

Timothy D. Walston

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Department of Biology
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EDUCATION

University of Wisconsin-Madison, Madison, Wisconsin, 2000-2006
Ph.D. in Genetics

University of Wisconsin-La Crosse, La Crosse, Wisconsin, 1998-2000
M.S. in Biology – Cellular and Molecular Biology

Taylor University, Upland, IN, 1994-1998
B.A. in Biology – Pre-Medicine

TEACHING EXPERIENCE

Truman State University, Kirksville, Missouri
Assistant Professor, 2006-present
Associate Director, STEP (STEM Talent Expansion Program) Office, 2009-present

Courses taught:

BIOL107: Introductory Biology I (Fall 2006 – 2009)
BIOL145: Freshman Biology Seminar (Fall 2007, 2010)
BIOL300: Genetics (Spring 2007 – 2010)
BIOL362: Embryology and Developmental Biology (Fall 2008, 2009, 2010)
INDV101: Truman Week (Fall 2007, 2009, 2010)
IDSM140: Integrated Freshman Seminar: STEM (Science, Technology, Engineering and Mathematics) (Fall 2010)

Advising and Mentoring:

Mentored 14 undergraduates and 1 Masters student in research projects
(See “Research Presentations of Student Mentees”)

Mentored 15 undergraduate and 2 graduate teaching assistants

Served as an academic advisor

Fall 2007 – 9 undergraduate advisees

Spring 2008 – 12 undergraduate advisees

Fall 2008 – 22 undergraduate advisees, 1 graduate advisee

Spring 2009 – 20 undergraduate advisees, 1 graduate advisee

Fall 2010 – 21 undergraduate advisees, 2 graduate advisees

University of Wisconsin-Stevens Point, Stevens Point, Wisconsin
Adjunct Faculty, Spring 2006
Course: BIOL 317/517: Developmental Biology

Crossroads College, Rochester, Minnesota
Adjunct Faculty, January 2003
Course: NSQ 2700: Contemporary Issues in Genetics

University of Wisconsin-Madison, Madison, Wisconsin
Teaching Assistant: ZOO 470: Introduction to Animal Development (Spring 2003)
GEN 466: General Genetics (Fall 2001)
Guest Lecturer: ZOO 679: Senior Honors Seminar (March 2003)
Trainer/Mentor: Hardin Lab (2001-2005)
-Mentored undergraduate and first-year graduate student research projects

WormClassroom.org
Lecture Contributor: "C. elegans Early Embryo Development" (Fall 2005)
www.wormclassroom.org/ce/dbCimCollege.html

University of Wisconsin-La Crosse, La Crosse, Wisconsin
Teaching Assistant: BIO 436/536: Molecular Biology Lab (Fall 1999)
BIO 101: Introductory Biology (1998 – 2000)
Guest Lecturer: BIO 435/535: Molecular Biology (Fall 2005)
Trainer/Mentor: Cooper Lab (1998-2000)
-Supervised six undergraduates in one-year independent study research projects.

Taylor University, Upland, Indiana
Teaching Assistant: BIO 101: Cell Biology (Fall 1997, Spring 1998)

RESEARCH EXPERIENCE

Truman State University – Principal Investigator, 2006-present

Current Undergraduate Research Projects:

- Mathematical Biology Research Learning Community – Modeling the forces that direct cell shape during early embryogenesis in *C. elegans* (Interdisciplinary)
- Establishing *C. elegans* as a genetic model for neural tube defects
- *C. elegans* as an indicator of *Staphylococcus aureus* virulence
- Survey of early cell division and morphogenesis in diverse nematode species
- Genetic analysis of embryonic morphogenesis

University of Wisconsin-Madison - Doctoral Research, 2000 – 2006

Thesis title: The role of the Dishevelleds during cell division and morphogenesis in *C. elegans*. Advisor: Jeff Hardin.

University of Wisconsin-La Crosse - Masters Research, 1998-2000

Thesis title: Role of the H-helix in serpin inhibition of thrombin bound to thrombomodulin. Advisor: Scott Cooper.

PUBLICATIONS (underline indicates undergraduate author)

2010:

Walston, T. and Hardin, J., Visualizing cell contacts and cell polarity in *Caenorhabditis elegans* embryos. Chapter in "Imaging in Developmental Biology", R. Wong and J. Sharpe, editors. Cold Spring Harbor Laboratory Press, *in press*.

Miller, J. and **Walston, T.**, Interdisciplinary training in mathematical biology through team-based undergraduate research and courses. *CBE-Life Sciences Education* (2010) 9(3): 284-289.

2009:

King, R., Maiden, S., Hawkins, N., Kidd, A., Kimble, J., Hardin, J., and **Walston, T.** The N- or C-terminal domains of DSH-2 can activate the *C. elegans* Wnt/ β -catenin asymmetry pathway. *Developmental Biology* (2009) 328(2):245-256.

Hingwing, K., Lee, S., Nykilchuk, L., **Walston, T.**, Hardin, J., and Hawkins, N. CWN-1 functions with DSH-2 to regulate *C. elegans* asymmetric neuroblast division in a β -catenin independent Wnt pathway. *Developmental Biology* (2009) 328(2):234-244.

2007:

Gonzales, P., **Walston, T.**, Camacho, L., Kielar, D., Church, F., Rezaie, A., and Cooper, S. Mutation of the H-helix in antithrombin decreases heparin stimulation of protease inhibition. *Biochimica et Biophysica Acta – Proteins & Proteomics* (2007) 1774(11):1431-1437.

2006:

Lee, J.* , Marston, D.* , **Walston, T.**, Hardin, J., Halberstadt, A., and Goldstein, B. Wnt/Frizzled signaling controls *C. elegans* gastrulation by activating actomyosin contractility. *Current Biology* (2006) 16(20):1986-1997.

Walston, T.*, Guo, C.* , Hardin, J., and Hedgecock, E. *mig-5* controls cell fate determination and cell migration in *C. elegans*. *Developmental Biology* (2006) 298(2):485-497.

Walston, T. and Hardin, J. Wnt signaling directs asymmetric cell divisions in *C. elegans* embryos. *Seminars in Developmental Biology* (2006) 17(2):204-213 (Invited review article).

2004:

Walston, T., Tuskey, C., Edgar, L., Hawkins, N., Ellis, G., Bowerman, B., Wood, W., and Hardin, J. Multiple Wnt signaling pathways converge to orient the mitotic spindle in early *C. elegans* embryos. *Developmental Cell* (2004) 7(6):831-841.

Hardin, J., and **Walston, T.** Models of morphogenesis: the mechanisms and mechanics of cell rearrangement. *Current Opinion in Genetics and Development*. (2004) 14(4):399-406 (Invited review article).

2003:

Yang, L., Manithody, C., **Walston, T.**, Cooper, S., and Rezaie, A. Thrombomodulin enhances the reactivity of thrombin with protein C inhibitor by providing both a binding-site for the serpin and allosterically modulating the activity of thrombin. *Journal of Biological Chemistry* (2003) 278(39):37465-37470.

2000:

Wilkomm, K., Camacho, L., Wong, L., **Walston, T.**, Wolf, M., and Cooper, S. Conversion of the heparin binding domain in human antithrombin to resemble that of protein C inhibitor. *University of Wisconsin-La Crosse Journal of Undergraduate Research* (2000) 3:161. (non-peer reviewed)

MASTER'S STUDENT THESES

King, Michelle, Establishing *C. elegans* as a model of neural tube defects, Summer 2010.

Johnson, Corey, Geometric comparisons of the EMS blastomere in *Caenorhabditis elegans* and *Caenorhabditis briggsae*. *In progress*.

Johnson, Charleen, A genetic screen for genes involved in embryonic morphogenesis. *In progress*.

RESEARCH PRESENTATIONS (underline indicates undergraduate author)**2010:**

Walston, T., Confocal microscopy at Truman State University. Seminar presentation. Truman State University BBB Meeting.

2009:

Walston, T., Model organisms: What does a worm embryo tell us about ourselves? Seminar presentation. Truman State University Faculty Research Conference.

Walston, T., Sometimes life needs to be dishevelled: Cell shape, polarity, and migration in the *C. elegans* embryo. Seminar presentation. Missouri Western University Biology Seminar.

Walston, T., Research in *C. elegans*. Invited lecture. Missouri Western University Developmental Biology Lab.

2008:

Beck, J., Matthews, B., Miller, J. and **Walston, T.**, Learning experiences in integrative mathematics and biology at Truman State University. Poster presentation. Monsanto “Preparing Students for Careers in Industry” Workshop.

Miller, J. and **Walston, T.** Learning experiences in integrative mathematics and biology at Truman State University. Poster presentation. Howard Hughes Medical Institute Quantitative Biology Workshop.

Walck, E., Davis, C., Thatcher, S., and Walston, T., A Glazier-Granier-Hogeweg (GGH) Model for *Caenorhabditis elegans* embryonic development. Poster presentation. Worm Development and Evolution Meeting.

Walston, T., Nematodes and “What can we learn from the skin of a worm?” Invited lecture. Schuyler County High School Advanced Biology Class.

2007:

Walston, T., What can we learn from the skin of a worm? Explorations in embryogenesis and cell migration. Invited seminar presentation. A.T. Still University-Kirksville College of Osteopathic Medicine Basic Sciences Seminar.

Walston, T., Sometimes life needs to be dishevelled: Roles for Wnt signaling in *C. elegans*. Seminar presentation. Truman State University BBB Meeting.

2006:

Walston, T., Guo, C., Proenca, R., Wu, M., Herman, M., Hardin, J., and Hedgecock, E. *mig-5/Dsh* controls cell fate determination and cell migration in *C. elegans*. Poster presentation. *C. elegans* Development and Evolution Meeting.

2005:

Walston, T., King, R., Nakamura, K., Mello, C., and Hardin, J. Wnt signaling regulates hypodermal morphogenesis. Seminar presentation. 15th International *C. elegans* Meeting.

2004:

Walston, T., Tuskey, C., Hawkins, N., Ellis, G., Bowerman, B., and Hardin, J. The Dishevelleds and Casein Kinase I regulate spindle orientation through a Wnt pathway independent of transcription. Seminar presentation. Midwest Worm Meeting.

2003:

Walston, T., Tuskey, C., Ellis, G., Bowerman, B., and Hardin, J. The Dishevelleds act redundantly in spindle positioning in early *C. elegans* embryos. Seminar presentation. 14th International *C. elegans* Meeting.

2002:

Walston, T. Sometimes life needs to be dishevelled: Roles for Wnt signaling in *C. elegans*. Seminar presentation. Zoology Research Show and Tell.

Walston, T., Hawkins, N., Ellis, G., Bowerman, B., and Hardin, J. A role for Wnt signaling in morphogenesis. Poster presentation. Midwest Worm Meeting.

2000:

Walston, T., Wolf, M., Stoehr, R., Thomas, M., Rezaie, A., and Cooper, S. Role of the H-helix in serpin inhibition of thrombin bound to thrombomodulin. Poster presentation. American Society for Biochemistry and Molecular Biology Annual Meeting.

1999:

Walston, T., Stoehr, R., Thomas, M., and Cooper, S. Alteration of the negatively charged H-helix in human antithrombin. Poster presentation. American Society for Biochemistry and Molecular Biology Annual Meeting.

RESEARCH PRESENTATIONS OF STUDENT MENTEES (underline indicates undergraduate author)

2010:

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *Caenorhabditis elegans* as a model host for *Staphylococcus aureus* virulence. Poster presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

Johnson, C. and **Walston, T.** Geometric comparisons of the EMS blastomere in *Caenorhabditis elegans* and *Caenorhabditis briggsae*. Poster presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *Caenorhabditis elegans* as a model host for *Staphylococcus aureus* virulence. Poster presentation. National Conference on Undergraduate Research.

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *Caenorhabditis elegans* as a model host for *Staphylococcus aureus* virulence. Poster presentation. Truman State University Student Research Conference.

Johnson, C. and **Walston, T.** Geometric comparisons of the EMS blastomere in *Caenorhabditis elegans* and *Caenorhabditis briggsae*. Seminar presentation. Truman State University Student Research Conference.

Johnson, C., Zittnan, C., **Walston, T.,** and Thatcher, S. A Glazier-Granier-Hogeweg model of early embryogenesis in *Caenorhabditis elegans*. Seminar presentation. Truman State University Student Research Conference.

King, M., **Walston, T.**, Beck, J., and Buckner, B. Establishing *Caenorhabditis elegans* as a model for neural tube defects. Seminar presentation. Truman State University Student Research Conference.

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *Caenorhabditis elegans* as a model host for *Staphylococcus aureus* virulence. Poster presentation. Capitol Appreciation Day – Kirksville Showcase, Jefferson City, MO.

Johnson, C., Zittnan, C., Thatcher, S., and **Walston, T.** A Glazier-Granier-Hogeweg model of early development and centrosomal movement in *Caenorhabditis elegans*. Poster presentation. Capitol Appreciation Day – Kirksville Showcase, Jefferson City, MO.

Johnson, C. Geometric comparisons of the EMS blastomere in *Caenorhabditis elegans* and *C. briggsae*. Seminar presentation. Truman State University Biology Seminar.

2009:

Johnson, C., Zittnan, C., Thatcher, S., and **Walston, T.** A Glazier-Granier-Hogeweg model of early development and centrosomal movement in *Caenorhabditis elegans*. Seminar presentation. National Institute for Mathematical and Biological Synthesis (NIMBioS) Undergraduate Research Conference.

Zittnan, C., Johnson, C., Thatcher, S., and **Walston, T.** A Glazier-Granier-Hogeweg model of early embryogenesis in *Caenorhabditis elegans*. Seminar presentation. Truman Mathematical Biology Colloquium.

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *Caenorhabditis elegans* as a model host for *Staphylococcus aureus* virulence. Poster presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

Zittnan, C., Johnson, C., Thatcher, S., and **Walston, T.** Segmenting early embryogenesis in *Caenorhabditis elegans*. Poster presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

King, M., and **Walston, T.** Establishing *Caenorhabditis elegans* as a model for neural tube defect. Poster presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

Budine, T., Chamberlain, N., Singh, V., and **Walston, T.** *C. elegans* as a model host for *S. aureus* virulence. Poster presentation. Truman Summer Undergraduate Research Experience Poster Session.

Zittnan, C., Johnson, C., Thatcher, S., and **Walston, T.** Segmenting early embryogenesis in *Caenorhabditis elegans*. Seminar presentation. Truman MathBio Research Presentations, Bond Life Sciences Center, University of Missouri.

King, M., and **Walston, T.** Effect of folic acid on cell migration during hypodermal morphogenesis. Poster presentation. 17th International *C. elegans* Meeting.

Warnhoff, K., Wehrman, A., Thatcher, S., and **Walston, T.** Segmenting early embryogenesis in *Caenorhabditis elegans*. Poster presentation. 17th International *C. elegans* Meeting.

Ekpoh, K. H., and **Walston, T.** Determination of an effective substrate for nutritional examination of *C. elegans* during embryogenesis. Poster presentation. National Conference on Undergraduate Research.

King, M., and **Walston, T.** Determination of an effective substrate for nutritional examination of *C. elegans* during embryogenesis. Seminar presentation. National Conference on Undergraduate Research.

Ekpoh, K. H., and **Walston, T.** Determination of an effective substrate for nutritional examination of *C. elegans* during embryogenesis. Poster presentation. Truman State University Student Research Conference.

King, M., and **Walston, T.** Effect of folic acid on cell migration during *Caenorhabditis elegans* development. Seminar presentation. Truman State University Student Research Conference.

Walck, E., and **Walston, T.** Determining the function of *Dishevelled* protein domains during development. Seminar presentation. Truman State University Student Research Conference.

Warnhoff, K., Wehrman, A., **Walston, T.**, and Thatcher, S., Segmenting early embryogenesis in *Caenorhabditis elegans* embryos. Seminar presentation. Truman State University Student Research Conference.

Wehrman, A., Warnhoff, K., Thatcher, S., and **Walston, T.** A semi-automated procedure for segmenting early embryogenesis in *Caenorhabditis elegans*. Poster presentation. Capitol Appreciation Day – Kirksville Showcase, Jefferson City, MO.

2008:

Ekpoh, K. H. and **Walston, T.** Hypodermal morphogenesis in nematodes. Poster presentation. Science Pioneers Reverse Science Fair, Kansas City, MO.

Wehrman, A., Warnhoff, K., Thatcher, S., and **Walston, T.** A semi-automated procedure for segmenting early embryogenesis in *Caenorhabditis elegans*. Poster presentation. Society for Mathematical Biology Annual Meeting.

Ekpoh, K. H. and **Walston, T.** Hypodermal morphogenesis in nematodes. Poster presentation. Truman Summer Undergraduate Research Experience Poster Session.

Wehrman, A., Warnhoff, K., Thatcher, S., and **Walston, T.** Segmenting early embryogenesis in *Caenorhabditis elegans*. Seminar presentation. Truman MathBio Research Presentations, Donald Danforth Plant Sciences Center.

King, M., and **Walston, T.** Determination of an effective substrate for nutritional examination of *C. elegans* during embryogenesis. Poster presentation. Truman State University Student Research Conference.

Walck, E., Davis, C., Thatcher, S., and **Walston, T.** A Glazier-Granier-Hogeweg (GGH) Model for *Caenorhabditis elegans* embryonic development at the four-cell stage. Seminar presentation. Truman State University Student Research Conference.

2007:

Walck, E., Davis, C., Thatcher, S., and **Walston, T.** A Cellular Potts model of *Caenorhabditis elegans* embryonic development in the four-cell stage. Poster presentation. The Joint Annual Meetings of the Society for Mathematical Biology and the Japanese Society for Mathematical Biology. (Best undergraduate poster award)

Walck, E., Davis, C., Thatcher, S., and **Walston, T.** A Cellular Potts model of *Caenorhabditis elegans* embryonic development in the four-cell stage. Poster presentation. Truman Summer Undergraduate Research Experience Poster Session.

King, M., and **Walston, T.** Establishing *C. elegans* as a model system for neural tube defects. Poster presentation. Truman Summer Undergraduate Research Experience Poster Session.

COLLABORATIVE RESEARCH PRESENTATIONS (underline indicates undergraduate author)

2009:

Middlemas, D. and **Walston, T.**, Confocal Microscope Research. Seminar presentation. Interdisciplinary Biomedical Research Symposium, A.T. Still University.

Cooper, C., Janick-Buckner, D., **Walston, T.**, and Moore, B. Innovative Biology Education at Truman State University. Poster presentation. Transforming Undergraduate Education in Biology Conference.

Hingwing, K., Lee, S., **Walston, T.**, Hardin, J., and Hawkins, N. Identification of *dsh-2* genetic interactors that regulate asymmetric neuroblast division through a β -catenin. Poster presentation. 17th International *C. elegans* Meeting.

2007:

Hingwing, K., Lee, S., Nykilchuk, L., **Walston, T.**, Hardin, J., and Hawkins, N. Elucidating the role of DSH-2 and CWN-1 in asymmetric cell division. Poster presentation. 16th International *C. elegans* Meeting.

2006:

Grana, T., Cox, E., **Walston, T.**, and Hardin, J. HMR-1/cadherin and SAX-1/L1CAM function redundantly to regulate cell-cell adhesion and gastrulation in *C. elegans*. Poster presentation. American Society for Cell Biology Meeting.

Walston, T., King, R., and Hardin, J. Wnt signaling regulates cell rearrangement during morphogenesis in *C. elegans*. Seminar presentation. *C. elegans* Development and Evolution Meeting.

Marston, D., Lee, J., Halberstadt, A., **Walston, T.**, Hardin, J., and Goldstein, B. Wnt/Frizzled signaling controls *C. elegans* gastrulation by activating actomyosin contractility. Seminar presentation. *C. elegans* Development and Evolution Meeting.

Hingwing, K., Lee, S., Nykilchuk, L., Hardin, J., **Walston, T.**, and Hawkins, N. Identification of genes that function with DSH-2 to regulate asymmetric cell division. Poster presentation. *C. elegans* Development and Evolution Meeting.

Grana, T., Cox, E., **Walston, T.**, and Hardin, J. HMR-1/cadherin and SAX-7/L1CAM function redundantly to regulate cell-cell adhesion, cell division polarity and gastrulation in *C. elegans*. Poster presentation. *C. elegans* Development and Evolution Meeting.

2005:

Lee, S., Hingwing, H., Gleave, J., **Walston, T.**, Hardin, J., and Hawkins, N. A genetic screen to isolate genes that function with DSH-2 in asymmetric cell division. Poster presentation. 15th International *C. elegans* Meeting.

2003:

Tuskey, C., **Walston, T.**, Ellis, G., Bowerman, B., and Hardin, J. Wnt signaling orients the mitotic spindle in the early *C. elegans* embryo. Poster presentation. 14th International *C. elegans* Meeting.

2000:

Willkomm, K., Camacho, L., Wong, L., **Walston, T.**, Wolf, M., and Cooper, S. Conversion of the heparin binding domain in human antithrombin to resemble that of protein C inhibitor. Poster presentation. American Society for Biochemistry and Molecular Biology Annual Meeting.

1999:

Thomas, M., Walston, T., Stoehr, R., and Cooper, S. Replacement of the reactive site loop of human antithrombin with that of protein C inhibitor. Poster presentation. American Society for Biochemistry and Molecular Biology Annual Meeting.

EXTERNAL FUNDING

J. Miller (Principal Investigator), B. Kramer and **T. Walston**. National Science Foundation Proactive Recruitment in Introductory Science and Mathematics – “Scientists Prepared, Enriched, and Challenged Through Research-based Activities (SPECTRA)” \$1,200,000 (2009-2014).

T. Walston (Principal Investigator), Z. Ma, J. Herrera, D. Janick-Buckner, and B. Buckner. National Science Foundation Major Research Instrumentation – “Acquisition of Confocal Microscopy Instrumentation to Enhance Undergraduate Research at Truman State University” \$196,304 (2009-2012).

AWARDS AND HONORS

BBB Biology Professor of the Year Runner-up – Truman State University, 2009-2010
 Educator of the Year Nominee – Truman State University, 2010
 William O’Donnell Lee Advising Award Nominee – Truman State University, 2009
 Rada Distinguished Alumni Award Nominee – UW-LaCrosse, 2008
 Best Undergraduate Poster (Awarded to Elise Walck) – Society for Mathematical Biology, 2007
 Schlimgen Outstanding Genetics Ph.D. Research Award – Department of Genetics, UW-Madison, 2006
 Vilas Travel Fellowship – Graduate Student Collaborative, UW-Madison, 2005
 John Jefferson Davis Travel Fellowship – Dept. of Zoology, UW-Madison, 2004, 2005
 U.S. Patent No. 6,794,493 – Antithrombin H-helix Mutants, Walston, T., Cooper, S., and Rezaie, A. – United States Patent and Trademark Office, 2004
 Graduate Training Grant Fellowship – Laboratory of Genetics, UW-Madison, 2000 – 2002

UNIVERSITY AND SCIENTIFIC COMMUNITY SERVICE

BIOL545 Waiver Committee, Truman State University, Fall 2010-present
 Fishing Club Faculty Advisor, Truman State University, Fall 2010-present
 Confocal Microscope Oversight Committee (Chair), Truman State University, Fall 2009-present
 SPECTRA Program Steering Committee, Truman State University, Fall 2009-present
 University Admissions Committee, Truman State University, Spring 2009-present
 Biochemistry and Molecular Biology Major Committee, Truman State University, Spring 2008 - present
 Biology Masters Program Committee, Truman State University, Spring 2008-present

Genetics Education Curriculum Committee, American Society of Human Genetics, 2007-present
 K-12 Genetics Mentor, American Society of Human Genetics, 2006-present
 Member, American Association for the Advancement of Science, 1998-present
 Member, Genetics Society of America, 2003-present
 Truman State University Senior Portfolio Reviewer, Summer 2010
 Graduate Council Representative, Truman State University, Spring 2010
 Mathematical Biology Minor Oversight Committee, Truman State University, 2009
 NSF Research Learning Communities in Mathematical Biology Mentor, 2007-2009
 NSF Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) Mentor, 2007-2009
 Animal Models Panel, Interdisciplinary Biomedical Research Symposium, AT Still University, Fall 2009
 National Science Foundation Major Research Instrumentation Panel Reviewer, 2009
 Poster Session Judge, 17th International *C. elegans* Meeting, 2009
 Poster Session Judge, Worm Development and Evolution Meeting, 2008
 Biology Department Technician Search Committee, Truman State University, Spring 2008
 Ecological Geneticist Search Committee, Truman State University, September 2007-February 2008
 Microscopy and Digital Imaging Workshop, Math-Biology Program, Truman State University, July 20, 2007
 Education Workshop Panel, International *C. elegans* Meeting, June 28, 2007
 Genetics Department Retreat Committee, UW Madison, 2001-2005
 Volunteer, Society for Developmental Biology Annual Meeting, 2002
 Peer reviewer – *CBE-Life Sciences Education* (August 2007, October 2007, July 2010),
 Brooker *Biology* textbook chapter review (2007), Brooker *Genetics* textbook chapter review (2010, 2007)

VOLUNTEER COMMUNITY SERVICE

National Weather Service Trained Storm Spotter, CWIP# ADA210, 2005-present
 Bioethics Class Teacher, Grace Community Bible Church, Kirksville, MO, Fall 2010
 Young Couples Class Coordinator, Grace Community Bible Church, Kirksville, MO, Fall 2008-present
 Marriage Conference Host, *Love and Respect*, Grace Community Bible Church, Kirksville, MO, April 18-19, 2008
 Marriage Class Leader, *Love and Respect*, Grace Community Bible Church, Kirksville, MO, November 2007-February 2008
 Marriage Support Group Leader, *An Intimate Marriage*, First Assembly of God, Kirksville, MO, September-October 2007, May-June 2008
 Marriage Mentor, Blackhawk Church, Madison, WI, 2005-2006
 Personal Finance Teacher, Blackhawk Church, Madison, WI, 2004-2006
 American Red Cross Blood Drive Coordinator, Madison, WI, 2003-2006
 Three blood drives yearly with approximately 100 donors each
 American Red Cross Blood Donor – 36 lifetime units donated