

Charles Wayne Fox

Department of Entomology
S-225 Agricultural Science Center North
University of Kentucky
Lexington, KY 40546-0091

Home Phone: 859-276-5298
Office Phone: 859-904-9404
Lab Phone: 859-257-7472
Fax: 859-323-1120
E-mail: fox@uky.edu
Web: www.uky.edu/~cfox



Last updated 4 Oct 2011

Education

Ph.D. 15 December 1993 – Integrative Biology, University of California, Berkeley
B.S. 19 June 1987 – Zoology, University of California, Davis (Highest Honors)

Academic Employment

1999 – pres Department of Entomology, College of Agriculture, University of Kentucky, Lexington, KY. Professor (2006 – pres); Acting Chair (sabbatical replacement; May – August 2011); Associate Professor (2001 – 2006); Director, Center for Ecology, Evolution and Behavior (CEEB; 2001 – 2007); Assistant Professor (1999 – 2001)

2004 – pres Editor, *Functional Ecology*, published by Wiley-Blackwell on behalf of the British Ecological Society (Executive Editor, Jun 2005 – Jun 2010; Special Features and Reviews Editor, Jul 2010 – pres; Editor, Feb 2004 – Jun 2005)

1996 – 1999 Assistant Professor, Louis Calder Center, Biological Field Station of Fordham University, Armonk, NY, & Department of Biological Sciences, Fordham University, Bronx, NY

1994 – 1996 NSF Postdoctoral Fellow & Research Assistant Professor, Department of Biological Sciences, University of South Carolina, Columbia, SC

1993 – 1994 Research Assistant Professor, Department of Biological Sciences, University of South Carolina, Columbia, SC

1994 Instructor, Midlands Technical College, Columbia, South Carolina

1988 – 1993 Graduate Student Instructor, Department of Zoology and Department of Integrative Biology, University of California, Berkeley, CA

1987 – 1988 Teaching Assistant, Department of Biology, University of California, Riverside, CA

Grants and Fellowships

- 2006 – 2010 United States Department of Agriculture, Kentucky Agricultural Experiment Station. Inbreeding and the fitness consequences of colonizing novel environments in herbivorous insects. Charles W. Fox (PI). Funding is variable among years averaging ~\$47,000 per year.
- 2004 National Science Foundation, EPSCoR (through Kentucky EPSCoR). The evolution of genetic architecture in an agricultural pest of stored beans. Charles W. Fox and James Wagner (co-PIs). \$16,181.60.
- 2003 University of Kentucky, Research Committee Grant. Covariation and differentiation of juvenile and adult morphology. Charles W. Fox (PI). \$5870.
- 2003 – 2004 Fundación para la Promoción de la Investigación y la Tecnología (Colombia). Variación en el uso de plantas hospederas y sus consecuencias para la evolución de vida en *Stator limbatus* (Coleoptera: Bruchidae). Angela R. Amarillo Suárez (PI) and Charles W. Fox (Co-PI). Project number 1568. 9,372,000 Colombian pesos (\approx \$3430).
- 2001 – 2005 National Science Foundation. The evolutionary genetics of sexual-size dimorphism in a seed-feeding beetle. Charles W. Fox (PI) and Claudia M. Rauter (co-PI). DEB-01-10754 (became DEB-02-71929 when Claudia moved to Nebraska). \$254,000. Received an REU Supplement in 2003 (\$6,000), 2004 (\$12,000), and 2005 (\$6000).
- 2001 – 2004 National Science Foundation. Indirect genetic effects of parental care behavior. Claudia M. Rauter and Charles W. Fox (co-PIs). IBN-01-12418. \$274,161.
- 2001 National Science Foundation, EPSCoR (through Kentucky EPSCoR). Do maternal effects help mediate host range expansion of a seed-feeding beetle onto exotic host species? David M. Gordon and Charles W. Fox (co-PIs). \$14,910.
- 2000 – 2006 United States Department of Agriculture, University of Kentucky Agricultural Experiment Station. Consequences of variation in host plant resistance for the evolution of offspring size in a seed-feeding beetle. Charles W. Fox (PI). Funding is variable among years averaging ~\$45,000 per year.
- 2000 – 2001 University of Kentucky, Research Committee Grant. The influence of parental care on genetic variance components. Charles W. Fox (PI). \$4,935.
- 1998 – 2001 National Science Foundation. The evolutionary genetics of an adaptive maternal effect: Egg size plasticity in a seed beetle. DEB-98-07315 (Fordham University) and DEB-99-96371 (University of Kentucky). Charles W. Fox (PI). \$220,000. Received an REU Supplement in 1999 (\$5,000) and 2000 (\$5,000).
- 1997 – 1998 Fordham University, Faculty Research Grant. Genetic variation in egg size plasticity in a seed beetle. \$4,000. Charles W. Fox (PI).
- 1994 – 1996 National Science Foundation, Postdoctoral Fellowship in Environmental Biology. The evolution of diet breadth in two seed-feeding beetles. Charles W. Fox (PI). DEB-94-03244. \$69,600.
- 1994 – 1997 National Science Foundation. Genetic variation for maternal ovipositional preferences and offspring growth and survival. Timothy A. Mousseau (PI) and Charles W. Fox (post-doc). DEB-94-09004. \$218,000.
- 1993 – 1995 United States Department of Agriculture. Preference/performance relationships in a leaf-mining beetle. Timothy A. Mousseau (PI) and Charles W. Fox (post-doc). USDA/CSRS Grant no. 93-01887. \$71,012.
- 1990 – 1993 National Institute of Health, Training Grant. Graduate Group in Genetics, University of California, Berkeley. ~\$25,500 + tuition and registration fees.
- 1987 – 1988 Graduate Fellowship, University of California, Riverside. \$6,650.

- 1986 – 1987 Henry A. Jastro Scholarship, University of California, Davis. \$1,200.
1985 – 1986 The American Legion Scholarship, Post 299, Chino, California. \$500.
1984 – 1985 The American Legion Scholarship, Post 299, Chino, California. \$500.

Honors and Awards

- 2011 Royal Entomological Society, Best Paper published in *Physiological Entomology* (2009-2010)
1987 Departmental Citation, Department of Zoology, University of California, Davis, CA

Editorial Experience

Journals

- Functional Ecology* – Executive Editor (1 Jun 2005 – 30 June 2010); Co-editor (Feb 2004 – Jun 2005, 1 Jul 2010 – present)
Year in Evolutionary Biology series – co-editor with Timothy Mousseau (2011 – present)(published by the *Annals of the New York Academy of Sciences*)
Ecology and Evolution – Editorial Board (2011 – present)
Evolutionary Ecology Research – Associate Editor (2004 – present)
Ecology and Ecological Monographs – Associate Editor (2004 – 2007)
Journal of Evolutionary Biology – Editorial Board (2004 – 2005) – I resigned from this editorial board effective 31 Dec 2005 to dedicate more time to my role as Executive Editor of *Functional Ecology*.

Edited Books – see publication list below

Publications

Books

- Westneat DF & CW Fox (editors). 2010. *Evolutionary Behavioral Ecology*. Oxford University Press, New York.
Carroll SP & CW Fox (editors). 2008. *Conservation Biology: Evolution in Action*. Oxford University Press, New York. 378 pages.
Fox CW & JB Wolf (editors). 2006. *Evolutionary Genetics: Concepts and Case Studies*. Oxford University Press, New York. 592 pages.
Fox CW, DA Roff & DJ Fairbairn (editors). 2001. *Evolutionary Ecology: Concepts and Case Studies*. Oxford University Press, New York. 424 pages.
Mousseau TA & CW Fox (editors). 1998. *Maternal Effects as Adaptations*. Oxford University Press, New York. 375 pages.

Book Chapters and Invited Papers

- Fox CW & DF Westneat. 2010. Adaptation. Pp 16-31 in DF Westneat & CW Fox (editors) *Evolutionary Behavioral Ecology*. Oxford University Press, NY.
Fox CW & ME Czesak. 2009. Adaptive maternal effects: A case study of egg size plasticity in a seed-feeding beetle. Pp 781-815 in DW Whitman & TN Ananthakrishnan (editors) *Phenotypic Plasticity of Insects: Mechanisms and Consequences*. Science Pub Inc.
Carroll SP & CW Fox. 2009. The evolution of life histories. Pp 567-570 in M Ruse & J Travis (editors) *Evolution: The First Four Billion Years*. Belknap Press, Cambridge, MA.

- Carroll SP & **CW Fox**. 2008. The next communities: evolution and the integration of invasive species. Pp 239-251 in SP Carroll & **CW Fox** (editors) *Conservation Biology: Evolution in Action*. Oxford University Press, New York.
- Carroll SP & **CW Fox**. 2007. Dissecting the evolutionary impacts of plant invasions: bugs and beetles as native guides. *Global Change Biology* 13: 1644-1657. doi: 10.1111/j.1365-2486.2007.01403.x
- Fox CW**, RC Stillwell & J Moya-Laraño. 2007. Variation in selection and the evolution of sexual size dimorphism in two seed-feeding beetles. Pp 88-96 in DJ Fairbairn, W Blanckenhorn & T Székely (editors) *Sex, Size and Gender Roles: Evolutionary Studies of Sexual Size Dimorphism*. Oxford University Press, Oxford.
- Carroll SP, H Dingle, TR Famula & **CW Fox**. 2002. Genetic architecture of adaptive differentiation in evolving host races of the Soapberry Bug, *Jadera haematoloma*. In AP Hendry & MT Kinnison (eds.) *Microevolution – Rate, Pattern and Process*. Kluwer Academic Publishers, Dordrecht.
- Messina FJ & **CW Fox**. 2001. Offspring size and number. Pp. 113-127 in **CW Fox**, DA Roff & DJ Fairbairn (eds.) *Evolutionary Ecology: Concepts and Case Studies*. Oxford University Press, New York.
- Czesak ME & **CW Fox**. 2001. The evolutionary ecology of offspring size; concepts and a case study. *Recent Research Developments in Ecology* 1: 97-114.
- Fox CW** & ME Czesak. 2000. Evolutionary ecology of progeny size in arthropods. *Annual Review of Entomology* 45: 341-369. doi: 10.1146/annurev.ento.45.1.341
- Fox CW**. 2000. Maternal effects in insect-plant interactions: Lessons from a desert seed beetle. *Recent Research Developments in Entomology* 3: 71-93.
- Fox CW** & TA Mousseau. 1998. Maternal effects as adaptations for transgenerational phenotypic plasticity in insects. pp. 159-177 in TA Mousseau & **CW Fox** (editors) *Maternal Effects as Adaptations*. Oxford University Press, New York.
- Fox CW**, & TA Mousseau. 1998. Concluding remarks: Generalities, implications, and future directions. pp. 345-348 in T. A. Mousseau & **CW Fox** (editors) *Maternal Effects as Adaptations*. Oxford University Press, New York.
- Mousseau TA & **CW Fox**. 1998. The adaptive significance of maternal effects. *Trends in Ecology and Evolution* 13: 403-407. doi: 10.1016/S0169-5347(98)01472-4

Submitted Manuscripts (including those in various states of post-submission revision)

- Huang Y, JW Mains, **CW Fox** & SL Dobson. Sustainability and dynamics of closed *Aedes albopictus* (Diptera: Culicidae) populations with overlapping generations. *Submitted*.
- Melguizo N, **CW Fox** & J Moya-Laraño. Kicking males during copulation is a form of female choice. *Submitted*.
- Fox CW**, WG Wallin, ML Bush, ME Czesak & FJ Messina. Effects of seed beetles on the performance of two desert legumes depend on host species, plant stage, and beetle density. *Submitted*.

Manuscript in press

- Fox CW**, J Xu, WG Wallin & CL Curtis. Male inbreeding status affects female fitness in a seed-feeding beetle. *Journal of Evolutionary Biology* *in press*. doi: 10.1111/j.1420-9101.2011.02400.x
- Reed DH, **CW Fox** & TN Kristensen. Inbreeding-stress interactions: genetic mechanisms and consequences. *Annals of the New York Academy of Sciences* *in press*.

Peer Reviewed Manuscripts

- Amarillo-Suárez AR, RC Stillwell & **CW Fox**. 2011. Natural selection on body size is mediated by multiple interacting factors: a comparison of beetle populations varying naturally and experimentally in body size. *Ecology and Evolution* 1: 1-14. doi: 10.1002/ece3.1
- Messina FJ & **CW Fox**. 2011. Egg-dumping behavior is not correlated with wider host acceptance in the

- seed beetle *Callosobruchus maculatus* (Coleoptera: Chrysomelidae: Bruchinae). *Annals of the Entomological Society of America* 104: 850-856. doi: 10.1603/AN11040
- Fox CW**, JD Wagner, S Cline, FA Thomas & FJ Messina. 2011. Rapid evolution of lifespan in a novel environment: sex-specific responses and underlying genetic architecture. *Evolutionary Biology* 38: 182-196. doi: 10.1007/s11692-011-9116-9
- Fox CW** & DH Reed. 2011. Inbreeding depression increases with environmental stress: An experimental study and meta-analysis. *Evolution* 65: 246–258. doi, paper: 10.1111/j.1558-5646.2010.01108.x, data: 10.5061/dryad.1854 [*Faculty of 1000 selection*; f1000.com/8588956]
- Fox CW**, RC Stillwell, WG Wallin, CL Curtis & DH Reed. 2011. Inbreeding-environment interactions for fitness: Complex relationships between inbreeding depression and temperature stress in a seed-feeding beetle. *Evolutionary Ecology* 25: 25-43. doi: 10.1007/s10682-010-9376-3
- Fox CW** & DH Reed. 2010. Inbreeding depression increases with maternal age in a seed-feeding beetle. *Evolutionary Ecology Research* 12: 961-972.
- Fox CW**, ML Bush & FJ Messina. 2010. Biotypes of the seed beetle *Callosobruchus maculatus* have differing effects on the germination and growth of their legume hosts. *Agricultural and Forest Entomology* 12: 353-362. doi: 10.1111/j.1461-9563.2010.00484.x
- Stillwell RC, WU Blanckenhorn, T Teder, G Davidowitz & **CW Fox**. 2010. Sex differences in phenotypic plasticity affect variation in sexual size dimorphism in insects: from physiology to evolution. *Annual Review of Entomology* 55: 227-245. doi: 10.1146/annurev-ento-112408-085500
- Fox CW** & J Moya-Laraño. 2009. Diet affects female mating behavior in a seed-feeding beetle. *Physiological Entomology* 34: 370-378. doi: 10.1111/j.1365-3032.2009.00700.x
- Saeki Y, PH Crowley, **CW Fox** & DA Potter. 2009. A sex-specific size-number trade-off in clonal broods. *Oikos* 118: 1552-1560. doi: 10.1111/j.1600-0706.2009.17571.x
- Fox CW** & RC Stillwell. 2009. Environmental effects on sex differences in the genetic load for adult lifespan in a seed-feeding beetle. *Heredity* 103: 62-72. doi: 10.1038/hdy.2009.31
- Stillwell RC & **CW Fox**. 2009. Geographic variation in body size, sexual size dimorphism and fitness components of a seed beetle: Local adaptation vs. phenotypic plasticity. *Oikos* 118: 703-712. doi: 10.1111/j.1600-0706.2008.17327.x
- Fox CW**, JD Wagner, S Cline, FA Thomas & FJ Messina. 2009. Genetic architecture underlying convergent evolution of egg-laying behavior in a seed-feeding beetle. *Genetica* 136: 179-187. doi: 10.1007/s10709-008-9334-y
- Stillwell RC, J Moya-Laraño & **CW Fox**. 2008. Selection does not favor larger body size at lower temperature in a seed-feeding beetle. *Evolution* 62: 2534-2544. doi:10.1111/j.1558-5646.2008.00467.x
- Fox CW**, KL Scheibly & DH Reed. 2008. Experimental evolution of the genetic load and its implications for the genetic basis of inbreeding depression. *Evolution* 62: 2236–2249. doi: 10.1111/j.1558-5646.2008.00441.x [*Faculty of 1000 selection*; f1000.com/1115292]
- Moya-Laraño J, M El Tigani El-Sayyid & **CW Fox**. 2007. Smaller beetles are better scramble competitors at cooler temperatures. *Biology Letters* 3: 475-478. doi: 10.1098/rsbl.2007.0300
- Stillwell RC, GE Morse & **CW Fox**. 2007. Geographic variation in body size and sexual size dimorphism of a seed-feeding beetle. *The American Naturalist* 170: 358-369. doi: 10.1086/520118
- Stillwell RC & **CW Fox**. 2007. Environmental effects on sexual size dimorphism of a seed-feeding beetle. *Oecologia* 153: 273-280. doi: 10.1007/s00442-007-0724-0
- Stillwell RC, WG Wallin, LJ Hitchcock & **CW Fox**. 2007. Phenotypic plasticity in a complex world: Interactive effects of food and temperature on fitness components of a seed beetle. *Oecologia* 153: 309-321. doi: 10.1007/s00442-007-0748-5
- Carroll SP, AP Hendry, DN Reznick & **CW Fox**. 2007. Evolution on ecological time scales. *Functional Ecology* 21: 387-393. doi: 10.1111/j.1365-2435.2007.01289.x
- Fox CW**, KL Scheibly, BP Smith & WG Wallin. 2007. Inbreeding depression in two seed-feeding beetles,

- Callosobruchus maculatus* and *Stator limbatus*. The Bulletin of Entomological Research 97: 49-54. doi: 10.1017/S0007485307004737
- Blanckenhorn WU, RC Stillwell, KA Young, **CW Fox** & KG Ashton. 2006. When Rensch meets Bergmann: Does sexual size dimorphism change systematically with latitude? Evolution 60: 2004-2011. doi: 10.1111/j.0014-3820.2006.tb01838.x
- Fox CW**, DM Gordon & P Bojang. 2006. Genetic and environmental sources of variation in survival on non-native host species in the generalist seed beetle, *Stator limbatus*. The Southwestern Naturalist 51: 490-501. doi: 10.1894/0038-4909(2006)51[490:GAESOV]2.0.CO;2
- Amarillo-Suárez AR & **CW Fox**. 2006. Population differences in host use by a seed-beetle – local adaptation, phenotypic plasticity and maternal effects. Oecologia 150: 247-258. doi: 10.1007/s00442-006-0516-y
- Fox CW**, KL Scheibly, WG Wallin, LJ Hitchcock, RC Stillwell & BP Smith. 2006. The genetic architecture of lifespan and mortality rates: Gender and species differences in inbreeding load of two seed-feeding beetles. Genetics 174: 763-773. doi: 10.1534/genetics.106.060392
- Fox CW**, RC Stillwell, WG Wallin & LJ Hitchcock. 2006. Temperature and host species affect nuptial gift size in a seed-feeding beetle. Functional Ecology 20: 1003-1011. doi: 10.1111/j.1365-2435.2006.01197.x
- Fox CW** & KL Scheibly. 2006. Variation in inbreeding depression among populations of the seed beetle, *Stator limbatus*. Entomologia Experimentalis et Applicata 121: 137-144. doi: 10.1111/j.1570-8703.2006.00465.x
- Czesak ME, **CW Fox** & JB Wolf. 2006. Experimental evolution of phenotypic plasticity: How predictive are cross-environment genetic correlations? The American Naturalist 168: 323-335.
- Moya-Laraño J & **CW Fox**. 2006. Total ejaculate size, second male body size and moderate polyandry increase female fecundity in a seed beetle. Behavioral Ecology 17: 940-946. doi: 10.1093/beheco/arl029
- Fox CW** & ME Czesak. 2006. Selection on body size and sexual size dimorphism differs between host species in a seed-feeding beetle. Journal of Evolutionary Biology 19: 1167-1174. doi: 10.1111/j.1420-9101.2006.01092.x
- Fox CW** 2006. Colonization of a new host by a seed-feeding beetle: Genetic variation, maternal experience, and the effect of an alternate host. Annales Zoologici Fennici 43: 239-247.
- Fox CW** 2005. Problems in measuring among-family variation in inbreeding depression. American Journal of Botany 92: 1929-1932. doi: 10.3732/ajb.92.11.1929
- Stillwell RC & **CW Fox**. 2005. Complex patterns of phenotypic plasticity: Interactive effects of temperature during rearing and oviposition. Ecology 86: 924-934. doi: 10.1890/04-0547
- Fox CW**, ML Bush, DA Roff & WG Wallin. 2004. The evolutionary genetics of lifespan and mortality rates in two populations of the seed beetle, *Callosobruchus maculatus*. Heredity 92: 170-181. doi: 10.1038/sj.hdy.6800383
- Fox CW**, ME Czesak & WG Wallin. 2004. Complex genetic architecture of population differences in adult longevity of a beetle: Non-additive inheritance, gender differences, body size and a large maternal effect. Journal of Evolutionary Biology 17: 1007-1017. doi: 10.1111/j.1420-9101.2004.00752.x
- Fox CW**, RC Stillwell, AR Amarillo-S, ME Czesak & FJ Messina. 2004. Genetic architecture of population differences in oviposition behavior of the seed beetle *Callosobruchus maculatus*. Journal of Evolutionary Biology 17: 1141-1151. doi: 10.1111/j.1420-9101.2004.00719.x
- Cope JM & **CW Fox**. 2003. Oviposition decisions in the seed beetle *Callosobruchus maculatus* (Coleoptera: Bruchidae): Effects of seed size on superparasitism. Journal of Stored Products Research 39: 355-365. doi: 10.1016/S0022-474X(02)00028-0
- Czesak ME & **CW Fox**. 2003. Evolutionary ecology of size and number in a seed beetle: Genetic trade-offs differ between environments. Evolution 57: 1121-1132. doi: 10.1111/j.0014-3820.2003.tb00321.x

- Czesak ME & CW Fox. 2003. Genetic variation in male effects on female reproduction and the genetic covariance between the sexes. *Evolution* 57: 1359-1366. doi: 10.1111/j.0014-3820.2003.tb00343.x
- Fox CW, ML Bush & WG Wallin. 2003. Maternal age affects offspring lifespan of the seed beetle, *Callosobruchus maculatus*. *Functional Ecology* 17: 811-820. doi: 10.1111/j.1365-2435.2003.00799.x
- Fox CW, L Dublin & SJ Pollitt. 2003. Gender differences in mortality rates in two seed beetle species. *Functional Ecology* 17: 619-626. doi: 10.1046/j.1365-2435.2003.00781.x
- Fox CW & J Moya-Laraño. 2003. Why organisms show late-life mortality plateaus: A null model for comparing patterns of mortality. *Evolutionary Ecology Research* 5: 999-1009.
- Fox CW & CM Rauter. 2003. Bet-hedging and the evolution of multiple mating. *Evolutionary Ecology Research* 5: 273-286.
- Heath DD, JW Heath, CA Bryden, RM Johnson & CW Fox. 2003. Rapid evolution of egg size in captive salmon. *Science* 299: 1738-1740. doi: 10.1126/science.1079707
- Fox CW & DD Heath. 2003. Response to technical comment on "Rapid evolution of egg size in captive salmon" (I). *Science* 302: 59c. doi: 10.1126/science.1085855
- Heath DD, J Moya-Laraño & CW Fox. 2003. Response to technical comment on "Rapid evolution of egg size in captive salmon" (II). *Science* 302: 59e. doi: 10.1126/science.1088250
- Dobson SL, CW Fox & FM Jiggins. 2002. The effect of *Wolbachia*-induced cytoplasmic incompatibility on host population size in natural and manipulated systems. *Proceedings of the Royal Society of London, Series B* 269: 437-445. doi: 10.1098/rspb.2001.1876
- Savalli UM & CW Fox. 2002. Proximate mechanisms influencing egg size plasticity in the seed beetle, *Stator limbatus*. *Annals of the Entomological Society of America* 95: 724-734. doi: 10.1603/0013-8746(2002)095[0724:PMIESP]2.0.CO;2
- Carroll SP, H Dingle, TR Famula & CW Fox. 2001. Genetic architecture of adaptive differentiation in evolving host races of the Soapberry Bug, *Jadera haematolma*. *Genetica* 112: 257-272. doi: 10.1023/A:1013354830907
- Fox CW ME Czesak & RW Fox. 2001. Consequences of plant resistance for herbivore survivorship, growth, and selection on egg size. *Ecology* 82: 2790-2804. doi: 10.2307/2679961
- Waddell KJ, CW Fox, KD White & TA Mousseau. 2001. Leaf abscission phenology of a scrub oak: Consequences for growth and survivorship of a leafmining beetle. *Oecologia* 127: 251-258. doi: 10.1007/s004420000576
- Fox CW 2000. Natural selection on seed beetle egg size in the field and the laboratory: Variation among environments. *Ecology* 81: 3029-3035. doi: 10.2307/177398
- Fox CW & UM Savalli. 2000. Maternal effects mediate host expansion in a seed-feeding beetle. *Ecology* 81: 3-7. doi: 10.2307/177128
- Savalli UM., ME Czesak & CW Fox. 2000. Paternal investment in the seed beetle, *Callosobruchus maculatus* (Coleoptera: Bruchidae): Variation among populations. *Annals of the Entomological Society of America* 93: 1173-1178. doi: 10.1603/0013-8746(2000)093[1173:PIITSB]2.0.CO;2
- Fox CW, ME Czesak & UM Savalli. 1999. Environmentally-based maternal effects on development time in the seed beetle, *Stator pruininus* (Coleoptera: Bruchidae): Consequences of larval density. *Environmental Entomology* 28: 217-223.
- Fox CW, ME Czesak, TA Mousseau & DA Roff. 1999. The evolutionary genetics of an adaptive maternal effect: Egg size plasticity in a seed beetle. *Evolution* 53: 552-560. doi: 10.2307/2640791
- Heath DD, CW Fox & JW Heath. 1999. Maternal effects on offspring size: Variation through early development of chinook salmon. *Evolution* 53: 1605-1611. doi: 10.2307/2640906
- Savalli UM & CW Fox. 1999. The effect of male mating history on paternal investment, fecundity, and female remating in the seed beetle *Callosobruchus maculatus*. *Functional Ecology* 13: 169-177. doi: 10.1046/j.1365-2435.1999.00287.x
- Savalli UM & CW Fox. 1999. The effects of male size, age, and mating behavior on sexual selection in the seed beetle *Callosobruchus maculatus*. *Ecology, Ethology and Evolution* 11: 49-60.

- Fox CW** 1998. Genetic and maternal influences on body size and development time in the seed beetle, *Stator limbatus* (Coleoptera: Bruchidae). *Annals of the Entomological Society of America* 91: 128-134.
- Fox CW & UM Savalli**. 1998. Inheritance of environmental variation in body size: Superparasitism of seeds affects progeny and grandprogeny body size via a non-genetic maternal effect. *Evolution* 52: 172-182. doi: 10.2307/2410932
- Savalli UM & **CW Fox**. 1998. Sexual selection and the fitness consequences of male body size in the seed beetle, *Stator limbatus*. *Animal Behaviour* 55: 473-483. doi: 10.1006/anbe.1997.0622
- Savalli UM & **CW Fox**. 1998. Genetic variation in paternal investment in a seed beetle. *Animal Behaviour* 56: 953-961. doi: 10.1006/anbe.1998.0853
- Fox CW**. 1997. The ecology of body size in a seed beetle, *Stator limbatus*: Persistence of environmental variation across generations? *Evolution* 51: 1005-1010. doi: 10.2307/2411176
- Fox CW**. 1997. Egg size manipulations in the seed beetle, *Stator limbatus*: consequences for progeny growth. *The Canadian Journal of Zoology* 75: 1465-1473. doi: 10.1139/z97-769
- Fox CW, JA Nilsson & TA Mousseau**. 1997. The ecology of diet expansion in a seed-feeding beetle - pre-existing variation, rapid adaptation and maternal effects? *Evolutionary Ecology* 11: 183-194. doi: 10.1023/A:1018499832664
- Fox CW, MS Thakar & TA Mousseau**. 1997. Egg size plasticity in a seed beetle: An adaptive maternal effect. *The American Naturalist* 149: 149-163. doi: 10.1086/285983
- Fox CW, KJ Waddell, J des Lauriers & TA Mousseau**. 1997. Seed beetle survivorship, growth and egg size plasticity in a paloverde hybrid zone. *Ecological Entomology* 22: 416-424. doi: 10.1111/j.1365-2311.1997.eent095.x
- Fox CW, KJ Waddell, FR Groeters & TA Mousseau**. 1997. Variation in budbreak phenology affects the distribution of a leafmining beetle (*Brachys tessellatus*) on turkey oak (*Quercus laevis*). *Écoscience* 4: 480-489.
- Fox CW & TA Mousseau**. 1996. Larval host plant affects the fitness consequences of egg size in the seed beetle *Stator limbatus*. *Oecologia* 107: 541-548. doi: 10.1007/BF00333946
- Fox CW, AD Harbin & TA Mousseau**. 1996. Suitability of a non-host palo verde for development of *Stator limbatus* (Coleoptera; Bruchidae) larvae. *The Pan-Pacific Entomologist* 72: 31-36.
- Fox CW, JD Martin, MS Thakar & TA Mousseau**. 1996. Clutch size manipulations in two seed beetles: consequences for progeny fitness. *Oecologia* 108: 88-94. doi: 10.1007/BF00333219
- Fox CW & TA Mousseau**. 1995. Determinants of clutch size and seed preference in a seed beetle, *Stator beali* (Coleoptera: Bruchidae). *Environmental Entomology* 24: 1557-1561.
- Fox CW & TA Mousseau**. 1995. Asymmetrical reproductive isolation between *Stator limbatus* (Horn) and *S. beali* Johnson (Coleoptera: Bruchidae). *The Coleopterists Bulletin* 49: 179-181.
- Fox CW, LA McLennan & TA Mousseau**. 1995. Male body size affects female lifetime reproductive success in a seed beetle. *Animal Behaviour* 50: 281-284. doi: 10.1006/anbe.1995.0242
- Fox CW, KJ Waddell & TA Mousseau**. 1995. Parental host plant affects offspring life histories in a seed beetle. *Ecology* 76: 402-411. doi: 10.2307/1941199
- Fox CW, DL Hickman, EL Raleigh & TA Mousseau**. 1995. Paternal investment in a seed beetle (Coleoptera: Bruchidae): influence of male size, age, and mating history. *Annals of the Entomological Society of America* 88: 100-103.
- Fox CW, KJ Waddell, KD White, SH Faeth & TA Mousseau**. 1995. Suppression of leafminer (Coleoptera: Buprestidae) populations on turkey oak (Fagaceae) using implants of acephate. *Environmental Entomology* 24: 1548-1556.
- Fox CW**. 1994. The influence of egg size on offspring performance in the seed beetle, *Callosobruchus maculatus*. *Oikos* 71: 321-325. doi: 10.2307/3546280
- Fox CW**. 1994. Maternal and genetic influences on egg size and larval performance in a seed beetle: Multigenerational transmission of a maternal effect? *Heredity* 73: 509-517. doi:

10.1038/hdy.1994.149

- Fox CW** & RL Caldwell. 1994. Host-associated fitness trade-offs do not limit the evolution of diet breadth in the small milkweed bug *Lygaeus kalmii* (Hemiptera: Lygaeidae). *Oecologia* 97: 382-389.
- Fox CW** & H Dingle. 1994. Dietary mediation of maternal age effects on offspring performance in a seed beetle (Coleoptera: Bruchidae). *Functional Ecology* 8: 600-606. doi: 10.2307/2389921
- Fox CW** & DL Hickman. 1994. Influence of oviposition substrate on female receptivity to multiple mating in *Callosobruchus maculatus* (Coleoptera: Bruchidae). *Annals of the Entomological Society of America* 87: 395-398.
- Fox CW** & M Tatar. 1994. Oviposition substrate affects adult mortality, independent of reproduction, in the seed beetle *Callosobruchus maculatus*. *Ecological Entomology* 19: 108-110. doi: 10.1111/j.1365-2311.1994.tb00399.x
- Fox CW**, KJ Waddell & TA Mousseau. 1994. Host-associated fitness variation in a seed beetle (Coleoptera: Bruchidae): evidence for local adaptation to a poor quality host. *Oecologia* 99: 329-336. doi: 10.1007/BF00627746
- Fox CW**. 1993. A quantitative genetic analysis of oviposition preference and larval performance on two hosts in the bruchid beetle, *Callosobruchus maculatus*. *Evolution* 47: 166-175. doi: 10.2307/2410126
- Fox CW**. 1993. Multiple mating, lifetime fecundity and female mortality of the bruchid beetle *Callosobruchus maculatus* (Coleoptera: Bruchidae). *Functional Ecology* 7: 203-208. doi: 10.2307/2389888
- Fox CW**. 1993. The influence of maternal age and mating frequency on egg size and offspring performance in *Callosobruchus maculatus* (Coleoptera: Bruchidae). *Oecologia* 96: 139-146. doi: 10.1007/BF00318042
- Fox CW** & RG Lalonde. 1993. Host confusion and the evolution of insect diet breadths. *Oikos* 67: 577-581. doi: 10.2307/3545371

Editorials/Letters

- Abbot P., *et al.* (137 authors listed alphabetically). 2011. Inclusive fitness theory and eusociality. *Nature* 471: E1-E4. doi: 10.1038/nature09831
- Fox C**, K Thompson, F Messina & L Baker. 2010. So what is *functional ecology* anyway. *Bulletin of the British Ecological Society* 40(4): 66-67.
- Martinez del Rio, C, **C Fox** & W Foster. Author and editor comment. *Functional Ecology* 24: 243.
- Fox C**, K Thompson, J Cresswell, F Messina & L Baker. 2008. Editorial. *Functional Ecology* 22: 1-2.
- Robinson D, S Chown, **C Fox**, K Thompson & J Cresswell. 2005. Editorial. *Functional Ecology* 19: 201.

Book Reviews

- Fox CW**. 2010. All that I am, I owe to my mother. Review of: *Maternal Effects in Mammals*, edited by Dario Maestripietri and Jill M. Mateo. *Trends in Ecology and Evolution* 25: 323-324. doi:10.1016/j.tree.2010.01.006
- Mousseau TA & **CW Fox**. 1994. *Evolution of Life: Processes, Patterns, and Prospects*, by Michael L. McKinney. *Quarterly Review of Biology* 69: 94-95. <http://www.jstor.org/stable/3036061>

Published Photographs

- Savalli UM & **CW Fox**. 1996. Photograph of *Stator limbatus* on *Acacia greggii* seeds. *Science* 273: 1334.
- Savalli UM & **CW Fox**. 1996. Photograph demonstrating egg size plasticity in *Stator limbatus*. *Science* 273: 1334.

Letters to the Editor

- Sharkey MJ & CW Fox. 2000. Humans, apes have ancestor in common. *Lexington Herald-Leader*, Lexington, Kentucky.

Other Publications from My Laboratory

Savalli UM 2001. Sexual selection. Pp 207-221 in **CW Fox**, DA Roff & D Fairbairn (eds.) *Evolutionary Ecology: Concepts and Case Studies*. Oxford University Press, New York.

Publications that Make Extensive Use of My Research as a Case Study

(note: these are reviews that use my work as a case study, not simply reviews that cite my research)

Scheiner SM 2006. Phenotypic plasticity. In CW Fox & JB Wolf (eds.) *Evolutionary Genetics: Concepts and Case Studies*. Oxford University Press, NY. (Egg size plasticity in *Stator limbatus* is used as a case study for the evolution of phenotypic plasticity).

Doughty P & DN Reznick. 2003. Patterns and analysis of adaptive phenotypic plasticity in animals. In TJ DeWitt & SM Scheiner (editors) *Phenotypic Plasticity: Functional and Conceptual Approaches*. Oxford University Press, NY. (Egg size plasticity in *Stator limbatus* is used as a case study for the evolution of plasticity).

Roff DA 2001. Life history evolution. Sinauer Associates, Inc., Sunderland, MA. ("One of the best studied cases of phenotypic plasticity in response to site quality is the analysis of egg-size plasticity in the seed beetle *Stator limbatus*." My work is discussed on pages 433-438, along with some modeling by the author).

Freeman S & JC Herron. 1998 (1st ed.), 2001 (2nd ed.), 2004 (3rd ed.) & 2007 (4th ed.). *Evolutionary Analysis*. Prentice Hall, Upper Saddle River, NJ. (Fox et al. 2007, egg size plasticity in *Stator limbatus*, used as an example to illustrate the evolution of offspring size; Heath et al. 2003, evolution of egg size in salmon, used in 4th ed.).

Pennisi E 1996. A new look at maternal guidance. *Science* 273: 1334-1336. (Discusses egg size plasticity and the influence of maternal effects on diet expansion in *Stator limbatus*).

Presented Papers/Invited Seminars (* = invited) (excludes seminars at home institution)

- 1992 Society for the Study of Evolution, Berkeley, CA.
- 1994 Society for the Study of Evolution, Athens, GA.
- 1995 Society for the Study of Evolution, Montreal, Canada.
- 1995 Ecological Society of America, Snowbird, UT.
- 1995* Department of Biological Sciences, Fordham University, Bronx, NY (job seminar).
- 1996* Society for the Study of Evolution, St. Louis, MS – Symposium: *Maternal Effects as Adaptations*.
- 1997* Department of Entomology, Rutgers University, New Brunswick, NJ.
- 1997 Society for the Study of Evolution, Boulder, CO (2 talks).
- 1997* Department of Ecology and Evolution, SUNY, Stony Brook, NY.
- 1997* American Museum of Natural History, New York Entomological Society, New York, NY.
- 1997* Department of Entomology, University of Maryland, College Park, MD.
- 1998* Department of Ecology and Evolutionary Biology, Brown University, Providence, RI.
- 1999* Department of Biology, University of Nevada, Las Vegas, NV.
- 1999* Department of Biology, Virginia Tech, Blacksburg, VA.
- 1999* Department of Biology, University of Northern British Columbia, Prince George, BC.
- 1999* Department of Biochemistry and Biology, University of Houston, Houston, TX.
- 1999* Department of Biology, University of California, Riverside, CA.
- 1999* Department of Entomology, University of Kentucky, Lexington, KY (job seminar).
- 1999* Department of Entomology, Ohio State University, Columbus, Ohio.
- 1999* School of Biological Sciences, University of Kentucky, Lexington, KY.
- 2000 Entomological Society of America, North-Central Branch meeting, Minneapolis, MN.

- 2000 Society for the Study of Evolution, Bloomington, IN.
- 2000* Departments of Botany and Zoology (co-sponsored), University of Toronto, Toronto, Ontario (two talks).
- 2000* Department of Entomology and the Center for Community Genetics, University of Minnesota, Minneapolis, MN (two talks).
- 2000* Department of Biology, University of Akron, Akron, OH (two talks).
- 2001* Department of Biology, Centre College, Danville, KY.
- 2001* Department of Biology, Transylvania University, Lexington, KY.
- 2001* Department of Biological Sciences, University of Cincinnati, Cincinnati, OH.
- 2001* Department of Biology, University of California, Riverside, CA.
- 2002* Department of Biology, University of Louisville, Louisville, KY.
- 2002* Department of Biology, Utah State University, Logan, UT.
- 2002* Department of Entomology, University of California, Davis, CA.
- 2002* Department of Integrative Biology, University of California, Berkeley, CA.
- 2002* Department of Life Sciences, Indiana State University, Terre Haute, IN.
- 2002* Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN.
- 2002* Department of Biological Sciences, Illinois State University, Normal, IL.
- 2002* Department of Biology, University of Pennsylvania, Philadelphia, PA.
- 2003* European Society of Evolutionary Biologists, Leeds, England (Symposium – Reproductive Investment)
- 2003 Entomological Society of America, Cincinnati, OH.
- 2004* Estacion Experimental Zonas Aridas, Almeria, Spain.
- 2004* Biologia Animal y Ecologia, Universidad de Granada, Granada, Spain.
- 2004* International Congress of Entomology, Brisbane, Australia – Symposium: Genetic and Evolutionary Mechanisms of Response to Environmental Change
- 2004* School of Biological Sciences, University of Manchester, Manchester, England.
- 2007* Department of Entomology, University of Illinois, Urbana-Champaign, IL.
- 2007* Department of Ecology & Evolutionary Biology, University of Arizona, Tucson, AZ.
- 2007* School of Biological Sciences, University of Manchester, Manchester, England
- 2008* School of Biological Sciences, University of Wollongong, Wollongong, Australia; keynote speaker at 2nd Workshop in Evolutionary Biology, *Evolution of Parental Effects: Conceptual Issues and Empirical Patterns*.
- 2008* Department of Zoology, University of Melbourne, Melbourne, Australia.
- 2008* Department of Entomology, University of Arkansas, Fayetteville, AR.
- 2008* Department of Animal and Plant Sciences, University of Sheffield, Sheffield, England.
- 2009* Darwin 200 Años symposium, Bogotá, Colombia
- 2009* Sociedad Colombiana de Entomología, Bogotá, Colombia
- 2009* Facultad de Estudios Ambientales y Rurales, Universidad Javeriana, Bogotá, Colombia
- 2009* Department of Biology, University of Nevada, Reno, Nevada
- 2009* Zoological Museum, University of Zürich (December; first talk of visit), Zürich, Switzerland
- 2010* Zoological Museum, University of Zürich (January; second talk of visit), Zürich, Switzerland
- 2010* Department of Biology, University of Louisville, Louisville, KY.

Papers Presented by My Students/Post-docs (on which I am a co-author)

- 1999 Udo M. Savalli & Charles W. Fox, Animal Behavior Society
- 1999 Udo M. Savalli & Charles W. Fox, Society for the Study of Evolution (talk given by C. Fox)
- 2000 Mary Ellen Czesak & Charles W. Fox, Society for the Study of Evolution

- 2001 Mary Ellen Czesak & Charles W. Fox, Society for the Study of Evolution
- 2003 R. Craig Stillwell & Charles W. Fox, Ecological Society of America, Savannah, Georgia, USA
- 2003 R. Craig Stillwell & Charles W. Fox, Entomological Society of America, Cincinnati, Ohio, USA
- 2003 Angela Amarillo-S & Charles W. Fox, Entomological Society of America, Cincinnati, Ohio, USA
(2nd place winner in the Section C student paper competition)
- 2004 R. Craig Stillwell & Charles W. Fox, Ecological Society of America, Portland, Oregon, USA
- 2004 Angela Amarillo-S & Charles W. Fox, Ecological Society of America, Portland, Oregon, USA
(2nd place winner in the Section C student paper competition)
- 2004 R. Craig Stillwell & Charles W. Fox, 17th Annual Forum of the Ohio Valley Entomological Association, Hanover, Indiana, USA (1st place Ph.D. Student Paper Competition)
- 2004 Angela Amarillo-S & Charles W. Fox, Entomological Society of America, Salt Lake City, UT, USA
- 2005 R. Craig Stillwell, Geoff E. Morse and Charles W. Fox. International workshop on the evolution of sexual size dimorphism, Monte Verità, Locarno, Switzerland
- 2005 R. Craig Stillwell, Geoff E. Morse and Charles W. Fox. Ecological Society of America, Montréal, Canada
- 2005 R. Craig Stillwell, Geoff E. Morse and Charles W. Fox. The Organization for Tropical Studies, Palo Verde Biological Station, Cost Rica
- 2006 R. Craig Stillwell, William G. Wallin, Lisa J. Hitchcock and Charles W. Fox. Ecological Society of America, Memphis, Tennessee, USA
- 2006 R. Craig Stillwell & Charles W. Fox, 19th Annual Forum of the Ohio Valley Entomological Association, Hanover, Indiana, USA. (2nd place Ph.D. Student Paper Competition)
- 2007 Angela Amarillo-S & Charles W. Fox, Congreso Colombiano de Entomología, Cartagena, Colombia

Academic Advisors, Advisees and Collaborators

Graduate Dissertation Committee:

Roy L. Caldwell, Chair of Committee, Integrative Biology, Univ. California, Berkeley
Montgomery W. Slatkin, Co-Chair of Committee, Integrative Biology, Univ. California, Berkeley
Hugh Dingle, Dept. Entomology & Center for Population Biology, Univ. California, Davis
James L. Patton, Dept. Integrative Biology & Museum of Vertebrate Zoology, Univ. California, Berkeley
Stephen Welter, Entomology, Univ. California, Berkeley

Post-doctoral Advisor:

Timothy A. Mousseau, Biological Sciences, University of South Carolina

Post-doctoral Associates/Advisees:

Jordi Moya-Laraño (2002-2003) Department of Entomology, University of Kentucky
Claudia M. Rauter (1999-2002) Department of Entomology, University of Kentucky
Udo M. Savalli (1996-1999) Louis Calder Center, Fordham University, NY, (1999-2001) Department of Entomology, University of Kentucky

PhD Students:

R. Craig Stillwell (PhD 2007) Entomology, University of Kentucky, KY (2007 Gamma Sigma Delta Outstanding Ph.D. Student Award) (currently, post-doctoral fellow, Center for Insect Science, University of Arizona, Tucson, AZ)

Angela R. Amarillo-Suárez (PhD 2006) Entomology, University of Kentucky, KY (currently Profesora Asistente, Departamento de Ecología y Territorio, Pontificia Universidad Javeriana,

Bogotá, Colombia)

Mary Ellen Czesak (PhD 2001) Entomology, University of Kentucky, KY (currently Lecturer,
Department of Biology, Vassar College, Poughkeepsie, NY)

PhD Committees:

Richard Pond (PhD *in progress*) Psychology, University of Kentucky, KY
Ashley Pott (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Kelton Welch (PhD *in progress*) Entomology, University of Kentucky, KY
Kausalya Shenoy (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Jimmy Mains (PhD *in progress*) Entomology, University of Kentucky, KY
Daniel P. Wetzel (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Patricia Hartman (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Bridget Sousa (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Yoriko Saeki (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Damon Orsetti (PhD *in progress*) Biological Sciences, University of Kentucky, KY
Eunho Suh (PhD 2011) Entomology, University of Kentucky, KY
Mary Klugh Hart (PhD 2011) Biological Sciences, University of Kentucky, KY
Luke Dodd (PhD 2010) Entomology, University of Kentucky, KY
Zhaolin Zhang (PhD 2009) Entomology, University of Kentucky, KY
Corey Brelsfoard (PhD 2009) Entomology, University of Kentucky, KY
W. Rodney Cooper (PhD 2007) Entomology, University of Kentucky, KY
Felix Zajitschek (PhD 2007) Biological, Earth and Environmental Sciences, University of New South
Wales, Australia (external examiner)
Zhijoung Xi (PhD 2005) Entomology, University of Kentucky, KY
Judith Elizabeth Lock (PhD 2005) Faculty of Life Science, University of Manchester, United
Kingdom (external examiner)
John H. Niedzwiecki (PhD 2005) Biological Sciences, University of Kentucky, KY
Bradley F. Dickey (PhD 2004) Biological Sciences, University of Kentucky, KY
Linda Fuselier (PhD 2004) Biological Sciences, University of Kentucky, KY
Thomas M. McCarthy (PhD 2003) Biological Sciences, University of Kentucky, KY (outside
examiner)
J. Chadwick Johnson (PhD 2003) Biological Sciences, University of Kentucky, KY
Eric Marsland (PhD 2003) Entomology, University of Kentucky, KY
Matthew Turnbull (PhD in 2002) Entomology, University of Kentucky, KY
Roland Hilgarth (PhD 2001) Entomology, University of Kentucky, KY
Grant S. McIntyre (PhD 2000) Biological Sciences, University of Alberta, Edmonton, Canada
(external examiner)
Bryan G. Spohn (PhD 2000) Entomology, University of Kentucky, KY
Jennifer Anne Sadowski (PhD 1999) Biological Sciences, University of Kentucky, KY
A. Jeyakumar (PhD 1999) Entomology Research Institute, University of Madras, India
Linde E. T. Ostro (PhD 1998) Biological Sciences, Fordham University, NY
Scott C. Silver (PhD 1997) Biological Sciences, Fordham University, NY

MS Thesis Committees:

J. Ray Fisher (MS 2009) Entomology, University of Kentucky, KY
Shelly Kay Kellogg (MS 2004) Entomology, University of Kentucky, KY
Tria Kinnard (MS 2002) Biological Sciences, University of Kentucky, KY
Malorie Gelinias (MS 2001) Biology, McGill University, Montreal, Quebec, Canada
Thomas Pucci (MS 2001) Entomology, University of Kentucky, KY
John C. McCool (MS 1999) Biological Sciences, Fordham University, NY
Alissa A. Huss (MS 1998) Biological Sciences, Fordham University, NY

Undergraduate Researchers (* indicates co-author on published or in prep manuscript)

University of Kentucky:

Research Assistants (paid)

Blake Grigsby (Summer 2011 – present)
Sheldon McLetchie (Summer 2011 – present)
Dan McCamish (Spring 2011 – present)
Ian Becker (Fall 2010 – present)
Jessica Ryan Connors (Fall 2010–Spring 2011)
Adam Kesheimer (Spring 2010–Summer 2010)
Sabrina Saia (Fall 2009–Summer 2010)
Russell Cunningham (Fall 2009–Spring 2010)
Adam Dickinson (Summer 2009)
Kevin Handel (Summer 2009–Summer 2010)
Brittany Schneider (Spring 2009–Spring 2010)
Bonnie Leksrisawat (Fall 2008–Spring 2009)
Jacob R. Beard (Fall 2008)
Jessica Huber (Summer 2007)
Katherine (Katie) Huber (Summer 2007)
Emily Cottrell (Spring 2007–Summer 2007)
Alysha Lewis (Spring 2007)
Taylor Tardy (Fall 2006–Summer 2008)
*Carrie Curtis (Summer 2006–Spring 2007)
Christopher Ryan Ernst (Summer 2005)
Lauren Cline (Summer 2004)
Fabiola Djojo (Summer 2004)
Scott Serdoz (Fall 2003–Spring 2004)
Denise Johnson (Fall 2003–Summer 2005)
Chee Beng Yap (Richard; Summer–Fall 2003)
*Ana Lucia P. DeSouza (Summer 2003–Fall 2004)
*Lisa Hitchcock (Summer 2003–Summer 2006)
Maria Gomez (Summer 2003)
Lana Ng (Spring 2003)
Oriaku Njoku (Fall 2002–Summer 2005)
Laura Hettinger (Fall 2002–Spring 2003)
Kim Carrico (Spring 2002–2003)
Jennifer L. McCauley (Fall 2001)
Stephanie Wyatt (Fall 2001–Spring 2002)
J. Matt Fulkerson (Summer 2001–Fall 2001)
Jennifer L. Smith (Spring 2001–Spring 2002)
R. Nathan Correll (Spring 2001–Spring 2002)
Carolyn M. Thornton (Spr. 2001–Fall 2001)
E. Courtney Elkins (Fall 2000–Spring 2003)
Brad A. Graham (Fall 2000)
Leigh Ann Pass (Fall 2000)

Fordham University (*includes two high school students*):

*Elizabeth Morgan (1999) Calder Summer Undergraduate Research Program

Student Independent Research
(credit or Epscor stipend)

Renu Ramesh (Fall 2010–Fall 2011)
Adam Dickinson (Spring 2009)
Bonnie Leksrisawat (Spring 2009)
William (Billy) Etheridge (Summer 2007)
*Carrie Curtis (Fall 2006)
Brian Schleter (Fall 2006)
*Benjamin Smith (Fall 2005)
Oriaku Njoku (Summer 2004)
*Frances Ann Thomas (Summer 2004;
Transylvania University student)
*Sara Cline (Summer 2004; Transylvania
University student)
*Maysaa El Tigani El-Sayyid (Fall 2003–Spring
2004)
E. Courtney Elkins (Fall 2002)
R. Nathan Correll (Fall 2001–Spring 2002)
Jennifer L. Smith (Fall 2001–Spring 2002)
*Marsha Bush (Summer 2001, Spring–Fall
2002, Fall 2003)
Jennifer L. McCauley (Spring 2001)
R. Keith Rickman (Spring–Fall 2001)
*Pasano Bojang (Summer 2001; KSU student)
*Natasha Mwale (Summer 2001; KSU student)
*Sarah J. Pollitt (Fall 2000)
*La'Tansha Dublin (Fall 2000)

*Jason M. Cope (1998) Calder Summer Undergraduate Research Program
Eric Levine (1997–1999), Greeley High School, Chappaqua, NY
Russ Mehta (1996–1997), Byram Hills High School, Armonk, NY
University of South Carolina (*Tim Mousseau was the official advisor of these students, but they worked with me*)
Tameika Dawkins (1995) *E. Lloyd Raleigh (1994)
*Amy D. Harbin (1995–1996) Heather Rush (1995)
Reka Kovacs (1995) *Kenn White (1994–1995)
*John D. Martin (1995) *Monica S. Thakar (1995–1996)
University of California at Davis (*includes only students that are co-authors on publications*)
*Debra L. Hickman (1993–1994)

Professional Services

Grant Panels

Science Foundation Ireland; Ecology, Evolutionary, Environmental and Organismal Biology (EOB) panel of the Research Frontiers Programme, February 2008
National Science Foundation Panel Advisor – Population Biology, April 2000
National Science Foundation Panel Advisor – Dissertation Improvement Grants, Ecological and Evolutionary Physiology, March 1996

Symposium/meeting organization

Co-organizer, special issue of Functional Ecology – “Evolution on Ecological Timescales” with Andrew Hendry, Scott Carroll and David Reznick. Published June 2007.
University of Kentucky Center for Ecology, Evolution and Behavior Annual Spring Research Symposium (organizer – May 2003, May 2004, May 2005, May 2006, May 2007, May 2008)
Co-organizer, Symposium – “Maternal Effects as Adaptations” with Timothy A. Mousseau, annual meeting of the Society for the Study of Evolution, St. Louis, 1996
Local Arrangements Committee, 2003 annual meeting of the Entomological Society of America. Cincinnati, OH

Manuscript Reviews for:

Aging Cell	Environmental Entomology
Agricultural and Forest Entomology	Ethology
American Naturalist	Evolution
American Zoologist	Evolutionary Ecology
Animal Behavior	Evolutionary Ecology Research
Annals of the Entomological Society of America	Functional Ecology
Behavioral Ecology	Genetica
Behavioral Ecology and Sociobiology	Heredity
Biology Letters	Integrative and Comparative Biology
BMC Evolutionary Biology	Journal of Animal Ecology
Cambridge Univ. Press - Book Chapters	Journal of Evolutionary Biology
Canadian Journal of Zoology	Journal of Insect Behavior
Coleopterist's Bulletin, The	Journal of Insect Physiology
Ecological Entomology	Journal of Insect Science
Ecology	Nature
Écoscience	Oecologia
Entomologia Experimentalis et Applicata	Oikos
	Oxford Univ. Press – Book chapters

Physiological Entomology
Population Ecology
Proceedings of the National Academy of
Sciences

Proceedings of the Royal Society of London B
Quarterly Review of Biology
Science

Proposal Reviews:

Cambridge University Press – Book proposals
National Environment Research Council, Great
Britain
National Science Foundation, USA
National Sciences and Engineering Research

Council of Canada
Oxford University Press – Book proposals
WCB/McGraw Hill – Book proposal

University Services (at the University of Kentucky)

Departmental Service: (Committees encompass academic years unless otherwise noted)

Acting chairman (sabbatical replacement; June – August 2011)
Curriculum Committee (chair, January 2004 – present)
Director of Undergraduate Studies (January 2004 – present)
Electron Microscope Committee (never met) (2000 – 2003)
Faculty Search Committees: Insect Physiologist (2001 – 2002), Department chair (2002 – 2003, again
in 2009), Insect Ecologist (2007)
Faculty Secretary (2000 – 2001)
Linnaean Team captain (1999)
Seminar Committee (chair, 2000 – present)
Awards Committee (2002 – 2003)
Social Committee (1999 – 2002)

College Service (College of Agriculture):

Graduate Curriculum Committee (2009-2010)
Advising for undergraduate students majoring in Agricultural Biotechnology (3-9 students per year;
1999 – present)
Agricultural Biotechnology Advisory Committee (2002 – 2008)
Undergraduate Curriculum Committee (2005 – 2007)
Natural Resource Initiative Planning Committee (June 2007 – 2008)
Gamma Sigma Delta Outstanding Ph.D. Student award committee (Spring 2008, Spring 2010)
Review Committee for the *College of Agriculture* (March-July 2007)
Kentucky Agricultural Experiment Station: Research Committee (2002 – 2004)
Scholarship Review Committee (Spring 2002, Spring 2005)
College Advisory Committee for Appointment, Promotion and Tenure (2006 – 2008, 2011 – 2013)
Faculty Advisor, Agricultural Biotechnology Club (2000 – 2001)
Faculty Advisor, UK Pre-Med Association (2000 – 2001)

University Service:

Graduate Council (2010 – present)
CEEB Kentucky Opportunity Fellowship review committee (Spring 2010)
University Senate (2006 – 2009)
University delegate to the *Organization for Tropical Studies* (OTS) (2005 – present)
Faculty judge, University of Kentucky Graduate Student Congress' 3rd annual interdisciplinary
graduate student conference (3 April 2009)
Science Advisory Committee, *Tracy Farmer Center for the Environment* (January 2005 – July 2006)
Graduate Council (Fall 2004 [sabbatical replacement]; 2010 – present)

Goldwater Scholarship selection committee (Spring 2004)
 Electronic Theses and Dissertations Committee + ETD Procedures Sub-committee (2002 – 2003)
 Coordinator, annual “Center for Ecology, Evolution and Behavior Spring Research Symposium”; a 2-day symposium with students, faculty, and invited speakers (2002 – 2008)
 Organizer, Invasive Species symposium (Fall 2008)
 Director, *Center for Ecology, Evolution and Behavior* (2001 – 2007)

Teaching

- 2011 **Seminar: Life History Plasticity** (graduate seminar; w/ David Westneat; 1 credit). Fall. Biology 770, University of Kentucky.
- 2008 **Seminar: Insect Seasonality** (graduate seminar; w/ John Obrycki; 1 credit). Fall. Entomology 770, University of Kentucky.
- 2008 **Genetics** (undergraduate lecture; 4 credits). Fall. Biology 304, University of Kentucky.
- 2007 **Seminar: Evolutionary Conservation Biology** (graduate seminar; w/ John Obrycki; 1 credit). Spring. Entomology 770, University of Kentucky.
- 2007 **Seminar: Adaptation** (graduate seminar; w/ David Westneat; 1 credit). Spring. Entomology 770, University of Kentucky.
- 2006 **Genetics** (undergraduate lecture; 4 credits). Fall. Biology 304, University of Kentucky.
- 2006 **Seminar: Evolution on Ecological Timescales** (graduate seminar; 1 credit). Fall. Entomology 770, University of Kentucky.
- 2004 **Genetics** (undergraduate lecture; 4 credits). Fall. Biology 304, University of Kentucky.
- 2003 **Seminar: Life History Ecology and Evolution** (graduate seminar; 1 credit). Fall. Entomology 770, University of Kentucky.
- 2003 **Special Topic: Evolutionary Genetics** (graduate lecture/discussion, 4 credits). Spring. Entomology 695, U. Kentucky.
- 2003 **Applications of Genetics** (graduate lecture/discussion, w/ Reddy Palli; 3 credits). Spring. Entomology/Biology 567, University of Kentucky.
- 2002 **Genetics** (undergraduate lecture; 3 credits). Fall. Agricultural Biotechnology/Entomology/Animal Science 360, University of Kentucky.
- 2001 **Genetics** (undergraduate lecture; 3 credits). Fall. Agricultural Biotechnology/Entomology/Animal Science 360, University of Kentucky.
- 2001 **Applications of Genetics** (graduate lecture/discussion; w/ Bruce Webb; 3 credits). Spring. Entomology/Biology 567, University of Kentucky.
- 2000 **Genetics** (undergraduate lecture; 3 credits). Fall. Agricultural Biotechnology/Entomology/Animal Science 360, University of Kentucky.
- 1999 **Genetics** (undergraduate lecture; 3 credits). Fall. Agricultural Biotechnology/Entomology/Animal Science 360, University of Kentucky.
- 1999 **Seminar in Ecology and Evolution** (graduate seminar; 1 credit). Spring. Biological Sciences (BIGA) 8530, Fordham University.
- 1998 **Population Biology** (graduate lecture, 3 credits). Fall. Biological Sciences (BIGA) 6531, Fordham U.
- 1998 **Methods in Ecology** (graduate lab course; team taught by 3 faculty; 1 credit). Fall. Biological Sciences (BIGA) 6541, Fordham University.
- 1998 **Ecological Methods** (graduate lecture+lab; w/ Craig Frank; 4 credits). Fall. Biological Sciences (BIGA) 6534, Fordham University.
- 1998 **Seminar in Ecology and Evolution** (graduate seminar; 1 credit). Fall. Biological Sciences (BIGA) 8531, Fordham University.

- 1998 **Evolutionary Ecology** (graduate lecture course; 3 credits). Spring. Biological Sciences (BIGA) 6589, Fordham University.
- 1998 **Seminar in Ecology and Evolution** (graduate seminar; 1 credit). Spring. Biological Sciences (BIGA) 8530, Fordham University.
- 1997 **Ecological Methods** (graduate lecture+lab; team taught with Craig Frank; 4 credits). Fall. Biological Sciences (BIGA) 6534, Fordham University.
- 1997 **Ecology** (undergraduate lecture/lab course; 4 credits). Fall. Biological Sciences (BIRU) 2561, Fordham University.
- 1997 **Ecology: A Human Approach** (non-majors lecture course; 3 credits). Spring. Biological Sciences (BIRU) 1002, Fordham University.
- 1996 **Ecological Methods** (graduate lecture+lab; w/ Craig Frank; 4 credits). Fall. Biological Sciences (BIGA) 6534, Fordham University.
- 1996 **Field Entomology** (graduate lab course; 4 credits). Summer. Biological Sciences (BIGA) 5554, Fordham University.
- 1996 **Ecology: A Human Approach** (non-majors lecture course; 3 credits). Spring. Biological Sciences (BIFC) 1202, Fordham University.
- 1994 **General Biology 1: Principles**. Lecturer. Spring. Biology 101, Midlands Technical College.
- 1994 **General Biology 2: Organismal Diversity**. Lecturer. Spring. Biology 102, Midlands Technical College.
- 1993 **California Plant Life**. Lab Instructor. Spring. Integrative Biology 102L, University of California, Berkeley.
- 1992 **California Plant Life**. Lab Instructor. Spring. Integrative Biology 102L, University of California, Berkeley.
- 1991 **Animal Behavior**. Discussion Instructor. Spring. Integrative Biology 145, University of California, Berkeley.
- 1990 **Natural History of the Vertebrates**. Field Instructor. Spring. Integrative Biology 104, University of California, Berkeley.
- 1989 **Animal Biology** (non-majors course). Discussion Instructor. Fall. Integrative Biology 30, University of California, Berkeley.
- 1989 **Natural History of the Vertebrates**. Lab and Field Instructor. Spring. Zoology 107, University of California, Berkeley.
- 1988 **General Biology**. Lab Instructor. Fall. Biology 1a, University of California, Berkeley.
- 1988 **Organismal Biology**. Lab Instructor. Spring. Biology 5B, University of California, Riverside.
- 1988 **General Biology**. Lab Instructor. Winter. Biology 5A, University of California, Riverside.
- 1987 **The Biology of Populations**. Lab Instructor. Fall. Biology 5C, University of California, Riverside.
- 1986 **General Zoology**. Assistant to lab instructor. Winter. Zoology 2, University of California, Davis.