

CURRICULUM VITAE

KENNETH D. WHITNEY

ISI RESEARCHER ID: B-2971-2011

GOOGLE SCHOLAR, RESEARCHGATE: KENNETH WHITNEY

Department of Biology
MSC03 2020
University of New Mexico
Albuquerque, NM 87131

OFFICE PHONE: (505) 277-4408
FAX: (505) 277-0304
EMAIL: whitneyk@unm.edu

APPOINTMENTS

- 2012-present Associate Professor, University of New Mexico, Department of Biology
- 2012 Associate Professor, Rice University, Dept. of Ecology and Evolutionary Biology
- 2005-2012 Assistant Professor, Rice University, Dept. of Ecology and Evolutionary Biology
- 2003-2005 Postdoctoral Fellow, Indiana University; Advisor: Loren H. Rieseberg

ADJUNCT AND OTHER APPOINTMENTS

- 2014-present Senior Research Fellow, UCLA Center for Tropical Research (CTR)
- 2010-present Adjunct Graduate Doctoral Faculty, Texas State University – San Marcos
- 2009-present Faculty, Rocky Mountain Biological Laboratory

EDUCATION

- 2003 Ph.D., Population Biology, University of California at Davis
Major professor: Maureen L. Stanton
Committee Members: Sharon Y. Strauss, Thomas B. Smith
- 1997 M.A., Ecology and Systematics, San Francisco State University
Major professor: Thomas B. Smith
Committee Members: V. Thomas Parker, Eric J. Routman
- 1989 A.B. *summa cum laude*, English, Dartmouth College
minor in Environmental Studies

OTHER PROFESSIONAL EXPERIENCE – ENVIRONMENTAL CONSULTING

1997-1998 Staff Scientist, Stillwater Ecosystem, Watershed and Riverine Sciences
Berkeley, CA

1989-1992 Scientist I, EA Engineering, Science, and Technology, Inc.
Lafayette, CA

RESEARCH SUPPORT

2013-2018 \$690,237 National Science Foundation DEB 1257965 (PI; co-PI Loren Rieseberg). *Repeatability and genetic architecture of adaptive introgression: a long-term experimental evolution study in sunflowers*

2012-2015 \$310,822 National Science Foundation DEB 1146203 (co-PI with Stephen Hovick). *Effects of population genetic diversity on colonization success.*

2007-2012 \$577,527 National Science Foundation DEB 0716868 (PI; co-PI Loren Rieseberg; 100% of funds to Rice Univ.). *Long-term natural selection and adaptive introgression in weedy sunflowers.*

2010-2012 \$14,982 National Science Foundation Dissertation Improvement Grant DEB 1011661 (co-PI Jeffrey Ahern). *DISSERTATION RESEARCH: Evolutionary ecology of defensive chemical variation in Xanthium strumarium*

2012 \$7,500 National Science Foundation REU supplement to DEB 0716868

2011 \$7,500 National Science Foundation REU supplement to DEB 0716868

2009-2010 \$50,000 Shell Center for Sustainability (co-PI Lesley Campbell). *Response of native plant mating systems to global change*

2009-2010 \$26,608 Hamill Innovation Grant, Rice Institute of Biosciences and Bioengineering AND Rice Faculty Initiatives Fund (co-PI Michael Covington). *Seed-seed signaling in Arabidopsis thaliana: evolutionary ecology and molecular mechanisms of a newly-discovered process*

2010 \$7,000 National Science Foundation REU supplement to DEB 0716868

2009 \$7,475 National Science Foundation REU supplement to DEB 0716868

2007-2009 \$20,000 National Geographic Society 8237-07 (PI; co-PIs Amy Savage, Jennifer Rudgers). *Yellow Crazy Ant invasion of the Samoan Archipelago: Do novel mutualisms amplify the ecological impacts?*

2005 \$50,000 Genomics Education Matching Fund Program, Licor Corporation (co-PI with Michael Kohn)

2003-2005 \$89,200 USDA NRI Postdoctoral Fellowship

2001	\$5,000	ARCS Foundation Scholarship
1999-2001	\$8,800	UC Davis competitive intramural research grants
1998-2001	\$5,000	Center for Tropical Research Grant
1997-2000	\$66,000	EPA STAR Fellowship
1996	\$5,000	NSF Graduate Research Traineeship
1994-1996	\$43,000	NSF Graduate Research Fellowship
1994	\$24,000	Wildlife Conservation Society (co-PI with T. B. Smith, V. T. Parker, M. Fogiel)

OTHER SUPPORT

2007 Brown Foundation Teaching Grant, \$4,977 (co-PI with Jennifer Rudgers)

MANUSCRIPTS IN REVIEW

46. Hovick*, S.M., and K. D. Whitney. *in review*. Propagule size but not population genetic diversity impact initial colonization success in a ruderal species.

PUBLICATIONS, PEER-REVIEWED (*Coauthor associated with my lab; †Undergraduate student)

45. Bock, D. G., C. Caseys, R. D. Cousens, M. Hahn, S. M. Heredia, S. Hübner, K. G. Turner, K. D. Whitney, and L. H. Rieseberg. 2015. What we still do not know about invasion genetics. *Molecular Ecology* 24: 2277-2297. [Invited Review & Synthesis]

44. Whitney, K. D., K. W. Broman, N. C. Kane, S. M. Hovick*, R. A. Randell, and L. H. Rieseberg. 2015. QTL mapping identifies candidate alleles involved in adaptive introgression and range expansion in a wild sunflower. *Molecular Ecology* 24: 2194-2211.

43. Whitney, K. D., and E. Gering. 2015. Five decades of invasion genetics. *New Phytologist* 205: 472-475.

42. Hovick*, S.M., and K. D. Whitney. 2014. Hybridization is associated with increased fecundity and size in invasive taxa: meta-analytic support for the hybridization-invasion hypothesis. *Ecology Letters* 17: 1464–1477.

41. Singer M. S., I. H. Lichter-Marck, T. E. Farkas, E. Aaron, K. D. Whitney, and K. A. Mooney. 2014. Herbivore diet breadth mediates the cascading effects of carnivores in food webs. *Proceedings of the National Academy of Sciences* 111: 9521-9526.

40. Lamperti, A. M., A. R. French, E. S. Dierenfeld, M. K. Fogiel, K. D. Whitney, D. J. Stauffer, K. M. Holbrook, B. D. Hardesty, C. J. Clark, J. R. Poulsen, B. Wang, T. B. Smith, V. T. Parker. 2014. Diet

selection is related to breeding status in two frugivorous hornbill species of Central Africa. *Journal of Tropical Ecology* 30: 273-290.

39. Rudgers, J. A., S. N. Kivlin, K. D. Whitney, M. V. Price, N. M. Waser, J. Harte. 2014. Responses of high-altitude graminoids and soil fungi to 20 years of experimental warming. *Ecology* 95:1918–1928.

38. Ahern*, J. R. and K. D. Whitney. 2014. Sesquiterpene lactone stereochemistry influences herbivore resistance and plant fitness in the field. *Annals of Botany* 113: 731-740.

37. Ahern*, J. R. and K. D. Whitney. 2014. Stereochemistry affects sesquiterpene lactone bioactivity against an herbivorous grasshopper. *Chemoecology* 24: 35-39.

36. Chamberlain*, S. A., K. D. Whitney, and J.A. Rudgers. 2013. Proximity to agriculture alters abundance and community composition of wild sunflower mutualists and antagonists. *Ecosphere* 4(8): 96.

35. Laurance W. F., D. C. Useche, J. Rendeiro, ... K. Whitney, et al. 2012. Averting biodiversity collapse in tropical forest protected areas. *Nature* 489: 290-294.

34. Hovick*, S.M., E. D. Gumuser*†, K. D. Whitney. 2012. Community dominance patterns, not colonizer genetic diversity, drive colonization success in a test with grassland species. *Plant Ecology* 213: 1365-1380.

33. Chamberlain*, S., S. Hovick*, C. Dibble, B. Van Allen, B. Maitner, J. Ahern*, L. Bell-Dereske, N. Rasmussen, J. Carillo, M. Meza-Lopez, C. Roy, E. Siemann, M. Lajeunesse and K. D. Whitney. 2012. Does phylogeny matter? Assessing the impact of phylogenetic information in ecological meta-analysis. *Ecology Letters* 15: 627–636.

32. Hovick*, S. M., L. G. Campbell*, A. A. Snow, and K. D. Whitney. 2012. Hybridization alters early life-history traits and increases plant colonization success in a novel region. *American Naturalist* 179: 192-203.

31. Maitner, B. S., J. A. Rudgers, A. E. Dunham, and K. D. Whitney. 2012. Patterns of bird invasion are consistent with environmental filtering. *Ecography* 35: 614-623.

30. Savage*, A. M., and K. D. Whitney. 2011. Mutualistic, trait-mediated indirect interactions in invasions: a highly invasive ant has unique behavioral responses to plant nectar. *Ecosphere* 2(9):106.

29. Albert*, L. P., L. G. Campbell*, and K. D. Whitney. 2011. Beyond simple reproductive assurance: cleistogamy allows adaptive plastic responses to pollen limitation. *International Journal of Plant Sciences* 172:862-869.

28. Ness, J. H., E. J. Rollinson†, and K. D. Whitney. 2011. Phylogenetic distance can predict susceptibility to attack by natural enemies. *Oikos* 120:1327-1334.

27. Whitney, K. D., B. Boussau, E. J. Baack, and T. Garland Jr. 2011. Drift and genome complexity revisited. *PLoS Genetics* 7(6): e1002092

26. Savage*, A. M., S. D. Johnson*†, K. D. Whitney, and J. A. Rudgers. 2011. Do invasive ants respond more strongly to carbohydrate availability than co-occurring non-invasive ants? A test along an active *Anoplolepis gracilipes* invasion front. *Austral Ecology* 36: 310-319.

25. Craig*†, S., S. Kannadan*†, S. L. Flory, E. K. Seifert, K. D. Whitney, and J. A. Rudgers. 2011. Potential for endophyte symbiosis to increase resistance of the native grass *Poa alsodes* to invasion by the non-native grass *Microstegium vimineum*. *Symbiosis* 53: 17-28.
24. Whitney, K. D. and T. Garland Jr. 2010. Did genetic drift drive increases in genome complexity? *PLoS Genetics* 6(8): e1001080.
23. Whitney, K. D., J. R. Ahern*, L. G. Campbell*, L. P. Albert*, and M. S. King*†. 2010. Patterns of hybridization in plants. *Perspectives in Plant Ecology, Evolution and Systematics* 12: 175-182.
22. Whitney, K. D., R. A. Randell, and L. H. Rieseberg. 2010. Adaptive introgression of abiotic tolerance traits in the sunflower *Helianthus annuus*. *New Phytologist* 187: 230-239.
21. Whitney, K. D., E. J. Baack, J. L. Hamrick, M. J. W. Godt, B. C. Barringer, M. D. Bennett, C. G. Eckert, C. Goodwillie, S. Kalisz, I. J. Leitch, and J. Ross-Ibarra. 2010. A role for nonadaptive processes in plant genome size evolution? *Evolution* 64: 2097-2109.
20. Scascitelli, M., K. D. Whitney, R. A. Randell, M. King, C. A. Buerkle, and L. H. Rieseberg. 2010. Genome scan of hybridizing sunflowers from Texas (*Helianthus annuus* and *H. debilis*) reveals asymmetric patterns of introgression and small islands of genomic differentiation. *Molecular Ecology* 19:521-541.
19. Crawford*, K. M., and K. D. Whitney. 2010. Population genetic diversity influences colonization success. *Molecular Ecology* 19: 1253–1263.
18. Whitney K.D., Rudgers J.A. 2009. Constraints on plant signals and rewards to multiple mutualists? *Plant Signaling & Behavior* 4(9): 801-804.
17. Savage* A.M., J.A. Rudgers & K.D. Whitney. 2009. Elevated dominance of extrafloral nectary-bearing plants is associated with increased abundances of an invasive ant and reduced native ant richness. *Diversity and Distributions* 15: 751-761.
16. Whitney, K.D. 2009. Comparative evolution of flower and fruit morphology. *Proceedings of the Royal Society B-Biological Sciences* 276:2941-2947.
15. Whitney, K.D., J.R. Ahern*, and L.G. Campbell*. 2009. Hybridization-prone plant families do not generate more invasive species. *Biological Invasions* 11:1205-1215.
14. Whitney, K.D. & C.A. Gabler. 2008. Rapid evolution in introduced species, ‘invasive traits’ and recipient communities: challenges for predicting invasive potential. *Diversity and Distributions* 14: 569–580.
13. Rieseberg, L. H., S. C. Kim, R. A. Randell, K. D. Whitney, B. R. Gross, C. Lexer, and K. Clay. 2007. Hybridization and the colonization of novel habitats by annual sunflowers. *Genetica* 129: 149-165.
12. Rudgers, J.A. & K.D. Whitney. 2006. Interactions between insect herbivores and a plant architectural dimorphism. *Journal of Ecology* 94: 1249-1260.
11. Whitney, K. D., R. A. Randell, and L. H. Rieseberg. 2006. Adaptive introgression of herbivore resistance traits in the weedy sunflower *Helianthus annuus*. *American Naturalist* 167(6): 794-807.

10. Whitney, K. D. 2005. Linking frugivores to the dynamics of a fruit color polymorphism. *American Journal of Botany* 92: 859-867.
9. Baack, E. J., K. D. Whitney, and L. H. Rieseberg. 2005. Hybridization and genome size evolution: timing and magnitude of nuclear DNA content increases in *Helianthus* homoploid hybrid species. *New Phytologist* 167:623-630.
8. Whitney, K. D. 2005. Evidence for simple genetic control of a fruit colour polymorphism in *Acacia ligulata*. *Australian Journal of Botany* 53: 363-366.
7. Whitney, K. D., and M. L. Stanton. 2004. Insect seed predators as novel agents of selection on fruit color. *Ecology* 85: 2153-2160.
6. Whitney, K. D. 2004. Experimental evidence that both parties benefit in a facultative plant-spider mutualism. *Ecology* 85:1642-1650.
5. Whitney, K. D., and C. E. Lister. 2004. Fruit colour polymorphism in *Acacia ligulata*: seed and seedling performance, clinal patterns, and chemical variation. *Evolutionary Ecology* 18: 165-186.
4. Whitney, K. D. 2002. Dispersal for distance? *Acacia ligulata* seeds and meat ants *Iridomyrmex viridiaeneus*. *Austral Ecology* 27: 589-595.
3. Whitney, K. D., and T. B. Smith. 1998. Habitat use and resource tracking by African *Ceratogymna* hornbills: implications for seed dispersal and forest conservation. *Animal Conservation* 1: 107-117.
2. Whitney, K. D., M. K. Fogiel, A. M. Lamperti, K. M. Holbrook, D. M. Stauffer, B. D. Hardesty, V. T. Parker, and T. B. Smith. 1998. Seed dispersal by *Ceratogymna* hornbills in the Dja Reserve, Cameroon. *Journal of Tropical Ecology* 14: 351-371.
1. Smith, T. B., K. K. Rasmussen, K. D. Whitney, and M. K. Fogiel. 1996. A preliminary survey of birds from the Lac Lobeke Reserve, south-eastern Cameroon. *Bird Conservation International* 6: 167-174.

HIGHLIGHTS OF MY PUBLISHED WORK

Singer et al. 2014:

- “Diverse diet makes caterpillars more likely target for birds,” *Los Angeles Times*, 16 June 2014
- “Picky Eaters Are Less Likely to Be Eaten,” *Discover Magazine Blog*, 17 June 2014
- “Variety in a Caterpillar's Diet Could Spell Its Doom,” *Audubon Magazine Blog*, 16 June 2014

Laurance et al. 2012:

- *Faculty of 1000 Biology* 'Recommended'. <http://f1000.com/prime/717956187>

Whitney & Garland 2010:

- Research Highlights: "Ginormous genomes." *Nature* 467(7312): 135.
- *PLoS Genetics* "Most Viewed" article 8/27/10 - 10/7/10

- "Not the origin of genome complexity." *Discover* Magazine, Gene Expression Blog, 27 August 2010. <http://blogs.discovermagazine.com/gnxp/2010/08/not-the-origin-of-genome-complexity/>
- *Faculty of 1000 Biology* 'Must Read'. <http://f1000.com/5141957>

Crawford & Whitney 2010:

- *Faculty of 1000 Biology* 'Recommended'. <http://f1000.com/4675956>
- News and Views: "Population-level traits that affect, and do not affect, invasion success." Sanders, N. J. 2010. *Molecular Ecology* 19: 1079–1081.

Whitney, Randall, Rieseberg 2010:

- Forum: "What's good for you may be good for me: evidence for adaptive introgression of multiple traits in wild sunflower." Vekemans, X. 2010. *New Phytologist* 187: 6-9.

Whitney, Ahern, Campbell 2009:

- *Faculty of 1000 Biology* 'Recommended'. <http://f1000.com/1162698>

INVITED SEMINARS & PRESENTATIONS

- 2015 VISTAS Program, Michigan State University (27 May)
New Mexico State University (5 Feb)
- 2014 KBS Eminent Ecologists Series, Kellogg Biological Station, Michigan State University (21 May)
- 2013 University of Miami, Dept. of Biology (November)
- 2012 University of New Mexico, Dept. of Biology (April)
Molecular Ecology 2012, Vienna, Austria (scheduling conflict, declined)
University of Arizona, Department of Ecology and Evolutionary Biology (5 Mar)
- 2011 University of Houston, Dept. of Biology (12 Oct)
- 2010 University of Richmond (1 Nov)
Rocky Mountain Biological Lab Seminar Series, Gothic, CO (29 June)
- 2009 10th Annual Ecological Integration Symposium, "Resilience from Genes to Ecosystems: Ecological, Evolutionary, and Social Perspectives on Sustainable Conservation", Texas A&M University (March 6).
- 2008 Texas A & M University, Department of Entomology (2 October).
Rice University, Institute of Biosciences and Bioengineering Symposium (18 June).
The Evolutionary Ecology of Plant-animal Interactions: from Genes to Communities. Spanish Association of Terrestrial Ecology, Mallorca, Spain (April 21-23).
- 2007 Microevolutionary Change in Human-altered Environments: An International Summit to Translate Science into Policy. University of California, Los Angeles (February 8-11).
Texas A & M University, Department of Rangeland Ecology and Management (17 April).
- 2006 Central Texas Ecologists' Meeting, Austin, TX (18 Nov).

- Botanical Society of America Symposium, 'Hybridization as a Stimulus for the Evolution of Invasiveness in Plants.' Chico State University, Chico, CA (2 August).
Trinity University, Dept. of Biology
- 2005 NSF-USDA-EPA Principal Investigators Symposium
University of Tennessee, Department of Ecology and Evolutionary Biology
USDA Sunflower Unit, Symposium on Wild *Helianthus*
- 2004 Rice University, Department of Ecology & Evolutionary Biology
University of Akron, Department of Biology
Tufts University, C. Orians Lab
- 2003 University of Wyoming, Department of Botany
University of Pittsburgh, Department of Biology
Susquehanna University, Department of Biology
Entomological Society of America Symposium, 'Stable Isotopes in Basic and Applied Entomology'
University of Toronto, Departments of Botany and Zoology
- 2001 University of Arizona, J. Bronstein Lab
- 1998 University of Queensland, Centre for Conservation Biology

PROFESSIONAL MEETING ABSTRACTS

- Whitney, K.D. and S. M. Hovick. Are hybridization and genetic diversity drivers of colonization success? Invasion Genetics: The Baker and Stebbins Legacy. Asilomar, California, Aug 2014.
- Hovick, S. M. and K.D. Whitney. Hybridization increases fecundity and size in invasive taxa: meta-analytic support for the hybridization-invasion hypothesis. Society for the Study of Evolution, American Society of Naturalists & Society of Systematic Biologists; Raleigh, NC, Jun 2014.
- Hovick, S. M. and K.D. Whitney. Simply a numbers game? Disentangling the effects of founder population size and population genetic diversity on colonization success. American Society of Naturalists, Asilomar, California, Jan 2014.
- Whitney K. D., L. H. Rieseberg. Identifying key alleles and traits in adaptive introgression events: insights from experimental evolution in sunflowers. American Society of Naturalists, Asilomar, California, Jan 2014.
- Sneck M., K. D. Whitney, and L. G. Campbell. Evolutionary response to global change: an experimental test of the effect of altered precipitation on hybridization rates in sunflower (*Helianthus*). Society for The Study of Evolution, Snowbird, Utah 2013.
- S.M. Hovick, L.H. Rieseberg and K.D. Whitney. Replaying the clock in hybrid evolution: A field experimental evolution study using sunflowers (*Helianthus*). Ecological Society of America, Portland, Oregon, 2012.
- Campbell L. G., K. L. Mercer, C. Chaplin, and K. D. Whitney. Do hybridization rates vary with water availability? First Joint Congress on Evolutionary Biology, Ottawa, Canada 2012.
- Gumuser, E.D., S.M. Hovick and K.D. Whitney. Importance of functional group dominance and colonizer genetic diversity on invasive success. Ecological Society of America, Austin TX 2011.
- Hovick, S.M., L.G. Campbell, A.A. Snow and K.D. Whitney. Hybridization in wild radish (*Raphanus raphinistrum*) alters early life-history traits and increases colonization success in a novel region. Ecological Society of America, Austin TX 2011.

- Savage, A.M., K. D. Whitney and J. A. Rudgers. Can novel mutualisms with native species modify the community-wide consequences of ant invasions? A test using the *Anoplolepis gracilipes* invasion of the Samoan Archipelago. Ecological Society of America, Austin TX 2011.
- Sloat, L.L., C.A. Lamanna, G. Aldridge, B.J. Enquist, A.N. Henderson, D.W. Inouye, M.J. Stansberry, K.D. Whitney, I. Billick. A comprehensive functional trait database for the plants of the Rocky Mountain Biological Laboratory. Ecological Society of America, Austin TX 2011.
- Ahern, J. R., and K. D. Whitney. Ecological factors associated with the maintenance of a defensive chemical polymorphism in *Xanthium strumarium*. Society for The Study of Evolution, Norman, OK 2011.
- Ahern, J. R., and K. D. Whitney. Factors associated with the maintenance of a defensive chemical polymorphism in *Xanthium strumarium*. Ecological Society of America, Austin TX 2011.
- Chamberlain, S. A. and K. D. Whitney. Mutualist and antagonist arthropod communities of native plants are influenced by proximity to agricultural crops. Ecological Society of America, Austin TX 2011.
- Campbell, L.G., K. Mercer and K. D. Whitney. Do hybridization rates vary with water availability? Canadian Society for Evolution and Ecology, May 2011.
- Ness, J.H., E.J. Rollinson, K. D. Whitney. Phylogenetic community structure influences among-species differences in susceptibility to attack by natural enemies. Ecological Society of America, Pittsburgh, PA 2010.
- Maitner, B.S., A. E. Dunham, J. A. Rudgers, K. D. Whitney. Phylogenetic community structure is correlated with the success of invasive avifauna. Ecological Society of America, Pittsburgh, PA 2010.
- Ahern, J. R., Whitney, K. D. Effects of sesquiterpene lactone stereochemistry on herbivore resistance in *Xanthium strumarium*. Gordon Research Conference: Plant-Herbivore Interactions. Galveston, TX 2010.
- Whitney, K. D., J. H. Ness. Phylogenetic community structure influences herbivore damage. Gordon Research Conference: Plant-Herbivore Interactions. Galveston, TX 2010.
- Savage, A. M., K. D. Whitney, and J. A. Rudgers. The invasive ant *Anoplolepis gracilipes* modifies the community-wide impacts of a facultative mutualism. Sigma Xi, the Scientific Research Society Annual Conference, The Woodlands, TX. November 2009.
- Whitney, K. D., J. R. Ahern, L. G. Campbell and L. P. Albert. Explaining hybridization propensity in plants. Ecological Society of America, Albuquerque, NM 2009.
- Ahern, J.R. & K. D. Whitney. Sesquiterpene lactone stereochemistry determines herbivore resistance in *Xanthium strumarium* (Asteraceae). Ecological Society of America, Albuquerque, NM 2009.
- Savage, A. M. , J. A. Rudgers and K.D. Whitney. Community-level consequences of an ant-plant mutualism change when an invasive ant dominates local ant assemblages. Southeast Ecology and Evolution Conference, Gainesville, FL. March 2009.
- Whitney, K. D., J. R. Ahern, and L. G. Campbell. Hybridization-prone plant families do not generate more invasive species. Society for the Study of Evolution, Minneapolis, MN. 2008.
- Savage, A. M., J. A. Rudgers, and K. D. Whitney. Yellow crazy ant invasion of the Samoan Archipelago: Can novel mutualisms facilitate community-wide impacts? Southeast Ecology and Evolution Conference, Tallahassee, FL. March 2008.
- Crawford, K. M., P. Thompson, and K. D. Whitney. Genetic diversity and early colonization success: Testing hypotheses with a model system. Ecological Society of America, San Jose, CA. 2007.
- Whitney, K. D., R. A. Randell, L. H. Rieseberg. Adaptive introgression of herbivore-resistance traits and range expansion in sunflowers. Society for the Study of Evolution, Stony Brook, NY. 2006.
- Whitney, K. D., R. A. Randell, C. Orians, L. H. Rieseberg. Introgression of herbivore resistance traits and the evolution of invasiveness in sunflowers (*Helianthus*). Gordon Conference on Plant-Herbivore Interaction. Ventura, CA. 2004.
- Whitney, K. D., R. A. Randell, C. Orians, L. H. Rieseberg. Introgression of herbivore resistance traits and the evolution of invasiveness in sunflowers (*Helianthus*). Ecological Society of America,

- Portland, OR. 2004.
- Whitney, K. D. Experimental evidence that both parties benefit in an Australian plant-spider mutualism. Ecological Society of America, Tucson, AZ. 2002.
- Whitney, K. D. Seed dispersers, predators, and the maintenance of genetic variation: fruit color polymorphism in *Acacia ligulata*. Ecological Society of America, Madison, WI. 2001.
- Whitney, K. D. Fruit color polymorphism in *Acacia ligulata*: Are seed dispersers or seed predators key to the riddle? 3rd International Symposium on Frugivores and Seed Dispersal, São Pedro, Brazil. 2000.
- Whitney, K. D. Seed dispersers, seed predators, and the maintenance of genetic variation: aril color polymorphism in *Acacia ligulata*. Ecological Society of Australia, Melbourne, Australia. 2000.
- Whitney, K. D. & T. B. Smith. Conservation value of seed dispersal by Hornbills. Earthwatch/UK Tropical Forest Forum conference: African rainforests and the conservation of biodiversity, Limbe, Cameroon. 1997.
- Whitney, K. D. & T. B. Smith. Frugivore visitation, seed removal, and seed deposition at three species of African nutmeg (Myristicaceae). Ecological Society of America, Providence, RI. 1996.
- Whitney, K. D. & T. B. Smith. Seasonal variation in diet and habitat use of two large African forest hornbills: implications for forest dynamics. Ecological Society of America, Snowbird, Utah. 1995.
- Smyth, A. P. & K. D. Whitney. A comparison of seed dispersal in primary vs. secondary forest for an afro-tropical pioneer species, *Rauwolfia macrocarpa*. Ecological Society of America, Snowbird, Utah. 1995.
- Whitney, K. D. & T. B. Smith. Visitation and dispersal of the Myristicaceae by hornbills (Bucerotidae) in an African forest. Association for Tropical Biology, San Diego, CA. 1995.

TEACHING EXPERIENCE

University of New Mexico

- Basic Graduate Evolution (Bio 517), Spring 2013, Spring 2014, Spring 2015
 Introductory Biology (Bio 203), Fall 2014
 Evolution and Ecology of Pollination (Bio 402/502), Spring 2015

Rice University

- Plant Diversity (EBIO 336), Spring 2007, Spring 2008, Spring 2010, Spring 2011, Spring 2012.
 Graduate Core Class in Ecology and Evolutionary Biology (EBIO 529), Ecological Genetics module, Fall 2006, Fall 2008, Fall 2009, Fall 2010, Fall 2011.
 Topics in Ecology (EBIO 563): Fall 2008, Fall 2009, Fall 2010.
 Topics in Evolution (EBIO 561): Spring 2006, Spring 2007.

HONORS AND AWARDS

- 2014 KBS Eminent Ecologist, Kellogg Biological Station, Michigan State University
 2012 Finalist, Phi Beta Kappa Teaching Prize, Rice University
 2007 Distinguished Associate Award, Lovett College, Rice University
 2001 Phi Sigma, University of California at Davis Chapter
 1997 Graduate Student Award for Distinguished Achievement in Biology, SFSU
 1989 High Honors in the Major, Dartmouth College
 1988 Phi Beta Kappa, Dartmouth College Chapter
 1988 Presidential Scholar, Dartmouth College
 1988 Ralston English Prize, Dartmouth College

POSTDOCTORAL FELLOW SUPERVISION

	<u>Dates</u>	<u>Current Position</u>
Dr. Stephen Hovick	May 2010 – July 2013	Senior Research Associate, Dept. of Evolution, Ecology, and Organismal Biology, Ohio State University
Dr. Lesley Campbell	January 2008 - July 2010	Assistant Professor, Dept. of Chemistry and Biology, Ryerson University, Toronto

GRADUATE STUDENT SUPERVISION

	<u>Status</u>	<u>Co-supervisor</u>	<u>Current Position</u>
Kellen Paine	Ph.D. in progress		
Catherine Cumberland	Ph.D. in progress		
Michelle Sneck	M.A. 2012		Ph.D. program with Tom Miller, Rice University
Scott Chamberlain	Ph.D. 2012	J. Rudgers	Postdoc with Elizabeth Elle, Simon Fraser University
Jeffrey Ahern	Ph.D. 2012		Postdoc with Juha-Pekka Salminen, University of Turku, Finland
Amy Savage	Ph.D. 2011	J. Rudgers	Postdoc with Rob Dunn, North Carolina State University
Autumn Hardin*	Ph.D. 2008		Adjunct Faculty, Lone Star College, Houston, Texas
Amaris Swann*	Ph.D. 2007		Program Manager, UNM Sevilleta Field Station, University of New Mexico

*research conducted in L. Meffert Lab

M.S./PH.D. THESIS COMMITTEES

Michelle Afkhami (Rice EEB)	Lindsey Kaufman (UNM Biology)
Lara Appleby (University of Houston)	Anthony Kinyo (Rice EEB)
Kayce Bell (UNM Biology)	Jennie Kuzdzal (Rice EEB)
Julieta Bettinelli (UNM Biology)	John Liu (Rice Biochem & Cell Biol)
Juli Carillo (Rice EEB)	Joshua Lynn (UNM Biology)
Kerri Crawford (Rice EEB)	Brian Maitner (Rice EEB)
Sarah Christensen (Rice Biochem & Cell Biol)	Onza Razafindratsima (Rice EEB)
Juan Diaz (Rice EEB)	Christopher Roy (Rice EEB)
Christopher Dibble (Rice EEB)	Ching-Hua Shih (Rice EEB)
Diana Dugas (Rice Biochem & Cell Biol)	Laurie Stevison (Rice EEB)
Danielle Goodspeed (Rice Biochem & Cell Biol)	Sunni Taylor (Texas State University San Marcos)
Joseph Hinton (Rice EEB)	Benjamin Van Allen (Rice EEB)
	Kimberly Vincent (Rice EEB)
	Yichen Zheng (University of Houston)

MENTORING – UNDERGRADUATE INDEPENDENT RESEARCH PROJECTS SINCE 2005 (22)

	<u>Project</u>	<u>Current Position</u>
Phillip Agosti Charles Ary	NSF REU (2013 at RMBL) Senior thesis (2010)	Current 5 th -year Senior Development Analyst, Clean Line Energy Partners, Houston TX
Carina Baskett	Independent study	NSF Predoctoral Fellow; Ph.D. Program in Ecology, Evolution, and Behavioral Biology, Michigan State University
Jonathan Berg Morgan Black Katherine Boles	NSF REU (2012) Senior thesis (2012) Senior thesis (2008)	Current Sophomore Current Senior Masters Program in Landscape Architecture, University of Virginia
Jeremy Caves	Independent study	NSF Predoctoral Fellow; PhD program in Environmental Earth System Science, Stanford University
Christopher Chen Skylar Craig Anna Dipaola Esra Gumuser Carlisle Evans-Peck Amy Ewbank	NSF REU (2009) Senior thesis (2010) NSF REU (2014 at RMBL) Senior thesis (2011) NSF REU (2012 at RMBL) NSF REU (2011); Senior thesis (2012)	M.D. program, Baylor College of Medicine M.D. program Current Junior Current 5 th -year Senior
Sally Johnson	Senior thesis (2008)	MS Program in Environmental Science and Management, UC Santa Barbara
Matthew King	Independent study	Clinical internship with Dr. Richard Stasney, Methodist Hospital
Darren Li Lauren Merchant Reshmi Paul Fatima Pino Justin Rigby Marcus Stansberry	NSF REU, Senior thesis (2011) NSF REU (2014 at Sevilleta) Century Scholar MARC student NSF REU (2014 at RMBL) NSF REU (2010 at RMBL), Senior thesis (2010)	M.D. program, University of Michigan Current student
Emily Stone Paul Thompson	NSF REU (2011 at RMBL) Independent study	Rising Senior at UC Berkeley University of Pittsburgh School of Nursing Program
Anika Vinze	Independent study	Masters Program in Health Science in Global Disease Epidemiology, Johns Hopkins University
Niki VonHedemann	Senior thesis (2008)	MA Program in Geography, University of Arizona

MENTORING – POSTGRADUATE TECHNICIANS

Position following their tenure in my lab:

Kendall Beals	(current)
Bethany Haley	Director of Operations, TEDxABQ
Melanie Kazenel	MS Program in Biology, University of New Mexico
Loren Albert	PhD Program in Ecology and Evolutionary Biology, University of Arizona
Nancy Falxa-Raymond	MA Program in Conservation Biology, Columbia University
Samantha Hammer	MS Program in Hydrology, University of Arizona
Megan Rúa	PhD Program in Ecology, University of North Carolina – Chapel Hill
Elizabeth Siefert	Technician, University of Guelph
Carolina Simao	PhD Program in Ecology and Evolutionary Biology, University of Michigan
Prudence Sun	Company member, Suchu Dance

SOCIETY MEMBERSHIP

American Society of Naturalists
Ecological Society of America
Sigma Xi
Society for the Study of Evolution

JOURNAL EDITORIAL POSITIONS

Associate Editor, *Journal of Ecology*, September 2011 - present
Ad Hoc Editor, *Ecology*, March 2012

SERVICE IN PEER REVIEW – JOURNALS (80+ reviews)

<i>American Journal of Botany</i>	<i>Journal of Tropical Ecology</i>
<i>American Midland Naturalist</i>	<i>Molecular Biology and Evolution</i>
<i>American Naturalist</i>	<i>Molecular Ecology</i>
<i>Annals of Botany</i>	<i>Nature Climate Change</i>
<i>Australian Journal of Botany</i>	<i>Naturwissenschaften</i>
<i>Biological Invasions</i>	<i>New Phytologist</i>
<i>BMC Evolutionary Biology</i>	<i>Oecologia</i>
<i>Botany</i>	<i>Oikos</i>
<i>Current Biology</i>	<i>Plant and Soil</i>
<i>Diversity and Distributions</i>	<i>Plant Biology</i>
<i>Ecography</i>	<i>Plant Biosystems</i>
<i>Ecological Research</i>	<i>Plant Ecology</i>
<i>Ecology</i>	<i>PLoS One</i>
<i>Ecology Letters</i>	<i>Proceedings of the National Academy of Sciences USA</i>
<i>Evolution</i>	<i>Proceedings of the Royal Society B: Biological Sciences</i>
<i>Functional Ecology</i>	<i>Philosophical Transactions of the Royal Society B:</i>
<i>Genetics</i>	<i>Biological Sciences</i>
<i>Heredity</i>	<i>Science</i>
<i>Invasive Plant Science and Management</i>	<i>Trends in Plant Science</i>

Journal of Applied Ecology
Journal of Ecology
Journal of Evolutionary Biology

Wildlife Research
Zoo Biology

SERVICE IN PEER REVIEW – GRANTING AGENCIES

DFG (German Research Foundation) (1)
Grant Agency of the Czech Academy of Science (1)
International Post doc Fellowship Programme in Plant Sciences, Zurich-Basel Plant
Science Center - ETH Zürich (1)
National Geographic Society (2)
NSF, Environmental Genomics (2)
NSF, Evolutionary Ecology (17)
NSF, Evolutionary Genetics (1)
NSF, Integrative Organismal Systems (2)
NSF, International Research Fellowship Program (1)
NSF, Population and Evolutionary Processes (6)
NSF, Population and Evolutionary Processes, DDIG (22)
NYZS/The Wildlife Conservation Society (1)
Swiss National Science Foundation (SNSF) (1)
USDA, Biology of Weedy and Invasive Plants Panel (1)

SERVICE – GRANTING AGENCY PANELS & RESEARCH LAB COMMITTEES

NSF, Evolutionary Ecology Panel, Mar 2011
NSF, Population and Evolutionary Processes Panel, Doctoral Dissertation Improvement Grants, Feb 2008
RMBL (Rocky Mountain Biological Lab) Research Committee, 2013-2016

SERVICE & OUTREACH IN SCIENCE EDUCATION

2014 “Aphids and Ants”. Kids nature camp, Rocky Mountain Biological Lab, 8 July 2014
2013 “Hybridization in Wild Plants.” Adult Science Lecture & Field Trip, Rocky Mountain
Biological Lab, 1 Aug 2013
2013 “Aphids and Ants”. Kids nature camp, Rocky Mountain Biological Lab, 2 Aug 2013
2010 Civic Scientist Series. Carnegie Vanguard High School, 13 Oct 2010
2009 Civic Scientist Series. Carnegie Vanguard High School, 14 Oct 2009
Civic Scientist Series. Eastwood Academy, 10th grade biology class, 24 Feb 2009.
“Field biology in Africa and Australia”
2007 Instructor, International Baccalaureate teacher training workshop, Rice University
2006 Instructor, Advanced Placement teacher training workshop, Rice University
2006 Instructor, International Baccalaureate teacher training workshop, Rice University