

Joshua A Shapiro

Bryn Mawr College
Department of Biology

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**RESEARCH
INTERESTS**

- Causes and consequences of genotypic and phenotypic diversity
- Genomic signatures of selection and demography
- Evolution of expression patterns and expression regulation
- Processes underlying population structure and speciation

EDUCATION

Ph.D. University of Chicago Department of Ecology and Evolution 2007
Dissertation: Selection and Structure in *Drosophila* Populations During the
Process of Speciation
Advisor: Dr. Chung-I Wu

B.A. Williams College Biology 1998
Summa Cum Laude with Highest Honors
Thesis: Population Structure and Gene Flow in Chorus Frog Tadpoles
(*Pseudacris triseriata*) on North Government Island
Advisor: Dr. David Smith

EXPERIENCE

Assistant Professor 2013–present
Visiting Assistant Professor 2011–2013
Department of Biology, Bryn Mawr College

Associate Professional Specialist 2011–2013
Post-Doctoral Research Associate 2006–2011
Lecturer 2008–2009

Lewis-Sigler Institute for Integrative Genomics, Princeton University
Advisor: Dr. Leonid Kruglyak

Laboratory Technician 2000
Department of Cell Biology, University of Virginia
Supervisor: Dr. P. Prabhakara Reddi

Fulbright Scholar 1999
Centre for Research on Introduced Marine Pests, CSIRO, Australia
Supervisor: Dr. Craig Proctor

PUBLICATIONS

EC Andersen*, JP Gerke*, **JA Shapiro***, JR Crissman, R Ghosh, JS Bloom, M-A Félix, L Kruglyak (2012) Chromosome-scale selective sweeps shape *Caenorhabditis elegans* genomic diversity.

Nature Genetics 44:285-290

R Ghosh, EC Andersen, **JA Shapiro**, JP Gerke, L Kruglyak (2012) Natural variation in a chloride channel subunit confers avermectin resistance in *C. elegans*.

Science 355:574-578

X-M Lu*, **JA Shapiro***, C-T Ting, Y Li, C Li, J, Xu, Y-J Chen, AJ Greenberg, S-H Li, C-I Wu (2010) Genome-wide mis-expression of X-linked vs. autosomal genes associated with hybrid male sterility.

Genome Research 20:1097-1102

IM Ehrenreich, N Torabi, Y Jia, J Kent, S Martis, **JA Shapiro**, D Gresham, A Caudy, L Kruglyak (2010) Dissection of genetically complex traits with extremely large pools of yeast segregants.

Nature 464:1039-1042

J Schacherer*, **JA Shapiro***, DM Ruderfer, L Kruglyak (2009) Comprehensive polymorphism survey elucidates population structure of *Saccharomyces cerevisiae*.

Nature 458:342-345

MH Kohn, **JA Shapiro**, C-I Wu (2008) Decoupled differentiation of gene expression and coding sequence among *Drosophila* populations.

Genes & Genetic Systems 83: 265-273

JA Shapiro, W Huang, C Zhang, J Lu, DA Turissini, S Fang, H-Y Wang, RR Hudson, C-I Wu (2007) Adaptive genic evolution in the *Drosophila* genomes.

Proceedings of the National Academy of Sciences USA 104:2271-2276

S Lee, J Bao, G Zhou, **JA Shapiro**, J Xu *et al.* (2005) Detecting novel low-abundant transcripts in *Drosophila*.

RNA 11: 939-946

PP Reddi, AM Shore, **JA Shapiro**, A Anderson, MH Stoler, KK Acharya (2003) Spermatid-specific promoter of the SP-10 gene functions as an insulator in somatic cells.

Developmental Biology 262:173-182

*Equal authorship contribution

- PRESENTATIONS**
- Chromosome-scale selective sweeps shape *Caenorhabditis elegans* genomic diversity.
Evolution 2011, platform presentation
 - A survey of global *C. elegans* diversity by RAD-Seq.
2nd UK RAD Sequencing Meeting, August 2010, invited speaker
 - Selective effects of polymorphisms affecting gene expression in a global sample of *Saccharomyces cerevisiae*.
Meeting of the Society for Molecular Biology and Evolution 2010, poster
 - Genome-wide association mapping of gene expression variation in *S. cerevisiae*.
Meeting of the Society for Molecular Biology and Evolution 2009, poster
 - Association mapping of gene expression in *Saccharomyces cerevisiae*.
Gordon Research Conference on Quantitative Genetics 2009, poster
 - Analysis and mapping of gene expression variation in *Saccharomyces cerevisiae*.
Yeast Genetics and Molecular Biology Meeting 2008, poster
 - Gene expression variation in *Saccharomyces cerevisiae*
Evolution 2008, platform presentation
 - Population structure and evolutionary history of *Saccharomyces cerevisiae*.
Cold Spring Harbor Labs: The Biology of Genomes 2007, poster
 - Genetic differentiation between behavioral races of *Drosophila melanogaster*.
Drosophila Research Conference 2005, platform presentation
 - Changes in gene expression associated with *Ods* introgression-induced hybrid male sterility.
Drosophila Research Conference 2004, poster

**HONORS,
AWARDS &
AFFILIATIONS**

Post-Doctoral Poster Prize, Annual Meeting of the Society for Molecular Biology and Evolution 2009

Howard Hughes Medical Institute Pre-Doctoral Fellowship in Biological Sciences 2001-2006

NSF Graduate Research Fellowship (Declined) 2000

Honorable Mention NSF Graduate Research Fellowship 1999

Fulbright Award (U.S. Student Program) Full grant to Australia 1999

Erastus C Benedict Prize in Biology, Williams College 1998

Phi Beta Kappa

Sigma Xi

Genetics Society of America

Society for the Study of Evolution

Society for Molecular Biology and Evolution