karinina 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)**

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 sticleback) 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 Naturaists, 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?](http://www.evolutionmeeting.org/engine/search/index.php?func=detail&aid=13)”

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, Minneapois 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”