

CURRICULUM VITAE

JOHN E. POOL

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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 Nieslen. Department of Integrative Biology, University of California, Berkeley (Winter 2008 - present) 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, “The genetic basis and adaptive significance of parallel melanic evolution in *Drosophila melanogaster*”, \$605,028 (In Review).

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).

Publications:

Pool, J. E., I. Hellmann, J. D. Jensen, and R. Nielsen. 2010. Population genetic inference from genomic sequence variation. *Genome Research*, Accepted. (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.

Referee for:

Biological Journal of the Linnean Society * *Evolution* * *Genetica* * *Genetics* * *Journal of Heredity* * *Molecular Biology and Evolution* * *Molecular Ecology* * *PLoS Genetics*

Professional Society Memberships:

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

Conference Presentations:

Evolution 2009 (Moscow, ID). Oral presentation. “Inference of historical changes in migration rate from the lengths of migrant tracts”.

Evolution: The Molecular Landscape 2009 (Cold Spring Harbor, NY). Poster. “Inference of historical changes in migration rate from the lengths of migrant tracts”.

Molecular Biology and Evolution 2008 (Barcelona, Spain). Oral presentation. “The Impact of Founder Events on Chromosomal Variability in Multiply Mating Species”.

Estimating Demographic Parameters From Genetic Data 2007 (La Fouly, Switzerland). Oral presentation. “Population size changes reshape genomic patterns of diversity”.

Conferences Jacques Monod: Evolutionary Genomics 2007 (Roscoff, France). Oral presentation “Population size changes reshape genomic patterns of diversity”.

European Drosophila Research Conference 2007 (Vienna, Austria). Oral presentation. “Positive selection at *ebony* and locally adaptive melanism in sub-Saharan *Drosophila melanogaster*”.

European Society for Evolutionary Biology 2007 (Uppsala, Sweden). Poster. “The genetic basis of adaptive pigmentation variation in *Drosophila melanogaster*”.

Molecular Biology and Evolution 2006 (Tempe, AZ). Oral presentation. “Genetic structure and population history of sub-Saharan populations of *Drosophila melanogaster*”.

Eastern Great Lakes Molecular Evolution 2005 (Toronto). One of five abstracts selected for oral presentations. “Inferring the combined effects of population history and positive selection on genetic variation in Afrotropical and cosmopolitan *Drosophila melanogaster*”.

Evolution 2005 (Fairbanks, AK). Oral Presentation.

Evolution 2003 (Chico, CA). Oral presentation.

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: Cathryn Loughlin and Moshe Rhodes. 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).