

## CURRICULUM VITAE

**Barbara T. Wakimoto**

University of Washington, Department of Biology

### Education:

1981-1984 Postdoctoral Fellow in Molecular Genetics (with Allan Spradling)  
Carnegie Institution Dept. of Embryology, Baltimore, MD  
1981 Ph.D. in Genetics, Indiana University, Bloomington, IN (with Thomas Kaufman)  
1976 B.Sc. in Zoology, Arizona State University, Tempe, AZ

### Employment:

University of Washington, Seattle, Washington:  
2004-present Professor, Dept. of Biology, Adjunct Professor, Dept. of Genome Sciences  
2003-2004 Associate Chair, Dept. of Biology  
1999-2003 Director, Biology Program  
1997 Professor, Dept. of Zoology, Adjunct Professor, Dept. of Genetics  
1990-1997 Associate Professor, Dept of Zoology, Adjunct Assoc. Prof., Dept. of Genetics  
1984-1990 Assistant Professor, Dept of Zoology, Adjunct Asst. Prof., Dept of Genetics

Visiting Professorships:  
2000 University of Rome, Rome, Italy  
1996-1997 University of California at San Diego and The Salk Institute, La Jolla, CA  
1992 University of Bari, Bari, Italy

### Honors and Awards:

2006 Fellow, American Association for Advancement of Science  
2005-2007 Washington Research Foundation Endowed Professor of Basic Biological Sciences  
2004 National Academies of Science Education Fellow in the Life Sciences  
2000 Istituto Pasteur-Fondazione Cenci Bolognetti Visiting Professorship Award  
1996-1997 NSF Visiting Professorship for Women Award  
1985-1988 Searles Scholar  
1981-1984 Helen Hay Whitney Postdoctoral Fellow  
1978-1981 NIH Genetics Training Grant Pre-doctoral Trainee

### Societies:

American Association for the Advancement of Science  
American Society for Cell Biology  
Genetics Society of America  
Society of Developmental Biology

### Professional Duties (National):

2006-2009 Member, National Science Foundation Advisory Committee  
Directorate of Biological Sciences (BIOAC)  
2006-2009 American Association for the Advancement of Sciences Electorate Nominating  
Committee, Biological Sciences, Section B (community elected position)  
2005-2010 Member, Advisory Committee, March of Dimes, Basil O'Conner Awards  
2007 Member, Review Panel, NIH National Human Genome Research Institute, MOD-  
ENCODE grants  
2004-2007 Member-at-Large, Board of Directors, National Drosophila Research Community  
2003-2004 President, Board of Directors, National Drosophila Research Community  
(community elected position)  
2003-2005 Consultant, Chromatin Inc., Chicago, IL  
2001-2005 Member, Selection Committee, DeLill Nasser Award for Professional Development  
in Genetics, Genetics Society of America  
2000-2003 Secretary, Genetics Society of America (community elected position)  
2000 Ad hoc Member, NIH Reproductive Biology Study Section  
1996- Member, NSF Grants Review Panel, Eukaryotic Genetics Program

**Professional Duties (University of Washington, past 3 academic years):**

- 2006-present Program Director, Interdisciplinary Developmental Biology Graduate Training Grant Program (NIH-funded)
- 2005-present Program Director, UW Howard Hughes Medical Institute Undergraduate Science Education Programs (HHMI-funded)
- 2006-2007 Member: Biology Dept. Promotion and Tenure Committee; Faculty Advisory Group for M.S. in Biology Teaching Grad Program; Advisory Committee, Center for Instructional Development and Resources (2002-2007); Advisory Committee, UW Office of Undergrad Education Classroom Support Services (since 2002)
- 2005-2006 Member: Steering Committee, Molecular and Cellular Biology Graduate Program; UW Provost's Committee on Improving the Undergraduate Experience; College of Arts and Sciences Committee for Integrated Science Degree

**Other Activities in Education:**

- 2008-2011 Associate Editor, CBE-Life Science Education Journal
- 2007-2008 Member, Review Committee, HHMI Science Education Program Grants
- 2007-2010 Co-organizer, Northwest HHMI Network (with Oregon State Univ., Montana State Univ., and Univ. of Montana HHMI Program Directors)
- 2006 - 2008 Organizer, Diversity in the Sciences Symposia (HHMI-, NIH-, university-funded)  
Member, Core Committee, Diversity in the Sciences Consortium Group
- 2004 Participant, National Academies of Sciences Summer Institute on Undergraduate Education, Univ. of Wisconsin
- 2003-2005 Organizer, UW HHMI Future Faculty Fellows Program for Postdoctoral Scientists
- 2003 Member, UW College of Arts and Sciences Writing in the Curriculum Committee
- 2002 Member, Search Committee, UW Dean Undergraduate Education & Vice Provost
- 1999-2003 Chair, UW Biology Curriculum Committee

**Teaching Interests:** Undergraduate level courses: Introductory Biology, Foundations Cell Biology, Advanced Cell Biology, Cell and Molecular Biology of Human Diseases, Controversies in Biology Seminar Courses  
Graduate level courses: Cellular & Developmental Biology, Analysis of Development, Biology of Drosophila, Grad Seminar on Teaching, Mentoring, & Preparing for Your Postdoc

**Research Interests:** Developmental Genetics, Reproductive Biology, Fertilization Epigenetics, Chromosome Structure, and Heterochromatin

**Recent Invited Research Presentations (last five years):**

Western Washington University, Dept. of Biology  
Epigenetics in Biology & Disease Conference, FHCRC, Plenary Speaker  
University of North Carolina, Genetics Graduate Group  
National Meeting American Society of Andrologists, Plenary Lecturer  
Chromatin Inc., Chicago ILL, Research Presentation  
Gordon Conference on Molecular Evolution, Plenary Speaker  
Tucson Comparative Genomics of Drosophila, Symposium Speaker  
The Jackson Labs, Bar Harbor, Seminar  
University of Texas SW Medical School, Green Reproductive Biology Postdoc-Invited Speaker  
University of California – San Francisco, Dept. of Biochemistry Seminar  
Gordon Conference on Fertilization, Session Leader and Speaker  
National Academy of Sciences/ Institute of Medicine Symposium: "New Frontiers in Contraceptive Research", Plenary Speaker  
International Conference on Heterochromatin, Invited Speaker and Session Leader  
Universita di Roma "La Sapienza", Department of Genetics Seminar  
Universita Tuscia, Department of Biology Seminar  
Cell Biology Group, Hospital for Sick Children, Toronto, Seminar

### Grants (last 5 years):

- 2002-present National Science Foundation IBN-0211733  
“Developmental genetic analysis of fertilization pathways in *Drosophila*”  
P.I. Barbara T. Wakimoto
- 2006-present Howard Hughes Medical Institute Science Education Grant  
Program Director: Barbara T. Wakimoto
- 2006-present National Institutes of Health  
Interdisciplinary Graduate Training Program in Developmental Biology  
Program Director: Barbara T. Wakimoto  
\$389,547 annual costs
- 2002-2007 National Science Foundation MCB-0213163  
“Heterochromatic loci and position effects in *Drosophila*”  
P.I. Barbara T. Wakimoto
- 2005-2007 National Institutes of Health U54 HD42454  
NIH – Center for Research in Reproduction and Contraception Pilot Project  
“TILLING *Drosophila* for reproductive molecules”  
P.I. William Bremner,

### Selected Publications:

- Wakimoto B.T. (2000) Doubling the rewards: testis ESTs for *Drosophila* gene discovery and spermatogenesis expression profile analysis. *Genome Res.* 10(12), 1841-2.
- Tomkiel, J.E., Wakimoto, B.T., and Briscoe, A. (2001) The *teflon* gene defines a function required for cohesion between autosomal homologs at meiosis I in *Drosophila*. *Genetics* 157, 273-281.
- Eacker, S. and Wakimoto, B.T. (2001) Paternal inheritance. *Encyclopedia of Genetics*, Editors: Sydney Brenner and Jeffrey H. Miller, Elsevier Press.
- Weiler, K.S. and Wakimoto, B.T. (2002) Suppression of heterochromatic gene variegation can be used to distinguish and characterize *E(var)* genes potentially important for chromosome structure in *Drosophila melanogaster*. *Mol Genet Genomics* 266(6):922-32.
- Hoskins, R.A., Smith, C.D., Carlson, J.W., Carvalho, A.B., Halpern, A., Kaminker, J.S., Kennedy, C., Mungall, C.J., Sullivan, B.A., Sutton, G.G., Yasuhara, J.C., Wakimoto, B.T., Myers, E.W., Celniker, S.E., Rubin, G.M., and Karpen, G.H. Heterochromatic sequences in a *Drosophila* whole-genome shotgun assembly. (2002) *Genome Biol.* 3(12):RESEARCH 0085.1-0085.16.
- Pimpinelli, S. and Wakimoto, B.T. (2003) Expanding the boundaries of heterochromatin. *Genetica* 117(1-2):111-116.
- Yasuhara, J.C., Marchetti, M., Fanti, L., Pimpinelli, S., and Wakimoto, B.T. (2003) A strategy for mapping the heterochromatin of Chromosome 2 of *D. melanogaster*. *Genetica* 117(1-2): 217-226.
- Wakimoto, B.T., Lindsley, D., and Herrera, C. (2004) Toward a comprehensive genetic analysis of male fertility in *Drosophila melanogaster*, *Genetics* 167(1): 207-16.
- Giansanti, M.G., Farkas, R.M., Bonaccoris, S., Lindsley, D.L., Wakimoto, B.T., Fuller, M.T., and Gatti, M. (2004) Genetic dissection of meiotic cytokinesis in *Drosophila* males. *Molecular Biology of the Cell* 15: 2509-2522.
- Yasuhara, J.C., DeCrease, C., and Wakimoto, B.T. (2005) Evolution of heterochromatic genes of *Drosophila*. *Proc. Natl. Acad. Sci.* 102: 10958-10963.
- Yasuhara, J. C. and Wakimoto, B.T. (2006) Oxymoron no more: the expanding world of heterochromatic genes *Trends in Genetics* 22:330-338.
- Wilson, K.L, Fitch, K.R., Bafus, B.T., and Wakimoto, B. T. (2006) Sperm plasma membrane breakdown during *Drosophila* fertilization requires Sneaky, an acrosomal membrane protein, *Development* 133:4871-4879.
- Smith, M.K., and Wakimoto, B.T. (2007) Complex regulation and multiple developmental functions of *misfire*, the *Drosophila melanogaster* ferlin gene. *BioMed Central Dev. Biology* March 26; 7:21.
- Yasuhara, J.Y. and Wakimoto, B.T. (2008) Molecular landscape of histone modifications in *Drosophila* heterochromatic genes and euchromatin-heterochromatin transition zones, *PLoS Genetics* 4(1): e16 doi:10.1371/journal.pgen.004001