

KEVIN P. OH, *Curriculum Vitae*

Department of Neurobiology and Behavior
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ACADEMIC APPOINTMENTS AND EDUCATION

Postdoctoral Research Associate, Department of Neurobiology and Behavior, Cornell University, Ithaca, NY, 2009 – present. Mentor: K. L. Shaw

Ph.D., Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ, 2003 – 2009. Advisor: A. V. Badyaev

B.A. with Honors, Biology and Environmental Studies, *cum laude*, Bowdoin College, Brunswick, ME, 1997 – 2001. Advisor: N. T. Wheelwright

EMPLOYMENT

Lecturer, Cornell University, Ithaca, NY, 2012

Graduate Research Associate, University of Arizona, Tucson, AZ: *Evolution and ontogeny of conditional mating strategies*, 2005 – 2008

Graduate Teaching Associate, University of Arizona, Tucson, AZ, 2004 – 2009

Graduate Research Assistant, University of Arizona, Tucson, AZ: *Evolution of maternal effects in a model avian system*, 2005 – 2007

Field Research Technician, Skidmore College, Saratoga Springs, NY, 2003

High School Biology & Chemistry Teacher, Hyde School, Bath, ME, 2001 – 2003

Field Research Technician, Hubbard Brook Experimental Forest, 2001

Field Research Technician, Bowdoin Biological Station, Kent Island, NB, 2000, 2002

PUBLICATIONS

Forthcoming

Oh, K. P. and A. V. Badyaev. The evolution of mate choice for genetic benefits: single-locus effects and the heritability of heterozygosity in a passerine bird. *In revision*.

Oh, K. P. and K. L. Shaw. Multivariate sexual trait divergence between incipient species in relation to selection, genetic variation, and phenotypic plasticity. *In prep*.

Oh, K. P. and K. L. Shaw. Parallel genomic architecture of sexually-isolating behavior in a rapidly speciating cricket clade. *In prep*.

Journal Articles

Oh, K. P. and K. L. Shaw. 2013. Multivariate sexual selection in a rapidly evolving speciation phenotype. *Proceedings of the Royal Society B—Biological Sciences* 280: 20130482.

Oh, K. P., Conte, G. and K. L. Shaw. 2013. Founder effects and the evolution of asymmetrical sexual isolation in a rapidly-speciating clade. *Current Zoology* 59: 230-238.

Oh, K. P., Fergus, D. J., Grace, J. L. and K. L. Shaw. 2012. Interspecific genetics of speciation phenotypes: song and preference coevolution in Hawaiian crickets. *Journal of Evolutionary Biology* 25: 1500-1512.

- Shaw, K. L., Ellison, C. K., **Oh, K. P.** and C. Wiley. 2011. Pleiotropy, “sexy” traits, and speciation. *Behavioral Ecology* 22: 1154-1155.
- Oh, K. P.** 2011. Inclusive fitness of ‘kissing cousins’: new evidence of a role for kin selection in the evolution of extra-pair mating in birds. *Molecular Ecology* 20: 2657-2659.
- Oh, K. P.** and A. V. Badyaev. 2010. Structure of social networks in a passerine bird: consequences for sexual selection and the evolution of mating strategies. *American Naturalist* 176: E80-E89.
- Stein, L. R., **Oh, K. P.** and A. V. Badyaev. 2010. Fitness consequences of male provisioning of incubating females in a desert passerine bird. *Journal of Ornithology* 151: 227-234.
- Oh, K. P.** and A. V. Badyaev. 2009. Isolation and characterization of seventeen microsatellite loci for the house finch (*Carpodacus mexicanus*). *Molecular Ecology Resources* 9: 1029-1031.
- Oh, K. P.** and A. V. Badyaev. 2008. Evolution of adaptation and mate choice: Parental relatedness affects expression of phenotypic variance in a natural population. *Evolutionary Biology* 35: 111-124.
- Badyaev, A. V., Young, R. L., **Oh, K. P.**, and C. Addison. 2008. Evolution on a local scale: Developmental, functional, and genetic bases of divergence in bill form and associated changes in song structure between adjacent habitats. *Evolution* 62: 1951-1964.
- Badyaev, A. V., and **K. P. Oh.** 2007. Environmental induction and phenotypic retention of adaptive maternal effects. *BMC Evolutionary Biology* 8:3 doi:10.1186/1471-2148-8-3.
- Lindstedt, E., **Oh, K. P.**, and A. V. Badyaev. 2007. Ecological, social, and genetic contingency of extrapair behavior in a socially monogamous bird. *Journal of Avian Biology* 38: 214-238.
- Oh, K. P.** and A. V. Badyaev. 2006. Adaptive genetic complementarity in mate choice coexists with preference for elaborate sexual traits. *Proceedings of the Royal Society B—Biological Sciences* 273: 1913-1919.
- Badyaev, A. V., Hamstra, T. L., **Oh, K. P.**, and D. Acevedo Seaman. 2006. Sex-biased maternal effects reduce ectoparasite-induced mortality in a passerine bird. *Proceedings of the National Academy of Sciences of the United States* 103: 14406-14411.
- Badyaev, A. V., **Oh, K. P.**, and R. Mui. 2006 Evolution of sex-biased maternal effects in birds: II. Contrasting sex-specific oocyte competition in native and recently established populations. *Journal of Evolutionary Biology* 19: 909-921.

Theses

- Oh, K. P.** 2009. Evolutionary dynamics of sexual traits: demographic, behavioral, and genetic contingencies. PhD dissertation, University of Arizona, Tucson, AZ.
- Oh, K. P.** 2001. The influence of age and sex on territory size in Savannah sparrows (*Passerculus sandwichensis*). Undergraduate honors thesis, Bowdoin College, Brunswick, ME.

MEDIA COVERAGE (selected)

- 2010 *Science*, “How Ugly Finches Get the Girls”
Nature, Research Highlights, “Sexual Selection: Networking for Mates”
New York Times, “Love Among Finches: It’s Not All About Looks”
Current Biology, “Behavioural Ecology: Social Networking for Dullards”
Smithsonian Magazine, “Wild Things: Life as We Know It”
- 2006 *Scientific American*, “Finches Provide Answer to Another Evolutionary Riddle”
ScienceNOW, “Despair Not, Frumpy Guys”
Quirks & Quarks, *CBC Radio Interview*
Arizona Daily Star, “For Finches, Flashy Mates Get Picked First”

AWARDS & HONORS

Outstanding Graduate Teaching Assistant, Department of Ecology & Evolutionary Biology, University of Arizona, 2008

Galileo Circle Scholar, College of Science, University of Arizona, 2007

Marcia Brady Tucker AOU Travel Award, 2005, 2008

International Behavioral Ecology Congress Travel Grant, 2008

North American Ornithological Societies Travel Award, 2006

James R. Silliman Memorial Research Award, 2004, 2005, 2006

EEB Small Research Grant, University of Arizona, 2004 – 2008

Graduate and Professional Student Council Travel Grant, 2005, 2008

Student Membership Award, American Ornithologists' Union, 2004 – 2006

University of Arizona Graduate College Fellowship, 2003 – 2004

Honorable Mention, NSF Graduate Research Fellowship, 2003, 2004

Dean's List, Bowdoin College, 1997 – 1999

Sarah and James Bowdoin Scholar, 1997

SYMPOSIA AND INVITED SEMINARS

Queen's University, Department of Biology, Kingston, ON, 2013

University of Rochester, Department of Biology, Rochester, NY, 2013

Vassar College, Department of Biology, Poughkeepsie, NY, 2013

Gettysburg College, Department of Biology, Gettysburg, PA, 2013

American Genetic Association President's Symposium, Cornell University, Ithaca, NY, 2013

Graduate Program in Organismic and Evolutionary Biology, University of Massachusetts Amherst, MA, 2012

Smithsonian Conservation Biology Institute, Washington, DC, 2011

CONTRIBUTED SCIENTIFIC PRESENTATIONS

Oh, K. P. and K. L. Shaw. 2013. Incipient speciation in a Hawaiian cricket: sexual trait divergence in relation to selection, G, and developmental plasticity, Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Snowbird, UT.

Oh, K. P. and K. L. Shaw. 2012. Intraspecific divergence of a multivariate sexual trait in Hawaiian crickets: Does G matter? 1st Joint Congress on Evolutionary Biology, Ottawa, ON, Canada.

Oh, K. P. and K. L. Shaw. 2012. Heterogeneous sexual selection and intraspecific divergence of a speciation phenotype. Speciation Symposium, Cornell University, Ithaca, NY.

Oh, K. P. and K. L. Shaw. 2012. Concordance between multivariate sexual selection and repeatability of a sexually isolating trait. Speciation Symposium, Cornell University, Ithaca, NY.

Oh, K. P. 2011. Age-dependent female reproductive strategies in a passerine bird. Cooperation and Parental Care Symposium, Cornell Lab of Ornithology, Ithaca, NY.

Oh, K. P. and K. L. Shaw. 2011. Contrasting patterns of multivariate sexual selection in a rapidly-speciating cricket. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Norman, OK.

Contributed Scientific Presentations (Continued)

- Oh, K. P.** and K. L. Shaw. 2010. Divergent female preferences and the evolution of sexual isolation in Hawaiian crickets. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Portland, OR.
- Oh, K. P.** and A.V. Badyaev. 2009. Evolution of mate choice for genetic benefits in a passerine bird. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Moscow, ID.
- Oh, K. P.** and A.V. Badyaev. 2008. Comparative mate choice promotes spatiotemporal structuring of sexual traits in a passerine bird. 12th International Society for Behavioral Ecology Congress, Ithaca, NY.
- Oh, K. P.** and A.V. Badyaev. 2008. Comparative mate choice promotes spatiotemporal structuring of sexual traits in a passerine bird. 126th Stated Meeting of the American Ornithologists' Union, Portland, OR.
- Badyaev, A. V., Young, R. L., **Oh, K. P.**, and C. Addison. 2008. Evolution on a local scale: Developmental, functional, and genetic bases of divergence in bill form and associated changes in song structure between adjacent habitats. 126th Stated Meeting of the American Ornithologists' Union, Portland, OR.
- Oh, K. P.** and A. V. Badyaev. 2008. Evolution of adaptation and mate choice: Parental relatedness affects expression of phenotypic variance in a natural population. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Minneapolis, MN.
- Oh, K. P.** and A. V. Badyaev. 2007. The ontogeny of mate preferences: Does juvenile experience matter? 125th Stated Meeting of the American Ornithologists' Union, Laramie, WY.
- Oh, K. P.** and A. V. Badyaev. 2006. Evolution of adaptive mate choice in relation to age-dependent reproductive strategies. IV North American Ornithological Conference, MX.
- Badyaev, A. V. and **K. P. Oh.** 2006. Evolution of maternal effects: from environmental induction to genetic accommodation. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Stony Brook, NY.
- Badyaev, A. V. and **K. P. Oh.** 2005. Sex-specific oocyte competition as a constraint on sex-ratio adjustment. 123rd Stated Meeting of the American Ornithologists' Union, Santa Barbara, CA.
- Oh, K. P.** and A. V. Badyaev. 2005. The evolution of context-dependent biparental investment strategies: Cooperation or conflict? 123rd Stated Meeting of the American Ornithologists' Union, Santa Barbara, CA.
- Oh, K. P.** and A. V. Badyaev. 2005. Condition-dependent genetic complementarity in mate choice. Joint conference of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists, Fairbanks, AK.
- Oh, K. P.** and A. V. Badyaev. 2005. Fitness consequences of differential reproductive allocation in relation to sexual ornament elaboration in a passerine bird. 2005 Meeting of the Society for Integrative and Comparative Biology, San Diego CA
- Oh, K. P.** and A. V. Badyaev. 2004. Phenotypic and genetic complementarity in mate choice. 122nd Meeting of the American Ornithologists Union, Quebec, QC, Canada.
- Oh, K. P.** and A. V. Badyaev. 2004. Is there someone for everyone? Evolutionary consequences of phenotypic and genetic complementarity in mate choice. Society for the Study of Evolution and American Naturalists' Society Meeting, Fort Collins, CO

TEACHING EXPERIENCE

Lecturer (Cornell University)

Concepts in Sexual Selection Theory (BIONB4200), 2012

Graduate Teaching Associate (University of Arizona)

Animal Behavior, ECOL487 (69 students), 2008

Vertebrate Physiology, ECOL437 (32/30/30 students), 2006, 2008, 2009

Evolution of Animal Form & Function, ECOL330 (35 students), 2004

Guest Lecturer

Evolution, Pacific Lutheran University, 2013

Sex, Genes and Evolution (BIOMG 1250), Cornell University, 2012

Evolution of Animal Form & Function (ECOL330), 4 lectures, University of Arizona

Ornithology (ECOL484/584), University of Arizona, 2007

Mentoring and Supervising

High School Students, Tucson High Magnet School

P. Gelb, 2003 – 2004

C. Hill-Kiwak, 2007

B.Sc./M.Sc. Students

E. Lindstedt, 2004 – 2005 (*currently PhD student, Univ. of Ohio*)

J. Merkle, 2004 – 2007 (*currently PhD student, Univ. Laval*)

T. Hamstra, 2004 – 2008 (*M.Sc.*)

E. Solares, 2005

T. Kodera, 2005 (*currently PhD student, Univ. of California, Riverside*)

L. Stein, 2006 – 2009 (*currently PhD student, Univ. of Illinois*)

High School Teacher, Hyde School, Bath, ME

Biology, Biology II, and Chemistry: *Developed curriculum and taught ~90 students in 3 sections per semester, served as faculty advisor for 10 students per year, 2001 – 2003.*

Assistant Dean of Students, 2002 - 2003

PROFESSIONAL SERVICE AND OUTREACH

National Science Foundation, External Reviewer, IOS Panel, 2012

Volunteer Presenter, 9th Annual *Insectapalooza*, Dept. of Entomology, Cornell University, 2012

Organizing Committee Member, Symposium on Cooperative Behavior and Parental Care, Cornell University, 2011

Sigma Xi Foundation, External Grant Reviewer, Cornell University, 2011, 2012, 2013

Expert reviewer for Global Invasive Species Database, IUCN Species Survival Commission, 2007

Ad hoc reviewer for *American Naturalist*, *Evolution*, *Proceedings of the Royal Society B—Biological Sciences*, *Biology Letters*, *Journal of Evolutionary Biology*, *Journal of the Royal Society Interface*, *Behavioral Ecology*, *Molecular Ecology*, *Evolutionary Ecology*, *Functional Ecology*, *Evolutionary Biology*, *Ethology*, *Behavioral Ecology & Sociobiology*, *Animal Behaviour*, *Current Zoology*, *Molecular Ecology Notes*, *Condor*, and *Wilson Bulletin*.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Society for the Study of Evolution, *American Society of Naturalists*, *American Genetic Association*, *International Society for Behavioral Ecology*, *American Ornithologists' Union*, *Society for Integrative and Comparative Biology*, *Sigma Xi Society*

PROFESSIONAL REFERENCES

Dr. Alexander V. Badyaev, Professor
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University of Arizona
Tucson, AZ 85721
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Dr. Michael S. Webster, Professor
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