

Selected Publications

Aguila, J.R., D.K. Hoshizaki and A.G. Gibbs. Contribution of larval nutrition to adult reproduction in *Drosophila melanogaster*. Submitted.

Hoshizaki, D.K., A.G. Gibbs and N.D. Bond. Fat body. In: R.F. Chapman's *The Insects: Structure and Function*, 5th ed., S.J. Simpson, ed. Submitted.

Merkey, A.B., C.K. Wong, D.K. Hoshizaki and A.G. Gibbs. Energetics of metamorphosis in *Drosophila melanogaster*. In revision.

Bond, N.D., D.K. Hoshizaki and A.G. Gibbs (2010). The role of 20-hydroxyecdysone signaling in *Drosophila* pupal metabolism. *Comparative Biochemistry and Physiology A* 157: 398-404.

Gibbs, A.G. and S. Rajpurohit (2010). Water-proofing properties of cuticular lipids. In: *Insect Lipids; Biology, Biochemistry and Chemical Biology* G.J. Blomquist and A.G. Bagnères, eds. pp. 100-120.

Sinclair, B.J., A.G. Gibbs, W-K. Lee, A. Rajamohan, S.P. Roberts and J.J. Socha (2009). Synchrotron X-ray visualisation of ice formation in insects during lethal and non-lethal freezing. *PLoS ONE* 4(12): e8259. doi:10.1371/journal.pone.0008259.

Gefen, E. and A.G. Gibbs (2009). Interactions between environmental stress and male mating success may enhance reproductive isolation of stress-resistant *Drosophila* populations. *Evolution* 63: 1653-1659.

Gibbs, A.G. and E. Gefen (2009). Physiological adaptation and laboratory selection. In: *Experimental Evolution* T. Garland and M.R. Rose, eds. pp. 523-550.

Gefen, E., C. Ung and A.G. Gibbs (2009). Partitioning of transpiratory water loss of the desert scorpion, *Hadrurus arizonensis* (Iuridae). *Journal of Insect Physiology* 55: 544-548.

Dahlhoff, E.P., S.L. Fearnley, D.A. Bruce, A.G. Gibbs, R. Stoneking, D.M. McMillan, K. Diener, J.T. Smiley and N.E. Rank (2008). Differences among phosphoglucose isomerase genotypes in effects of temperature on physiology and fecundity of a montane willow beetle: implications for persistence of native populations enduring climate change. *Physiological and Biochemical Zoology* 81: 718-732.

Smigel, J. and A.G. Gibbs (2008). Conglobation in the pill bug (*Armadillidium vulgare*) as a water conservation mechanism. *Journal of Insect Science* Available online: insectscience.org/8.44.

Gibbs, A.G. and D.K. Hoshizaki (2008). Meeting report: Life is a gas. *Fly* 2: 1-2.

Aguila, J.R., J. Suszko, A.G. Gibbs and D.K. Hoshizaki (2007). The role of larval fat cells in adult *Drosophila melanogaster*. *Journal of Experimental Biology* 210: 956-963.

Sinclair, B.J., A.G. Gibbs and S.P. Roberts (2007). Gene transcription during exposure to, and recovery from, cold and desiccation stress in *Drosophila melanogaster*. *Insect Molecular Biology* 16: 435-443.

Sinclair, B.J., S. Nelson, T.L. Nilson, S.P. Roberts and A.G. Gibbs (2007). The effect of selection for desiccation resistance on cold tolerance of *Drosophila melanogaster*. *Physiological Entomology* 32: 322-327.

Kaun, K.R., C.A.L. Riedl, M. Chakabarty-Chatterjee, A.T. Belay, S.J. Douglas, A.G. Gibbs and M.B. Sokolowski (2007). Natural variation in a cGMP-dependent protein kinase affects food-related traits in *Drosophila*. *Journal of Experimental Biology* 210: 3547-3558.

Gibbs, A.G. (2007). Waterproof cockroaches: the early work of J. A. Ramsay. Invited commentary for JEB Classics. *Journal of Experimental Biology* 210: 921-922.

Hoshizaki, D.K. and A.G. Gibbs (2007). Meeting report: Integrating insulin signaling and stress responses. *Fly* 1: 110-112.

Quinlan, M.C. and A.G. Gibbs (2006). Discontinuous gas exchange in terrestrial insects. *Respiration Physiology and Neurobiology* 154: 18-29.

Chown, S.L., A.G. Gibbs, S.K. Hetz, C.J. Klok, J.R.B. Lighton, E. Marais (2006). Discontinuous gas exchange in insects: a clarification of hypotheses and approaches. *Physiological and Biochemical Zoology* 79: 333-343.

Gefen, E., A.J. Marlon and A.G. Gibbs (2006). Selection for desiccation resistance in adult *Drosophila melanogaster* affects larval development and metabolite accumulation. *Journal of Experimental Biology* 209: 3293-3300.