

CURRICULUM VITAE

Daniel J. Funk

Associate professor, Department of Biological Sciences, Vanderbilt University, VU Station B, Box 35-1634, Nashville, TN 37235; phone: (615) 322-2214, fax: (615) 343-6707, e-mail: daniel.j.funk@vanderbilt.edu

Research interests

Speciation, ecological specialization; phylogenetic approaches; evolutionary genetics; herbivorous insect biology

Education and training

Degrees earned

University of Notre Dame	1985 – 1989	B.S. in Honors Biology and Philosophy
State Univ. of NY at Stony Brook	1989 – 1996	Ph.D. in Ecology and Evolution

Further education

1988, spring	Study abroad in London, United Kingdom
1988, summer	Field course in Aquatic Ecology, University of Notre Dame Environmental Research Center (UNDERC), Land O' Lakes, Wisconsin
1991, spring	2-month field course in Tropical Ecology, Organization of Tropical Studies, Costa Rica

Graduate advisor

Douglas Futuyma – Distinguished Professor, National Academy member (2006)

Postdoctoral advisors

Nancy Moran – Regents Professor, MacArthur Fellow (1997), National Academy member (2004)
Elizabeth Bernays – Regents Professor Emerita

Employment history

Technician	1989 summer	Univ. Notre Dame Ecol. Res. Ctr.
Teaching Assistant (7 diff. courses)	1989 – 1996 (7 semesters)	SUNY at Stony Brook
Research assistant (for D. Futuyma)	1989 – 1996 (6 semesters)	SUNY at Stony Brook
Instructor	1995 summer	SUNY at Stony Brook
NIH Postdoctoral Fellow	1996 – 1999	University of Arizona
Assistant Professor	2000 – 2006	Vanderbilt University
Associate Professor	2007 –	Vanderbilt University

Honors and awards

Finalist, National Merit Scholarship
Named Notre Dame Scholar
Graduate of University of Notre Dame Honors Program, 1989
First annual Graduate Student Teaching Award, Department of Ecology and Evolution, 1995
NIH Postdoctoral Fellowship, 1996-1999
Invited to serve as Associate Editor for *Evolution*
Invited to serve as Associate Editor for *BMC Ecology* (declined due to time constraints)
Invited to serve on three NSF Advisory Panels (scheduling conflicts precluded participation)

Publications

Published articles

- Futuyma, D.J., J. Walsh, T. Morton, **D.J. Funk**, and M.C. Keese. 1994. Genetic variation in a phylogenetic context: responses of two specialized leaf beetles (Coleoptera: Chrysomelidae) to host plants of their congeners. *Journal of Evolutionary Biology* 7: 127-146.
- Futuyma, D.J., M.C. Keese, and **D.J. Funk**. 1995. Genetic constraints on macroevolution: the evolution of host affiliation in the leaf beetle genus *Ophraella*. *Evolution*. 49: 797-809.
- Funk, D.J.**, D.J. Futuyma, G. Ortí, and A. Meyer. 1995a. Mitochondrial DNA sequences and multiple data sets: a phylogenetic study of phytophagous beetles (Chrysomelidae: *Ophraella*). *Molecular Biology and Evolution* 12: 627-640.
- Funk, D.J.**, D.J. Futuyma, G. Ortí, and A. Meyer. 1995b. A history of host associations and evolutionary diversification for *Ophraella* (Coleoptera: Chrysomelidae): new evidence from mitochondrial DNA. *Evolution*. 49: 1008-1017.
- Adams, D., and **D.J. Funk**. 1997. Morphometric inferences on sibling species and sexual dimorphism in *Neochlamisus bebbianae* leaf beetles: multivariate applications of the thin-plate spline. *Systematic Biology* 46: 178-192.
- Funk, D.J.** 1998. Isolating a role for natural selection in speciation: host adaptation and sexual isolation in *Neochlamisus bebbianae* leaf beetles. *Evolution* 52: 1744-1759.
- Funk, D.J.** 1999. Molecular systematics of COI and 16S in *Neochlamisus* leaf beetles and the importance of sampling. *Molecular Biology and Evolution* 16: 67-82.
- Bernays, E.A., and **D.J. Funk**. 1999. Specialists make faster decisions than generalists: experiments with aphids. *Proceedings of the Royal Society of London B*. 266: 151-156.
- Bernays, E.A., **D.J. Funk**, and N.A. Moran. 2000. Intraspecific differences in olfactory sensilla in relation to diet breadth in *Uroleucon ambrosiae*. (Homoptera: Aphididae). *Journal of Morphology* 245: 99-109.
- Bernays, E.A., and **D.J. Funk**. 2000. Electrical penetration graph analysis reveals population variation of host-plant probing behaviors within the aphid species *Uroleucon ambrosiae*. *Entomologia Experimentalis et Applicata* 97: 183-191.
- Funk, D.J.**, L. Helbling, J.J. Wernegreen, and N.A. Moran. 2000. Intraspecific phylogenetic congruence among multiple symbiont genomes. *Proceedings of the Royal Society of London B* 267: 2517-2521.
- Funk, D.J.**, J.J. Wernegreen, and N.A. Moran. 2001. Intraspecific variation in symbiont genomes: bottlenecks and the aphid-*Buchnera* association. *Genetics* 157: 477-489.
- Funk, D.J.**, and E.A. Bernays. 2001. Geographic variation in host specificity reveals host range evolution in *Uroleucon ambrosiae* aphids. *Ecology* 82: 726-739.
- Funk, D.J.**, K.E. Filchak, and J.L. Feder. 2002. Herbivorous insects: model systems for the comparative study of speciation ecology. *Genetica* 116: 251-267.
- Herbeck, J.T., **D.J. Funk**, P.H. Degnan, and J.J. Wernegreen. 2003. A conservative test of genetic drift in the endosymbiotic bacterium *Buchnera*: slightly deleterious mutations in the Chaperonin *groEL*. *Genetics* 165: 1651-1660.
- Funk, D.J.**, and K.E. Omland. 2003. Species-level paralogy and polyphyly: frequency, causes, and consequences, with insights from animal mitochondrial DNA. *Annual Review of Ecology, Evolution and Systematics* 34: 397-423.

- Gomez-Zurita, J., A.P. Vogler, and **D.J. Funk**. 2004. Diagnosing an overlooked North American taxon: biological observations and mitochondrial insights on *Calligrapha suturella* Schaeffer, 1933 new status (Coleoptera, Chrysomelidae). *Annals of the Entomological Society of America* 97: 28-36.
- Wernegreen, J.J., and **D.J. Funk**. 2004. Mutation exposed: a neutral explanation for extreme base composition of an endosymbiont genome. *Journal of Molecular Evolution* 59: 849-858.
- Nosil, P., T.H. Vines, and **D.J. Funk**. 2005. Perspective: Reproductive isolation caused by natural selection against immigrants using divergent environments. *Evolution* 59: 705-719.
- Brown, C.G., and **D.J. Funk** 2005. Aspects of the natural history of *Neochlamisus* (Coleoptera: Chrysomelidae): fecal-case associated life history and behavior, with a method for studying insect constructions. *Annals of the Entomological Society of America* 98: 711-725.
- Funk, D.J.**, P. Nosil*, and W.J. Etges. 2006. Ecological divergence is consistently positively associated with reproductive isolation across disparate taxa. *Proceedings of the National Academy of Sciences USA* 103: 3209-3213.
- Gomez-Zurita, J., **D.J. Funk**, and A.P. Vogler. 2006. The evolution of unisexuality in *Calligrapha* leaf beetles: molecular and ecological insights on origins via interspecific hybridization. *Evolution* 60: 328-347.
- Egan, S.P., and **D.J. Funk**. 2006 Individual advantages to ecological specialization: insights on cognitive constraints from three conspecific taxa. *Proceedings of the Royal Society of London, Series B* 273: 843-848.
- Chaboo, C.S., C.G. Brown, and **D.J. Funk**. 2008. Fecal case architecture in the *gibbosus* species group of *Neochlamisus* Karren 1972 (Coleoptera: Chrysomalidae: Cryptocephalinae: Chlamisini. *Zoological Journal of the Linnaean Society* 152: 315-351.
- Nosil, P., S.P. Egan, and **D.J. Funk**. 2008. Heterogeneous genomic differentiation between walking-stick ecotypes: 'isolation by adaptation' and multiple roles for divergent selection. *Evolution* 62: 316-336.
- Egan*, S.P., P. Nosil, and **D.J. Funk**. 2008. Selection and genomic differentiation during ecological speciation: isolating the contributions of host-association via a comparative genome scan of *Neochlamisus bebbianae* leaf beetles. *Evolution* 62: 1162-1181.
- Nosil, P., **D.J. Funk**, and D. Ortiz-Barrientos. 2009. Invited review: Divergent selection and heterogeneous genomic divergence. *Molecular Ecology* 18: 375-402.
- Egan, S.P., and **D.J. Funk**. 2009. Ecologically dependent postmating isolation between sympatric 'host forms' of *Neochlamisus bebbianae* leaf beetles. *Proceedings of the National Academy of Sciences USA* 106: 19426-194231.
- D.J. Funk**. 2010. Does strong selection promote host specialization and ecological speciation in insect herbivores? Evidence from *Neochlamisus* leaf beetles. *Ecological Entomology* 35: 42-53.
- Brown, C.G., and **D.J. Funk**. 2010. Antipredatory properties of an animal architecture: how complex faecal cases thwart arthropod attack. *Animal Behaviour* 79: 127-136.
- Chafee, M, **D.J. Funk**, R. Harrison, and S. Bordenstein. 2010. Lateral phage transfer in obligate intracellular bacteria (*Wolbachia*): verification from natural populations. *Molecular Biology and Evolution* 27: 501-505.

Accepted pending minor revision

- Novick, L.R., Catley, K.M., and **D.J. Funk**. Characters are key: the effect of synapomorphies on cladogram comprehension. In revision for *Evolution: Education and Outreach*.

In revision

Novick, L.R., Catley, K.M., and **D.J. Funk**. Inference is bliss: using evolutionary inference to guide inferences about biological categories. In revision for *Cognitive Science*.

Submitted

Funk, D.J., S.P. Egan, and P. Nosil. "Isolation by Adaptation" in *Neochlamisus* leaf beetles: Host-Related Selection Promotes Neutral Genomic Divergence. To be Resubmitted, to *Molecular Ecology*.

Nosil, P., Egan, S.P., and **D.J. Funk**. Population genomic evidence that stronger divergent selection promotes speciation. Submitted to *Evolution*.

Book chapters

Funk, D.J., K.E. Filchak, and J.L. Feder. 2002. Herbivorous insects: model systems for the comparative study of speciation ecology. In: (Egges, W., M. Noor, eds.) **Genetics of Mate Choice: from Sexual Selection to Sexual Isolation**. Kluwer Academic Publishers, New York.

Funk, D.J., and P. Nosil. 2008. Comparative analyses and the study of ecological speciation in herbivorous insects. Pp. 117-135 in: (Tilmon, K., ed.) **Specialization, Speciation, and Radiation: the Evolutionary Biology of Herbivorous Insects**. University of California Press, Berkeley, CA.

Funk, D.J. 2009. Investigating ecological speciation. Pp. 195-218 in: (Butlin, R.K, J. Bridle, and D. Schluter, eds.) **Speciation and Patterns of Diversity**. Cambridge University Press, Cambridge.

Funk, D.J. 2010. Specialization. In: (Breed, M., J. Moore, eds.) **The Encyclopedia of Animal Behavior**. Elsevier Press (In Press).

Catley, K.M., Novick, L.R., and **D.J. Funk**. The promise and challenges of introducing tree thinking into evolution education. Submitted for inclusion in: (Brem, S., G. Sinatra, eds.) **Evolutionary Challenges: Integrating Research and Practice in Teaching and Learning about Evolution**. Oxford University Press, Oxford.

Research grants

- | | |
|-------------|--|
| 1993 - 1996 | NSF Doctoral Dissertation Improvement Grant (DEB9229286): "The Role of Selection in Speciation and Diversification of Herbivorous Insects: an Analysis of Mechanism", \$10,000 |
| 1994 | Sigma Xi, Grant-in-Aid of Research: "Modes of Diversification by an Herbivorous Beetle: Phylogeny, Geography, and Host Associations", \$600 |
| 1995 | Sigma Xi, Grant-in-Aid of Research: funding renewed for previous grant, \$600 |
| 1996-1999 | NIH Postdoctoral Fellowship in Molecular Insect Science (1996-1999) |
| 2001-2004 | Vanderbilt Discovery Grant: "Planting an Aphid Garden: a Model System for the Ecological and Genetic Analysis of Speciation", \$32,000 |
| 2002-2004 | NSF Equipment Grant 0140522: "Equipment for automated acquisition of DNA sequence and DNA fragment size data"; co-PIs: D. McCauley, J. Burke, O. Pellmyr, C. Johnson, \$118,025 |
| 2003-2007 | NSF DEB0221262: "Evolutionary Genetics and the Ecology of Speciation", \$389,000 |
| 2006-2008 | Vanderbilt Discovery Grant: "Speciation and species distributions in North American tiger beetles of the <i>Cicindela sylvatica</i> species group: abiotic factors and an ecophylogeographic approach", \$50,000 |
| 2006-2008 | NSF IOB0447659: "The Ecological and Individual Context of Host Choice and Reproductive Isolation: a Behavioral Approach", \$197,000 |

- 2007-2010 NSF DEB0640741: “Investigating the Speciation Continuum: Ecology, Reinforcement, and the Evolution of Reproductive Isolation in *Timema* Stick Insects”, \$407,573
- 2009-2011 “Evolution without Sex: Historical Circumstances and Ecological Implications of the Hybrid Origin of Unisexual Insects”, J. Gomez-Zurita = PI, D. Funk, A. Gonzalez, A. Cordosa = co-investigators, 171,100 EUR (administered by PI)

Invited presentations (including only those accepted)

Seminars at universities and institutes (all visits funded by host institution)

- Fall 1995 Queens College, Biology Department
- Fall 1996 University of Arizona, Dept. of Ecology and Evolutionary Biology
- Fall 1997 University of Connecticut, Dept. of Ecology and Evolutionary Biology
- Spring 1998 University of Texas, Austin, Dept. of Zoology
- Fall 1998 University of Arizona, Dept. of Entomology
- Spring 1999 Vanderbilt University, Dept. of Biology
- Spring 1999 University of Alabama, Dept. of Biological Sciences
- Spring 1999 San Diego State University, Dept. of Biology
- Spring 2001 University of the South, Biology Department
- Spring 2002 University of California, Davis, Entomology Dept.
- Fall 2002 Western Carolina University, Dept. of Biology
- Spring 2003 Texas A&M University, Entomology Dept.
- Spring 2004 University of Tennessee, Knoxville, Dept. of Ecology and Evolutionary Biology
- Fall 2004 University of Arkansas, Fayetteville, Dept. of Biological Sciences
- Fall 2005 University of Massachusetts, Amherst, Dept. of Entomology
- Fall 2005 University of Massachusetts, Amherst, Biology Dept. [separate invitation & date from the above]
- Spring 2006 Auburn University, Dept. of Entomology
- Spring 2006 University of Georgia, Athens, Dept. of Entomology
- Fall 2006 North Carolina State University, Dept. of Entomology
- Spring 2007 Max-Planck Institute of Chemical Ecology, Jena, Germany
- Fall 2007 University of Notre Dame, Dept. of Biological Sciences
- Spring 2008 University of Minnesota, Duluth, Biology Dept.
- Fall 2008 State University of New York at Stony Brook, Dept. of Ecology & Evolution
- Spring 2009 Univ. Maryland, College Park, Behavior, Ecology, Evolution, & Systematics Program
- Summer 2009 Wesleyan University, Biology Dept. & Howard Hughes Program
- Spring 2010 Wright State University, Dept. of Biological Sciences
- Spring 2010 Belmont University, Biology Department

Symposium talks (symposium topic, venue):

- Fall 2000 Aphid genetics, Entomological Society of America national meeting
- Summer 2002 Premating isolation, American Society of Naturalists national meeting
- Fall 2003 Insect-plant interactions, Entomological Society of America national meeting (with D. Futuyma)
- Spring 2004 Multi-trophic interactions, University of Toronto, symposium sponsored by NSF
- Fall 2004 DNA taxonomy, Entomological Society of America, national meeting
- Spring 2006 Biodiversity Research and Systematics in the SEB, Entomol. Soc. Am., SE branch meeting
- Spring 2007 Speciation and Ecology, Symposium of the British Ecological Society, Univ. Sheffield, U.K.
- Fall 2007 Symposium in honor of Elizabeth Bernays, Entomological Society of America national meeting
- Spring 2009 Insect evolution below the species level: ecological specialization and the origin of species, Darwin-Wallace Celebratory Meeting, The Royal Entomological Society of London, Rothamsted, U.K.
- Fall 2010 Host-associated population differentiation, Entomological Society of America national meeting

Conference presentations (all presentations delivered by DJF; * = poster; others are talks)

- ***Funk, D.J.**, D.J. Futuyma, G. Ortí, and Axel Meyer. 1993. Molecular phylogenetics of *Ophraella* leaf beetles and the history of host associations. Society for the Study of Evolution, annual meeting, Snowbird, Utah.
- Funk, D.J.** 1995. Phylogeography and host-associated speciation in *Neochlamisus* leaf beetles. Society for the Study of Evolution, annual meeting, Montreal, QUE.
- *Adams, D.C. and **D.J. Funk**. 1995. Morphometric analysis of *Neochlamisus* (Coleoptera: Chrysomelidae): inferences on host races and sexual dimorphism. Society for the Study of Evolution, annual meeting, Montreal, QUE.
- Funk, D.J.** 1996. Host-use differentiation and reproductive isolation in *Neochlamisus bebbianae* leaf beetles: does selection drive speciation? Society for the Study of Evolution, annual meeting, St. Louis, MO.
- Funk, D.J.** 1997. The evolution of sex ratios in *Neochlamisus* leaf beetles. Society for the Study of Evolution, annual meeting, Boulder, CO.
- Funk, D.J.** 1998. Host-associated differentiation in a recently generalized aphid: prospects for speciation in *Uroleucon ambrosiae*. Society for the Study of Evolution, annual meeting, Vancouver, BC.
- ***Funk, D.J.**, M. Gelsey, and N.A. Moran. 1998. Intraspecific population structure of an aphid-bacterial symbiosis. 3rd International Symposium on Molecular Insect Science. Snowbird, UT.
- Funk, D.J.**, L. Helbling, and N.A. Moran. 1999. Transcontinental homogeneity and the population genetics of an aphid/bacterial symbiosis. Society for the Study of Evolution, annual meeting, Madison, WI.
- Funk, D.J.**, J.J. Wernegreen, and N.A. Moran. 2000. The population genetics of an aphid-bacterial endosymbiosis. Society for the Study of Evolution, annual meeting, Bloomington, IN.
- Funk, D.J.**, J.J. Wernegreen, and N.A. Moran. 2000. The population genetics of an aphid-bacterial endosymbiosis. Invited symposium lecture. Entomological Society of America annual meeting, Montreal.
- Funk, D.J.** 2001. Induction of host preferences and reproductive isolation in *Neochlamisus bebbianae* leaf beetles. Society for the Study of Evolution, annual meeting, Knoxville, TN.
- Funk, D.J.**, K.E. Filchak, and J.L. Feder. 2002. Herbivorous insects: model systems for the comparative study of speciation ecology. American Society of Naturalists annual meeting, Banff, BC.
- Funk, D.J.**, and K.E. Omland 2003. Species-level paraphyly and polyphyly: incidence and implications with insights from animal mitochondrial DNA. Society for the Study of Evolution, annual meeting, Chico, CA.
- Futuyma, D.J., and **D.J. Funk**. 2003. Adaptation and speciation in herbivorous insects. Invited symposium lecture. Entomological Society of America annual meeting, Cincinnati, OH.
- Funk, D.J.**, and K.E. Omland 2003. Species-level paraphyly and polyphyly: incidence and implications with insights from insect mitochondrial DNA. Entomological Society of America, annual meeting, Cincinnati, OH.
- Funk, D.J.** 2003. *Neochlamisus*: the ecology and evolution of cryptic case-bearers. Chrysomelid workers assembly. Entomological Society of America annual meeting, Cincinnati, OH.
- Funk, D.J.** 2004. Species-level polyphyly and the importance of sampling DNA diversity. Invited symposium lecture. Entomological Society of America annual meeting, Cincinnati, OH.

- Funk, D.J.**, P. Nosil, and W.J. Etges. 2005. Ecological divergence consistently promotes speciation across disparate taxa. Society for the Study of Evolution, annual meeting, Fairbanks, AK.
- Funk, D.J.** 2006. Herbivorous insects: Paragons of ecological speciation. Entomological Society of America, Southeastern Branch annual meeting, Wilmington, NC.
- Funk, D.J.**, S.P. Egan, and P. Nosil. 2006. Comparative genome scans in ecologically speciating herbivore populations. Society for the Study of Evolution, annual meeting, Stony Brook, NY.
- Funk, D.J.**, S.P. Egan, and P. Nosil. 2006. Evolutionary differentiation in host-associated (*Neochlamisus*) leaf beetles: Insights from AFLPs. Entomological Society of America annual meeting, Indianapolis, IN.
- Funk, D.J.** 2007. Assessing ecological speciation: Its investigation and importance. British Ecological Society Symposium on Speciation and Ecology, Sheffield, United Kingdom
- Funk, D.J.**, and S.P. Egan. 2007. Intrinsic advantages to ecological specialization: population- and individual-level evidence for cognitive constraints. Invited symposium lecture. Entomological Society of America annual meeting, San Diego
- Funk, D.J.**, S.P. Egan, and P. Nosil. 2008. "Isolation by Adaptation" in *Neochlamisus* leaf beetles: host-related selection promotes neutral genomic divergence. Society for the Study of Evolution annual meeting, Minneapolis, MN.
- Funk, D.J.**, and S.P. Egan 2009. Ecologically dependent postmating isolation between sympatric host forms of *Neochlamisus bebbianae* leaf beetles. Entomological Society of America, annual meeting, Indianapolis, IN.

Service

To profession

- Associate Editor, *Evolution*, 2005-2007 (3-year term)

- Ad hoc reviewer of manuscripts for 40 peer-reviewed journals:

<i>The American Naturalist</i>	<i>Heredity</i>
<i>Annals of the Entomol. Society of America</i>	<i>Journal of Heredity</i>
<i>Biological Journal of the Linnean Society</i>	<i>Journal of Insect Science</i>
<i>Biology Letters</i>	<i>Journal of Molecular Evolution</i>
<i>BMC Ecology</i>	<i>Microbial Ecology</i>
<i>BMC Evolutionary Biology</i>	<i>Molecular Biology and Evolution</i>
<i>Cladistics</i>	<i>Molecular Ecology</i>
<i>Coleopterist's Bulletin</i>	<i>Naturwissenschaften</i>
<i>Diversity and Distributions</i>	<i>Molecular Phylogenetics and Evolution</i>
<i>Ecological Entomology</i>	<i>Oecologia</i>
<i>Ecology</i>	<i>Oikos</i>
<i>Ecology Letters</i>	<i>PNAS</i>
<i>Economic Entomology</i>	<i>Proceedings of the Royal Society, London</i>
<i>Entomologia Experimentalis et Applicata</i>	<i>The Quarterly Review of Biology</i>
<i>Environmental Entomology</i>	<i>Science</i>
<i>Evolution</i>	<i>Systematic Biology</i>
<i>Evolutionary Applications</i>	<i>Systematic Botany</i>
<i>Evolutionary Ecology</i>	<i>Systematic Entomology</i>
<i>Functional Ecology</i>	<i>Trends in Ecology and Evolution</i>
<i>Genetica</i>	<i>Trends in Genetics</i>

- Ad hoc reviewer of grant proposals for:
 - NSF Ecology Panel
 - NSF Population Biology Panel
 - NSF Systematic Biology and Biodiversity Inventories Panel
 - NSF Career Grant Program
 - NSF Biodiversity Surveys and Inventories Program
 - NSF International Research Fellowship Program
 - Netherlands Organization for Scientific Research: Earth and Life Sciences
 - Austrian Science Fund
 - Kansas State Ecological Genomics Seed Grant Program
 - Sigma Delta Epsilon-Graduate Women in Science Program
- Outside examiner for Ph.D. dissertation, Griffith University, Australia
- Tenure letter writer, Texas State University, University of Minnesota, Duluth
- External reviewer, scientific staff evaluation, Smithsonian Tropical Research Institution, Panama
- Book prospectus reviewer, Wiley Press
- Professional memberships:
 - American Society of Naturalists
 - Entomological Society of America
 - Society for the Study of Evolution
 - Society of Systematic Biology

To Vanderbilt University

- Dept. of Biological Sciences, Associate Director of Graduate Studies, 2005-2009
- Dept. of Biological Sciences, Graduate Program Committee, 2000-2009
- College of Arts and Science Committee on Educational Programs, 2007-
- Highlands Biological Station Board of Scientific Directors, Vanderbilt representative, 2000-2007
- Co-organizer, Biological Sciences special seminar series for Vanderbilt community, 2001
- Dept. of Biological Sciences faculty search committees:
 - Evolution tenure-track faculty search committee, 2000-2001
 - Zoology/Ecology lecturer search committee, 2001
 - Chair, Zoology/Behavioral Ecology lecturer search committee, 2002
 - Ecology tenure-track faculty search committee, 2002-2003
 - Chair, Microbial Ecology/Evolution tenure track faculty search committee, 2006-2007
 - Chair, Evolutionary Ecology tenure track faculty search committee, 2007-2008

External recognition

- 2003 Annual Review paper selected as a Fast Breaking Paper by Thompson-ISI, leading to online interview/article on their website; this paper now has 400+ citations, 5th most among all articles published in this venue since 2000
- various aspects of past research highlighted in two leading Evolutionary Biology textbooks
- interviewed for, quoted in, 2006 New York Times article on butterfly hybridization
- 2006 PNAS paper focus of Vanderbilt Explorer online article and Vanderbilt Register front page article; subsequently picked up by online sites for MSNBC, Science Daily, etc.; also interviewed for article in Seed Magazine (online)
- 2009 PNAS paper focus of Vanderbilt Explorer online article
- Yet-to-be-published paper in *Animal Behavior* drawing attention: has thus far been covered online by articles for MSNBC, LiveScience, Yahoo News, WBKO.com, World Association of Young Scientists, Not Exactly Rocket Science, etc.; associated article to be published in *Science News*; subject of request for television segment on Discovery Channel, Canada

Teaching and mentoring

Courses developed:

BSCI 205 – Evolution (required core course for Biological Sciences majors)
BSCI 247 – Molecular Evolution (upper level course)
BSCI 275 – Herbivorous Insects and Biological Diversity (senior seminar)
BSCI 275 – Evolution, Science, and Society (senior seminar)

Guest lecturer in the following courses:

BSCI 105, Human Biology
EDUC 2900, Current Topics in Science Education: Scientific Literacies
DIV 3321, Process Theology
DIV 3401, LAW 736, REL 3401, HOD 3660, Religion, Politics, and Social Issues

Ph.D. advisor:

Christopher Brown (2003-2009, graduated) – presently Assistant Professor at Shorter College, Rome, GA
Daniel Duran (2004-2009)
Scott Egan (2004-2009)
Gregory Colby (2009)

External Committee Member

Michael Remple – Dept. of Psychology, Vanderbilt University
Aman Gill – Dept. of Ecology & Evolution, State University of New York at Stony Brook (present)

Undergraduate research

- participation by 31 Vanderbilt undergraduates and 3 from other Universities
- including 16 women, several ethnic minorities
- ≥ six have entered graduate school in the biological sciences; many in medical school

‘Outreach’

- active participant in School for Math & Science at Vanderbilt, for talented high school students
- interviewed four times for student course projects at Vanderbilt and Belmont Universities
- one of these students won an AAAS fellowship at *Scientific American* based on the resulting paper
- initiated ongoing collaboration with P. Nosil while he was a graduate student at Simon Fraser University; Dr. Nosil won the 2008 Dobzhansky Prize – awarded by the Society for the Study of Evolution (the leading international evolution society) to the most promising evolutionary biologist no more than five years removed from earning their Ph.D.; acknowledged me as one of his 3 major mentors at the associated talk
- as Associate Editor for *Evolution*, handled manuscript by Langerhans et al. that won the 2008 Fisher Prize for best dissertation-based paper published in *Evolution*; Langerhans later said I should be a co-author on this paper, based on the work I did on its several revisions prior to acceptance
- panelist for “Faith and Evolution” discussion, focal event of Belmont Univ.’s Darwin celebration
- guest ‘debater’ on the inaugural episode of “The Great American Debate” radio program, heard in 28 states and 3 countries; topic: ‘whether intelligent design should be taught in public science classes’
- participant in Notre Dame Alumni Mentoring Program via summer ’09 research by Charley Spear
- participant in "Ethics in Science: Teaching, Research, & Community" workshop; co-speaker on “Teaching hard topics” topic, Fall 2009
- scientific consultant for The Clergy Letter Project, to provide information on evolution to religious leaders and contribute to reduced misunderstanding between science and religion