CURRICULUM VITAE

Priscilla Kate Tucker

Professor of Ecology and Evolutionary Biology and

Curator of Mammals, Museum of Zoology, University of Michigan

ADDRESS

Museum of Zoology University of Michigan 1109 Geddes Ave. Ann Arbor, MI 48103

Ph: 734-647-2207 FAX: 734-763-4080 email: ptuck@umich.edu

EDUCATION

1970-1974 Colgate University, Hamilton, NY, B.A. 1977-1980 Texas A&M University, College Station, TX, M.S. 1980-1984 Texas A&M University, College Station, TX, Ph.D.

POSTDOCTORAL TRAINING

Postdoctoral Trainee with Dr. Eva Eicher, The Jackson Laboratory, 1985-1988.

ACADEMIC APPOINTMENTS

Visiting Instructor, Dept. of Wildlife and Fisheries Sciences, Texas A&M University, 1984-1985.

Assistant Professor of Biology/Assistant Curator of Mammals, 1988-1995.

Associate Professor of Biology/Associate Curator of Mammals, 1995-2001.

Associate Professor of Ecology and Evolutionary Biology/Associate Curator of Mammals, 2001-2005

Professor of Ecology and Evolutionary Biology/Curator of Mammals, 2005-present

Senior Fellow, Sweetland Writing Center, Fall 2005-Winter 2006.

Senior Fellow, Learning Analytics Workshop, Winter 2013

GRADUATE ASSISTANTSHIPS

Graduate Teaching Assistant, Dept. of Wildlife and Fisheries Sciences and Dept. of Biology, Texas A&M University, 1978-1981.

Graduate Assistant, non-teaching. Dept. of Wildlife and Fisheries Sciences, Texas A&M University, 1981.

Graduate Assistant, Research, Dept. of Wildlife and Fisheries Sciences, Texas A&M University, 1982-1984.

MAJOR AREAS OF RESEARCH INTEREST

Organismal, chromosomal and genome evolution, speciation, mammalian systematics

SCIENTIFIC REVIEW ACTIVITIES

National

1986-1989, American Society of Mammalogists: member of Honoraria committee

1986-present, Reviewer of manuscripts for Behavioral Ecology and Sociobiology, Biological Journal of the Linnean Society, Evolution, Folia Zoologica, Genetical Research, Genetics, Genome, Hereditas, Journal of Biogeography, Journal of Heredity, Journal of Mammalogy, Journal of Molecular Evolution, Journal of Experimental Zoology, Mammalian Genome., Molecular Biology and Evolution, Molecular Ecology, Plos Biology, Plos Genetics, Proceedings of the Biological Society of Washington, Proceedings of the Royal Society, Systematic Biology, Trends in Genetics, Zootaxa.

1986-present, Ad hoc reviewer of National Science Foundation grants twice a year

1993, American Museum of Natural History Search Committee for a Curator of Mammals.

1994, Member of two National Science Foundation Advisory Panels

1994 -1996, Member of the National Science Foundation Systematic Biology Program Advisory Panel

1997-1998, Member of a National Science Foundation Advisory Panel

1998, Society of Systematic Biologists Nominations Committee

1999, Member of a National Science Foundation Advisory Panel

2000, Member of a National Science Foundation Advisory Panel

2000-2004, Member of the *Peromyscus* Stock Center External Advisory Board (Committee Chair in 2001 and 2004)

2001-2004, Member of the Editorial Board for Systematic Biology

2002, Member of a National Science Foundation Advisory Panel

2003, Member of a National Science Foundation Advisory Panel

2004 –2006, Society of Systematic Biologists - elected to Council

2007, Society of Systematic Biologists Nominations Committee

2008, Member of a National Science Foundation Advisory Panel

2010, Member of a National Science Foundation Advisory Panel

2012, Member of a National Science Foundation Advisory Panel

2013, Member of a National Science Foundation Advisory Panel, Spring and Fall

State

1989-present, Michigan Dept. of Natural Resources Technical Advisory Committee on Mammals

GRANT SUPPORT

NSF Cytogenetic studies of sex chromosome-autosome translocations in phyllostomid bats. \$91,371. 1982-1984 (Co-Principal Investigator with J. W. Bickham; awarded when I was a graduate student).

Rackham Foundation Faculty Research Grant, University of Michigan. The Evolution of Y chromosome DNA sequences in mammals. \$5,500. 5/89-10/90.

Office of the Vice President for Research, University of Michigan. The evolution of Y chromosome DNA sequences in mammals. \$10,000. 5/89-5/90.

NSF RPG/ROW. Evolution of the mammalian Y chromosome. \$18,000. 8/1/90-7/31/91.

Office of the Vice President for Research, University of Michigan. Molecular studies of Y chromosome evolution in mice. \$5,000. 6/1/91-12/31/91.

University of Michigan Memorial-Phoenix Project. Evolution of the male sex-determining locus, *Sry*, in mice. \$5,000. 5/1/92-6/30/93.

NSF Research Initiation Award. Phylogeny reconstruction using the sex determining locus, *Sry*, in mice. \$300,000. 9/1/92-8/31/97.

Alfred P. Sloan Foundation Postdoctoral Sponsor. Evolution of the sex chromosome-linked zinc finger genes in mice. (with Ronald Adkins) \$70,000. 9/1/93-8/31/95.

NSF REU Supplement. Phylogeny reconstruction using the sex determining locus, Sry, in mice. \$10,000.5/1/93-8/31/93

NSF REU Supplement. Phylogeny reconstruction using the sex determining locus, *Sry*, in mice. \$5,000. 5/1/94-8/31/94

University of Michigan Research Partnership Grant. A molecular phylogeny of the nesomyine rodents of Madagascar. (with Sharon Jansa) \$14,214 6/1/94-5/31/95.

NSF REU Supplement. Phylogeny reconstruction using the sex determining locus, *Sry*, in mice. \$5,000. 5/1/95-8/31/95.

NSF REU Supplement. Phylogeny reconstruction using the sex determining locus, *Sry*, in mice. \$5,000. 5/1/96-8/31/96.

NSF Doctoral Dissertation Improvement Grant. Molecular Phylogeny of the endemic rodents of Madagascar. Sponsor for Sharon Jansa. \$10,000. 6/1/96-5/31/98.

NSF REU Supplement. Phylogeny reconstruction using the sex determining locus, *Sry*, in mice. \$5,000. 5/1/97-4/30/98.

NSF Career Advancement Award. Developmental genetic analysis of an eyeless strain of mice. A study toward understanding eye morphogenesis and evolution. \$42,000. 9/1/97-8/31/98.

NIH Molecular Analysis of Congenital Anophthalmia. Co-PI with Tom Glaser \$1,276,625. 4/1/00-3/31/05.

NSF Dynamics of Genes in Hybrid Zones. \$192,000. 8/1/02-7/31/05.

NSF REU Supplement. Dynamics of Genes in Hybrid Zones. \$6,000 5/1/03-8/31/03

NSF REU Supplement. Dynamics of Genes in Hybrid Zones. \$6,000 5/1/04-8/31/04

OVPR/Rackham Spring/Summer Research Grant \$4,000 5/1/04-8/31/04

NSF Advance Elizabeth Caroline Crosby Award \$10,000 1/1/2005

NSF REU Supplement. Dynamics of Genes in Hybrid Zones. \$6,000 5/1/05-8/31/06

NSF Collaborative Research on the genetic basis of reproductive isolation in house mice. \$532,361. 4/1/08-3/31/11 (no cost extension until 3/31/13).

NSF REU Supplement Collaborative Research on the genetic basis of reproductive isolation in house mice. \$6,000 5/01/08 - 4/30/09

NSF ROA Supplement Collaborative Research on the genetic basis of reproductive isolation in house mice. \$25,000 1/01/2011-3/31/12. Host for Prof. David Kass (EMU).

NSF Development of a Liquid Nitrogen Storage Facility for Frozen Tissues at the University of Michigan Museum of Zoology \$178, 085 4/01/2011-3/31/2013.

AWARDS AND HONORS

- 1979 Elected to the biological honor society, Phi Sigma
- 1980 Elected to the honor society, Phi Kappa Phi
- 1984 Honorable Mention-Wilks Award from the Southwestern Association of Naturalists
- 1984 A. Brazier Howell Award from the American Society of Mammalogists, 1984
- 1991 University of Michigan ADVICE High Honors List, Fall 1991 for my course "Special Topics in Molecular Evolution"
- 1992 Research Initiation Award, National Science Foundation
- 1997 Career Advancement Award, National Science Foundation

MEMBERSHIP IN PROFESSIONAL SOCIETIES

The Society for the Study of Evolution

INVITED SYMPOSIA/SEMINARS

Connecticut College, Dept. of Biology, February, 1985. Sex chromosome-autosome translocations in the leaf-nosed bats, family Phyllostomidae.

The Jackson Laboratory, March, 1985. Sex chromosome-autosome translocations in the leaf-nosed bats, family Phyllostomidae.

Gordon Research Conference on Mammalian Embryogenesis and Gametogenesis, August, 1986. Evolution of the Y Chromosome.

Hofstra University, Dept. of Biology, October, 1987. Evolution of the Y Chromosome in the genus *Mus*.

University of Michigan, Dept. of Biology, November, 1987. Evolution of the Y Chromosome in the genus *Mus*.

Brown University, Div. of Biology and Medicine, February, 1988. Evolution of the Y Chromosome in the genus *Mus*.

North Carolina State University, Dept. of Genetics, April, 1993. Evolution of the sex determining locus, Sry, in mice.

Cornell University, Division of Biological Sciences, Section of Genetics and Development, April, 1993. Evolution of the sex determining locus, Sry, in mice.

University of Michigan, Dept. of Human Genetics, April, 1993. Evolution of the sex determining locus, Sry, in mice.

University of Michigan, Museum of Zoology, Distinguished Women in Systematics Series, May, 1993. Phylogeny reconstruction using paternally inherited characters in mice.

McMaster University, Department of Biology, April, 1994. Evolution of sex chromosome-linked genes in mice.

Society for Molecular Biology and Evolution (Joint meeting with Society for the Study of Evolution, the Society of Systematic Biology, and the American Society of Naturalists), Symposium on "Molecular evolution of adaptive characters in higher organisms", June, 1994. Evolution of the sex determining gene in rodents.

AAAS Pacific Division Meetings, Symposium on "Molecular Genetic Approaches in Conservation", June, 1994. The utility of paternally inherited characters in conservation biology.

University of Texas, Houston, "Molecular Evolution of *Sry* in Old World mice and rats", January 1995.

University of Washington, Dept. of Zoology and Burke Museum, Invited Lectureship Series in Systematics and Evolution, February 1995.

NIH Genetics Training Grant Program, University of Michigan, Genetics Short Course in Molecular Evolution, March 1995.

The Royal Society, London, "Mechanisms of Vertebrate Sex Determination", May 1995.

Gordon Research Conference in Molecular Evolution, January 1996.

Eastern Michigan University, Department of Biology, "Evolution of the Y chromosome in mice", October 1996.

University of South Carolina, Department of Biological Sciences, "Identification of a homeobox gene mutation in an eyeless strain of mice: a study toward understanding eyelessness in nature", June 1999.

Fourth European Congress of Mammalogy, Brno Czech Republic, "The genus *Mus* as a model for evolutionary studies – a symposium in honour of Louis Thaler", July 2003.

Ninth International Mammalogical Congress, Sapparo, Japan, Symposium on the Evolution of the Genus *Mus*. "A Genomic Study of a hybrid zone in European House Mice." August 2005.

RIKEN Tsukuba Institute BioResource Center, Tsukuba Japan, August 2005.

Tokyo Metropolitan Institute for Medical Research, Tokyo, Japan, August 2005.

The Jackson Laboratory, Bar Harbor, ME, September 2007

Max-Planck-Institute for Evolutionary Biology, Department of Evolutionary Genetics

Ploen, Germany, March 2008

Mouse Evolutionary Genetics Meeting, University of North Carolina, June 2009

Complex Trait Consortium Meeting, University of Chicago and Northwestern University Session on evolutionary genetics of wild house mice. Genome-wide dynamics in naturally occurring hybrid populations of *Mus musculus domesticus* and *Mus musculus musculus* Chicago, May 2010

PUBLICATIONS

- 1. Tucker, P. K. and D. J. Schmidly (1981). Studies of a contact zone among three chromosomal races of *Geomys bursarius* in eastern Texas. J. Mamm. 62:258-272.
- 2. Bickham, J. W., P. K. Tucker and J. M. Legler (1985). Diploid-triploid mosaicism: A bizarre phenomenon in side-necked turtles (*Platemys platycephala*). Science 227:1591-1593.
- 3. Tucker, P.K. (1986). Sex chromosome-autosome translocations in the leaf-nosed bats family Phyllostomidae. I. Mitotic analyses of the subfamilies Stenodermatinae and Phyllostominae. Cytogenet. Cell Genet. 43:19-27.
- 4. Tucker, P. K. and J. W. Bickham (1986). Sex chromosome-autosome translocations in the leaf-nosed bats family Phyllostomidae. II. Meiotic analyses of the subfamilies Stenoderminae and Phyllostominae. Cytogenet. Cell Genet. 43:28-37.
- 5. Engstrom, M. D., H. H. Genoways, and P. K. Tucker (1987). Morphological variation, karyology, and systematic relationships of *Heteromys gaumeri* (Rodentia:Heteromyidae). Fieldiana Zoology, New Series No.39, pp. 289-304.
- 6. Tucker, P. K. and J. W. Bickham (1989). Heterochromatin and sex chromosome variation in the genus *Carollia* (Chiroptera: Phyllostomidae). J. Mamm. 70:174-179.
- 7. Tucker, P. K., B. K. Lee, and E. M. Eicher (1989). Y chromosome evolution in the subgenus *Mus* (genus *Mus*). Genetics 122:169-179.
- 8. Eicher, E. M., K.. W. Hutchison, S. J. Philips, P. K. Tucker and B. K. Lee (1989). A repeated segment on the mouse Y chromosome is composed of retroviral-related, Y-enriched, and Y-specific sequences. Genetics 122: 181-192.
- 9. Hale, D. W., P. A. Hunt, P. K. Tucker, and E. M. Eicher (1991) Synapsis and obligate recombination between the sex chromosomes of male laboratory mice carrying the Y* mutation. Cytogenetics Cell Genetics 57:231-239.
- 10. Eicher, E. M., D. W. Hale, P. A. Hunt, B. K. Lee, P. K. Tucker, T. R. King, J. T. Eppig, L. L. Washburn (1991). The mouse Y* chromosome involves a complex rearrangement including interstitial positioning of the pseudoautosomal region. Cytogenetics Cell Genetics 57:221-230.
- 11. Mitchell, M. J., D. R. Woods, P. K. Tucker, J. S. Opp, and C. E. Bishop (1991). Homology of a candidate spermatogenic gene from the mouse Y chromosome to the ubiquitinactivating enzyme E1. Nature 354:483-486.
- 12. Tucker, P. K., K. Phillips, and B. Lundrigan (1992). A mouse Y chromosome pseudogene is related to human ubiquitin activating enzyme E1. Mammalian Genome 3:28-35.

- 13. Tucker, P. K., B. K. Lee, B. L. Lundrigan, and E. M. Eicher (1992). Geographic origin of the Y chromosomes in "old" inbred strains of mice. Mammalian Genome 3:254-261.
- 14. Tucker, P. K., R.D. Sage, J. H. Warner, A.C. Wilson, and E.M. Eicher (1992). Abrupt cline for sex chromosomes in a hybrid zone between two species of mice. Evolution 46:1146-1163.
- 15. Tucker, P. K. and B. L. Lundrigan (1993) Rapid evolution of the sex determining locus in Old World mice and rats. Nature 364:715-717.
- 16. Tucker, P. K. and B. Lundrigan (1993). Comparative Studies of the mammalian Y chromosome. Methods in Enzymology 224:517-525.
- 17. Lundrigan, B. L. and P. K. Tucker (1994). Tracing paternal ancestry in mice using the Y-linked sex determining locus, *Sry*. Molecular Biology and Evolution 11:483-492.
- 18. Miller, K., B. L. Lundrigan, and P. K. Tucker (1995). Length variation of CAG repeats within *Sry* in populations of *Mus domesticus*. Mammalian Genome 6:206-208.
- 19. Tucker, P. K. and B. L. Lundrigan (1995). The nature of gene evolution on the mammalian Y chromosome: lessons from *Sry*. Phil. Trans. of the Royal Soc., series B. 350:221-227.
- 20. Myers, P., B. L. Lundrigan and P. K. Tucker (1995) Molecular phylogenetics of oryzomyine rodents: the genus *Oligoryzomys*, Molecular Phylogenetics and Evolution,4:372-382.
- 21. Lacey, E., J. Wieczorek, and P. K. Tucker (1997). Male mating behavior and fertilization success in Arctic ground squirrels. Animal Behavior 53:767-779.
- 22. Lundrigan, B. L. and P. K. Tucker (1997) Evidence for multiple copies of the male sexdetermining locus, *Sry*, in African murine rodents. Journal of Molecular Evolution 45:60-65.
- 23. Cerchio, S. and P. K. Tucker (1998) Influence of alignment on the mtDNA phylogeny of cetacea: Questionable support for Mysticeti/Physeteroidea clade. Sys. Bio. 47:336-344.
- 24. Brown, N. L., S. Kanekar, M. L. Vetter, P. K. Tucker, D. L. Gemza, and T. Glaser (1998) Math5 encodes a murine helix-loop-helix transcription factor expressed during early stages of retinal neurogenesis. Development 125:4821-4833.
- 25. Jansa, S. A., S. M. Goodman, and P. K. Tucker (1999) Molecular phylogeny and biogeography of the native rodents of Madagascar (Muridae: Nesomyinae): A test of the single origin hypothesis. Cladistics 15:253-270.
- 26. Schaner, P., N. Richards, A. Wadhawa, I. Aksentijevich, D. Kastner, P. Tucker, and D. Gumucio (2001) Rapid evolution of pyrin in Primates: Role of positive selection. Nature Genetics 27:318-321
- 27. Tucker, P. K., A. Munson, S. Kanekar, H. Schlecht, M. Vetter, L. Laemle, T. Glaser (2001) The eyeless mouse mutation (ey1) removes an alternative start codon from the *Rx/rax* homeobox gene and acts as a hypomorphic gene. Genesis 31:43-53.
- 28. Lundrigan, B., S. Jansa, and P. K. Tucker (2002) Phylogenetic relationships in the genus *Mus*, based on maternally, paternally, and biparentally inherited characters. Systematic Biology 53:410-431.
- 39. Jansa, S. A., B. L. Lundrigan, P. K. Tucker (2003) Tests for positive selection on immune and reproductive genes in closely related species of the murine genus *Mus*. Journal of Molecular Evolution 56:294-307.

- 30. Tucker, P. K., R. A. Adkins, and J. S. Rest (2003) Differential Rates of Evolution for the ZFY-related zinc finger genes, *Zfy*, *Zfx* and *Zfa* in the mouse genus *Mus*. Molecular Biology and Evolution 20:999-1005.
- 31. Sanstedt, S. and P. K. Tucker (2004) Evolutionary strata on the X chromosome in the mouse genus *Mus*. Genome Research 14:267-272.
- 32. Bozikova, E. P., Muncliner, K. Teeter, P. K. Tucker, M. Macholan, and J. Pialek (2005) Mitochondrial DNA in the hybrid zone between *Mus musculus musculus* and *Mus musculus domesticus*: a comparison of two transects. Biol. J. Linn. Soc. 84:363-378.
- 33. Tucker, P. K., S. Sandstedt and B. L. Lundrigan (2005) Phylogenetic relationships in the genus *Mus*: examining gene trees and species trees. Biol. J. Linn. Soc. 84:653-662.
- 34. Sanstedt, S and P. K. Tucker (2005) Male-driven evolution in closely related species of the mouse genus *Mus*. Journal of Molecular Evolution 61:138-144.
- 35. Podlaha, O., D. Webb, P. K. Tucker, and J. Zhang (2005) Positive selection for indel substitutions in the rodent sperm protein Catsper1. Molecular Biology and Evolution 22:1845-1852.
- 36. Sanstedt, S and P.K. Tucker (2006) Inefficient purifying selection: the Mammalian Y chromosome in the rodent genus *Mus*. Mammalian Genome 17:14-21.
- 37. Teeter, K..C., B. A. Payseur, L. W. Harris, M. A. Bakewell, L.M. Thibodeau, J. E. O'Brien, J. G. Krenz, M. A. Sans-Fuentes, M. W. Nachman, and P. K. Tucker. (2008) Genome-wide patterns of gene flow across a house mouse hybrid zone. Genome Research 18:67-76.
- 38. Johnsen, J. J., G. G. Levy, R. J. Westrick, P. K. Tucker, and D. Ginsburg (2008) The endothelial-cell specific regulatory mutation, *Mvwf1*, is a common murine founder allele. Mammalian Genome 19:32-40.
- 39. Teeter, K. C. L. M. Thibodeau, Z. Gompert, C. A. Buerkle, M. W. Nachman, and P.K. Tucker (2010). The variable genomic architecture of isolation between hybridizing species of house mouse. Evolution 64, 472-485
- 40. Chatfield, M. W. H., K. H. Kozak, B. M. Fitzpatrick, and P. K. Tucker (2010) Patterns of differential introgression in a salamander hybrid zone: inferences from genetic data and ecological niche modeling. Molecular Ecology 19, 4265–4282.
- 41. Yang H., J. Wang J, J. P. Didion, R. J. Buus, T. A. Bell, C. E. Welsh, F. Bonhomme, A. H.-T. Yu, M. W. Nachman, J. Pialek, P. Tucker, P. Boursot, L. McMillan, G. A. Churchill, F. Pardo-Manuel de Villena (2011) Subspecific origin and haplotype diversity in the laboratory mouse. Nature Genetics 43: 648–655.
- 42. Vošlajerová Bímová, M. Macholán, S. J. E. Baird, P. Munclinger, P. Dufková, C. M. Laukaitis, R. C. Karn, K. Luzynski, P. K. Tucker, J. Piálek (2011) Reinforcement selection acting on the European house mouse hybrid zone. Molecular Ecology 20: 2403–2424
- 43. Wang, L., K. Luzynski, J. Pool, V. Janoušek, P. Dufková, M. Mrkvicová Vyskočilová, K. Teeter, M. W. Nachman, P. Munclinger, M. Macholán, J. Piálek, and P. K. Tucker, (2011). Measures of linkage disequilibrium among neighboring SNPs indicate asymmetries across the house mouse hybrid zone. Molecular Ecology 20: 2985–3000.

- 45. Janoušek, V., L. Wang, K. Luzynski, P. Dufková, M. Mrkvicová Vyskočilová, M. W. Nachman, P. Munclinger, M. Macholán, J. Piálek, and P. K. Tucker. (2012) Genomewide architecture of reproductive isolation in a naturally occurring hybrid zone between *Mus musculus musculus* and *M. m. domesticus*. Molecular Ecology, 21:3032-3047.
- 46. Phifer-Rixey, M., F.Bonhomme, P, Boursot, G.A Churchill, J. Piálek, P. Tucker, and M. Nachman (2012). Adaptive evolution and effective population size in wild house mice. Molecular Biology and Evolution 29:2949-2955.
- 47. Campbell, P., Good J.M., Dean M.D., Tucker, P.K., Nachman, M.W. (2012) The contribution of the Y chromosome to hybrid male sterility in house. Genetics, 191:1271-1281.
- 48. Albrechtová, J, T. Albrecht, S. Baird, M. Macholán, P. Munclinger, G. Rudolfsen, P. K. Tucker, and J. Piálek. (2012) Sperm related phenotypes implicated in both maintenance and breakdown of a natural species barrier in the house mouse. Proc. Royal Soc. B. 279:4803-4810.
- 49. Kass, D.H., V. Janoušek, L. Wang and P. K. Tucker 2014 The uncharacterized gene *1700093K21Rik* and flanking regions are correlated with reproductive isolation in the house mouse, *Mus musculus* Mammalian Genome (DOI) **10.1007**/s**00335-014-9506-2**

BOOK CHAPTERS

- Tucker, P. K. and B. L. Lundrigan (1996). The utility of paternally inherited nuclear genes in conservation biology. In: "Molecular genetic approaches in conservation" (Smith, T. and Wayne, R. eds.), pp.74-86. Oxford University Press.
- Tucker, P.K. (2007) Systematics of the genus *Mus*. In: "Mouse in Biomedical Research, 2nd ed. (Fox J., Barthold S., Davisson M.T., Newcomer C., Quimby F., Smith A., eds.), pp. 13-23. Elsevier Press, Boston.
- Tucker, P.K. (2008) Evolutionary History of the genus *Mus*. In: "Eye, Retina, and the Visual System of the Mouse" (Chalupa, L.M. and Williams, R., eds). Pp. 7-11. The MIT Press, Cambridge.
- Tucker, P.K., L. Wang, K. Luzynski and K. Teeter (2012) Linkage disequilibrium approaches for detecting hybrid zone movement: a study of the house mouse hybrid zone in southern Bavaria. In: Evolution of the house mouse (Macholan, M., Baird, SJM, Munclinger, P and Pialek, J.) pp. 504-518. Oxford University Press.

PAPERS SUBMITTED/ IN PREPARATION

Janoušek, V., L. Wang, M.W. Nachman, P. Munclinger, M. Macholán, J. Piálek and P. K. Tucker. Identification of genomic regions of high and low differentiation between two house mouse subspecies (*Mus musculus musculus/M. m. domesticus*) and their introgression across the house mouse hybrid zone.

CONTRIBUTED PAPERS

- P.K. Tucker CV updated 03/17/2014
- 1980 Studies of a contact zone among three chromosomal races of *Geomys_bursarius* in eastern Texas. Annual Meeting of the Southwestern Association of Naturalists, New Mexico State University, Las Cruces, New Mexico.
- 1980 Studies of a contact zone among three chromosomal races of *Geomys bursarius* in eastern Texas, Sixtieth Annual Meeting of the American Society of Mammalogists, University of Rhode Island, Kingston, Rhode Island.
- 1981 Meiotic prophase in pocket gophers (*Geomys bursarius*) from a contact zone among three chromosomal races. Annual meeting of the Texas Genetics Society, Texas A&M University, College Station, Texas. Co-presentation with R.C. Dowler.
- 1981 Chromosomal and morphological variation among populations of *Ototylomys phyllotis* from southern Mexico. Sixty-first Annual Meeting of the American Society of Mammalogists, Miami University, Oxford Ohio. Co-presentation with M. D. Engstrom.
- 1981 Continued chromosomal investigations at hybrid zones of three races of the plains pocket gopher (*Geomys bursarius*) in east Texas. Sixty-first Annual Meeting of the American Society of Mammalogists, Miami University, Oxford, Ohio. Co-presentation with R. C. Dowler
- 1984 Sex chromosome-autosome translocations in the leaf-nosed bats family Phyllostomidae. Annual meeting of the Southwestern Association of Naturalists, Texas Tech University at Junction and Sixty-fourth Annual Meeting of the American Society of Mammalogists, Humboldt State University, Arcata, California.
- 1984 Heterochromatin and sex chromosome variation in the genus *Carollia* (Chiroptera: Phyllostomidae). Annual meeting of the Southwestern Association of Naturalists, Texas Tech University at Junction, Junction, Texas. Co-presentation with J. W. Bickham.
- 1985 Sex chromosome-autosome translocations in phyllostomid bats and mammalian sex chromosome evolution. Sixty-fifth Annual Meeting of the American Society of Mammalogists, University of Maine, Orono, Maine.
- 1985 Meiotic and mitotic analyses of sex chromosome-autosome translocations in the neotropical leaf-nosed bats, family Phyllostomidae, Poster Presentation. Symposium on Aneuploidy, Washington, D. C.
- 1986 Systematics of the big-eared climbing rat (genus *Ototylomys*) in northern middle America. Sixty-sixth Annual Meeting of the American Society of Mammalogists, University of Wisconsin, Madison, Wisconsin. Co-presentation with M. D. Engstrom.
- 1986 Y chromosome restriction fragment length polymorphism in the genus *Mus*. Fourteenth Molecular and Biochemical Workshop, The Jackson Laboratory, Bar Harbor, Maine. Copresentation with B. K. Lee and E. M. Eicher.

1987 Y chromosome restriction fragment length polymorphism in the genus *Mus*. Sixty-seventh Annual Meeting of the American Society of mammalogists, University of New Mexico, Albuquerque, New Mexico. Co-presentation with B. K. Lee and E. M. Eicher.

1987 Y chromosome restriction fragment length polymorphism in the genus *Mus*. Fifty-sixth Annual Meeting of the Genetics Society of America, San Francisco, California. Co-presentation with B. K. Lee and E. M. Eicher.

1988 The distribution of sex chromosomes in a hybrid zone between two species of the European house mouse (*Mus domesticus* and *Mus musculus*). XVI International Congress of Genetics, Toronto, Canada. Co-presentation with R. D. Sage, A. C. Wilson and E. M. Eicher.

1992 Phylogeny reconstruction using the Y chromosome-linked male sex determining locus, *Sry*, in mice (Genus *Mus*). Seventy-third meeting of the American Society of Mammalogists, The University of Utah. Co-presentation with B. L. Lundrigan.

1992 Tracing paternal ancestry in mice using the Y-linked sex determining locus, *Sry*. Joint meeting of The American Society of Naturalists, The Society of Systematic Biologists, and The Society for the Study of Evolution. University of California, Berkeley. Co-presentation with *B*. L. Lundrigan

1993 Male fertilization success in Arctic ground squirrels. Seventy-fourth annual meeting of the American Society of Mammalogists. Western Washington University, Bellingham. Copresentation with E. Lacey

1993 Two modes of evolution at the males sex determining locus *Sry* in mice. Joint meeting of The American Society of Naturalists, The Society of Systematic Biologists, and The Society for the Study of Evolution. Snowbird, Utah. Co-presentation with B. L. Lundrigan.

1994 Tracing paternal ancestry in mice using the Y-linked sex determining locus. Joint meeting of The American Society of Naturalists, The Society of Systematic Biologists, The Society for the Study of Evolution, and the Society for Molecular Biology and Evolution. University of Georgia, Athens. Co-presentation with B. L. Lundrigan.

1994 Tracing paternal ancestry in mice using the Y-linked sex determining locus. Seventy-fifth annual meeting of the American Society of Mammalogists. National Museum, Washington, D.C. Co-presentation with B. L. Lundrigan.

1994 Evolution of the murine *Zfy* gene. Joint meeting of The American Society of Naturalists, The Society of Systematic Biologists, The Society for the Study of Evolution, and the Society for Molecular Biology and Evolution. University of Georgia, Athens. Co-presentation with R. M. Adkins.

1995 Duplication of the mammalian sex-determining locus. 9th International Mouse Genome Conference, Ann Arbor, MI Co-presentation with B. L. Lundrigan

1996 Duplication of the mammalian sex-determining locus. The Fourth Annual Meeting of the Society for Molecular Biology and Evolution. Tucson, AZ. Co-presentation with B. L. Lundrigan.

1996 Duplication of the mammalian sex-determining locus in African murine rodents. Joint annual meeting of The American Society of Naturalists, The Society of Systematic Biologists, and The Society for the Study of Evolution. St Louis, MO June 1996 Co-presentation with B. L. Lundrigan.

1996 Evolution of the sperm recognition gene, *Zp3*, in the genus *Mus*. Joint annual meeting of The American Society of Naturalists, The Society of Systematic Biologists, and The Society for the Study of Evolution. St Louis, MO June 1996 Co-presentation with S. Jansa and B. L. Lundrigan

1997 *Mus* phylogeny based on combined molecular data sets. Symposium on Molecules and Morphology in Systematics, Paris, France March 1997. Co-presentation with B. L. Lundrigan and S. Jansa.

1998 Genetic analysis of an eyeless strain of mice: A study toward understanding eye morphogenesis and evolution. Joint annual meeting of The American Society of Naturalists, The Society of Systematic Biologists, and The Society for the Study of Evolution, Vancouver, B.C. June 1998. Co-presentation with V. Kule, L. Laemle, and T. Glaser.

1998 Analysis of an eyeless strain of mice: Identification of an *Rx* homeobox gene mutation. Great Lakes Vision Research Conference October 1998. Co-presentation with L. Laemle, A. Munson, and T. Glaser.

1999 Analysis of an eyeless strain of mice: Identification of an *Rx* homeobox gene mutation. ARVO, May 1999. Co-presentation with A. Munson, S. Kanekar, H. Schlecht, M. Vetter, L. Laemle, and T. Glaser.

1999 Analysis of an eyeless strain of mice: Identification of an *Rx* homeobox gene mutation. Symposium on The Developmental Basis of Evolutionary Change, U. of Chicago, May, 1999. Co-presentation with A. Munson, L. Laemle and T. Glaser.

2000 Eye regression during mammalian evolution: Comparative analysis of Rx/rax homeobox gene in an eyeless mouse strain and the blind mole rat *Spalax*. Great Lakes Mammalian Development Meeting, April 2000 and Society of Molecular Biology and Evolution, June 2000. Co-presentation with J. Rest, L. Laemle, A. Munson, A. Nevo and T. Glaser.

- P.K. Tucker CV updated 03/17/2014
- 2000 Possible role of positive selection on the evolution of pyrin (product of the Familial Mediterranean Fever locus) in primates. Society of Molecular Biology and Evolution, June 2000. Co-presentation with P. Schaner, N. Richards, A. Wadhwal, I. Aksentijevich, D. Kastner, and D. Gumucio.
- 2002 Chromosomal effects on gene evolution: A comparison of replacement and silent substitutions in X and Y-linked genes in the rodent genus *Mus*. Gordon Research Conference, January 2002. Co-presentation with S. Sandstedt.
- 2002 Chromosomal effects on gene evolution: A comparison of replacement and silent substitutions in X and Y-linked genes in the rodent genus *Mus*. The American Genetic Association's Annual Symposium entitled "Molecular Evolutionary Genetics", March 2002. Copresentation with S. Sandstedt.
- 2002 An analysis of introgression in the European House Mouse Hybrid Zone. Joint meeting of the Society of Systematic Biologists and the Society for the Study of Evolution. June, 2002. Copresentation with K. Teeter.
- 2003 Differential introgression in the European House Mouse hybrid zone. Joint meeting of the Society of Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2003. Co-presentation with K. Teeter.
- 2003 X chromosomal strata similar to human strata in genus *Mus*, Joint meeting of the Society of Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2003. Co-presentation with S. Sandstedt.
- 2003 Male-driven evolution in closely related species of the mouse genus *Mus*. Society of Molecular Biology and Evolution. June 2003. Co-presentation with S. Sandstedt
- 2004 Inefficient purifying selection on a mammalian Y chromosome. Joint meeting of the Society of Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2004. Co-presentation with S. Sandstedt.
- 2005 The genomics of a house mouse hybrid zone: comparisons among loci and between transects. Joint meeting of the Society of Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2005. Co-presentation with K. Teeter.
- 2010 Genome wide dynamics in naturally occurring hybrid populations of *Mus musculus domesticus* and *M. m. musculus*. Co-presentation with Liuyang Wang. Joint meeting of the Society of Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2010
- 2011 Detailed Analysis of a chromosomal region in the house mouse, *Mus musculus*, correlated with reproductive isolation. Co-presentation with David Kass. Joint meeting of the Society of

Systematic Biologists, the Society for the Study of Evolution and the American Society of Naturalists. June, 2010

2011 Measures of linkage disequilibrium among neighboring SNPs indicate asymmetries across the house mouse hybrid zone. European Congress of Mammalogy, July 2011.

2013 A genomic perspective on the evolution of genes in regions with limited gene flow across the house mouse hybrid zone. Co-presentation with Vaclav Janoušek. European Society of Evolution, August 2013.

2014 Identification of genomic regions of high and low differentiation between two house mouse subspecies (*Mus musculus musculus/M. m. domesticus*) and their introgression across the house mouse hybrid zone Co-presentation with Václav Janoušek. Complex Trait Consortium, Berlin and Wild Mouse Biology Workshop, Ploen, May 2014.

GRADUATE STUDENTS

Sharon Jansa (PhD 1992-1998) Molecular Phylogeny and Biogeography of Madagascar's native rodents (Muridae-Nesomyinae)- Assistant Professor, University of Minnesota Sara Sandstedt (PhD 1995-2003) Evolution of the sex chromosome-linked genes *Smcx* and *Smcy* in the muroid rodent genus *Mus*.- Research Scientist, Department of Epidemiology University of Michigan.

Kate Teeter (PhD 1998-2005) The nature of genetic isolation between sibling species of European house mice in a hybrid zone- Assistant Professor, Northern Michigan University Matthew Chatfield (PhD 2003-2009) Hybrid Zone dynamics between two species of salamanders in the genus *Plethodon*- Postdoctoral Associate Tulane University Meghan Shilts (MS 2005-2007) Speciation and population genetics in a pocket gopher population-Research Assistant

Kenneth Luzynski (MS 2008-2009) Adaptive introgression across a house mouse hybrid zone-PhD student University of Vienna

Beatriz Otero (MS 2011- 2013) (PhS 2013- present) The effect of matrix composition in agroecosystems: assessing population structure in *Heteromys* mice.

Marcella Baiz (PhD 2013- present)

Lisa Walsh (MS 2012-present) Population genetics of range expansions

POSTDOCTORAL ASSOCIATES

Barbara Lundrigan (1992-1997) Associate Professor, Michigan State University Ronald Adkins (1993-1995) Assistant Professor, Department of Pediatrics and Center of Genomics and Bioinformatics, University of Tennessee-Memphis. Liuyang Wang (2009-2011) Postdoctoral Associate, Duke University

SENIOR HONORS THESIS

Kimberly Phillips B.S. 1991(research resulted in publication) Kathryn Miller B.S. 1994 (research resulted in publication)

Matthew Debnar B.S. 1995

Sarah Hazen B.S. 1997

Janelle O'Brien 2007 (recipient of the Jermone and Isabella Karle Mathematics and Natural Science Prize. This is a prize given to the top honors student in science or mathematics in LSA. Her research resulted in publication.

PH.D. DISSERTATION COMMITTEES

Michael Nachman, Ph.D. 1990, Biology, Dr. Brown and Dr. Myers

Martha Gach, Ph.D. 1993, Biology, Dr. Smith and Dr. Brown

Sheng-Hai Wu, Ph.D. 1994, Biology, Dr. Nussbaum

Shawn Meagher, Ph.D. 1995, Biology, Dr. Myers

Lori Thrun, Ph.D. 1996, Biology, Dr. Webb and Dr. Karsch

Alan Wolf, Ph.D. 1996, Biology, Dr. Kluge

I-Min Tso, Ph.D. 1996, Biology, Dr. Burch

David Marshall, Ph.D. 2000, Biology, Dr. Alexander

Suk-won Jin, Ph.D. 2000, Biology, Dr. Ellis

Tamaki Yuri, Ph.D. 2001, Biology, Dr. Payne and Dr. Mindell

Jennifer Ast, Ph.D. 2002, Biology, Dr. Kluge

Mallika Krishnan, PhD, 2002, Biology, Dr. Mindell

Soochin Cho, Ph.D. 2003, Biology, Dr. Ellis

Glenn Fox, Ph.D. 2005, EEB, Dr. Kluge

Xionglei He, Ph.D. 2007, EEB, Dr. Zhang

Ondrej Podlaha, Ph.D. 2007, EEB, Dr. Zhang

Xiaoxia Wang Ph.D. EEB, 2007, Dr. Zhang

Wendy Grus, EEB, 2008 Dr. Zhang

Ben-Yang Liao, EEB, 2008 Dr. Zhang

Margaret Bakewell, EEB, 2011 Dr. Zhang

MASTERS COMMITTEE

Travis Glen, M.S. 1991, School of Natural Resources, Dr. Low

PARTICIPATION IN COURSES

1989Wi Biology 830, Graduate student seminar: (7 students enrolled)

1989Fa Biology 100, Biology for non-majors (50% participation; 270 students enrolled)

Biology 700, Advanced Study: (1 student)

1990Wi Biology 730, Advanced Study: (1 student)

1990Su Biology 300, Honors Seminar Reading: (1 student)

1990Fa Biology 390, Evolution (50% participation; 75 students enrolled)

Biology 490, Undergraduate Honors research: (1 student)

1991Wi Biology 990, Dissertation-Precandidate: (1 student)

Biology 490, Undergraduate Honors research: (1 student)

```
P.K. Tucker CV updated 03/17/2014
1991Fa Biology 514, Special Topics in Molecular Evolution (100% participation; 7 students)
        Biology 700, Advanced Study: (2 students)
        Biology 990, Dissertation-Precandidate: (1 student)
1992Wi Biology 730, Advanced Study: (2 students)
        Biology 995, Dissertation-Candidate (1 student)
1992Fa Biology 390, Evolution (50% participation; 90 students)
        Biology 700, Advanced Study: (2 students)
        Biology 995, Dissertation-Candidate: (1 student)
1993Wi Biology 300, Undergraduate Research: 2 students
        Biology 990, Dissertation-Precandidate: 2 students
        Biology 995, Dissertation-Candidate: 1 student
1993Fa Biology 514, Special Topics in Molecular Evolution (100% participation, 18 students)
        Biology 300, Undergraduate Research: (2 students)
        Biology 995, Dissertation-Precandidate: (1 student)
1994Wi Biology 995, Dissertation-Candidate: (1 student)
        Biology 400, Undergraduate Advanced Research (2 students)
        Biology 700, Advanced Study: (1 student)
1994Fa Biology 390, Evolution (100% participation; 60 students)
        Biology 995, Dissertation-Candidate (1 student)
        Biology 300, Undergraduate Research (1 student)
1995Wi Biology 300, Undergraduate Research (1 student)
        Biology 400, Undergraduate Advanced Research (1 student)
        Biology 700, Advanced Study (1 student)
        Biology 995, Dissertation-Candidate (1 student)
1995Sp Biology 300, Undergraduate Research (2 students)
1995Fa Biology 514, Special Topics in Molecular Evolution (100% participation; 8 students)
        Biology 150, Introductory Biology Seminar (100% participation, 18 students)
        Biology 400, Undergraduate Advanced Research (1 student)
        Biology 995, Dissertation-Candidate (1 student)
1996Wi Biology 995, Dissertation Candidate (1 student)
        Biology 300, Undergraduate research (1 student)
        Biology 400, Undergraduate Advanced Research (1 student)
1996Fa Biology 390, Evolution (100% participation, 56 students)
        Biology 995, Dissertation Candidate (1 student)
        Biology 400, Undergraduate Advanced Research (1 student)
1997Wi Biology 995, Dissertation Candidate (1 student)
        Biology 990, Dissertation Precandidate (1 student)
```

Biology 400, Undergraduate Advanced Research (1 student)

P.K. Tucker CV updated 03/17/2014 1997Fa On sabbatical 1998Wi On sabbatical 1998Fa Biology 390 Evolution (100% participation, 84 students) Biology 700 Advanced Study (1 student) Biology 995 Dissertation Candidate (1 student) 1999Wi Biology 730 Advanced Study (1 student) Biology 995 Dissertation Candidate (1 student) 1999Fa Biology 514 Special Topics in Molecular Evolution (100% participation, 12 students) Biology 995 Dissertation Candidate (1 student) 2000Wi Biology 800 Seminar (3 students) Biology 995 Dissertation Candidate (1 student) Biology 990 Dissertation Pre-Candidate (1 student) 2000Su Biology 300 Undergraduate Research 2000Fa Biology 990 Dissertation Pre-Candidate (1 student) Biology 995 Dissertation Candidate (1 student) 2001Wi Biology 995 Dissertation Candidate (2 students) Biology 300 Undergraduate Research (1 student) Biology 390 Evolution (100% participation, 144 students) 2001Fa EEB 514 Special Topics in Molecular Evolution (100% participation, 11 students) EEB 995 Dissertation Candidate (2 students) EEB 300 Undergraduate Research (1 student) 2002Wi EEB 995 Dissertation Candidate (2 students) 2002Fa Biology 390 Evolution (100% participation, 127 students) EEB 995 Dissertation Candidate (2 students) 2003Wi EEB 995 Dissertation Candidates (2 students) EEB 300 Undergraduate research (1 student) 2003Fa EEB 300 Undergraduate research (1 student) EEB 995 Dissertation Candidate (1 student) UROP (2 students) 2004Wi Biology 390 Evolution (100% participation, 123 students) EEB 300 Undergraduate research (1 student) UROP (two students) EEB 800 Molecular Evolution Seminar (5 students) EEB 995 Dissertation Candidate (1 student) 2004Sp EEB 300 Undergraduate Research (1 student) 2004Fa Biology 390 Evolution (100% participation, 95 students) EEB 300 Undergraduate Research (1 student)

EEB 700 Advanced Study (1 student)

EEB 995 Dissertation Candidate (1 student)

UROP (1 student)

2005Wi EEB 401 Advanced Topics/Speciation (13 students)

EEB 800 Seminar (with George Zhang, 8 students)

EEB 990 Dissertation Precandidate (1 student)

EEB 995 Dissertation Candidate (1 student)

UROP (1 student)

Honor's Research (1student)

2005Fa EEB 300 Undergraduate Research (1 student)

EEB 700 Advanced Study (1 student)

HONORS 390 Research (1 student)

2006Wi Biology 390 Evolution (100% participation, 132 students)

EEB 300 Undergraduate Research (2 students)

EEB730 Advanced Study (1 student)

EEB 995 Dissertation Candidate (1 student)

2007Fa EEB 401 Capstone Seminar (10 students)

EEB 400 Undergraduate Research (2 students)

EEB 990 Dissertation Precandidate (1 student)

2007Wi On Sabbatical

2007Fa Biology 390 Evolution (100% participation, 145 students)

EEB 410 Capstone Seminar (17 students)

2008Wi EEB 400 Undergraduate Research (1 student)

EEB 995 Dissertation Candidate (1 student)

2008Fa EEB410 Capstone Seminar (22 students)

EEB 700 Advanced Study (2 students)

2009Wi EEB 730 Advanced Study (1 student)

EEB995 Dissertation Candidate (1 student)

2009Fa EEB410 Capstone Seminar (30 students)

EEB300 Undergraduate Research (1 student)

UROP (1 student)

EEB 700 (1 student)

2010Wi EEB300 Undergraduate Research (1 student)

UROP (1 student)

2010Fa EEB410 Capstone Seminar (15 students)

UROP (2 students)

REU (1 student)

2011Wi UROP (2 students)

REU (1 student)

2011Sp/Su EEB 300 Undergraduate Research (1 student)

2011Fa UROP (1 student)

ENVIRON300 Undergraduate Research (1 student)

EEB410 Capstone Seminar (17 students)

EEB730 Advanced Study (1 student)

2012Wi UROP (1 student)

EEB300 Undergraduate Research (1 student)

EEB401 Professional Development (5 students)

2012Fa EEB410 Capstone Seminar (16 students)

EEB 730 Advanced Study (1 student)

2013Wi EEB730 Advanced Study (1 student)

EEB 790 MS thesis (1 student)

2013Fa EEB 410 Capstone Seminar (20 students)

EEB 700 (1 student)

2014Wi EEB 451 Biology of Mammals (40 students)

EEB 300 Co-sponsor (2 students)

EEB 730 (1 student)

UNIVERSITY SERVICE

1991- Participation in the King-Chavez-Parks College Day Program

2001-2003 LSA Curriculum Committee

2003 Dean's Advisory Committee on Gender and the Natural Sciences in LSA

2002-present Genetics Training Grant Executive Committee

2008-2011 LSA Executive Committee – elected member

2009-2010 Dean's Advisory Committee on the Associate Professor Rank

2011-present PitE Advisory Committee

2012-2013 LSA Nominations Committee, Chair

2014-present ADVANCE Advisory Board in LSA

DEPARTMENT SERVICE

- 1991 Department of Biology Executive Committee, Ph.D. Admissions Committee, EEOB Graduate Student Evaluation Committee, MEPG Group Leader
- 1992 Senior Molecular Biologist Search Committee, Department of Biology Executive Committee, MEPG Group Leader
- 1993 Population Geneticist Search Committee
- 1994 Masters Committee-Chair, Helen Olsen Brower Fellowship Review Committee
- 1995 Masters Committee-Chair, Systematic Botanist Search Committee
- 1996 Department of Biology Executive Committee
- 1997 Full academic year sabbatical
- 1998 Curriculum Committee, EEOB Executive Committee

- P.K. Tucker CV updated 03/17/2014
- 1999 Curriculum Committee, EEOB Executive Committee, MCDB Executive Committee
- 2000 Curriculum Committee, MEPG Subgroup of MCDB-Chair, MCDB Executive Committee
- 2001 Curriculum Committee, EEOB Executive Committee, MCDB Executive Committee, MEPG Subgroup-Chair, Systematic Botanist Search Committee
- 2002 EEB Seminar Committee, EEB Chair Search Committee
- 2003 EEB Executive Committee, Museum/Herbarium Director Search Committee, ad hoc Target of Opportunity Committee, EEB Evaluation Committee
- 2004 EEB Executive Committee, EEB Evaluation Committee, Evolutionary Genetics Search Committee
- 2005 EEB Evaluation Committee, Plant Evolution and Systematics Search Committee (Chair)
- 2006 EEB Promotion and Merit Committee, Planning Committee-Young Investigators Symposium
- 2007 EEB Promotion and Merit Committee, Fungal Evolutionary Biologist Search Committee (Chair)
- 2011 present EEB Associate Chair, Undergraduate Affairs
- 2013 Frontiers MS Admission Committee

MUSEUM SERVICE

- 1989-1992 Museum of Zoology Executive Committee
- 1997-1999 Museum of Zoology Executive Committee