

Curriculum Vitae
Jason G. Mezey

Center for Population Biology
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EDUCATION

2000 Ph.D., Department of Ecology and Evolutionary Biology, Yale University
1994 B.A. “*cum laude*, Distinction in Biology”, University of Pennsylvania

PROFESSIONAL EXPERIENCE

2003 Postdoctoral Research Associate, Center for Population Biology and
Section of Evolution and Ecology, University of California, Davis
2000 Postdoctoral Research Associate, Department of Biology, Florida State
University

PROFESSIONAL DISTINCTIONS AND AWARDS

2000 Finalist, Life Sciences Research Foundation Fellowship, Lewis Thomas
Laboratory, Princeton, NJ
1995-1999 NIH Genetics Pre-Doctoral Training Grant
1997 Travel Grant, Institute for Biospheric Studies, New Haven, CT
1995 Complex Systems Summer School, Santa Fe Institute, Santa Fe, NM
1994 University Fellowship, Yale University
1994 G. Evelyn Hutchinson Prize, Yale University
1994 Nassau Undergraduate Research Award, University of Pennsylvania
1993 Research Training Program, National Museum of Natural History,
Washington, DC
1992 Research Experience for Undergraduates, American Museum of Natural
History, New York, NY

PAPERS PRESENTED AT CONFERENCES

2004 Genome-wide differential gene expression in *Drosophila melanogaster*
subgroup, Society for the Study of Evolution, SSE
2004 Naturally segregating QTL affecting wing shape of *Drosophila*
melanogaster, *Drosophila* Research Conference
2003 Genetic variation in *Drosophila* wings: dimensionality of a really big **G**
matrix, SSE
2002 Comparing **G** matrices: interpreting results of a common principal

- 2002 components (CPC) analysis, Society for Mathematical Biology
Comparing **G** matrices: what common principal components can tell us, SSE
- 2002 Analyzing genetic architecture using common principal components (CPC), Florida Ecology and Evolution Symposium, FES
- 2001 Multivariate effects of mutations: a dimensionality approach, Society for Molecular Biology and Evolution
- 2001 Analysis of variation in multi-genic traits: a dimensionality approach, FES
- 1999 Testing hypotheses of genotype-phenotype map organization: an approach using quantitative trait loci, SSE
- 1997 Epistasis and evolution, Invited Talk, Special Session – International Conference on Complex Systems

REVIEWER

American Naturalist, Ecology, Ecology Letters, Evolution (x4), Genetics (x2), Heredity, Journal of Theoretical Biology, Nature Review Genetics, Proceedings of the National Academy of Sciences

PUBLICATIONS

- Mezey, J.G.**, D. Houle, and S.V. Nuzhdin (*in press*) Naturally segregating QTL affecting wing shape of *Drosophila melanogaster*. *Genetics*.
- Mezey, J.G.** and D. Houle (*in press*) The dimensionality of genetic variation for wing shape in *Drosophila melanogaster*. *Evolution*.
- Hahn, M.W., **J.G. Mezey**, D.J. Begun, J.H. Gillespie, A.D. Kern, C.H. Langley, and L.C. Moyle (*in press*) Natural Selection and codon bias on single genomes. *Nature*.
- Houle, D., **J.G. Mezey**, P. Galpern, and A. Carter (2004) Automated measurement of *Drosophila* wings. *BMC Evolutionary Biology*. 3:25.
- Mezey, J.G.** and D. Houle (2003). Comparing **G** matrices: why common principal components are informative. *Genetics* 165:411-425.
- Houle, D., **J.G. Mezey**, and P. Galpern (2003) Interpretation of the results of partial common principal components. *Evolution* 56:433-440.
- Mezey, J.G.**, J.M. Cheverud, and G.P. Wagner (2000) Is the genotype-phenotype map modular? An approach using quantitative trait locus (QTL) data. *Genetics* 156:305-311.
- Wagner, G.P. and **J.G. Mezey** (2000) Modeling the evolution of genetic architecture: a continuum of alleles model with pairwise *AxA* epistasis. *Journal of Theoretical Biology* 203:163-175.
- Kim, C., K. Kawasaki, S. Minoshima, C. Amemiya, W. Miller, N. Shimizu, W. Bailey, G.P. Wagner, **J.G. Mezey** and F. Ruddle (2000) Hox cluster duplication in the

horn shark (*Heterodontus francisi*) and the vertebrate radiation. *Proceedings of the National Academy of Sciences* 97:1655-1660.

ADDITIONAL MANUSCRIPTS

Mezey, J.G. and C. Jones (*manuscript complete*) Genomic co-expression domains are units of evolution of the *Drosophila* transcriptome. (Submission will honor the temporary embargo imposed on papers using the *Drosophila yakuba* genome. This manuscript will be submitted to *Nature*.)

INVITED PUBLICATIONS

- Mezey, J.G.** (*in prep*) Modularity. Fox, C.W. and J.B. Wolf (eds.) *Evolutionary Genetics: Concepts and Case Studies*. Oxford University Press.
- Wagner, G.P., **J.G. Mezey** and R. Callabretta (*in press*) Natural selection and the origin of modules. W. Callebaut and D. Rasking-Gutman (eds.) *Modularity: Understanding the Development and Evolution of Complex Systems*. MIT Press.
- James, F.C. and **J.G. Mezey** (2004) Geographic variation in the size and shape of the Savannah Sparrows (*Passerculus sandwichensis*). *The Auk* 121:269-270.
- Wagner, G.P. and **J.G. Mezey** (2004) The role of genetic architecture constraints for the origin of variational modularity. G. Schlosser and G.P. Wagner (eds.) *Modularity in Development and Evolution*. Chicago University Press.
- Mezey, J.G.** and G.P. Wagner (2000) An effect of scale in a non-additive genetic model. Y. Bar-Yam (ed.) *Unifying Themes in Complex Systems: Proceedings of the First International Conference on Complex Systems*. Perseus Books Group.

GRADUATE ADVISOR

Dr. Günter P. Wagner
Professor, Department of Ecology and Evolution
Yale University

POSTDOCTORAL ADVISORS

Dr. David Houle
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Florida State University

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