THOMAS GORDON WILSON

Education

B.S. Clemson University, Entomology 1968
M.S. North Carolina State University Entomology l970
PhD. University of Tennessee, Oak Ridge Biomedical Science 1975

Appointments

Postdoctoral Northwestern University 1975-77
University of California, Irvine, l977-79
Assistant Professor, University of Vermont, l982-1988
Visiting Scientist, CSIRO Division of Molecular Biology, Sydney, Australia, l988-89
Associate Professor, University of Vermont, l989-l993
Associate Professor, Colorado State University, l994-l998
Professor, Colorado State University, l998-2002
Professor, Ohio State University, 2003-present

Program capsules

Research: Molecular genetics of juvenile hormone endocrinology and insecticide resistance
Teaching: Insect molecular genetics; comparative endocrinology

Professional Service Highlights:

Panel member, USDA Competitive Grants Program, l994; 1996
Organizer and Section Chair, ACS Symposium, l995
Panel member, NIH DK Study Section, 2001

Five Selected Publications:

Ashok, M, Turner, C., and Wilson, T.G. l998. Insect juvenile hormone resistance gene homology with the bHLH-PAS family of transcriptional regulators. **Proc. Natl. Acad. Sci USA 95**: 2761-2766.

Restifo, L. and Wilson, T.G. l998. Intersection of ecdysone- and juvenile hormone-regulated pathways in *Drosophila*: evidence for *Broad-Complex* involvement. **Develop. Genet. 22**: 141-159.

Wilson, T.G. 2001. Resistance of *Drosophila* to toxins. **Annu. Rev. Entomol**. 46:545-571.

Daborn, P.J., Yen J.L., Bogwitz, M.R., Le Goff, G., Feil, E., Jeffers, S., Tijet, N., Perry, T., Heckel, D., Batterham, P., Feyereisen, R., Wilson, T.G., and ffrench-Constant, R.H. 2002. A single P450 allele associated with insecticide resistance in *Drosophila*. **Science** 297: 2253-2256.

Wilson, T.G. 2004. The molecular site of action of juvenile hormone and juvenile hormone insecticides during metamorphosis: how these compounds kill insects. **J. Insect Physiol**. 50: 111-121.

Five Selected Grants

NIH Grant RO1 GM 33422-04, a 3-year $276,000 grant; “Genetics of a hormone-resistant *Drosophila* mutant”, l989-1992

USDA Competitive Grants Program 9501918, a 2-year $120,000 grant, "Cloning a juvenile hormone insecticide resistance gene from pest insects", l995- 1997

NSF Grant IBN-9419774, a 3-year $300,000 grant, "Developmental analysis of a putative juvenile hormone receptor", l995-1998

NSF Grant IBN-0109942, a 2-year $210,000 grant, “A Drosophila juvenile hormone receptor”, 2001-2003

NIH Grant RO1 AI 052290, a 4-year $959,375 grant; “JH receptor in flies and mosquitoes”, 2003-2007

Key Collaborations

Dr. Linda Resitifo, Univ Arizona on juvenile hormone pathology in insects