

CURRICULUM VITAE OF KENT E. HOLSINGER

EDUCATION

- 1978: B.S., *Summa cum laude*, Departmental Honors in Biology, The College of Idaho
1982: Ph.D. in Biological Sciences, Stanford University

POSITIONS HELD

- 1982(Summer) Post-doctoral fellow, Department of Biological Sciences, Stanford University
1982–1984 Miller Research Fellow, Miller Institute for Basic Research in Science, University of California, Berkeley (sponsored by the Department of Botany)
1984–1986 Research Associate, Department of Biological Sciences and Dudley Herbarium, Stanford University
1985 Associate in the Agricultural Experiment Station, Department of Genetics, University of California, Davis
1985(Fall) Adjunct Lecturer, Department of Genetics, University of California, Davis
1986–1992 Assistant Professor, Department of Ecology and Evolutionary Biology, University of Connecticut
1992–1998 Associate Professor, Department of Ecology and Evolutionary Biology, University of Connecticut
1998–present Professor, Department of Ecology and Evolutionary Biology, University of Connecticut
2002–present Adjunct Professor, Department of Statistics, University of Connecticut

HONORS AND AWARDS

College

- Lawrence Henry Gipson Scholar
Outstanding Freshman in Chemistry
Outstanding Freshman in Mathematics
State of Idaho Scholarship
Outstanding Sophomore in Biology
Outstanding Junior, Faculty Association Scholarship
Outstanding Senior in Chemistry
Franklin H. Blood Memorial Award in Chemistry
Danforth Graduate Fellowship Finalist

Graduate School

National Science Foundation Graduate Fellowship
Associate Member, Sigma Xi

Post-Graduate

Full Member, Sigma Xi

Miller Fellow, Miller Institute for Basic Research in Science, University of California, Berkeley

Young Botanist Travel Award, XIV International Botanical Congress, Berlin, West Germany (1987)

Chancellor's Information Technology Award, University of Connecticut (2000)

Fellow, American Association for the Advancement of Science (2003)

Centennial Award, Botanical Society of America (2006)

American Association of University Professors, University of Connecticut Chapter, Service Excellence Award (2007)

University of Connecticut Alumni Association, Faculty Award for Research Excellence – Sciences (2007)

GRANTS

Population genetics of assortative mating and partial selfing, 1/1/87 to 12/31/88, University of Connecticut Research Foundation, \$17,300.

A conference on the genetics and population biology of rare plant conservation, 3/1/89 to 9/30/89, National Science Foundation BSR-8904619, \$17,000. (co-principal investigator; Donald A. Falk, Executive Director, Center for Plant Conservation, principal investigator; Peter S. Ashton, Harvard University, co-principal investigator).

Genetic studies of speciation in *Coreopsis* sect. *Coreopsis* (Asteraceae), 6/1/89 to 5/31/92, University of Connecticut Research Foundation, \$9,800.

Experimental studies of plant mating systems, 6/1/90 to 5/31/92, University of Connecticut Research Foundation, \$9,250 (with Carl D. Schlichting and Gregory J. Anderson).

Plant adaptation to variable environments: roles of genetic variation and phenotypic plasticity, 6/1/90 to 5/31/92, University of Connecticut Research Foundation, \$49,000 (with Robin Chazdon, David R. Miller, Stephen W. Pacala, Carl D. Schlichting, and John A. Silander, Jr.)

Two modes of speciation in *Coreopsis* (Asteraceae): a chloroplast DNA study, 5/15/91 to 5/14/93, National Science Foundation BSR-9105167, \$9,990 (Robert K. Jansen, co-principal investigator; Roberta J. Mason, co-principal investigator; Dissertation Improvement Grant for R. J. Mason).

A mass-action approach to the study of plant mating systems, 7/15/91 to 12/31/92, National Science Foundation BSR-9107330, \$25,000 (Gregory J. Anderson, co-principal investigator).

Systematic and evolutionary investigations of the North American *Crepis* agamic complex, 6/1/92 to 5/31/94, University of Connecticut Research Foundation, \$5,600.

- Systematic and evolutionary investigations of the North American *Crepis* agamic complex, 12/15/92 to 5/31/95, National Science Foundation BSR-9212989, \$10,850 (Jeanette Whitton, co-principal investigator; Dissertation Improvement Grant for J. Whitton).
- Polygenic variation in spatially structured populations, 6/1/94 to 12/31/95, University of Connecticut Research Foundation, \$4,210.
- Ecological factors in the evolution of plant mating systems, 11/1/95 to 10/31/98, National Science Foundation DEB-9509006, \$117,853 (REU supplement 5/31/97 to 8/31/97, \$5,000).
- Bayesian methods for analyzing genetic diversity, 8/1/2004 to 7/31/2007, National Institutes of Health 1R01-GM068449-01A1, \$378,000.
- Collaborative Research: Causes and Consequences of Tree Colonization Patterns in Wet Tropical Forests, 9/1/2004 to 8/31/2007, National Science Foundation DEB-0424767, \$19,374 (Robin Chazdon, principal investigator).
- Nitrogen deposition and population dynamics of a nitrogen-fixing plant species, 6/1/2006-5/31/2008, National Science Foundation DEB-0608243, \$11,993 (Krissa Skogen, co-principal investigator; dissertation improvement grant for Krissa Skogen).
- US-South Africa International Research Experience for Students - Biodiversity Hotspots: Ecological and Evolutionary Patterns and Process in the Cape Floristic Region: IRES, 9/15/2006-9/14/2009, National Science Foundation OISE-0623341, \$149,923 (John Silander, principal investigator; Cynthia Jones, Carl Schlichting, co-principal investigators).
- Dissertation Research: Exploring the mode of speciation in the South African genus *Protea* (Proteaceae), 6/1/2007 to 5/31/2009, National Science Foundation DEB-0709690, \$11,965 (Rachel Prunier, co-PI; dissertation improvement grant for Rachel Prunier)
- Evolutionary radiations in South African Proteaceae, 9/1/2007 to 8/31/2010, National Science Foundation DEB-0716622, \$538,535 (John Silander, co-principal investigator)

PUBLICATIONS

1. Holsinger, K. E. 1978. *Stewardship Master Plan for the Dautrich Memorial Desert Preserve*. Prepared for Idaho Chapter, The Nature Conservancy. September, 1978; Accepted May, 1979. Portland, Or.: The Nature Conservancy.
2. Holsinger, K. E. 1981. Comment: the blunting of Occam's razor, or to hell with parsimony. *Can. J. Zool.* 59:140–146.
3. Holsinger, K. E., and M. W. Feldman. 1981. A single locus model of selection in permanent translocation heterozygotes. *Theor. Popul. Biol.* 20:210–240.
4. Holsinger, K. E., and M. W. Feldman. 1982. The evolution of recombination in permanent translocation heterozygotes. *Theor. Popul. Biol.* 22:170–197.

5. Holsinger, K. E., and M. W. Feldman. 1983. Linkage modification with mixed random mating and selfing: a numerical study. *Genetics* 103:320–333.
6. Holsinger, K. E., and M. W. Feldman. 1983. Modifiers of mutation rate: evolutionary optimum with complete selfing. *Proc. Nat. Acad. Sci. USA* 80:6732–6734.
7. Holsinger, K. E., and N. C. Ellstrand. 1984. The evolution and ecology of permanent translocation heterozygotes. *Amer. Natur.* 124:48–71.
8. Holsinger, K. E. 1984. The nature of biological species. *Philos. Sci.* 51:293–307.
9. Holsinger, K. E., M. W. Feldman, and F. B. Christiansen. 1984. The evolution of self-fertilization in plants: a population genetic model. *Amer. Natur.* 124:446–453.
10. Holsinger, K. E. 1985. A phenetic study of *Clarkia unguiculata* Lindl. (Onagraceae) and its relatives. *Syst. Bot.* 10:155–165.
11. Holsinger, K. E. 1985. Taxonomic and nomenclatural notes on *Clarkia* sect. *Phaeostoma* Lewis & Lewis (Onagraceae). *Taxon* 34:704–706.
12. Holsinger, K. E. 1985. The nomenclatural status of *Opsianthes* Lilja (Onagraceae). *Taxon* 34:707–708.
13. Holsinger, K. E., and M. W. Feldman. 1985. Selection in complex genetic systems. VI. Equilibrium properties of two-locus selection models with partial selfing. *Theor. Popul. Biol.* 28:117–132.
14. Holsinger, K. E., and J. Roughgarden. 1985. A model for the dynamics of an annual plant population. *Theor. Popul. Biol.* 28:228–313.
15. Holsinger, K. E. 1986. Dispersal and plant mating systems: the evolution of self-fertilization in subdivided populations. *Evolution* 40:405–413.
16. Holsinger, K. E., M. W. Feldman, and L. Altenberg. 1986. Selection for increased mutation rates with fertility differences between matings. *Genetics* 112:909–922.
17. Holsinger, K. E., and H. Lewis. 1986. Description of a new section and subsection in *Clarkia* (Onagraceae). *Ann. Missouri Bot. Gard.* 73:491–494.
18. Robichaux, R. H., K. E. Holsinger, and S. R. Morse. 1986. Turgor maintenance in higher plants: the role of variation in tissue osmotic and elastic properties. In *On the Economy of Plant Form and Function*, ed. T. J. Givnish, pp. 353–380. Cambridge: Cambridge Univ. Press.
19. Huenneke, L. F., K. E. Holsinger, and M. E. Palmer. 1986. Plant population biology and the management of viable plant populations. In *The Management of Viable Populations: Theory, Applications, and Case Studies*, ed. B. A. Wilcox, P. F. Brussard, and B. G. Marcot, pp. 169–183. Stanford, Ca.: Center for Conservation Biology.

20. Holsinger, K. E. 1987. Discussion: pluralism in species concepts, or when must we agree with one another? *Philos. Sci.* 54:480–485.
21. Holsinger, K. E. 1987. Gametophytic self-fertilization in homosporous plants: development, evaluation, and application of a statistical method for evaluating its importance. *Amer. J. Bot.* 74:1173–1183.
22. Holsinger, K. E. 1987. Fertilization in ferns. *Trends Ecol. Evol.* 2:289–290.
23. Postlethwait, S., and K. E. Holsinger. 1988. The Plant Kingdom: Algae and Lower Land Plant (Chap. 23), The Seed Plants (Chap. 24). In *Biology*, by N. K. Wessels and J. L. Hopson, pp. 527–565. New York: Random House.
24. Holsinger, K. E., and L. D. Gottlieb. 1988. Isozyme variability in the tetraploid *Clarkia gracilis* (Onagraceae) and its diploid relatives. *Syst. Bot.* 13:1–6.
25. Holsinger, K. E. 1988. The evolution of self-fertilization in plants: lessons from population genetics. *Oecol. Plant.* 9:95–102.
26. Steele, K. P., K. E. Holsinger, R. K. Jansen, and D. W. Taylor. 1988. Phylogenetic relationships in green plants—a comment on the use of 5S ribosomal RNA sequences by Bremer et al. *Taxon* 37:135–138.
27. Huenneke, L. F., and K. E. Holsinger. 1988. Managing land to protect rare plant populations. *Fremontia* July, 1988, 3–8.
28. Soltis, P. S., D. E. Soltis, and K. E. Holsinger. 1988. Estimates of intragametophytic selfing and interpopulational gene flow in homosporous ferns. *Amer. J. Bot.* 75:1765–1770.
29. Holsinger, K. E. 1988. Inbreeding depression doesn't matter: the genetic basis of mating system evolution. *Evolution* 42:1235–1244.
30. Holsinger, K. E. 1989. The structure of vascular plants (Chap. 30), Plant development and plant hormones (Chap. 31), How plants transport water and nutrients (Chap. 32). In *The Nature of Life*, by J. Postlethwait and J. L. Hopson, pp. 631–690. New York: Random House.
31. Holsinger, K. E., and L. D. Gottlieb. 1989. The conservation of rare and endangered plants. *Trends Ecol. Evol.* 4:193–194.
32. Holsinger, K. E., M. W. Feldman, and U. Liberman. 1989. Appendix to “The reduction principle for genetic modifiers of the migration rate (by U. Liberman and M. W. Feldman).” In *Mathematical Evolutionary Theory*, ed. M. W. Feldman, pp. 133–137. Princeton, N. J.: Princeton Univ. Press.
33. Holsinger, K. E., and S. W. Pacala. 1990. Multiple niche polymorphisms in plant populations. *Amer. Natur.* 135:301–309.

34. Holsinger, K. E. 1990. The population genetics of mating system evolution in homo-sporous plants. *Amer. Fern J.* 80:153–160.
35. Jansen, R. K., K. E. Holsinger, H. J. Michaels, and J. D. Palmer. 1990. Phylogenetic analysis of chloroplast DNA restriction site data at higher taxonomic levels: an example from the Asteraceae. *Evolution* 44:2089–2105.
36. Steele, K. P., K. E. Holsinger, R. K. Jansen, and D. W. Taylor. 1991. Assessing the reliability of 5S rRNA sequence data for phylogenetic analysis in green plants. *Mol. Biol. Evol.* 8:240–248.
37. Holsinger, K. E. 1991. Inbreeding depression and the evolution of plant mating systems. *Trends Ecol. Evol.* 6:307–308.
38. Holsinger, K. E. 1991. Mass action models of plant mating systems: evolutionary stability of mixed mating systems. *Amer. Natur.* 138:606–622.
39. Falk, D. A., and K. E. Holsinger, eds. 1991. *Genetics and Conservation of Rare Plants*. New York: Oxford Univ. Press.
40. Holsinger, K. E., and L. D. Gottlieb. 1991. Conservation of rare and endangered plants: principles and prospects. In *Genetics and Conservation of Rare Plants*, ed. D. A. Falk and K. E. Holsinger, pp. 195–208. New York: Oxford Univ. Press.
41. Holsinger, K. E. 1991. Conservation of genetic diversity in rare and endangered plants. In *The Unity of Evolutionary Biology: The Proceedings of the Fourth International Congress of Systematic and Evolutionary Biology*, ed. E. C. Dudley, pp. 626–633. Portland, Or.: Dioscorides Press.
42. Goldstein, D. B., and K. E. Holsinger. 1992. Maintenance of polygenic variation in spatially structured populations: a role for local mating and genetic redundancy. *Evolution* 46:412–429.
43. Holsinger, K. E. 1992. Setting priorities for regional plant conservation programs. *Rhodora* 94:243–257.
44. Holsinger, K. E. 1992. Ecological models of plant mating systems and the evolutionary stability of mixed mating systems. In *Ecology and Evolution of Plant Reproduction: New Approaches*, ed. R. Wyatt, pp. 169–191. New York: Chapman and Hall.
45. Holsinger, K. E. 1992. Comment: functional aspects of mating system evolution in plants. *Int. J. Plant Sci.* 153(3):iii-v.
46. Huenneke, L. F., K. E. Holsinger, and M. E. Palmer. 1992. Plant population biology and the management of viable plant populations. In *Conservation Biology: A Training Manual for Biological Diversity and Genetic Resources*, ed. P. K. Vijay and J. White, pp. 115-132. London: Commonwealth Science Council (reprint of #19).

47. Holsinger, K. E. 1993. The evolutionary dynamics of fragmented plant populations. In *Biotic Interactions and Global Change*, ed. P. Kareiva, J. Kingsolver, and R. Huey, pp. 198–216. Sunderland, Mass.: Sinauer Associates.
48. Uyenoyama, M. K., K. E. Holsinger, and D. M. Waller. 1993. Ecological and genetic factors directing the evolution of self-fertilization. *Oxford Surv. Evol. Biol.* 9:327–381.
49. Holsinger, K. E., and R. K. Jansen. 1993. Phylogenetic analysis of restriction site data. In *Molecular Evolution: Producing the Biochemical Data*, ed. E. A. Zimmer, R. L. Cann, T. J. White, and A. C. Wilson, pp. 439–455. San Diego: Academic Press.
50. Mason, R. J., K. E. Holsinger, and R. K. Jansen. 1994. Biparental inheritance of the chloroplast genome in *Coreopsis* (Asteraceae). *J. Heredity* 85:171–173.
51. Holsinger, K. E., and J. D. Thomson. 1994. Pollen discounting in *Erythronium grandiflorum*: mass-action estimates from pollen transfer dynamics. *Amer. Natur.* 144:799–812.
52. Holsinger, K. E. 1994. Groups as vehicles and replicators: the problem of group-level adaptation. *Behav. Brain Sci.* 17:626–627.
53. Mason-Gamer, R. J., K. E. Holsinger, and R. K. Jansen. 1995. Chloroplast DNA haplotype variation within and among populations of *Coreopsis grandiflora* (Asteraceae). *Mol. Biol. Evol.* 12:371–381.
54. Holsinger, K. E. 1995. Population biology for policy makers: promises and paradoxes. *BioScience* 45(Supplement):S10–S20.
55. Holsinger, K. E. 1995. Conservation programs for endangered plant species. In *Encyclopedia of Environmental Biology*, ed. W. A. Nierenberg, vol. 1, pp. 385–400. San Diego: Academic Press, Inc.
56. Sullivan, J., K. E. Holsinger, and C. Simon. 1995. Among-site rate variation and phylogenetic analysis of 12S rRNA genes in sigmodontine rodents. *Mol. Biol. Evol.* 12:988–1001.
57. Bergman, A., D. B. Goldstein, M. W. Feldman, and K. E. Holsinger. 1995. Population structure, fitness surfaces, and linkage in the shifting balance process. *Genet. Res.* 66:85–92.
58. Holsinger, K. E., and R. J. Mason-Gamer. 1996. Hierarchical analysis of nucleotide diversity in geographically structured populations. *Genetics* 142:629–639.
59. Sullivan, J., K. E. Holsinger, and C. Simon. 1996. The effect of topology and taxon sampling on estimates of among-site rate variation. *J. Mol. Evol.* 42:308–312.
60. Holsinger, K. E. 1996. Pollination biology and the evolution of mating systems in flowering plants. *Evol. Biol.* 29:107–149.

61. diIorio, P., K. E. Holsinger, R. J. Schultz, and L. Hightower. 1996. Quantitative evidence that both *Hsc70* and *Hsp70* contribute to thermal adaptation in hybrids of the livebearing fishes *Poeciliopsis*. *Cell Stress & Chaperones* 1:139–147.
62. Simon, C., L. Nigro, J. Sullivan, K. E. Holsinger, A. Martin, A. Grapputo, A. Franke, and C. McIntosh. 1996. Large among-taxon differences in evolutionary rate and substitutional pattern of 12S ribosomal RNA genes: implications for tree building and molecular clocks. *Mol. Biol. Evol.* 13:923–932.
63. Gogarten, J. P., L. Olendzenski, E. Hilario, C. Simon, and K. E. Holsinger. 1996. Dating the cenacester of organisms. *Science* 274:1750–1751.
64. Holsinger, K. E., and P. Vitt. 1997. The future of conservation biology: what's a geneticist to do? In *The Ecological Basis of Conservation: Heterogeneity, Ecosystems, and Biodiversity*, ed. S. T. A. Pickett, R. S. Ostfeld, M. Shachak, and G. E. Likens, pp. 202–216. New York: Chapman and Hall.
65. Holsinger, K.E., and J. E. Steinbachs. 1997. Mating systems and evolution in flowering plants. In *Evolution and Diversification of Land Plants*, ed. K. Iwatsuki and P. Raven, pp. 223–248. Tokyo: Springer-Verlag.
66. LeBuhn, G., and K. E. Holsinger. 1998. A sensitivity analysis of pollen-dispersing schedules. *Evol. Ecol.* 12:111–121.
67. Russell, J. M., J. E. Steinbachs, and K. E. Holsinger. 1998. Longer is better: pollen quantity and anther-length relationship in *Hemerocallis coreana*. *Daylily Journal* 53:63–66.
68. Holsinger, K. E., R. J. Mason-Gamer, J. Whitton. 1999. Genes, demes, and plant conservation. In *Genes, Species, and the Threat of Extinction: DNA and Genetics in the Conservation of Endangered Species*, ed. L. F. Landweber and A. P. Dobson, pp. 23–46. Princeton: Princeton University Press.
69. Paoletti, C., and K. E. Holsinger. 1999. Spatial patterns of polygenic variation in *Impatiens capensis*, a species with an environmentally controlled mixed mating system. *J. Evol. Biol.* 12:689–696.
70. Steinbachs, J. E., and K. E. Holsinger. 1999. Pollen transfer dynamics and the evolution of gametophytic self-incompatibility. *J. Evol. Biol.* 12:770–778.
70. Holsinger, K. E. 1999. Analysis of genetic diversity in geographically structured populations: a Bayesian perspective. *Hereditas* 130:245-255.
72. Mason-Gamer, R. J., R. K. Jansen, and K. E. Holsinger. 1999. Chloroplast DNA restriction site analysis of *Coreopsis nuecensoides* and *C. nuecensis*, a progenitor-derivative species pair. *Plant Syst. Evol.* 218:5-12.

73. Holsinger, K. E. 2000. Reproductive systems and evolution in vascular plants. *Proc. Natl. Acad. Sci. USA* 97:7037–7042.
74. Holsinger, K. E. 2000. Reproductive systems and evolution in vascular plants. In *Variation and Evolution in Plants and Microorganisms: Towards a New Synthesis 50 Years after Stebbins*, ed. F. J. Ayala, W. M. Fitch, and M. T. Clegg, pp. 271–288. Washington, DC: National Academy Press (reprint of #72).
75. Holsinger, K. E. 2000. Demography and extinction in small populations. In *Genetics, demography, and the viability of fragmented populations*, ed. A. Young and G. Clarke, pp. 55–74. Cambridge: Cambridge University Press.
76. Holsinger, K. E. 2001. Sistemas de apareamiento, biología de la polinización y diversidad en angiospermas. In *Aspecto contemporáneos para el estudio de la biodiversidad*, ed. H. M. Hernández, A. García-Aldrete, F. Alvarez, and M. Ulloa. pp. 129–148. Mexico City: Instituto de Biología UNAM (translated by the editors).
77. Shenk, G., and K. E. Holsinger. 2001. *Castilleja coccinea* (L.) Sprengel: Indian Paintbrush Conservation and Research Plan. New England Wildflower Society, Framingham, MA.
78. Farnsworth, E. J., K. E. Holsinger, L. J. Mehrhoff, N. Murray, J. Preston, and J. A. Silander, Jr. 2001. The REAL Team: a cooperative student training program in rapid ecological assessment. *BioScience* 51:874–879.
79. Holsinger, K. E. 2001. Demes (p. 528), Equilibrium population (pp. 646–648), Gene pool (p. 797), Hardy-Weinberg law (pp. 912–914), Natural selection (pp. 1291–1297). Panmixis (pp. 1410–1411), In *Encyclopedia of Genetics*, ed. S. Brenner and J. Miller. London: Academic Press.
80. Steinbachs, J. E., and K. E. Holsinger. 2002. S-RNase mediated gametophytic self-incompatibility is ancestral in eudicots. *Mol. Biol. Evol.* 19:825–829.
81. Holsinger, K. E., P. O. Lewis, and D. K. Dey. 2002. A Bayesian approach to inferring population structure from dominant markers. *Mol. Ecol.* 11:1157–1164.
82. Henry, C. S., M. L. M. Wells, and K. E. Holsinger. 2002. A study of the inheritance of mating songs in two cryptic sibling lacewing species (Neuroptera: Chrysopidae: *Chrysoperla*). *Genetica* 116:269–289.
83. Fu, R., A. E. Gelfand, and K. E. Holsinger. 2003. Exact moment calculations for genetic models with migration, mutation, and drift. *Theor. Popul. Biol.* 63:231–243.
84. Caira, J. N., K. Jensen, and K. E. Holsinger. 2003. On a new index of host specificity, In *Taxonomy, Ecology, and Evolution of Metazoan Parasites*, eds. C. Combes and J. Jourdane, vol. 1, pp. 161–201. Perpignan: Presses Universitaires de Perpignan.

85. Vitt, P., K. E. Holsinger, and C. S. Jones. 2003. Local differentiation and plasticity in size and sex expression in jack-in-the-pulpit, *Arisaema triphyllum* (Araceae). *Amer. J. Botany* 90:1729–1735.
86. Holsinger, K. E., and L. E. Wallace. 2004. Bayesian approaches for the analysis of population genetic structure: an example from *Platanthera leucophaea* (Orchidaceae). *Molecular Ecology* 13:887–894.
87. Arensburger, P., T. R. Buckley, C. Simons, M. Moulds, and K. E. Holsinger. 2004. Evolution and phylogeny of the New Zealand cicada genera (Hemiptera: Cicadidae) based on nuclear and mitochondrial DNA data. *Journal of Biogeography* 31:557–569.
88. Heschel, M. S., J. R. Stinchcombe, K. E. Holsinger, and J. Schmitt. 2004. Natural selection on light response curve parameters in the herbaceous annual, *Impatiens capensis*. *Oecologia* 139:487–494.
89. Morales, J. M., D. T. Haydon, J. Frair, K. E. Holsinger, and J. M. Fryxell. 2004. Extracting more out of relocation data: building movement models as mixtures of random walks. *Ecology* 85:2436–2445.
90. Holsinger, K. E. 2004. From genes to genomes: the next century of heredity in America. *Journal of Heredity* 95:363–364.
91. Arensburger, P., C. Simon, and K. E. Holsinger. 2004. Evolution and phylogeny of the New Zealand cicada genus *Kikihia* Dugdale (Homoptera: Auchenorrhynca: Cicadidae) with special reference to the origin of the Kermadec and Norfolk Islands species. *Journal of Biogeography* 31:1769–1783.
92. Sezen, U. U., R. L. Chazdon, and K. E. Holsinger. 2005. Genetic consequences of tropical second-growth forest regeneration. *Science* 307:891.
93. Fu, R., D. K. Dey, and K. E. Holsinger. 2005. Bayesian models for analysis of genetic structure when populations are correlated. *Bioinformatics* 21:1516–1529.
94. Lewis, P. O., M. T. Holder, and K. E. Holsinger. 2005. Polytomies and Bayesian phylogenetic inference. *Systematic Biology* 54:241–253.
95. Hoffmeister, T. S., L. E. M. Vet, A. Biere, K. Holsinger, and J. Filser. 2005. Ecological and evolutionary consequences of biological invasion and habitat fragmentation. *Ecosystems* 8:657–667.
96. Song, S., D. K. Dey, and K. E. Holsinger. 2006. Hierarchical models with migration, mutation, and drift: implications for genetic inference. *Evolution* 60:1–12.
97. Holsinger, K. E. 2006. Similar strokes for different folks. *Heredity* 96:203.
98. Holsinger, K. E. 2006. Bayesian hierarchical models in geographical genetics. In *Applications of Computational Statistics in the Environmental Sciences*, ed. J. S. Clark and A. E. Gelfand, pp. 25–37. New York, NY: Oxford University Press.

99. Shannon, R. K., and K. E. Holsinger. 2007. The genetics of sex determination in stinging nettle (*Urtica dioica*). *Sexual Plant Reproduction* 20:35-43.
100. Bhattacharya, S., A. E. Gelfand, and K. E. Holsinger. 2007. Model fitting and inference under latent equilibrium processes. *Statistics and Computing* 17:193-208.
101. Sezen, U. U., R. L. Chazdon, and K. E. Holsinger. 2007. Multi-generational genetic analysis of tropical second-growth forest regeneration. *Ecology* 88:3065-3075.
102. Evans, M. E., K. E. Holsinger, and E. S. Menges. 2008. Modeling the effect of fire on the demography of *Dicerandra frutescens* ssp. *frutescens* (Lamiaceae), an endangered plant endemic to Florida scrub. *Population Ecology* 50:53-62.
103. Guo, F., D. K. Dey, and K. E. Holsinger. 2008. A hierarchical Bayesian approach for estimating origin of a mixed population. *IMS Collections* 3:237-250.
104. Lubell, J. D., M. H. Brand, J. M. Lehrer, and K. E. Holsinger. 2008. Detecting the influence of ornamental *Berberis thunbergii* var. *atropurpurea* in invasive populations of *Berberis thunbergii* DC. (Berberidaceae) using AFLP. *American Journal of Botany* 95:700-705.
105. Guo, F., D. K. Dey, and K. E. Holsinger. 2008. A Bayesian hierarchical model for analysis of SNP diversity in multilocus, multipopulation models. *Journal of the American Statistical Association* (in press).

BOOK REVIEWS

1. Holsinger, K. E. 1985. Review of *Dimensions of Darwinism: Themes and Counterthemes in Twentieth-Century Evolutionary Theory*, edited by M. Grene. *Philos. Sci.* 52:161-163.
2. Holsinger, K. E. 1985. Review of *Drawn from Nature*, by Charles van Ravensway. *University Publishing* (Winter, 1985).
3. Holsinger, K. E. 1987. Review of *Evolution at a Crossroads: The New Biology and the New Philosophy of Science*, edited by D. J. Depew and B. H. Weber. *Can. Philos. Rev.* 7:7-8.
4. Holsinger, K. E. 1988. Review of *Botanic Gardens and Germplasm Conservation*, by N. J. H. Smith. *Plant Genet. Newslett.* 4:14.
5. Holsinger, K. E. 1989. Review of *Proceedings of the Second International Conference on Quantitative Genetics*, edited by B. S. Weir, E. J. Eisen, M. M. Goodman, and G. Namkoong. *Plant Genet. Newslett.* 5:13.
6. Holsinger, K. E. 1990. Review of *Isozymes in Plant Biology*, edited by D. E. Soltis and P. S. Soltis. *Econ. Bot.* 44:544.

7. Holsinger, K. E. 1991. Review of *Forecasting Gene Frequency*, by N. J. T. Lo Cascio. *Quart. Rev. Biol.* 66:242.
8. Holsinger, K. E. 1992. Review of *Molecular Evolution: Computer Analysis of Protein and Nucleic Acid Sequences*, edited by R. F. Doolittle. *Plant Genet. Newslett.* 8:34,36.
9. Holsinger, K. E. 1993. Review of *Molecular Systematics of Plants*, edited by P. S. Soltis, D. E. Soltis, and J. J. Doyle. *Syst. Bot.* 18:539-541.
10. Holsinger, K. E. 1993. Review of *Applied Population Biology*, edited by S. K. Jain and L. W. Botsford. *J. Vegetation Sci.* 4:861-862.
11. Holsinger, K. E. 1994. Plant genetic resources: a popular introduction, review of *Genes, Crops, and the Environment*, by J. Holden, J. Peacock, and T. Williams. *Trends Ecol. Evol.* 9:195-196.
12. Holsinger, K. E. 1995. Problems of biodiversity conservation, review of *Biological Diversity: Problems and Challenges*, edited by S. K. Majumdar, F. J. Brenner, J. E. Lovich, J. F. Schalles, and E. W. Miller. *BioScience* 45:425-426.
13. Holsinger, K. E. 1996. Review of *Floral Biology: Studies of Floral Evolution in Animal-Pollinated Plants*, edited by D. G. Lloyd and S. C. H. Barrett. *Quart. Rev. Biol.* 71:574-575.
14. Holsinger, K. E. 1996. The scope and the limits of conservation genetics, review of *Conservation Genetics: Case Histories from Nature*, edited by J. C. Avise and J. L. Hamrick. *Evolution* 50:2558-2561.
15. Holsinger, K. E. 1997. Review of *Principles and Practice of Plant Conservation*, by D. R. Given. *Aquatic Botany* 55:301-302.
16. Holsinger, K. E. 1997. The botanical Kamasutra, review of *Plant Breeding Systems*, 2nd ed., by A. J. Richards. *Trends Plant Sci.* 2:485-486.
17. Holsinger, K. E. 1998. Review of *Population Biology: Concepts and Models*, by A. Hastings. *Quart. Rev. Biol.* 73:102.
18. Holsinger, K. E. 2001. Biodiversity in the United States, review of *Precious Heritage: The Status of Biodiversity in the United States*, edited by B. A. Stein, L. S. Kutner, and J. S. Adams. *BioScience* 51:256-257.
19. Holsinger, K. E. 2003. Dealing with data: a milestone in statistical genetics, review of *Handbook of Statistical Genetics*, edited by D. J. Balding, M. Bishop, and C. Cannings. *Heredity* 91:1.

TECHNICAL REPORTS

1. Population Biology Task Force. 1998. *Frontiers in Population Biology*. Prepared for the National Science Foundation. 8pp.
2. Holsinger, K. E., P. O. Lewis, and D. K. Dey. 2001. A Bayesian approach to inferring population structure from dominant markers. Technical report 01-30, Department of Statistics, University of Connecticut.
3. Fu, R., A. E. Gelfand, and K. E. Holsinger. 2002. Exact moment calculations for genetic models with migration, mutation, and drift. Technical report 02-11, Department of Statistics, University of Connecticut.
4. Holsinger, K. E., and the IBRCS Working Group. 2003. IBRCS White Paper: Rationale, Blueprint, and Expectations for the National Ecological Observatory Network. American Institute of Biological Sciences, Washington, DC. 68pp.
5. Fu, R., D. K. Dey, and K. E. Holsinger. 2003. Bayesian inference of genetic population structure from dominant markers. Technical report 03-17, Department of Statistics, University of Connecticut.
6. American Institute of Biological Sciences. 2004. IBRCS White Paper: A Plan for Developing and Governing the National Ecological Observatory Network (NEON). American Institute of Biological Sciences, Washington, DC. vi+17pp (+ appendices).
7. Fu, R., D. K. Dey, and K. E. Holsinger. 2004. Bayesian models for the analysis of genetic structure when populations are correlated. Technical report 04-12, Department of Statistics, University of Connecticut.
8. Song, S., D. K. Dey, and K. E. Holsinger. 2004. Hierarchical models with migration, mutation, and drift: implications for genetic inference. Technical report 04-26, Department of Statistics, University of Connecticut.
9. Evolutionary Biology Workshop. 2005. *Frontiers in Evolutionary Biology*. Prepared for the National Science Foundation. 10pp.
10. Song, S., D. K. Dey, and K. E. Holsinger. 2005. Genetic diversity of microsatellite loci in hierarchically structured populations. Technical report 05-12, Department of Statistics, University of Connecticut.
11. Guo, F., D. K. Dey, and K. E. Holsinger. 2006. A hierarchical Bayesian approach for estimating origin of a mixed population. Technical report 06-16, Department of Statistics, University of Connecticut.

POPULAR AND SEMI-POPULAR ARTICLES

1. Holsinger, K. E. 2001. Evolution answers questions that creationism can't. *The Hartford Courant* (7 January) p. C4.
2. Holsinger, K. E. 2001. New fossil part of Cambrian explosion. *United Press International* (9 September).
3. Holsinger, K. E. 2006. Responding to challenges for biological research and education. *BioScience* 56:3.
4. Holsinger, K. E. 2006. A new era for the public understanding of science. *BioScience* 56:955.

PUBLICATIONS BY STUDENTS

1. Kelly, J. K. 1992. Kin selection in density regulated populations. *J. Theor. Biol.* 157:447–461.
2. Kelly, J. K. 1994. The effect of scale dependent processes on kin selection: mating and density regulation. *Theor. Popul. Biol.* 46:32–57.
3. Vitt, P. 2001. Gender-related differences in gas exchange rates in *Arisaema triphyllum* (Araceae). *Rhodora* 103:387–404.

INVITED CONFERENCE AND SYMPOSIUM PRESENTATIONS

- 1986: Panelist, Conference on Viable Population Planning, Center for Conservation Biology, Stanford University, 3-27-86 to 3-28-86.
 “Genetic considerations for managing viable populations of endangered plants,” Rare & Endangered Plants: A California Conference on Their Conservation and Management, Sacramento, California, 11-5-86 to 11-8-86.
- 1987 “Population genetics of mating system evolution,” NATO Advanced Study Institute on Mathematical and Statistical Developments of Evolutionary Theory, University of Montreal, 8-3-87 to 8-21-87.
- 1988: “The population genetics of mating system evolution in homosporous ferns,” Symposium: Population Biology of Ferns, American Institute of Biological Sciences, University of California, Davis, 8-14-88 to 8-18-88.
 “Phylogenetic analysis of molecular sequence data: an example using 5S ribosomal RNA,” Symposium: Phylogenetic Analysis of Molecular Data—Theory and Application, American Institute of Biological Sciences, University of California, Davis, 8-14-88 to 8-18-88. (with K. P. Steele, R. K. Jansen, and D. W. Taylor).
- 1989: “Conference synthesis,” Genetics and Population Biology of Rare Plants, Missouri Botanical Garden, 3-9-89 to 3-11-89 (with L. D. Gottlieb).

“Pollination biology and the evolutionary stability of mixed mating systems,” Symposium: The Evolution of Plant Mating Systems, American Institute of Biological Sciences, University of Toronto, 8-6-89 to 8-10-89

Panelist, Salmon and Steelhead Production Principles for System Planning: Clarification and Revision Workshop, Northwest Power Planning Council, Portland, OR, 12-15-89.

1990: “Conservation of genetic diversity in rare plants: principles and prospects,” Congress Symposium: Conservation Biology—The Evolution and Ecology of Small Populations, IV International Congress of Systematic and Evolutionary Biology, University of Maryland, 7-1-90 to 7-7-90.

1991: “Ecological models of plant reproduction and the evolutionary stability of mixed mating systems,” Ecology and Evolution of Plant Reproduction: New Approaches, University of Georgia, 4-12-91 to 4-14-91.

“Evolutionary dynamics of fragmented plant populations,” NSF Workshop on Global Change, Friday Harbor, 9-20-91 to 9-23-91.

1992: “Setting priorities for regional plant conservation programs,” New England Plant Conservation: The Scientific Basis for Effective Action, sponsored by the New England Botanical Club and the New England Wildflower Society, Bentley College, 3-21-92.

Panelist, “Technical workshop to develop criteria for listing species on CITES appendices and the IUCN Red List of Threatened Species,” International Union for the Conservation of Nature, Zoological Society of London, 11-9-92 to 11-11-92.

1993: “Ecological determinants of mating system evolution in plants,” Symposium: The Evolution of Plant Mating Systems, XV International Botanical Congress, Yokohama, Japan, 8-28-93 to 9-3-93.

1994: “Principles of mating system evolution in homosporous plants,” Keynote Address: XXIII New England Fern Conference, Harvard Forest, Petersham, Massachusetts, 5-20-94 to 5-22-94.

“Population Biology for Policy Makers: Promises and Paradoxes,” Symposium: National Biodiversity Strategy: Toward a National Partnership, American Institute of Biological Sciences, Knoxville, Tennessee, 8-7-94 to 8-11-94.

1995: “Genetics and conservation: when do we need designer genes?” Plenary Lecture, Ontario Ecology and Ethology Colloquium, University of Toronto, 5-4-95 to 5-5-95.

“The future of conservation biology: what’s a geneticist to do?” Cary Conference VI, Enhancing the Ecological Basis of Conservation: Heterogeneity, Ecosystem Function, and Biodiversity, Institute of Ecosystem Studies, 5-9-95 to 5-11-95 (with P. Vitt).

- “Genetics in conservation programs, or when do we need designer genes?” Symposium: Conservation Biology: Bridging the Gap Between Research and Practice, American Institute of Biological Sciences, San Diego, CA, 8-5-95 to 8-9-95 (with P. Vitt).
- 1996: “Connecticut’s flora: where do we go from here?” The Flora of Connecticut: Current Issues and Research, University of Connecticut, 3-30-96.
- “Genes, demes, and plant conservation,” Genes, species, and the threat of extinction: DNA and genetics in the conservation of endangered species (a symposium in honor of Princeton University’s 250th anniversary), 10-4-96.
- 1997: Panelist, Norwalk River Basin and Adjacent Area Symposium, Natural Resources Conservation Service, United States Department of Agriculture, Norwalk, Connecticut, 6-30-97 to 7-2-97.
- Organizer and Moderator, Symposium: Conserving native plant biodiversity in the Canada and the U.S.: a cross-border comparison of problems and approaches, American Institute of Biological Sciences, Montreal, Quebec, 8-3-97 to 8-7-97.
- “The scope and the limits of plant conservation genetics,” Plenary Lecture, Genetics Society of Australia, University of Western Australia, 9-27-97 to 10-1-97
- 1998: “The scope and the limits of plant population genetics”, Graduate course: Conservation genetics in theory and practice, Scandinavian Association of Geneticists, Uppsala, Sweden, 8-20-98 to 8-23-98
- “Hierarchical analysis of genetic diversity in geographically structured populations: a Bayesian approach”, Plenary Lecture, Scandinavian Association of Geneticists, Uppsala, Sweden, 8-20-98 to 8-23-98
- Invited lecturer, III Cycle Romand en Sciences Biologique, “Biology of Reproduction”, La Sage, Valais, Switzerland, 9-9-98 to 9-12-98
- Panelist, Workshop on the Future of Population Biology, National Science Foundation, Arlington, VA, 10-28-98 to 10-30-98
- 1999: Panelist, The Future of Research and Management, Symposium: Invasive Plants: Research, Management, Policy, Communication, Wesleyan University, Middletown, CT 3-17-99
- “Global change and plant extinction: How great is the impact”, Symposium: Biodiversity and Climate Change: Conservation in the Face of Uncertainty, American Museum of Natural History, New York, NY, 4-30-99 to 5-1-99
- “Mating systems and the evolution of flowering plants”, Symposium: Contemporary approaches for the study of biodiversity, Instituto de Biología, Universidad Nacional Autónoma de México, Mexico City, Mexico, 5-27-99 to 5-28-99

- “Plant conservation on islands: lessons for the future”, Symposium: Critical issues in conservation biology of oceanic island plants, XVI International Botanical Congress, St. Louis, MO, 8-1-99 to 8-7-99.
- 2000: “Reproductive systems and evolution in plants”, Variation and Evolution in Plants and Microorganisms: Toward a New Synthesis 50 Years after Stebbins, National Academy of Sciences Colloquium, Irvine, CA, 1-27-2000 to 1-29-2000.
- “Demography and extinction in plant populations”, Keynote Address, Biology of Small Populations, Janet Meakin Poor Research Symposium, Chicago Botanic Garden, Chicago, IL 9-15-2000.
- “Demography and extinction: threats to persistence in small populations”, Population Extinction: Processes, Patterns, and Explanations, Tvärminne Zoological Station, Helsinki, Finland, 11-5-2000 to 11-7-2000.
- 2001: “A Bayesian framework for analysis of genetic structure: applications to nucleotide sequence and dominant-marker data,” Society for Molecular Biology and Evolution, University of Georgia, 7-7-2001 to 7-10-2001.
- 2002: “Evolutionary responses to a changing global environment,” ESF/LESC Exploratory Workshop, *Trophic Interactions in a Changing World*, Texel, The Netherlands, 4-3-2002 to 4-7-2002.
- “The inheritance of mating songs in two cryptic, sibling lacewing species (Neuroptera: Chrysopidae: *Chrysoperla*,” *Genetics of Mate Choice: From Sexual Selection to Sexual Isolation*, American Society of Naturalists, Banff, Canada, 7-11-2002 to 7-14-2002 (with C. S. Henry and M. L. Wells; presented by C. S. Henry).
- “Population genetics and the conservation of rare plants,” *Diversity to Domestication*, American Society of Agronomy/Crop Science Society of America/Soil Science Society of America, Indianapolis, IN, 11-10-2002 to 11-14-2002.
- 2005 “Frontiers in evolutionary biology,” National Science Foundation, Arlington, VA, 1-10-2005 to 1-12-2005 (co-organizer with J. G. Kingsolver).
- “Preliminary lessons for large-scale biodiversity research,” Workshop on Biodiversity Research in Germany, Potsdam, Germany, 2-3-2005 to 2-4-2005.
- “Bayesian hierarchical models in geographical genetics,” 19th New England Statistics Symposium, University of Connecticut, 4-23-2005.
- “Special meeting on open access journal publishing,” American Institute of Biological Sciences, Washington, DC, 5-9-2005 (organizer).
- “Plant genetic consequences of pollinator declines,” National Research Council Workshop, Status of Pollinators in North America, National Academy of Sciences, Washington, DC, 10-18-2005 to 10-19-2005 (with K. Skogen).
- 2006 “BioOne’s place in the scholarly research environment,” BioOne Publishers & Partners Meeting, Washington, DC, 4-25-2006.

CP0 Scoping meeting, DIVERSITAS, Paris, France, 4-28-2006 to 4-29-2006.

“Biodiversity: the interplay of science, valuation, and policy,” Annual meeting of the American Institute of Biological Sciences, Washington, DC, 5-24-2006 to 5-25-2006 (organizer).

2007 “Genetics, ecology, and climate change: challenges for plant conservation in the 21st century,” Keynote address, Student Research in Plant Biology and Conservation, Chicago Botanic Garden, 7-6-2007.

“Using genomic scans of F_{ST} to identify the footprints of selection,” Joint Statistical Meetings, Salt Lake City, UT, 7-29-2007 to 8-2-2007.

CONTRIBUTED CONFERENCE PRESENTATIONS

1986: “Why bother with bees when you can do it yourself?” Population Biologists of New England, University of Massachusetts-Amherst, 10-18-86.

1987: “The evolution of self-fertilization in plants: lessons from population genetics,” XIV International Botanical Congress, Berlin, West Germany, 7-24-87 to 8-1-87

1989: “Maintenance of polygenic variation in spatially structured populations,” Population Biologists of New England, Wesleyan University, 4-29-89. (presented by D. B. Goldstein)

“Maintenance of polygenic variation in spatially structured populations,” Society for the Study of Evolution/American Society of Naturalists, Pennsylvania State University, 6-15-89 to 6-18-89. (presented by D. B. Goldstein)

“Evolutionary stability of mixed mating systems,” Society for the Study of Evolution/American Society of Naturalists, Pennsylvania State University, 6-15-89 to 6-18-89.

1990: “Constraints on multiple resource use and the evolution of positive assortative mating,” IV International Congress of Systematic and Evolutionary Biology, University of Maryland, 7-1-90 to 7-7-90 (presented by D. B. Goldstein; with S. W. Pacala).

“An *a posteriori* method for weighting character-state transitions in parsimony analyses,” New England Molecular Evolutionary Biologists, University of Connecticut, 11-10-90.

1991: “Mating system evolution in *Senecio vulgaris*: the role of pollen discounting,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of Hawaii, Hilo, 7-28-91 to 8-3-91.

“Extensive cpDNA restriction site variation within populations of *Coreopsis* (Asteraceae),” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of Hawaii, Hilo, 7-28-91 to 8-3-91 (presented by R. J. Mason; with R. K. Jansen).

“Character weighting for phylogenetic analyses of restriction site data,” American Institute of Biological Sciences, Trinity University, 8-4-91 to 8-8-91 (presented by R. K. Jansen; with R. Olmstead).

“Different patterns of chloroplast DNA restriction site variation found within two populations of *Coreopsis grandiflora* (Asteraceae),” Population Biologists of New England, Boston University, 11-16-91 (presented by R. J. Mason; with R. K. Jansen).

- 1992: “Non-Mendelian inheritance of RAPD markers in *Lobelia cardinalis* L.?” International Organization of Plant Biosystematists, Missouri Botanical Garden, St. Louis 6-11-92 to 6-15-92 (presented by S. Fineschi).

“Patterns of restriction site diversity within and between populations of *Coreopsis grandiflora* (Asteraceae),” International Conference on Molecular Evolution, Pennsylvania State University, 6-11-92 to 6-14-92 (presented by R. J. Mason; with R. K. Jansen).

“Mass-action models of plant mating systems: the role of inbreeding depression,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of California, Berkeley, 6-17-92 to 6-21-92.

“Pollen packaging with unreliable pollinators,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of California, Berkeley, 6-17-92 to 6-21-92 (presented by G. LeBuhn).

- 1993: “Chloroplast DNA restriction site analysis of *Coreopsis nuceensis* and *C. nuceensis* (Asteraceae), a progenitor-derivative species pair,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, Snowbird, Utah, 6-19-93 to 6-23-93 (presented by R. J. Mason; with R. K. Jansen).

“A re-examination of the North American *Crepis* agamic complex (Asteraceae),” American Institute of Biological Sciences, Iowa State University, 8-1-93 to 8-5-93 (presented by J. Whitton; with R. K. Jansen).

“On the relationship between gametophytic apomixis and polyploidy,” American Institute of Biological Sciences, Iowa State University, Ames, Iowa, 8-1-93 to 8-5-93 (presented by J. Whitton).

- 1994: “Intraspecific chloroplast DNA polymorphism transcends species boundaries in *Coreopsis*,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of Georgia, 6-15-94 to 6-19-94 (presented by R. J. Mason)

“Local patterns of gender-switching in *Arisaema triphyllum*,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of Georgia, 6-15-94 to 6-19-94 (presented by P. Vitt).

- “Hierarchical analysis of haplotype diversity in spatially structured populations,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, University of Georgia, 6-15-94 to 6-19-94 (with R. J. Mason).
- 1995: “Impact of genomic interactions on stress resistance and expression of heat shock proteins in hybrids of *Poeciliopsis*,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, McGill University, 7-8-95 to 7-12-95 (with P. diIorio, R. J. Schultz, and L. Hightower; presented by P. diIorio).
- “Genetic variation in life-history traits within and among populations of *Impatiens capensis*,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, McGill University, 7-8-95 to 7-12-95 (presented by C. Paoletti).
- “Accommodating among site rate variation in phylogenetic analysis,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, McGill University, 7-8-95 to 7-12-95 (with J. Sullivan, G. J. P. Naylor, and C. Simon; presented by J. Sullivan).
- “Transexuality in the pulpit: an examination of gender choices,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, McGill University, 7-8-95 to 7-12-95 (presented by P. Vitt).
- “Inferring migration structures from nucleotide sequence data: a comparison of F_{ST} measures,” Society for the Study of Evolution/American Society of Naturalists/Society of Systematic Biologists, McGill University, 7-8-95 to 7-12-95.
- “Polygenic variation in *Impatiens capensis*,” Population Biologists of New England, 10-21-95 (presented by C. Paoletti).
- “Transexuality in the pulpit: an examination of gender choices,” Population Biologists of New England, 10-21-95 (presented by P. Vitt).
- 1996: “The evolution of gametophytic self-incompatibility: a new approach,” Society for the Study of Evolution/Society of Systematic Biologists, Washington University, 6-19-96 to 6-23-96 (presented by J. Steinbachs).
- “Patterns of pollen removal and the evolution of selfing rates,” Society for the Study of Evolution/Society of Systematic Biologists, Washington University, 6-19-96 to 6-23-96.
- “Reproductive patterns and the cost of reproduction in an endangered orchid *Isotria medeoloides*: A ten year retrospective,” Ecological Society of America, Providence, Rhode Island, 8-11-96 to 8-14-96 (with P. Vitt, S. C. Gawler, A. Dibble, T. Vining, W. A. Wright, and C. S. Campbell; presented by P. Vitt).

- 1997: “Pollen transfer dynamics and the evolution of gametophytic self-incompatibility,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, University of Colorado, 6-14-97 to 6-18-97 (presented by J. Steinbachs).
- 1998: “Evolutionary relationships of self-incompatibility related proteins,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, University of British Columbia, 6-20-98 to 6-24-98 (presented by J. Steinbachs).
- 1999: “Analysis of genetic diversity in geographically structured populations: a Bayesian approach,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, University of Wisconsin, 6-22-99 to 6-26-99.
- 2000: “Dating Gondwanan Colonization Events using Bayesian Statistics: an Example from NZ Cicadas, ” Third International Southern Connection Congress. Lincoln University, Canterbury, New Zealand, 1-17-2000 to 1-22-2000 (with C. Simon, T. Buckley, P. Arensburger, P. Lewis, and G. Chambers; presented by C. Simon).
 “Dating the origin of New Zealand cicadas using Bayesian statistics,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, Indiana University, 6-23-2000 to 6-27-2000 (with C. Simon, T. Buckley, and P. Arensburger; presented by C. Simon).
- 2001: “Inferring the genetic structure of populations from dominant marker data,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, University of Tennessee, 6-26-2001 to 6-30-2001 (with P. O. Lewis).
- 2003: “The Bayesian star tree paradox,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, California State University Chico, 6-21-2003 to 6-24-2003 (with P. O. Lewis and M. T. Holder; presented by P. O. Lewis).
 “The evolution of sun/shade physiology, or why G matrices don’t work,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, California State University Chico, 6-21-2003 to 6-24-2003.
- 2006: “Evolution in a hotspot: patterns of morphological divergence in the genus *Protea*,” American Society of Naturalists/Society of Systematic Biologists/Society for the Study of Evolution, State University of New York, Stony Brook, 6-23-2006 to 6-27-2006 (with R. Prunier and A. G Rebelo; presented by R. Prunier).
 “Does size matter? Genetic diversity in declining and secure populations of *Desmodium cuspidatum* (Fabaceae),” Botanical Society of America, California State University Chico, 7-30-2006 to 8-2-2006 (presented by K. A. Skogen).

- 2007: “Plastic and evolutionary responses to an environmental gradient: leaf traits in the genus *Protea* (Proteaceae L.),” Botanical Society of America, Chicago, IL, 7-7-2007 to 7-11-2007 (presented by R. Prunier).
- “The relationship between breeding systems and life-history in *Oenothera* sections *Kleinia* and *Onagra* (Onagraceae),” Botanical Society of America, Chicago, IL, 7-7-2007 to 7-11-2007 (with K. Theiss and M. E. K. Evans; presented by K. Theiss).
- “Does atmospheric nitrogen deposition contribute to the decline of a native nitrogen-fixing species, *Desmodium cuspidatum*?” Botanical Society of America, Chicago, IL, 7-7-2007 to 7-11-2007 (with K. A. Skogen and Z. G. Cardon; presented by K. A. Skogen).
- “On detecting stabilizing or divergent selection using patterns of variation at SNP loci,” Joint Statistical Meetings, Salt Lake City, UT, 7-29-2007 to 8-2-2007 (with F. Guo and D. Dey; presented by D. Dey).
- “A hierarchical Bayesian model of time-since-fire effects on the demography of the Florida scrub endemic, *Dicerandra frutescens* ssp. *frutescens*,” Ecological Society of America, San Jose, CA, 8-5-2007 to 8-10-2007 (with M. E. K. Evans and E. Menges; presented by M. E. K. Evans).

INVITED SEMINARS

- 1981: University of California, Davis
- 1982: University of California, Berkeley
- 1984: California State University, Hayward
University of California, Irvine
University of Georgia
University of New Brunswick
- 1985: Indiana University
Pomona College
University of California, Davis
University of Toronto
Yale University
- 1986: Brown University
University of Rochester
University of Washington
Wesleyan University
- 1988: State University of New York, Stony Brook
- 1989: Brown University
Tufts University
Yale University
- 1990: Harvard University
- 1992: Cornell University

- University of Massachusetts, Amherst
 University of Connecticut (Department of Statistics)
 Wesleyan University
- 1993: Yale University (School of Forestry - 3)
 Torrey Botanical Club, New York Botanical Garden
- 1994: University of Chicago
 University of Texas
 Amherst College
- 1995: Duke University
- 1996: McGill University
 Washington State University
 Boise State University
- 1997: Dalhousie University
 Centre for Plant Biodiversity Research (Canberra, Australia)
 University of Queensland
- 1998: Brown University
- 1999: Central Connecticut State University
 Oregon State University
 University of Oregon
- 2000: University of South Carolina
 University of Illinois, Chicago
 Université Montpellier II
- 2001: University of Arizona
- 2002: University of Connecticut (Department of Statistics)
 Ohio State University
- 2005: University of New Hampshire
- 2006: Yale University
- 2007: Musée de l'Homme
 Muséum national d'Histoire Naturelle (2)
- 2008: Florida State University (2)
 Yale University
 South African National Biodiversity Institute

EDITORSHIPS AND SOCIETY OFFICES

- 1988–1991 Book Review Editor, *Plant Genetics Newsletter*
- 1993–1998 Associate Editor, *The American Naturalist*
- 1994–1998 Associate Editor, *Systematic Botany*
- 1996–1998 Executive Vice President, Society for the Study of Evolution
- 1997–1998 Member, Board of Directors, American Institute of Biological Sciences
- 1997–2000 Associate Editor, *Evolution*
- 1997–2004 Member, Board of Editors, *Conservation Biology*

1997–2000	Council Member, European Society for Evolutionary Biology
2000–2001	Council Member, American Genetics Association
2002–2007	Member, Board of Directors, American Institute of Biological Sciences
2002–2004	Editor, <i>Heredity</i>
2002–2006	Member, Editorial Committee <i>Systematic Botany Monographs</i>
2002–2004	Associate Editor, <i>Conservation Genetics</i>
2002–2004	President (President-Elect, 2002; Past President 2004), American Genetics Association
2004–2007	Treasurer, Botanical Society of America
2005–2007	President-Elect, President, Past-President, American Institute of Biological Sciences
2007–present	Editorial Board, <i>BioScience</i>

NON-PROFIT BOARD MEMBERSHIPS

1991–1996	Secretary, Board of Trustees, Connecticut State Museum of Natural History
1992–1997	Member, Board of Trustees, Connecticut Chapter, The Nature Conservancy
1996–2003	Chair, Board of Trustees, Connecticut State Museum of Natural History
1997–2002	Vice Chair, Board of Trustees, Connecticut Chapter, The Nature Conservancy
2001–present	Chair, Board of Directors, BioOne
2002–present	Trustee Emeritus, Connecticut Chapter, The Nature Conservancy

OTHER SOCIETY ACTIVITIES

1988–1989	Committee on Trends, Priorities, and Needs, American Society of Plant Taxonomists
1988–1993	Subcommittee on Lectotypification, Special Committee on Lectotypification, International Association for Plant Taxonomy
1991–1993	Co-chair, Subcommittee on Genetic Resources, Systematics Agenda 2000: Integrating Biological Diversity and Societal Needs
1992–1995	Member, Steering Committee, Botany for the Next Millennium, Botanical Society of America
1993–1994	Member, Young Investigator Award Selection Committee, American Society of Naturalists
1994	Member, George R. Cooley Award Committee, American Society of Plant Taxonomists
1994–1997	Member, Advisory Committee on Biological Diversity, American Society of Naturalists
1999	Chair, Awards Committee, American Institute of Biological Sciences

1999–2000	Member, Public Policy Committee, American Institute of Biological Sciences
1999–present	Member, Finance Committee, Society for the Study of Evolution
2000–present	Society for the Study of Evolution Representative to the Council of the American Institute of Biological Sciences
2000	Member, Ad-Hoc Committee on Evolution and Society, Society for the Study of Evolution
2001–2002	Chair, Public Policy Committee, American Institute of Biological Sciences
2002–2004	Chair, Working Group, Infrastructure for Biology at Regional to Continental Scales, American Institute of Biological Sciences
2004	Member, Finance Committee, American Institute of Biological Sciences
2004	Chair, Awards Committee, American Institute of Biological Sciences
2004–2005	Chair, Publications Committee, American Genetics Association
2004–present	Member, Archives and History Committee, Botanical Society of America
2006–present	Member, Publications Committee, American Genetics Association
2007–present	Chair, Publications Committee, American Institute of Biological Sciences
2007–present	Chair, Year of Science Planning Committee, American Institute of Biological Sciences

OTHER PROFESSIONAL ACTIVITIES

1990–1991	Science/Stewardship Committee, Connecticut Chapter, The Nature Conservancy
1990–present	Plant Advisory Group, Department of Environmental Protection, State of Connecticut
1991(Spring)	Dissertation Research Improvement Advisory Panel, Division of Biotic Systems and Resources, National Science Foundation
1991	BBS Research Training Groups Program Site Visit Team, Directorate for Biological, Behavioral, and Social Sciences, National Science Foundation
1991–1993	Acting Director, George Safford Torrey Herbarium, University of Connecticut
1991–present	Member, Regional Advisory Council, New England Plant Conservation Program
1992(Fall)	Dissertation Research Improvement Advisory Panel, Division of Environmental Biology, National Science Foundation
1993	Visiting Fellow, Department of Biology, Yale University
1993–1994	Member, Special Study Section for review of Program Project Proposals (Genetics), National Institutes of Health

- 1993–1999 Director, Center for Conservation and Biodiversity, University of Connecticut
- 1993–1994 Member, Discipline Advisory Committee for Fulbright Scholar Awards in Life Sciences (plant sciences), Council for International Exchange of Scholars
- 1994 Research Training Groups Advisory Panel, Division of Biological Instrumentation and Resources, National Science Foundation
- 1994 Research Training Groups Program Site Visit Team, Division of Biological Instrumentation and Resources, National Science Foundation
- 1995–1996 Chair, Discipline Advisory Committee for Fulbright Scholar Awards in Life Sciences (plant sciences), Council for International Exchange of Scholars
- 1996–2000 Member, Ecosystem Research Program Scientific Review Panel, The Nature Conservancy
- 1997 Member, Research Planning Grants and Career Advancement Awards for Women Advisory Panel, Division of Environmental Biology, National Science Foundation
- 1998 Member, Integrative Graduate Education and Research Training Program Advisory Panel, Office of Multidisciplinary Activities, National Science Foundation
- 1998 Member, Population Biology Advisory Panel, Division of Environmental Biology, National Science Foundation
- 2000 Member, STAR Fellowships Advisory Panel, Environmental Protection Agency
- 2001 Member, Population Biology Advisory Panel, Division of Environmental Biology, National Science Foundation
- 2002 Member, Population Biology Advisory Panel, Division of Environmental Biology, National Science Foundation
- 2004 Member, Joint DMS/BIO/NIGMS Mathematical Biology Advisory Panel, National Science Foundation and National Institutes of Health
- 2006 Member, Graduate Fellowship Review Panel, National Science Foundation
- 2007 Member, Graduate Fellowship Review Panel, National Science Foundation
Member, Advancing Theory in Biology Advisory Panel, National Science Foundation
- 2008 Chair, Genetics and Evolutionary Biology panel, Graduate Research Fellowship Program, National Science Foundation

SELECTED DEPARTMENTAL AND UNIVERSITY SERVICE

- 1987–1991 Chair, Departmental Seminar Committee
- 1987–1988 Member, Physiological Plant Ecologist Search Committee
- 1987–1988 Chair, Plant Ecologist Search Committee
- 1989–1992 Member, Committee on Curricula and Courses, College of Liberal Arts and Sciences
- 1989–present Member, Departmental Committee on Curricula and Courses
- 1989–1990 Member, Molecular Evolutionist Search Committee
- 1989–1990 Member, Plant Structural Biologist Search Committee
- 1991–1992 Chair, Plant Systematist Search Committee
- 1992–1993 Member, Molecular Plant Geneticist Search Committee (Department of Molecular and Cell Biology)
- 1992–1993 Member, Theoretical Ecologist Search Committee
- 1992–1993 Member, American Association of University Professors Nominating Committee
- 1993–1994 Chair, Departmental Promotion, Tenure, and Reappointment Committee
- 1994–1995 Member, Departmental Promotion, Tenure, and Reappointment Committee
- 1994–present Member, Departmental Advisory Committee
- 1995–1996 Member, Development Advisory Committee, College of Liberal Arts and Sciences
- 1995–1996 Member, University Self Study Committee for Reaccreditation by Northeastern Association of Schools and Colleges
- 1995 Member, Collections Manager Search Committee
- 1995–1996 Member, Task Force on Future Directions for the Museum of Natural History
- 1996–1997 Member, Life Sciences Review Panel, University of Connecticut Research Foundation
- 1996–1997 Chair, Departmental Promotion, Tenure, and Reappointment Committee
- 1996–1997 Member, University Senate
- 1996–1997 Member, Plant Ecology/Ecosystem Ecology Search Committee
- 1997–1998 Chair, Life Sciences Review Panel, University of Connecticut Research Foundation
- 1997–1998 Chair, Evolutionary Biology Search Committee
- 1997–1998 Member, Chancellor’s Library Advisory Committee
- 1997–1998 Member, Land Plant Search Committee
- 1997–1998 Member, Phycology Search Committee
- 1998–1999 Member, Departmental Promotion, Tenure, and Reappointment Committee
- 1999–2000 Chair, Departmental Promotion, Tenure, and Reappointment Committee

1999(Fall)	Research Advisory Council, University of Connecticut Research Foundation
1999–2003	Member, University Senate
2000–2003	Member, Scholastic Standards Committee, University Senate
2000–present	Faculty Representative, Financial Affairs Committee, University of Connecticut Board of Trustees
2001–2002	Chair, Departmental Promotion, Tenure, and Reappointment Committee
2002	Member, University Director of Environmental Policy Search Committee
2002	Member, Department of Geology Review Team
2002–2003	Chair, Departmental Promotion, Tenure, and Reappointment Committee
2003–2004	Chair, University Budget Committee, University Senate
2004	Member, Geosciences Planning Committee, College of Liberal Arts & Sciences
2004	Member, Plant Biology Infrastructure Committee
2004	Member, University Chief Information Officer Search Committee
2004–2005	Member, Paleobiology Search Committee
2004–2005	Member, Spatial Statistics Search Committee, (Department of Statistics)
2005	Member, College of Liberal Arts & Sciences Dean’s External Funding Advisory Committee
2005–present	Member, University Senate
2005–present	Member, University Budget Committee, University Senate
2005–2006	Acting Head, Department of Ecology & Evolutionary Biology
2007–2008	Member, Departmental Promotion, Tenure, and Reappointment Committee
2007–2008	Member, College of Liberal Arts & Sciences Dean Search Committee
2007–present	Member, Academic Center/Institute Review Committee
2007–present	Member, Faculty Review Board
2007–present	Chair, Year of Science 2009 Coordinating Committee

MANUSCRIPT AND PROPOSAL REVIEW

Acta Oecologia Plantarum
 American Journal of Botany
 American Midland Naturalist
 The American Naturalist
 The American Statistician
 Annals of Botany
 Annals of the Entomological Society of America
 Annals of the Missouri Botanical Garden
 Auk

- Geography & Regional Science
- Instrumentation and Development
- Latin America Programs
- Physical Anthropology
- Population Biology
- Population Biology & Physiological Ecology
- Systematic Biology

National Sciences and Engineering Research Council of Canada

Nature

Nature Conservancy

Nature Reviews Genetics

New Jersey Sea Grant College Program

New Phytologist

Oxford University Press

Plant Species Biology

Princeton University Press

Proceedings of the National Academy of Sciences, U.S.A.

Restoration Ecology

Science

Sexual Plant Reproduction

Systematic Biology

Systematic Botany

Theoretical Population Biology

Trends in Plant Science

Trends in Ecology & Evolution

United Nations Environment Program — Global Biodiversity Assessment

United States Fish and Wildlife Service — Endangered Species Recovery Plans

United States Israel Binational Science Foundation

PROMOTION AND TENURE REVIEWS

Arizona State University West

Cornell University

Duke University

Harvard University (3)

Michigan State University

Montana State University

New Mexico State University

Ohio State University

Pennsylvania State University

Princeton University

Queen's University (2)

Trinity University

University of Auckland
 University of British Columbia
 University of Calgary
 University of California — Davis
 University of California — Irvine (2)
 University of California — Merced
 University of California — Los Angeles (2)
 University of Colorado
 University of Georgia
 University of Guelph
 University of Kansas
 University of Maryland — College Park
 University of Minnesota
 University of Missouri — Columbia
 University of Oregon
 University of Rochester
 University of Texas
 University of Virginia

EXTERNAL EXAMINER FOR PH.D.

Australian National University
 Brown University (3)
 Ohio State University
 State University of New York, Stony Brook
 Université Montpellier II
 University of Western Australia (2)

GRADUATE STUDENTS

Degrees Completed:

- David B. Goldstein, M. S., 1990, “The maintenance and geographic distribution of genetic variation,” (currently Director, Center for Population Genomics and Pharmacogenetics, Institute for Genome Sciences, Duke University).
- Roberta J. Mason-Gamer, Ph.D., 1993, “A molecular study of intraspecific diversity and speciation in *Coreopsis* section *Coreopsis* (Asteraceae),” (currently Associate Professor of Biology, University of Illinois Chicago).
- Jeannette Whitton, Ph.D., 1994, “ Systematic and evolutionary investigation of the North American *Crepis* agamic complex,” (co-advisor with Robert K. Jansen; currently Associate Professor of Botany, University of British Columbia).
- Claudia Paoletti, Ph.D., 1996, “Effects of habitat heterogeneity on *Impatiens capensis* reproduction, genetic, and phenotypic variation,” (currently Scientific Officer, Unit on genetically modified organisms, European Food Safety Authority, Parma, Italy).

Pati Vitt, Ph.D., 1997, “Functional ecology of gender switching in *Arisaema triphyllum*: an interdisciplinary approach,” (currently conservation research botanist, Chicago Botanical Garden).

Jennifer E. Steinbachs, Ph.D. 1999, “The evolution of gametophytic self-incompatibility: a theoretical perspective,” (currently Deputy Director, Center for Genomics and Bioinformatics, Indiana University).

Gregory K. Shenk, Ph.D., 2005, “Developmentally plastic responses to pollinators by *Lupinus perennis* flowers and what they tell us about the pollination mechanism in the general lupine flower,” (currently instructor, Greater Hartford Academy of Math & Science).

Present Students:

Krissa Skogen, Ph.D., (expected 2008).

Rachel Prunier, Ph.D., (expected 2009).

Kathryn Theiss, Ph.D., (expected 2010).

VISITING SCIENTISTS AND RESEARCH ASSOCIATES

Dr. Sylvia Fineschi, Institute for Agroforestry, Italian National Research Council, Porano, Italy, 4-91 to 7-92 (currently Ricercatore, CNR Istituto per la Protezione delle Piante, Florence).

Roberta D’Orazio, *borsa di studio*, Università degli Studi di Padova, Italy, 9-94 to 8-95.

Dr. M. Shane Heschel, *post-doctoral research associate*, 1-2002 to 5-2003 (currently Assistant Professor of Biology, Colorado College).

Dr. Jane E. Carlson, *post-doctoral research associate*, 11-2007 to present.

PROFESSIONAL ASSOCIATES

Ph.D. Advisor: Marcus W. Feldman (Stanford University)

Post-doctoral advisor: Robert Ornduff (University of California, Berkeley; deceased)