

CURRICULUM VITAE – June 2008

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CURRENT POSITION:

9/01-present Assistant Professor of Biology, University of Pennsylvania

EDUCATION:

6/99-6/01 Postdoctoral Associate, SUNY Stony Brook

8/93-5/99 Brown University, Providence, Rhode Island
Ph.D., 1999

8/89-5/93 College of the Holy Cross, Worcester, Massachusetts
Honors B.A. in Biology, *magna cum laude*, 1993

TEACHING AWARDS:

2006 - 2007 Excellence in Teaching, Department of Biology

RESEARCH AWARDS:

National Science Foundation, DEB-PEP, Evolutionary Genetics:

DEB-0823255

DEB-0710052

DEB-0542859

DEB-0236577

DEB-9801563

American Federation for Aging Research (AFAR, www.afar.org):

A 6152, Junior Investigator Award

Institute on Aging / Bingham Trust:

BT 54616 Pilot Award

PROFESSIONAL ACTIVITIES:

Memberships: Society for the Study of Evolution
American Society of Naturalists
Genetics Society of America
Society for Molecular Biology and Evolution

Reviewer, journals:

Evolution, Genetics, Ecology, Molecular Ecology, Molecular Biology and Evolution, Proceedings Roy. Soc. Lond. B, Ecology Letters, American Naturalist, Journal of Evolutionary Biology, Experimental Gerontology, Genetica, Aging Cell, Invertebrate Biology, Fly, Biological Journal of the Linnean Society, Gene, Trends in Genetics, Marine Biology

Reviewer, grants:

National Science Foundation: Directorate for Biological Sciences (Divisions of Environmental Biology, Emerging Frontiers, Integrative Biology and Neuroscience, Integrative Organismal Systems, Molecular and Cellular Biosciences); Directorate for Geosciences (Division of Ocean Sciences); Biocomplexity in the Environment: Integrated Research and Education in Environmental Systems, Genome-Enabled Environmental Sciences and Engineering; Panel Member, Evolutionary Ecology Panel of Population and Evolutionary Processes; Panel Member, Evolutionary Genetics Panel of PEP
Natural Sciences and Engineering Research Council of Canada
Natural Environment Research Council, U.K.
American Philosophical Society
Arthropod Genomics Center

PUBLICATIONS:

- Schmidt, P.S., C.T. Zhu, J. Das, M. Batavia, L. Yang and W.F. Eanes. 2008. An amino acid polymorphism in the *couch potato* gene forms the basis for climatic adaptation in *Drosophila melanogaster*. Proc. Nat. Acad. Sci. USA, in press.
- Schmidt, P.S., E. A. Serrão, G. A. Pearson, C. Riginos, P. D. Rawson, T. J. Hilbish, S. H. Brawley, G. C. Trussell, E. Carrington, D. S. Wethey, J. W. Grahame, F. Bonhomme and D. M. Rand. 2008. Ecological genetics in the North Atlantic: environmental gradients and adaptation at specific loci. Ecology, in press.
- Williams, K.D., P.S. Schmidt and M.B. Sokolowski. 2008. Photoperiodism in insects: molecular basis and consequences of diapause. Chapter 13 in *Photoperiodism: Seasonal Time Measurement*, R.J. Nelson, D.L. Denlinger and D. Somers (eds.). Oxford University Press, forthcoming.
- Phifer-Rixey, M., M. Heckman, G.C. Trussell and P.S. Schmidt. 2008. Maintenance of clinal variation for shell colour phenotype in the flat periwinkle *Littorina obtusata*. Journal of Evolutionary Biology 21: 966-978.

- Paaby, A.B. and P.S. Schmidt. 2008. Functional significance of allelic variation at *methuselah*, an aging gene in *Drosophila*. PLoS ONE 3(4) e1987. doi:10.1371/journal.pone.0001987.
- Schmidt, P.S. and A.B. Paaby. 2008. Reproductive diapause and life history clines in North American populations of *Drosophila melanogaster*. *Evolution* 62(5):1204-1215.
- Schmidt, P.S., M. Phifer-Rixey, G.M. Taylor and J.C. Christner. 2007. Genetic heterogeneity among intertidal habitats in the flat periwinkle, *Littorina obtusata*. *Molecular Ecology* 16: 2393-2404.
- Flowers, J.M., E. Sezgin, S. Kumagai, D.D. Duvernell, L.M. Matzkin, P.S. Schmidt and W.F. Eanes. 2007. Adaptive evolution of metabolic pathways in *Drosophila*. *Molecular Biology and Evolution* 24: 1347 – 1354.
- Schmidt, P.S. and D.R. Conde. 2006. Environmental heterogeneity and the maintenance of genetic variation for reproductive diapause in *Drosophila melanogaster*. *Evolution* 60(8): 1602-1611.
- Schmidt, P.S., A.B. Paaby, and M.S. Heschel. 2005. Genetic variance for diapause expression and associated life histories in *Drosophila melanogaster*. *Evolution* 59 (12): 2616-2625.
- Schmidt, K.S., J.L. Gallo, T. Giovannetti, C. Ferri, N. Sestito, D.J. Libon and P.S. Schmidt. 2005. The neuropsychological profile of alcohol related dementia suggests cortical and subcortical pathology. *Dementia and Geriatric Cognitive Disorders* 20 (5):286-291.
- Schmidt, P.S., L. M. Matzkin, M. Ippolito, and W.F. Eanes. 2005. Geographic variation in diapause incidence, life history traits and climatic adaptation in *Drosophila melanogaster*. *Evolution* 59 (8): 1721-1732.
- Duvernell, D.D., P.S. Schmidt, and W.F. Eanes. 2003. Clines and adaptive evolution in the *methuselah* gene region in *Drosophila melanogaster*. *Molecular Ecology* 12: 1277-1285.
- Rand D.M., T.B. Sackton, P.S. Spaeth and P.S. Schmidt. 2002. Ecological genetics of the *Mpi* and *Gpi* polymorphisms in the northern acorn barnacle and the spatial scale of neutral and non-neutral variation. *Integ. Comp. Biol.* 42: 825-836.
- Schmidt, P.S. and D.M. Rand. 2001. Adaptive maintenance of genetic polymorphism in an intertidal barnacle: habitat- and life history stage-specific survivorship of *Mpi* genotypes. *Evolution* 55 (7): 1336-1344.
- Schmidt, P.S. 2001. The effects of diet and physiological stress on the evolutionary dynamics of an enzyme polymorphism. *Proc. R. Soc. Lond. B.* 268 (1462): 9-14.
- Schmidt, P.S., D.D. Duvernell, and W.F. Eanes. 2000. Adaptive evolution of a candidate gene for aging in *Drosophila*. *Proc. Nat. Acad. Sci. USA* 97(20): 10861-10865.
- Schmidt, P.S., M. D. Bertness, and D.M. Rand. 2000. Environmental heterogeneity and balancing selection in the northern acorn barnacle, *Semibalanus balanoides*. *Proc. R. Soc. Lond. B.* 267: 379-384.
- Schmidt, P.S., and D.M. Rand. 1999. Intertidal microhabitat and selection at *Mpi*: interlocus contrasts in

the northern acorn barnacle, *Semibalanus balanoides*. *Evolution* 53(1): 135-146.

Bertness, M.D., G.H. Leonard, J.M. Levine, P.R. Schmidt, and A.O. Ingraham. 1999. Habitat modification by algal canopies: testing the relative contribution of positive and negative interactions in rocky intertidal communities. *Ecology* 80: 2711-2726.

Leonard, G.H., J.M. Levine, P.R. Schmidt, and M.D. Bertness. 1998. Flow-driven variation in intertidal community structure in a Maine estuary. *Ecology* 79: 1395-1411.

Manuscripts in review:

Schmidt, P.S., M. Batavia, J. Das, C.T. Zhu, W.F. Eanes, and S. Abroms. *Couch potato* aging in *Drosophila*. Aging Cell.

Taylor, G.M., N. Keyghobadi and P.S. Schmidt. Parallel latitudinal variation in armament of a marine invader and its prey. *Marine Biology*.

Manuscripts in preparation:

Flatt, T. & P.S. Schmidt. 2009. Evolution of aging. Special Issue of *Biochimica et Biophysica Acta* – (general subjects) *Biochemical and Molecular Mechanisms – from Model Systems to Human Longevity*.

Schmidt, P.S. 2010. Evolution and mechanisms of insect diapause, a plastic life history syndrome. Chapter 23 in *Molecular Mechanisms of Life History Evolution*, T. Flatt and A. Heyland (eds). Oxford University Press.

Schmidt, P.S., M. Batavia, S. Abroms and E.J. Dein. The functional significance of *couch potato* on stress resistance in *Drosophila melanogaster*. To be submitted to *Genetics*.

Paaby, A.B., M. Blackett, A.A. Hoffmann and P.S. Schmidt. Parallel independent clines on two continents and adaptive variation at the *Drosophila* insulin receptor, *InR*. To be submitted to *Genetics*.

Schmidt, P.S., A.B. Roddy and S. Sher. A molecular basis for adaptive life history trade-offs in *Drosophila melanogaster*. To be submitted to *PNAS*.

UNIVERSITY OF PENNSYLVANIA TEACHING CHRONICLE:

Courses taught: BIOL 102, Introductory Biology
 BIOL 230, Evolutionary Biology
 BIOL 419, Evolutionary Genetics
 BIOL 615, Graduate Seminar in Evolutionary Biology
 BIOL 399/499/699/899/999, Independent Studies