

CURRICULUM VITAE

JOHN E. POOL

University of California, Davis
Department of Evolution and Ecology
One Shields Ave, 2310 Storer Hall
Davis, CA 95616

e-mail: jepool@ucdavis.edu
telephone: +1-510-705-2781
fax: +1-530-752-1449

Degrees:

Cornell University	Genetics/Evolution	Ph.D. 2006
Western Michigan University	Biology	B.S. 2000

Appointments:

Fall 2009 – present	Postdoctoral Researcher. Advisor: Charles Langley. Center for Population Biology, University of California, Davis.
Fall 2006 – Fall 2009	Postdoctoral Researcher. Advisor: Rasmus Nielsen. Department of Integrative Biology, University of California, Berkeley (Winter 2008 – Fall 2009) Centre for Comparative Genomics, University of Copenhagen. (Fall 2006 - Fall 2007)
Summer 2006	Postdoctoral Researcher. Advisor: Charles F. Aquadro Dept. of Molecular Biology and Genetics, Cornell University.
Fall 2000 – Spring 2006	Graduate Student. Ph.D. Committee: Charles F. Aquadro (chair), Carlos D. Bustamante, Richard G. Harrison. Dept. of Molecular Biology and Genetics, Cornell University.
Summer 1999	Research Intern. E. O. Lawrence Berkeley National Laboratory.

Awards and Honors:

NSF Research Grant, “The genetic basis of parallel melanic evolution in *Drosophila melanogaster*”, Recommended for funding, \$150,000 (to begin in 2011).
NIH/NHGRI Kirschstein National Research Service Award (Postdoctoral Fellowship), “The use of recombining genetic markers for demographic inference”, \$139,346 (2006-2009).
NSF Doctoral Dissertation Improvement Grant, “The genetic structure and phylogeographic history of African populations of *Drosophila melanogaster*”, \$11,939 (2004-2006).
Sigma Xi of Cornell University Research Grant (2004).
Research Travel Grant, Cornell Graduate School, to collect *Drosophila melanogaster* from Cameroon (2003).
Conference Travel Grants, Cornell Graduate School (2001, 2002, 2003, 2005).
NSF Predoctoral Fellowship – Honorable Mention (2001).
Magna cum laude, Lee Honors College, Western Michigan University (2000).
Outstanding Senior in Biology, Western Michigan University (2000).

Peer-Reviewed Publications:

Yi*, X., Y. Liang*, E. Huerta-Sanchez*, X. Jin*, Z. X. P. Cuo*, J. E. Pool*, *et al.* 2010. Sequencing of Fifty Human Exomes Reveals Adaptation to High Altitude. *Science* 329:75-78. (*co-first author. Subject of a “Perspectives” article in the same issue, and media coverage from CNN, USA Today, and others)

Pool, J. E., I. Hellmann, J. D. Jensen, and R. Nielsen. 2010. Population genetic inference from genomic sequence variation. *Genome Research* 20:291-300. (Review article)

Rebeiz, M., J. E. Pool, V. Kaessner, C. F. Aquadro, and S. Carroll. 2009. Stepwise modification of a modular enhancer underlies local adaptation in a *Drosophila* population. *Science* 326:1663-1667. (Subject of of “News of the Week” article in the same issue, and NPR media coverage)

Pool, J. E. and R. Nielsen. 2009. Inference of historical changes in migration rate from the lengths of migrant tracts. *Genetics* 181:711-719.

Wang, J. *et al.* 2008. The diploid genome sequence of an Asian individual. *Nature* 456:60-65.

Pool, J. E. and R. Nielsen. 2008. The impact of founder events on chromosomal variability in multiply mating species. *Mol. Biol. Evol.* 25:1728-1736.

Pool, J. E. and R. Nielsen. 2007. Population size changes reshape genomic patterns of diversity. *Evolution* 62:3001-3006. (Selected for Faculty of 1000 Biology)

Pool, J. E. and C. F. Aquadro. 2007. The genetic basis of adaptive pigmentation variation in *Drosophila melanogaster*. *Molecular Ecology* 16:2844-2851. (“Fast Track” article, cover article, and subject of a “News and Views” article by M. Kohn and P. Wittkopp in the same issue)

Wong, A., J. D. Jensen, J. E. Pool, and C. F. Aquadro. 2007. Phylogenetics of the *Drosophila melanogaster* species group – evidence for ancestral lineage sorting and recombination. *Mol. Phyl. Evol.* 43:1138-1150.

Pool, J. E. and C. F. Aquadro. 2006. History and structure of sub-Saharan populations of *Drosophila melanogaster*. *Genetics* 174:915-929.

Pool, J. E., A. Wong, and C. F. Aquadro. 2006. Finding of male-killing *Spiroplasma* infecting *Drosophila melanogaster* in Africa implies transatlantic migration of this endosymbiont. *Heredity* 97:27-32.

Pool, J. E., V. Bauer DuMont, J. L. Mueller, and C. F. Aquadro. 2006. A scan of molecular variation leads to the narrow localization of a selective sweep affecting both Afrotropical and cosmopolitan populations of *Drosophila melanogaster*. *Genetics* 172:1093-1105.

Additional publications:

Pool, J. E. 2009. Notes regarding the collection of African *Drosophila melanogaster*. *Drosophila Information Service* 92:130-134.

Professional Society Memberships:

Genetics Society of America
Society for Molecular Biology and Evolution
Society for the Study of Evolution

Referee for:

Biological Journal of the Linnean Society * Evolution * Genetica * Genetics * Journal of Evolutionary Biology * Journal of Heredity * Molecular Biology and Evolution * Molecular Ecology * Nature Genetics * PLoS Genetics * Proceedings of the Royal Society, Series B

Invited Talks:

2011:	Carnegie Mellon University	Pennsylvania State University
	University of Delaware	University of Hawaii
	University of Oxford	University of Virginia
2010:	Michigan State University	Rutgers University
	University of Massachusetts Boston	University of Pittsburgh
	West Virginia University	WWTF Vienna
2009:	University of Cambridge	University of Mississippi
2008:	University of California Davis	
2006:	University of Maryland	

Conference Presentations: (oral presentations, unless otherwise noted)

Molecular Biology and Evolution 2010 (Lyon, France). “Population Genomics in *Drosophila melanogaster*: Biology, Geography, and Sequence Targets of Sweep-Like Outliers”

Evolution 2009 (Moscow, ID).

Evolution: The Molecular Landscape 2009 (Cold Spring Harbor, NY). Poster.

Molecular Biology and Evolution 2008 (Barcelona, Spain).

Estimating Demographic Parameters From Genetic Data 2007 (La Fouly, Switzerland).

Conferences Jacques Monod: Evolutionary Genomics 2007 (Roscoff, France).

European *Drosophila* Research Conference 2007 (Vienna, Austria).

European Society for Evolutionary Biology 2007 (Uppsala, Sweden). Poster.

Molecular Biology and Evolution 2006 (Tempe, AZ).

Eastern Great Lakes Molecular Evolution 2005 (Toronto).

Evolution 2005 (Fairbanks, AK).

Evolution 2003 (Chico, CA).

Molecular Evolution 2002 (Sorrento, Italy). Poster.

Molecular Biology and Evolution 2001 (Knoxville, TN). Poster.

Teaching, mentoring, and outreach experience:

Graduate teaching assistant for Population Genetics (Fall 2001, Cornell University).

Responsibilities included leading discussion sections and developing new assignments.

Graduate teaching assistant for Genetics (Spring 2002, Cornell University). Responsibilities included laboratory instruction and supervision.

Designed and taught a high school mini-course, titled “Finding change in your genes: DNA and the evolution of biodiversity”, through Cornell’s Graduate Student School Outreach Program, at South Seneca High School in Ovid, NY (2005).

Mentor to two Cornell undergraduate students. Helped Cathryn and Moshe develop independent research projects, gain molecular lab skills, analyze data, utilize bioinformatics resources, interpret and present their results.

Supplemental Instruction Leader, Molecular and Cellular Biology, Western Michigan University (1999).