

Heather L. D. Brown

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EDUCATION

University of Washington, Ph.D in Molecular and Cellular Biology. October 2001 to December 2007. Principal Advisor: Dr. James W. Truman, Department of Biology.
Washington State University, B.S. in Zoology, with minors in Biology and Ecology. September 1994- May 1998.

TEACHING AND MENTORING EXPERIENCE

Lecturer, Seattle University Biology Department. October 2010-present.

Bio I: Molecular and Cellular Biology – BIOL 161 & 171. Introductory course for majors emphasizing molecular and cellular biology, includes lab course.

Bio II: Ecology and Evolution – BIOL 162 & 172. Introductory course for majors emphasizing ecology, biodiversity and evolution, includes lab course.

Developmental Biology – BIOL 310. Upper level course for majors focusing on developmental processes of various organisms, includes lab course.

Principles of Biology – BIOL 101. Introductory course for non-majors

Genetics of Disease* – UCOR 1820. Introductory course for non-majors focusing on the process of science and biological concepts through the lens of inherited diseases.

Fierce Creatures: How Evolution Shapes Life on Earth* – UCOR 1820. Introductory course for non-majors focusing on the process of science and biological concepts through the lens of evolution. This course has been developed but not yet taught.

The Big C: Cancer in the 21st Century* – UCOR 3820. Upper level course for non-majors emphasizing concepts, disciplinary approaches and global issues relating to cancer.

**New core courses proposed and developed by H. Brown; accepted for implementation in the new Seattle University Core Curriculum beginning Fall 2013.*

Adjunct Lecturer, Seattle University Biology Department. January 2010-March 2010.

Bio I: Molecular and Cellular Biology – BIOL 161 & 171.

Instructor, University of Washington Robinson Center. July 2011, 2012 & 2013.

The Incredible World of Plants Summer Challenge Course. Development and instruction of an accelerated hands-on botany course for advanced 5th and 6th grade students.

Lecturer, University of Washington, Department of Biology. June 2008- August 2008.

Foundations in Molecular and Cellular Biology – BIOL 355. Course development and instruction in cooperation with Dr. Susan McNabb.

Guest Lecturer, Fred Hutchinson Cancer Research Center/New Mexico State University. October 13-15, 2009.

Introduction to Cancer – BIOL 385. Lecture development in conjunction with the Cancer Teaching Fellows Program at Fred Hutchinson Cancer Research Center.

Guest Lecturer, University of Puget Sound, Department of Biology. March 5, 2009.

Cell Biology – BIOL 212.

Greenhouse Docent, UW Department of Biology. October 2003- October 2007.
Docent for groups of all ages touring the botanical collections.

Teaching Assistant, Marine Biological Laboratory, Woods Hole, MA. July 2006 & 2007.
Neural Systems and Behavior Summer Course.

Teaching Assistant, UW Department of Biology. Winter 2007 & 2008.
Entomology – BIOL 454
Foundations in Molecular and Cellular Biology – BIOL 355

Science Education Partnership Program Teaching Assistant, Fred Hutchinson Cancer Research Center. Summer 2002.
Included public scientific outreach activities and laboratory mentoring of high school teachers, along with training workshops in scientific communication.

Undergraduate Research Mentor, UW Department of Biology. Jan 2007-June 2007.
Mentoring of an undergraduate neurobiology student in the development and implementation of a *Drosophila* neurodevelopment research project.

FHCRC Undergraduate Poster Session Judge, August 2009.

Guest Speaker in BIO 113D: Learning to Learn in Science. May 2007.

Bioscience Careers Seminar Committee Member, 2005 to 2009.

UWSOM Bioscience Experience Session Leader, July 2005.

RESEARCH EXPERIENCE

Postdoctoral Researcher, Fred Hutchinson Cancer Research Center. 2008-2010. Faculty Advisor: Dr. Bruce Edgar, Division of Basic Sciences. Investigation of the Tor pathway and its impact on the neuronal architecture of the *Drosophila* nervous system.

Ph.D Dissertation, University of Washington Molecular and Cellular Biology Department. 2001-2007.
Faculty Advisor: Dr. James W. Truman, Department of Biology.
Steroid hormone receptor regulation of neuronal pruning and outgrowth in the Drosophila central nervous system. Funded from 2003 to 2006 by the NIH Developmental Biology Training Grant.

Undergraduate Research, Washington State University, September 1997- May 1998.
Advisor: Dr. Lisa Shipley, Department of Natural Resource Sciences. Research on the nutritional physiology of the South African duiker. Funded by the Howard Hughes Undergraduate Research Fellowship.

PUBLICATIONS

Brown H.L., Kaun, K.R. and B.A. Edgar. The small GTPase Rheb affects central brain neuronal morphology and memory formation in *Drosophila*. *PLoS One*, 2012. Sept; 7(9):e44888.

Brown, H.L. and J.W. Truman. Fine-tuning of secondary arbor development: the effects of the ecdysone receptor on the adult neuronal lineages of the *Drosophila* thoracic CNS. *Development*, 2009. Oct; 136(19): 3247-56.

Brown H.L., Cherbas L., Cherbas P., and J.W. Truman. Use of time-lapse imaging and dominant negative receptors to dissect the steroid receptor control of neuronal remodeling in *Drosophila*. *Development*, 2006. Jan; 133(2): 275-85.

PROFESSIONAL MEETINGS AND ACTIVITIES

Core Development Workshops, Seattle University, September 2011- present.

Participated in curriculum development and course design for the new Seattle University Core Curriculum.

Cancer Teaching Fellows Program, Fred Hutchinson Cancer Research Center and New Mexico State University, June-October 2009.

Developed active learning-based lectures for the Introduction to Cancer class at NMSU. Mentored by Dr. Michele Shuster.

Future Faculty Fellows Workshop, Seattle WA, September 2008

Northwest Neuroscience Meeting, Seattle WA, April 2007.

40th Northwest Regional Developmental Biology Conference, Friday Harbor Laboratories, WA, March 2007. Poster presented.

47th Annual Drosophila Research Conference, Houston TX, March 2006
Poster and Ecdysone workshop talk.

Neurobiology of Drosophila, Cold Spring Harbor Laboratories NY, October 2003. Poster presented.

Northwest Neuroscience Meeting, Seattle WA, April 2005
Poster presented.

45th Annual Drosophila Research Conference, Washington DC, March 2004.
Poster and Ecdysone Workshop talk.

36th Northwest Regional Developmental Biology Conference, Friday Harbor Laboratories WA, March 2003. Platform talk.

Developmental Biology Training Grant Retreats, 2003-2006. Talks given each year.

HONORS AND AWARDS

NIH Developmental Biology Training Grant, 2003-2006

Howard Hughes Undergraduate Research Fellowship, 1997-1998

Phi Beta Kappa, 1998

S. Town Stephenson Scholar, Honors College Award, 1998

Washington Scholar, 1994-1998

Glen Terrell Presidential Scholar, 1994-1998

Contact Information for References:

Dr. Brenda Bourns

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Dr. Daniel Smith

Department of Biology, Seattle University

Tel: 206-296-5492 email: smithdr@seattleu.edu

Dr. Lindsay Whitlow

Department of Biology, Seattle University

Tel: 206-296-2110 email: whitlowl@seattleu.edu