Brian C. O'Meara

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Dept. of Ecology and Evolutionary Biology

University of Tennessee, Knoxville

Research

I address questions in evolutionary biology through development, implementation, and application of new phylogenetic methods. These include approaches for examining the process of continuous trait evolution (rate, optimal values, and other factors), species delimitation, phylogeography, diversification analyses, biogeography, and more. I also collaborate extensively with empiricists, including some of my own students.

Summary

Publications	44 journal articles, including *Science, Nature, Ann. Rev Ecology, Evolution & Systematics, Systematic Biology, Evolution*, etc.
Teaching	Approximately 4 courses per year on average, ranging from large introductory biology courses to small graduate seminars
Mentoring	4 PhD students, 12 postdocs, and served on 26 graduate student committees
Service/Outreach	Darwin Day TN advisor, co-organizer of women in science symposium, workshops, and other activities, co-organizer for scientific meetings, curator of R phylogenetics task view, instructor at workshops in Sweden, Switzerland, Brazil, and various US locations (Ohio, TN, NC)
Leadership	Associate Head for Dept. of Ecology & Evolutionary Biology, 2016-present; Associate Director for the National Institute for Mathematical and Biological Synthesis, 2016-present; Communications Director for the Society of Systematic Biologists, 2016-present; Society of Systematic Biologists Council, 2012-2014; iEvoBio co-organizer, 2014-2016.
Funding	$2.51M in external support, including 5 NSF grants (including a CAREER grant) plus funding from iPlant and Encyclopedia of Life
Altmetrics	Number of citations = 2316; h-index = 18; 60 public github repos; Erdos number = 4; papers have been saved times in reference manager Mendeley, have been tweeted about 661 times, and have been mentioned 30 times in the news

Education

University of California Davis: PhD (2008) in Population Biology

Harvard University: Bachelor (magna cum laude), with highest honors in Biology (2001)

Employment

2016-Present: Associate Head, Dept. of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN

2016-Present: Associate Director, Dept. of National Institute for Mathematical and Biological Synthesis (NIMBioS), University of Tennessee, Knoxville, TN

2015-Present: Associate Professor, Dept. of Ecology & Evolutionary Biology, University of Tennessee, Knoxville, TN

2009-2015: Assistant Professor, Dept. of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN

2007-2009: Postdoc, National Evolutionary Synthesis Center, Durham, NC

Publications: Papers

According to Google Scholar, my work has been cited 2316 times, and my h-index is 18. (Google Scholar tends to overestimate citations, however).

Schwery, O. and B. C. **O'Meara** (2016). " MonoPhy : a simple R package to find and visualize monophyly issues ". In: *PeerJ Computer Science* 2, p. e56.

O'Meara, B. C, S. D. Smith, W. S. Armbruster, L. D. Harder, C. R. Hardy, L. C. Hileman, L. Hufford, A. Litt, S. Magallon, S. A. Smith, P. F. Stevens, C. B. Fenster and P. K. Diggle (2016). "Non-equilibrium dynamics and floral trait interactions shape extant angiosperm diversity". In: *Proceedings of the Royal Society of London B: Biological Sciences* 283.1830.

O'Meara, B. C. and J. M. Beaulieu (2016). "Past, future, and present of state-dependent models of diversification". In: *American Journal of Botany*. 10.3732/ajb.1600012.

Beaulieu, J. and B. **O'Meara** (2016a). "Detecting hidden diversification shifts in models of trait-dependent speciation and extinction". In: *Systematic Biology* 65.4, pp. 583-601.

Beaulieu, J. M. and B. C. **O'Meara** (2016b). "Detecting hidden diversification shifts in models of trait-dependent speciation and extinction". In: *Systematic Biology*, p. syw022.

Zanne, A, D. Tank, W. Cornwell, J. Eastman, S. Smith, R. Fitzjohn, D. McGlinn, B. **O'Meara**, A. Moles, P. Reich, D. Royer, D. Soltis, P. Stevens, M. Westoby, I. Wright, L. Aarssen, R. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. Leishman, J. Oleksyn, P. Soltis, N. Swenson, L. Warman and J. Beaulieu (2015a). "Zanne et al. reply". In: *Nature* 521.7552, pp. E6-E7.

Zanne, A, D. Tank, W. Cornwell, J. Eastman, S. Smith, R. Fitzjohn, D. McGlinn, B. **O'Meara**, A. Moles, P. Reich, D. Royer, D. Soltis, P. Stevens, M. Westoby, I. Wright, L. Aarssen, R. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. Leishman, J. Oleksyn, P. Soltis, N. Swenson, L. Warman and J. Beaulieu (2015b). "Erratum: Three keys to the radiation of angiosperms into freezing environments (Nature (2014) 506 (89-92) (Doi:10.1038/nature12872))". In: *Nature* 521.7552.

Zanne, A. E, D. C. Tank, W. K. Cornwell, J. M. Eastman, S. A. Smith, R. G. FitzJohn, D. J. McGlinn, B. C. **O'Meara**, A. T. Moles, P. B. Reich, D. L. Royer, D. E. Soltis, P. F. Stevens, M. Westoby, I. J. Wright, L. Aarssen, R. I. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. R. Leishman, J. Oleksyn, P. S. Soltis, N. G. Swenson, L. Warman and J. M. Beaulieu (2015a). "Zanne et al. reply". In: *Nature* 521.7552, pp. E6-E7.

Zanne, A. E, D. C. Tank, W. K. Cornwell, J. M. Eastman, S. A. Smith, R. G. FitzJohn, D. J. McGlinn, B. C. **O'Meara**, A. T. Moles, P. B. Reich, D. L. Royer, D. E. Soltis, P. F. Stevens, M. Westoby, I. J. Wright, L. Aarssen, R. I. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. R. Leishman, J. Oleksyn, P. S. Soltis, N. G. Swenson, L. Warman and J. M. Beaulieu (2015b). "Corrigendum: Three keys to the radiation of angiosperms into freezing environments". In: *Nature* 521.7552, pp. 380-380.

O'Meara, B, K. Graham, S. Pellis and G. Burghardt (2015). "Evolutionary models for the retention of adult? adult social play in primates: The roles of diet and other factors associated with resource acquisition". In: *Adaptive Behavior* 23.6, pp. 381-391.

Beaulieu, J, B. **O'Meara**, P. Crane and M. Donoghue (2015a). "Heterogeneous rates of molecular evolution and diversification could explain the triassic age estimate for angiosperms". In: *Systematic Biology* 64.5, pp. 869-878.

Beaulieu, J. and B. **O'Meara** (2015a). "Extinction can be estimated from moderately sized molecular phylogenies". In: *Evolution* 69.4, pp. 1036-1043.

Beaulieu, J. M, B. C. **O'Meara**, P. Crane and M. J. Donoghue (2015b). "Heterogeneous Rates of Molecular Evolution and Diversification Could Explain the Triassic Age Estimate for Angiosperms". In: *Systematic Biology* 64.5, pp. 869-878.

Beaulieu, J. M. and B. C. **O'Meara** (2015b). "Extinction can be estimated from moderately sized molecular phylogenies". In: *Evolution* 69.4, pp. 1036-1043.

Aldrovandi, M, J. Johnson, B. **O'Meara**, R. Petersen and K. Hughes (2015). "The Xeromphalina campanella/kauffmanii complex: Species delineation and biogeographical patterns of speciation". In: *Mycologia* 107.6, pp. 1270-1284.

Zanne, A, D. Tank, W. Cornwell, J. Eastman, S. Smith, R. FitzJohn, D. McGlinn, B. **O'Meara**, A. Moles, P. Reich, D. Royer, D. Soltis, P. Stevens, M. Westoby, I. Wright, L. Aarssen, R. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. Leishman, J. Oleksyn, P. Soltis, N. Swenson, L. Warman and J. Beaulieu (2014a). "Erratum: Three keys to the radiation of angiosperms into freezing environments (Nature (2014)

506 (89-92) DOI:10.1038/nature12872)". In: *Nature* 514.7522.

Zanne, A, D. Tank, W. Cornwell, J. Eastman, S. Smith, R. Fitzjohn, D. McGlinn, B. **O'Meara**, A. Moles, P. Reich, D. Royer, D. Soltis, P. Stevens, M. Westoby, I. Wright, L. Aarssen, R. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. Leishman, J. Oleksyn, P. Soltis, N. Swenson, L. Warman and J. Beaulieu (2014). "Three keys to the radiation of angiosperms into freezing environments". In: *Nature* 506.7486, pp. 89-92.

Zanne, A. E, D. C. Tank, W. K. Cornwell, J. M. Eastman, S. A. Smith, R. G. FitzJohn, D. J. McGlinn, B. C. **O'Meara**, A. T. Moles, P. B. Reich, D. L. Royer, D. E. Soltis, P. F. Stevens, M. Westoby, I. J. Wright, L. Aarssen, R. I. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. R. Leishman, J. Oleksyn, P. S. Soltis, N. G. Swenson, L. Warman and J. M. Beaulieu (2014b). "Corrigendum: Three keys to the radiation of angiosperms into freezing environments". In: *Nature* 514.7522, pp. 394-394.

Williams, J, M. Taylor and B. **O'Meara** (2014). "Repeated evolution of tricellular (and bicellular) pollen". In: *American Journal of Botany* 101.4, pp. 559-571.

Jhwueng, D, S. Huzurbazar, B. **O'Meara** and L. Liu (2014a). "Investigating the performance of AIC in selecting phylogenetic models". In: *Statistical Applications in Genetics and Molecular Biology* 13.4, pp. 459-475.

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Cornwell, W, M. Westoby, D. Falster, R. Fitzjohn, B. **O'Meara**, M. Pennell, D. McGlinn, J. Eastman, A. Moles, P. Reich, D. Tank, I. Wright, L. Aarssen, J. Beaulieu, R. Kooyman, M. Leishman, E. Miller, U. Niinemets, J. Oleksyn, A. Ordonez, D. Royer, S. Smith, P. Stevens, L. Warman, P. Wilf and A. Zanne (2014). "Functional distinctiveness of major plant lineages". In: *Journal of Ecology* 102.2, pp. 345-356.

Banbury, B. and B. **O'Meara** (2014a). "Reol: R interface to the encyclopedia of life". In: *Ecology and Evolution* 4.12, pp. 2577-2583.

Banbury, B. L. and B. C. **O'Meara** (2014b). "Reol: R interface to the Encyclopedia of Life". In: *Ecol Evol* 4.12, pp. 2577-2583.

Zanne, A. E, D. C. Tank, W. K. Cornwell, J. M. Eastman, S. A. Smith, R. G. FitzJohn, D. J. McGlinn, B. C. **O'Meara**, A. T. Moles, P. B. Reich, D. L. Royer, D. E. Soltis, P. F. Stevens, M. Westoby, I. J. Wright, L. Aarssen, R. I. Bertin, A. Calaminus, R. Govaerts, F. Hemmings, M. R. Leishman, J. Oleksyn, P. S. Soltis, N. G. Swenson, L. Warman and J. M. Beaulieu (2013). "Three keys to the radiation of angiosperms into freezing environments". In: *Nature* 506.7486, pp. 89-92.

Stoltzfus, A, H. Lapp, N. Matasci, H. Deus, B. Sidlauskas, C. Zmasek, G. Vaidya, E. Pontelli, K. Cranston, R. Vos, C. Webb, L. Harmon, M. Pirrung, B. **O'Meara**, M. Pennell, S. Mirarab, M. Rosenberg, J. Balhoff, H. Bik, T. Heath, P. Midford, J. Brown, E. McTavish, J. Sukumaran, M. Westneat, M. Alfaro, A. Steele and G. Jordan (2013a). "Phylotastic! Making tree-of-life knowledge accessible, reusable and convenient". In: *BMC Bioinformatics* 14.

Stoltzfus, A, H. Lapp, N. Matasci, H. Deus, B. Sidlauskas, C. M. Zmasek, G. Vaidya, E. Pontelli, K. Cranston, R. Vos, C. O. Webb, L. J. Harmon, M. Pirrung, B. **O'Meara**, M. W. Pennell, S. Mirarab, M. S. Rosenberg, J. P. Balhoff, H. M. Bik, T. A. Heath, P. E. Midford, J. W. Brown, E. J. McTavish, J. Sukumaran, M. Westneat, M. E. Alfaro, A. Steele and G. Jordan (2013b). "Phylotastic! Making tree-of-life knowledge accessible, reusable and convenient". In: *BMC Bioinformatics* 14.1, p. 158.

Soltis, D, M. Mort, M. Latvis, E. Mavrodiev, B. **O'Meara**, P. Soltis, J. Burleigh and R. De Casas (2013). "Phylogenetic relationships and character evolution analysis of Saxifragales using a supermatrix approach". In: *American Journal of Botany* 100.5, pp. 916-929.

Darrin Hulsey, C, B. Keck, H. Alamillo and B. **O'Meara** (2013). "Mitochondrial genome primers for Lake Malawi cichlids". In: *Molecular Ecology Resources* 13.3, pp. 347-353.

Beaulieu, J, B. **O'Meara** and M. Donoghue (2013). "Identifying hidden rate changes in the evolution of a binary morphological character: The evolution of plant habit in campanulid angiosperms". In: *Systematic Biology* 62.5, pp. 725-737.

Stoltzfus, A, B. **O'Meara**, J. Whitacre, R. Mounce, E. Gillespie, S. Kumar, D. Rosauer and R. Vos (2012a). "Sharing and re-use of phylogenetic trees (and associated data) to facilitate synthesis". In: *BMC Research Notes* 5.

Stoltzfus, A, B. **O'Meara**, J. Whitacre, R. Mounce, E. L. Gillespie, S. Kumar, D. F. Rosauer and R. A. Vos (2012b). "Sharing and re-use of phylogenetic trees (and associated data) to facilitate synthesis". In: *BMC Research Notes* 5.1, p. 574.

Smith, S. and B. **O'Meara** (2012). "TreePL: Divergence time estimation using penalized likelihood for large

phylogenies". In: *Bioinformatics* 28.20, pp. 2689-2690.

O'Meara, B. (2012). "Evolutionary inferences from phylogenies: A review of methods". In: *Annual Review of Ecology, Evolution, and Systematics* 43, pp. 267-285.

Beaulieu, J, D. Jhwueng, C. Boettiger and B. **O'Meara** (2012). "Modeling stabilizing selection: Expanding the Ornstein-Uhlenbeck model of adaptive evolution". In: *Evolution* 66.8, pp. 2369-2383.

Stack, J, L. Harmon and B. **O'Meara** (2011a). "RBrownie: An R package for testing hypotheses about rates of evolutionary change". In: *Methods in Ecology and Evolution* 2.6, pp. 660-662.

Stack, J. C, L. J. Harmon and B. **O'Meara** (2011b). "RBrownie: an R package for testing hypotheses about rates of evolutionary change". In: *Methods in Ecology and Evolution* 2.6, pp. 660-662.

Goff, S, M. Vaughn, S. McKay, E. Lyons, A. Stapleton, D. Gessler, N. Matasci, L. Wang, M. Hanlon, A. Lenards, A. Muir, N. Merchant, S. Lowry, S. Mock, M. Helmke, A. Kubach, M. Narro, N. Hopkins, D. Micklos, U. Hilgert, M. Gonzales, C. Jordan, E. Skidmore, R. Dooley, J. Cazes, R. McLay, Z. Lu, S. Pasternak, L. Koesterke, W. Piel, R. Grene, C. Noutsos, K. Gendler, X. Feng, C. Tang, M. Lent, S. Kim, K. Kvilekval, B. Manjunath, V. Tannen, A. Stamatakis, M. Sanderson, S. Welch, K. Cranston, P. Soltis, D. Soltis, B. **O'Meara**, C. Ane, T. Brutnell, D. Kleibenstein, J. White, J. Leebens-Mack, M. Donoghue, E. Spalding, T. Vision, C. Myers, D. Lowenthal, B. Enquist, B. Boyle, A. Akoglu, G. Andrews, S. Ram, D. Ware, L. Stein and D. Stanzione (2011). "The iPlant collaborative: Cyberinfrastructure for plant biology". In: *Frontiers in Plant Science* 2.JUL.

Abercrombie, J, B. **O'Meara**, A. Moffatt and J. Williams (2011). "Developmental evolution of flowering plant pollen tube cell walls: Callose synthase (CalS) gene expression patterns". In: *EvoDevo* 2.1.

O'Meara, B. (2010). "New heuristic methods for joint species delimitation and species tree inference". In: *Systematic Biology* 59.1, pp. 59-73.

Collar, D, J. Schulte, B. **O'Meara** and J. Losos (2010). "Habitat use affects morphological diversification in dragon lizards". In: *Journal of Evolutionary Biology* 23.5, pp. 1033-1049.

Smith, S. and B. **O'Meara** (2009). "Morphogenera, monophyly, and macroevolution". In: *Proceedings of the National Academy of Sciences of the United States of America* 106.36.

Collar, D, B. **O'Meara**, P. Wainwright and T. Near (2009). "Piscivory limits diversification of feeding morphology in centrarchid fishes". In: *Evolution* 63.6, pp. 1557-1573.

O'Meara, B, A. Cécile, M. Sanderson and P. Wainwright (2006). "Testing for different rates of continuous trait evolution using likelihood". In: *Evolution* 60.5, pp. 922-923.

Driskell, A, C. Ané, J. Burleig, M. McMahon, B. **O'Meara** and M. Sanderson (2004). "Prospects for building the tree of life from large sequence databases". In: *Science* 306.5699, pp. 1172-1174.

Farrell, B, A. Sequeira, B. **O'Meara**, B. Normark, J. Chung and B. Jordal (2001). "The evolution of agriculture in beetles (Curculionidae: Scolytinae and Platypodinae)". In: *Evolution* 55.10, pp. 2011-2027.

Publications: Books or Book Chapters

O'Meara, B. and J. Beaulieu (2014). "Modelling stabilizing selection: The attraction of ornstein-uhlenbeck models". In: *Modern Phylogenetic Comparative Methods and their Application in Evolutionary Biology*, pp. 381-393.

Beaulieu, J. and B. **O'Meara** (2014). "Hidden markov models for studying the evolution of binary morphological characters". In: *Modern Phylogenetic Comparative Methods and their Application in Evolutionary Biology*, pp. 395-408.

O'Meara, B. (2012). "Evolutionary inferences from phylogenies: A review of methods". In: *Annual Review of Ecology, Evolution, and Systematics* 43, pp. 267-285.

Teaching

University Courses

I created a course on macroevolution targeted at upper level undergraduate and graduate students: we cover diversification, symbiosis, game theory, and more. I have also taught large introductory courses and small discussion seminars. In Spring 2016, as part of an NSF CAREER grant, I started a mixed online and in person course on phylogenetic methods. It is being revised to be taught again in Spring 2017. Note that the "HOFF joint lab group discussion" was a collaborative lab group meeting of the Hulsey-O'Meara-Fordyce-

Fitzpatrick labs.

Year	Semester	Course Number	Topic	Enrollment	Percent Effort
2017	Spring	EEB603	PhyloMeth	6	100
2017	Spring	EEB504	PhyloMeth	2	100
2016	Fall	EEB464	Macroevolution	28	100
2016	Spring	Biology150	Introductory biology	235	100
2016	Spring	EEB603	PhyloMeth	9 enrolled, plus dozens online	100
2015	Fall	EEB464	Macroevolution	27	100
2015	Fall	EEB607	Phyloseminar discussion	10	100
2015	Spring	EEB602	Phyloseminar discussion	13	100
2015	Spring	EEB607	HOFF joint lab group discussion	8	100
2014	Fall	EEB464	Macroevolution	28	100
2014	Fall	EEB504	HOFF joint lab group discussion	9	33
2014	Fall	EEB511	Graduate student core	12	50
2014	Fall	EEB607	Phyloseminar discussion	15	100
2014	Spring	Biology130	Introductory biology	94	100
2014	Spring	EEB602	Phyloseminar discussion	24	100
2014	Spring	EEB607	HOFF joint lab group discussion	6	25
2013	Fall	EEB464	Macroevolution	30	100
2013	Fall	EEB504	HOFF joint lab group discussion	11	25
2013	Fall	EEB511	Graduate student core	19	33
2013	Spring	EEB607	HOFF joint lab group discussion	8	25
2012	Fall	EEB464	Macroevolution	22	100
2012	Fall	EEB504	HOFF joint lab group discussion	5	25
2012	Fall	EEB511	Graduate student core	14	13
2012	Spring	Biology130	Introductory biology	206	100
2011	Fall	EEB464	Macroevolution	24	100
2011	Fall	EEB504	HOFF joint lab group discussion	7	25
2011	Fall	EEB503	EEB departmental seminar	44	100
2011	Fall	EEB511	Graduate student core	12	13
2011	Spring	EEB503	EEB departmental seminar	35	100
2011	Spring	EEB607	Speciation discussion	9	100
2010	Fall	EEB511	Graduate student core	8	13
2010	Spring	EEB607	Speciation discussion	13	100
2010	Spring	EEB409	Macroevolution	13	100

Workshops

I organize and/or participate in numerous workshops or tutorials.

Year	Location	Topic	Role
2017	Baton Rouge, LA	PHRAPL	Organizer/instructor
2016	Knoxville, TN	Evolutionary Quantitative Genetics workshop at NIMBioS	Instructor
2015	Ann Arbor, MI	Comparative methods in R, SSB satellite meeting	Organizer/instructor

2015	Knoxville, TN	Evolutionary Quantitative Genetics workshop at NIMBioS	Instructor
2015	Guaruja, Brazil	SSB-sponsored phylogeography workshop at Evolution meetings	Instructor
2014	Knoxville, TN	Evolutionary Quantitative Genetics workshop at NIMBioS	Instructor
2014	Knoxville, TN	Computing in the Cloud NIMBioS Tutorial	Co-organizer/instructor
2014	Columbus, OH	PHRAPL workshop	Co-organizer/Instructor
2013	Lausanne, Switzerland	Markov processes in phylogenetics	Instructor
2013	Vienna, Austria	eFlower Summer School	Remote instructor
2013	Knoxville, TN	Evolutionary Quantitative Genetics workshop at NESCent	Instructor
2010	Knoxville, TN	Fast, Free Phylogenies: HPC for Phylogenetics NIMBioS Tutorial	Organizer/instructor
2010	Gothenberg, Sweden	Species delimitation	Remote instructor
2008	Durham, NC	Computational phyloinformatics at NESCent	Instructor
2008	Bodega Bay, CA	Bodega Bay Workshop in Applied Phylogenetics	Instructor
2007	Bodega Bay, CA	Bodega Bay Workshop in Applied Phylogenetics	Instructor
2007	Davis, CA	Paleontology and its relevance to neontologists	Instructor
2006	Bodega Bay, CA	Bodega Bay Workshop in Applied Phylogenetics	Instructor
2006	Davis, CA	Model selection workshop	Organizer
2005	Bodega Bay, CA	Bodega Bay Workshop in Applied Phylogenetics	Instructor

Funding

This is all in addition to other **funding my students have gotten** (NSF EAPSI grant, fellowships from NIMBioS and PEER (an NIH-funded program at UTK), Google Summer of Code funding), **funding for workshops or working groups** (from NIMBioS and the Society for Systematic Biologists), and **funding I got before my faculty position** (NESCent postdoctoral fellowship, NSF DDIG, NSF GRF, and various internal grants at UC Davis). Total external funding, so far, as a faculty member is $2,508,362.

Year	Title	Funder	Amount
2015	CAREER: Reducing barriers for comparative methods (PI)	NSF	$738,000
2015	Collaborative Research: ABI Development: An open infrastructure to disseminate phylogenetic knowledge	NSF	$148,101
2014	Population genetics-based codon models	NSF	$470,000
2013	R interface to Encyclopedia of Life (Rubenstein Fellowship)	Encyclopedia of Life	$50,000
2013	Collaborative Research: Phylogeographic Inference Using Approximated Likelihoods	NSF	$340,000
2012	rPlant	iPlant	$98,252
2012	Historical naming traditions and cryptic speciation bias biodiversity estimates in transatlantic agaric fungi	NSF	$393,074
2011	iPlant: Trait evolution group, year 2	iPlant	$138,590
2010	iPlant: Trait evolution group, year 1	iPlant	$132,345

Presentations

Bold indicates presentation was delivered by me; otherwise, I was a coauthor. Also see various workshops under teaching.

March 2017: Invited talk on three projects at U. of Idaho, Moscow

September 2016: Symposium talk on Approximate Bayesian computation for trait evolution on phylogenies at Geological Society of America annual meeting.

August 2016: Talk on linking leaf spectra to phylogenies at Ecological Society of America 2016 annual meeting. Jose Eduardo Meireles, Brian O'Meara, Anna Schweiger, Aditya Singh, Phil Townsend, Susan Ustin, Michael Schaepman, Franziska Schrodt, John Gamon and Jeannine Cavender-Bares. Linking leaf spectra to phylogenies.

September 2015: Talk on heterogeneity at Texas A&M

June 2014: Talk on floral evolution at Evolution 2014 meeting; co-lead author was Stacey Smith, coauthors were W SArmbruster, L Harder, C Hardy, L Hileman, L Hufford, A Litt, S Magallon, S Smith, P Stevens, C Fenster, P Diggle.

June 2014: Talk on phylogeography at Evolution 2014 meeting; lead author and speaker was Nathan Jackson, other authors were A. Garcia, B. Carstens, and B. O'Meara.

June 2014: Talk on biogeography at Evolution 2014; lead author and speaker was Katie Massana (grad student), coauthors were J. Beaulieu, B. O'Meara, and N. Matzke.

June 2014: Talk on Hawaiian island plant immigration at Evolution 2014; lead author and speaker was Jeremy Beaulieu, coauthor was Brian O'Meara.

May 2014: Smithsonian Phylopizza

June, 2013: Symposium talk on species delimitation, Evolution meetings

Aug. 2012: Invited talk on comparative methods, Institute of Bioinformatics, U. of Georgia

June, 2012: Symposium talk on ABC and comparative methods, Evolution meetings

March, 2011: Phyloseminar talk on ABC and comparative methods. Apple Keynote and PDF.

May, 2010: Talk on phylogenetics and iPToL at iPlant meeting in Las Vegas

April, 2010: Invited talk on species delimitation at Louisiana State University

Nov., 2009: Talk at NIMBios about species delimitation and species tree inference

Mar., 2009: Talk to UT Knoxville EEB

June, 2008: Talk at Evolution 2008 in Minnesota

June, 2008: Poster at Evolution 2008 in Minnesota

June, 2008: Invited Joel Keizer Prize in Theoretical Biology lecture at University of California, Davis

May, 2008: Invited symposium talk at Interface 2008 [statistics conference] in NC

April, 2008: Invited talk to the Organismic and Evolutionary Biology department at Harvard U.

Jan., 2008: Invited symposium talk at Society for Integrative and Comparative Biology meeting in TX

Oct., 2007: Invited talk at Duke Systematics Discussion Group

Oct., 2007: Talk at NESCent brown bag lunch series

June, 2007: Exit seminar

June, 2006: Talk at Evolution 2006 in NY

Feb., 2006: Poster at CIPRES all hands meeting in TX

July, 2005: Talk at CIPRES-funded graduate student meeting in NM

June, 2005: Talk on Brownie at Evolution meetings in Alaska.

Dec, 2004: Presentation at the Bay Area Biosystematists meeting

Dec., 2001: Talk at Entomology Society of America national meeting in CA

June, 2001: Poster at Evolution 2001 in TN

Dec., 2000: Poster at the Entomology Society of America national meeting in Canada

Mentoring, Postdocs

I have mentored numerous postdocs off of my own grants and/or as one of their chosen NIMBioS mentors. Note that NIMBioS postdocs pursue independent research projects but choose one faculty member to mentor them in math and another to mentor them in biology (I have served in both roles).

Name	Duration	NIMBioS	Current Position
Hugo Alamillo	2011-	N	Assistant Professor North Seattle College

	2012		
Barb Banbury	2010-2012	N	Statistical Analyst at Fred Hutch
Jeremy Beaulieu	2012-2016	Both	Assistant Professor at U. of Arkansas
Juanjuan (JJ) Crosskey (formerly Chai)	2011-2013	Y	Member of Comparative Genomics group at Oak Ridge National Lab
Nathan Jackson	2013-2016	N	Researcher at National Jewish Health
Tony Jhwueng	2009-2011	Y	Assistant Professor Feng-Chia U., Taiwan
Sandy Kawano	2014-2016	Y	Starting as Assistant Professor at CSU Long Beach in Aug. 2017
Michelle Lawing	2012-2014	Y	Assistant Professor Texas A&M
Ryan Martin	2012-2013	Y	Assistant Professor Case Western U
Nick Matzke	2013-2015	Y	DECRA Fellow at The Australian National University in Canberra
Megan Rua	2015-2016	Y	Assistant Professor Wright State U
Sergei Tarasov	2016-present	Y	NIMBioS postdoc

Mentoring, Grad students in my lab

Name	Stage	Time in Lab	Note
Sam Borstein	PhD student	2014-present	
Jenn Bosco	PhD student	2012-present	Co-advised with Susan Riechert
Katie Massana	PhD student	2012-present	
Orlando Schwery	PhD student	2014-present	

Mentoring, Undergrad students in my lab

Name	Stage	Time in Lab	Note
Nicholas Gladstone	Undergrad	2016-present	
Christian Yarber	Undergrad	2015-present	

Mentoring, Grad student committees

In addition to my own students, of course.

Name	Department
Will Atwood	Geology
Jen Bauer	EEB
Sharon Clemmensen	EEB
Troy Fadiga	Geology
Aaron Floden	EEB
Mauricio Gonzalez-Forero	EEB
Alannie-Grace Grant	EEB
Phillip Hollingsworth	EEB
Whitaker Hoskins	EEB
Will Howell	EEB

Ivan Juric	EEB
Cedric Landerer	EEB
Jasper Lee	Microbiology
Bryan Looney	EEB
Liam Mueller	EEB
Tyson Paulson	EEB
Todd Pierson	EEB
Ryan Rooney	EEB
Max Rupp	EEB
Geetha Saarunya S	GST
Leonidas Salichos	Vanderbilt
Marisol Sanchez-Garcia	EEB
Sarah Sheffield	EEB
Jordan Utley	GST
Jess Welch	EEB
Rachel Wooliver	EEB

Service

- Communications Director for the Society of Systematic Biologists (SSB), 2016-present
- Co-organizer of iEvoBio meeting, 2016
- Co-organizer of SSB symposium on Breaking Barriers: Empirical, Theoretical, and Gender Issues in Phylogenetics for Evolution meetings in Brazil, 2015
- Co-organizer of SSB satellite meeting in May, 2015
- Co-organizer of iEvoBio meeting (met with SSB) May 2015
- Co-organizer of Evolution meetings, 2014, including sole organizer for lightning talks
- Co-organizer of iEvoBio meeting, 2014
- Member of Phylotastic leadership team (group arranging hackathons for making trees more reusable), 2012-present
- Organizer of lighting talks for Evolution meetings, 2013
- UTK Faculty advisor for Darwin Day Tennessee, 2012-present
- UTK Department representative on Dean's advisory council, 2012-2014
- UTK EEB Undergraduate affairs committee, 2012-2013
- UTK EEB Graduate admissions committee, 2013-present
- Chair, UTK EEB Web committee, 2011-present
- Co-organizer of Comparative Methods in R hackathon, 2007
- Bay Area Biosystematists Steering Committee: 2004-2007
- Secretary Cambridge Entomological Club, 2001-2002
- Reviewer for *Science, Heredity, Molecular Phylogenetics and Evolution, Systematic Biology, Evolution, Systematic Entomology, Proceedings of the Royal Society: Biological Sciences*, US National Science Foundation, and others.