

**Bruce A. Bowerman**  
*Curriculum Vitae*

Professor of Biology  
Institute of Molecular Biology  
University of Oregon  
Eugene, OR 97403-1229

**EDUCATION**

Kansas State University, Manhattan, Kansas, B.A., 1981, Biochemistry  
University of California, San Francisco, California, Ph.D., 1989, Biochemistry.

**RESEARCH TRAINING**

1984-1989 Ph.D. Thesis, University of California, San Francisco. Laboratory of Dr. Harold E. Varmus. Subject: Chromosomal integration of viral DNA in the retrovirus life cycle.

1989-1992 Postdoctoral Fellow, Fred Hutchinson Cancer Research Center. Laboratory of Dr. James R. Priess. Subject: Molecular Genetics of Embryogenesis in *Caenorhabditis elegans*.

1992-2003 Assistant/Associate Professor of Biology, Institute of Molecular Biology, U of Oregon.

present Professor of Biology, Institute of Molecular Biology, University of Oregon

2005- Director, Institute of Molecular Biology

**AWARDS**

1977-1980 State of Kansas Scholar and Putnam Scholar, Kansas State University.

1983 Regents Scholar, University of California.

1985 The Long Foundation Prize for Excellence in Teaching, University of California at San Francisco, School of Pharmacy.

1989-1992 Fellow of the Jane Coffin Childs Memorial Fund for Medical Research.

1993-1995 American Cancer Society Research Award.

1994-2011 National Institutes of Health RO1 Research Grant Award: Determination of Blastomere Fate in *C. elegans* embryos (1R01GM49869-15)

1999-2011 National Institutes of Health R01 Research Grant Award: Cytokinesis and the Cytoskeleton in *C. elegans* Embryos (2R01GM58017-09)

2002 W. Taylor Fithian Faculty Fellowship in Biology, University of Oregon.

2004-2008 National Institutes of Health R24 Research Grant Award: Gene Networks Specifying Cell Lineages in a Polychaete (1 R24GM071478-04)

## **SPEAKING ENGAGEMENTS**

### **Conferences (46):**

Cold Spring Harbor RNA Tumor Virus Meetings 1987, 1988, 1989  
Nucleic Acids Gordon Conference, 1987  
Cold Spring Harbor Meeting on Mechanisms of Genetic Recombination, 1988  
International *C. elegans* Meeting, 1991, 1993  
Animal Cells and Viruses Gordon Conference, 1992  
Society for Developmental Biology Meetings, 1994, 1996, 1998, 2000, 2005, (2008, Plenary Speaker).  
Molecular Genetics Gordon Conference, 1994  
West Coast Developmental Biology Meeting, 1995  
NIH Reproductive Physiology Study Section Workshop, 1995  
Northwest Regional Society for Developmental Biology Meeting, 1996  
Santa Cruz Developmental Biology Conference, 1996  
Cell Contact and Adhesion Gordon Conference, 1997, 1999  
Developmental Biology Gordon Conference, 1997  
The Wnt Meeting, 1998  
British Society for Developmental Biology Conference, 1998  
Biological Regulatory Mechanisms Gordon Conference, 1998  
Growth Factor Gordon Conference, 1998  
Genetical Society of Great Britain Conference, 1999  
The Cell Biology of Cell Division, 10th Annual Institute of Molecular Pathology Conference, Vienna, Austria, 1999.  
Keystone Symposium on Stem Cells, Asymmetric Cell Division and Fate, Keystone, CO, 2000.  
Keystone Symposium on the Integration of Cell Signalling Pathways, Keystone, CO, 2001.  
EMBO Workshop on axis formation in animal embryos, Heidelberg, Germany, 2001.  
Comparative Developmental Biology Conference, Sant'Angelo D'Ischia, Italy, 2001.  
Cytokinesis Workshop, Institute of Molecular Pathology, Vienna, Austria, 2001.  
Cytokinesis Workshop, Tokyo University, Japan, 2001.  
Conference on the Cytoskeleton and Differentiation, Brazilian Cell Biology Society, Sao Paulo, Brazil, 2001.  
Keystone Symposium on Wnt and  $\beta$ -catenin Signaling, Taos, New Mexico, 2002  
Stony Brook Symposium: Morphogenesis: From Signal Transduction to Pattern Formation, Stony Brook, New York, 2002.  
Molecular Basis of Development and Disease, Zhang Jia Jie, Hunan, China, 2002.  
Sonderforschungsbereich (Special Research Area Conference): Tissue determination and cell-type specification, Cologne, Germany, 2002.  
University of Minnesota Symposium on The Cell Cycle and Development, Minneapolis, MN, October, 2003.  
Central European Worm Meeting, Basel, Switzerland, January, 2004.  
American Society for Cell Biology Cytokinesis Conference, Burlington, Vermont, July, 2004.  
The Gurdon Institute Opening Symposium, Cambridge, England, July, 2005.

15<sup>th</sup> International Society of Developmental Biologists, Sydney, Australia, September, 2005.

Fred Hutchinson Cancer Research Center, Developmental Biology Symposium  
Keynote Speaker, December, 2005.

*C. elegans* Development and Evolution, Keynote Speaker, Madison, WI, June, 2006.  
Wnt Signaling in Development and Disease; Max Delbrück Institute, Berlin-Buch,  
Germany, September 2007.

**Seminars (88):**

University of Wisconsin (Biochemistry Dept; Department of Anatomy), 1993, 2000,  
2007.

University of California, Santa Cruz (Biology Dept), 1996

Massachusetts General Hospital. Dept. of Mol. Biol., 96; Cutaneous Biol. Res. Ctr,  
2002.

Oregon Health Sciences University (Vollum Institute), 1997

NYU Skirball Institute for Biomolecular Medicine, 1997

The Rockefeller University (Developmental group), 1991, 1997

Oregon Health Sciences University (Dept. of Cell and Dev. Biol.), 1997

Oregon State University (Dept. of Zoology), 1997

The National Cancer Institute (Frederick), 1997

The National Institutes of Health (Human Genome Center), Bethesda, MD, 1997

Princeton University (Molecular Biology Dept.), 1997

University of Colorado, Boulder (MCD Biology Dept.), 1997

University of Colorado, Denver (Health Sciences Campus), 1997

University of California, Berkeley (Mol. and Cell Biol./BMB & Genetics Sem. Series),  
1997

Institute for Cancer Research, The Chester Beatty Laboratories (London), 1998

University of Washington, Seattle (Dept. of Genetics), 1998

Johns Hopkins University (Molecular Biology and Genetics), 1998

Carnegie Institution of Washington, D.C. (Department of Embryology), 1998

University of California at San Francisco (Biochemistry and Biophysics Dept.), 1998,  
2001

Stanford University Medical School (Dev. Biol. Dept.), 1998

Washington University School of Medicine, St. Louis (Genetics Dept), 1998

Duke University (Genetics Program, Dept. of Cell Biology), Durham, NC, 1998, 2006.

University of Utah (Biology Dept), Salt Lake City, 1998.

University of California at San Diego (Dept. of Biology), 1999

University of North Carolina, Chapel Hill (Biology Dept.), 1999, 2006

Yale University (Genetics Dept.), New Haven, CT, 1999

University of Arizona (MCD Biology), Tucson, AZ, 1999, 2007.

Yale University School of Medicine (Dept. of Genetics), New Haven, CT, 1999.

Ontogeny, Inc. Boston, 1999.

Chiron, Inc. Emeryville, CA, 1999

Cornell Medical School, New York City (Dept. of Cell Biology & Anatomy), 1999.

University of Pennsylvania School of Medicine (Dept. of Med.; Center for Molecular  
Disease), 1999.

University of Zurich (Molekular Biologie), Switzerland, 1999.

National University of Singapore (Institute of Molecular Agrobiolgy), 2000.

Osaka University Medical School (Dept. of Molecular Biology), Japan, 2000.  
Nagoya University (Dept. of Biochemistry), Japan, 2000.  
Exelixis Corporation, South San Francisco, 2000.  
Harvard Medical School (Dept. of Pathology), Boston, MA, 2000.  
The University of Chicago (Dept. of Mol. Genetics & Cell Biology), 2000, 2008.  
The Wadsworth Institute, Albany, NY, 2000.  
Ohio State University, Columbus, Ohio 2000  
The University of Texas, Austin, Texas 2001  
The University of Rome, Italy, 2001  
The Swiss Institute for Cancer Research (ISREC), Lausanne, Switzerland, 2001.  
The Max Planck Institute for Evolutionary Biology, Tuebingen, Germany, 2001.  
Sloan-Kettering Memorial Cancer Research Center, New York, 2001.  
Rutgers University Medical School, New Jersey, 2001.  
University of Tokyo (Department of Biophysics and Biochemistry), Japan, 2001.  
RIKEN Center for Developmental Biology, Kobe, Japan, 2001.  
University of California, Irvine (Dept. of Dev. and Cell Biology), 2002.  
Columbia University (Dept. of Biological Sciences), 2002.  
Fudan University, Shanghai, China, 2002.  
Kansas State University, Division of Biology 2002; Biochemistry Department 2009.  
The Fred Hutchison Cancer Research Center, Seattle, WA, 2002.  
Max Planck Institute for Molecular Cell Biology and Genetics, Dresden, Germany,  
2002.  
Lisbon University School of Medicine, Lisbon, Portugal, 2002, 2004.  
University of Calgary, Calgary, Alberta, Canada. Department of Biochemistry, March,  
2003.  
University of Alberta, Edmonton, Alberta, Canada. Department of Genetics, March  
2003.  
Center for Cell Dynamics, University of Washington, Friday Harbor, Washington, May  
2003.  
Institute of Biochemistry, ETH, Zurich Switzerland (Graduate Student Seminar  
Series), 2004.  
Pierre Gönczy's lab, Institute for Experimental Cancer Research (ISREC), Lausanne,  
Switzerland, January, 2004.  
Vanderbilt University, Department of Cell and Developmental Biology, February,  
2004.  
Stanford University School of Medicine, Cancer Biology Program, February, 2004.  
Helsinki University School of Medicine, The Biomedicum; Helsinki, Finland, 2004.  
University of Wyoming, Department of Molecular Biology, Laramie, October, 2005.  
Utrecht University, Graduate School of Developmental Biology, The Netherlands,  
December 2005.  
Ecole Normal Superieure, Developmental Biology Unit, Paris, France, December,  
2005.  
University of California, Davis, Section in Cell and Molecular Biology, March, 2006.  
SRI, International, Menlo Park, California, March 2006.  
Simon Fraser University, Department of Molecular Biology, April, 2006.  
Center for Genome Research and Biocomputing, Oregon State Univ., Corvallis,  
Oregon, May 2006.  
Physiology Course, Woods Hole Marine Biology Station, Woods Hole, MA, July 2006.

Oklahoma Medical Research Foundation, Oklahoma City, OK, October 2006  
Mt. Sinai Medical Center, New York City, NY, November 2006  
Helsinki University Natural Sciences Campus, Helsinki, Finland, September, 2007.  
New York University, Dept. of Biology, New York City, NY, November 2006  
University of Texas Southwestern Medical School, Department of Molecular Biology,  
Dallas, TX, November 2007.  
University of Toronto, Department of Molecular Genetics, Toronto, Ontario, Canada,  
June 2008.  
Kansas University, Biology Department, Lawrence, KS, March 2009  
Stowers Institute for Biomedical Research, Kansas City, MO, March 2009

## TEACHING

- BI220, 221: Core Biology (undergraduate): 1994, 1995. Led discussion sections for courses taught by George and Karen Sprague on Molecular Genetics and Biochemistry.
- BI328 Developmental Biology (undergraduate): 1994, 1995, 1996, 1997, 1998, 1999, 2001, 2002, 2003 50-70 students. MWF Lecture and Thursday lab. Restructured entire lab and lecture to focus on genetic analyses in *Drosophila* and *C. elegans*.
- BI428/528 Developmental Genetics: 1996. Tues/Thur lectures (1.5 hrs). Lectures and student presentation on recent papers (mostly 1-2 years old). 1996 course: Cell signaling and morphogens. Cell cell interactions during imaginal disc development in *Drosophila*, neural tube and limb bud development in vertebrates, netrins and axonal guidance mechanisms.
- BI428/528, Developmental Genetics, 1998 Winter Quarter: Cell Polarity, Asymmetric Cell Divisions, and Cell Fate (neuroblast development and oocyte polarity in *Drosophila*, endoderm induction and a-p polarity in *C. elegans*,,, mother/daughter polarity in *S. cerevisiae*).
- BI428/528, Developmental Genetics, 1998 Fall Quarter: Cell Signaling mechanism: targeting the cytoskeleton vs targeting the nucleus: Notch signaling and the Wnt pathway; MAP Kinase pathways and signaling specificity.
- BI428/528, Developmental Genetics, 2003 Winter Quarter: Early Embryos: axis formation in *C. elegans*, *Illyanassa*, *M. musculus* and *D. melanogaster*.
- Bi610 Molecular Genetics, 2004, 2005. Genetic approaches to the study of biological processes, taught with Karen Guillemin (new core course for graduate program; fantastic course!). Genetics in T4 bacteriophage, phage lambda, yeast, humans, mice, worms and flies.
- Bi322 Cell Biology, 2005 Spring Quarter. Cell biology from a molecular genetic perspective. 75 students. Tu/Thu lecture; Wednesday discussion sections, lab demonstrations.
- Bi122 Introduction to Human Genetics, Spring 2006, 2007. 4 hrs credit; Tue/Thu lecture, Discussion Sections, two graduate TAs. 225 students.
- Guest lecturer for graduate courses: Gulbenkian Institute, Lisbon, Portugal, 1998, 1999, 2002;  
Institute of Molecular Agrobiolgy, National University of Singapore, 2000; Cold Spring Harbor *C. elegans* course, 2001; Sloan-Kettering/Rockefeller/Cornell Dev.

Biol. Course, 2001. Instructor in Cold Spring Harbor C. elegans Course, 3 weeks each August in 2002, 03, 04. Woods Hole Embryology Course Lecturere, June 2008.

## COMMITTEES

Radiation Safety Committee member 1998-2003 (Chair for two years).  
Member, Teaching Requirements Committee, Dept. of Biology, 2000.  
Biology Review Committee, 1998.  
Developmental Biology Search Committees for new faculty, 1994/5, 1996/7, 2001/2, 2002/3, 2004/5.  
Organizer of the Institute of Molecular Biology Seminar Series, 1994-present.  
Organizer for 1994, 1995, 2001-2004 Institute of Molecular Biology Annual Retreats.  
Graduate Recruitment and Admissions Committee, 1995/6, 1998/9; Chair 2002/3-2003/4.  
Biology Personnel Committee, 2002/3-3/4; 2007/8-8/9.  
Organizer of "Culture Night" for Molecular Biology Annual Retreat, 1994-present (invited artists that have participated include Ron Paul Finne, a film-maker and photographer; John Daniel, a poet and writer; David Wheeler, a Shakuhachi musician).

## Grant Panels/Meeting Organization/Editorial Boards/Web Site Organization:

American Heart Association, Northwest Region, ad Panel Member, March 7, 1997.  
Organizer for Northwest Regional Meeting of the Society for Developmental Biology, 1998; Mini-Symposium co-chair, Am. Soc. for Cell Biol. Mtg., Dec. 11-15, 1999;  
Co-Organizer, West Coast Regional C. elegans meeting, UCLA, June, 2000; Co-organizer, Am. Soc. For Cell Biol. Cytokinesis Conference, July, 2004.  
Outside Reviewer for NSF Research Grant Applications (14 applications), 1994-2000.  
American Cancer Society, Research Grant Review Panel Member, 1998-2001.  
NIH CDF-2 study section; ad hoc member; Oct. 7/8, 1999.  
NIH-CDF-4/CSF study section; panel member beginning February, 2000-2005.  
Chair February, 2004-June 2005. Ad hoc/phone reviews, March 2006-present.  
NIH General Medical Sciences Council, Ad Hoc, May 2006.  
NIH PPG Panel member, Feb 07; NIH PPG Panel chair, Aug 07; NIH Glue Grant Phase 1 panel chair, January 08; NIH CSF ad hoc reviewer, June 2008; NIH CSF ad hoc reviewer, October 2008; NIH ZRG1 CB Oct 2008 online chair;  
Editorial Board Member at *Development*, 1999-present; *Developmental Cell*, 2001-present; *Current Biology*, 2002-present; *Cell Motility and the Cytoskeleton*, 2006-present; *Developmental Dynamics*, 2006-present. I also review manuscripts regularly for Dev. Biol., Cell, Molecular Biology of the Cell, Molecular Cell, Science, Nature, JCB, MCB and others.  
Web-Site supervision for Signal Transduction Knowledge Environment (STKE) with Science Magazine and Highwire Press (C. elegans Wnt Signal Transduction Pathways).  
Faculty of 1000 web site editorial board member, 2001-2003.

## PERSONNEL

### Current Postdocs (2)

Sean O'Rourke, April, May, 2002-present, Damon Runyon-Walter Winchell Canc. Research Fellowship, 2002-05; Leukemia and Lymphoma Society Postdoctoral Fellowship, 2005-08.

Stephan Schneider, May, 2004-present. Funded by NIH R24 grant.

### Current Graduate Students (2):

Marc Dorfman, Ph.D. 2003-present; Development Training Grant.

Meredith Price, Ph.D., 2005-present. Genetics Training Grant, Fall 2005-present.

### Former Postdocs (7)

Morgan Goulding, November, 2001-2008; National Institutes of Health Postdoctoral Fellowship for 3 years. Second post-doc with Raghu Parasarathy at UO beginning in Fall, 2008.

Julie Canman, May 1, 2003- present. Funded by a 3 year Jane Coffin Childs Postdoctoral Fellowship and a 3 year Leukemia and Lymphoma Society Fellowship. Now a postdoc in Karen Oegema's lab, UCSD.

Bruce Nash, 2001-2005, funded by 2-year American Heart Association Postdoctoral Fellowship. Now employed at Cold Spring Harbor Laboratories; education development by generating laboratory courses for use at undergraduate college courses (nash@cshl.edu).

Rebecca Crowe, 6/99-7/02; American Cancer Society Postdoctoral Fellowship (PF-00-097-01-MBC; Jan. 1, 2000-Dec. 31, 2002). Now an Assistant Professor at Ursinus College, College Park, PA (rlyczak@ursinus.edu).

Danielle Hamill, 1997-2001, funded by a 3 year American Cancer Society Postdoctoral Fellowship. Now employed as an Assistant Professor at Ohio Wesleyan University in Delaware, Ohio (drhamill@cc.owu.edu).

Chris Shelton, 1994-1999, funded by a 3 year NIH Postdoctoral Fellowship (F32 GM16981). Now employed as a member of the Dept. of Comparative Genetics, UE0548; SmithKline Beecham Pharmaceuticals; P.O. Box 1539; King of Prussia, PA. 19406 (Christopher.A.Shelton@gsk.com).

Kathryn Swan, 1994-1999, funded 3 years by NIH Postdoctoral Fellowships (2 yrs + 1 yr renewal). Now employed as a Research Scientist at Exelixis, Incorporated, South San Francisco, kswan@exelixis.com (6/99 to present); 650-825-1524 (Exelixis).

Stephen Chamberlain, 2.5 yrs in lab. Subsequently employed as Research Associate at Molecular Probes, Inc., in Eugene, Oregon. Then he accepted a supervisorial laboratory position at Biosignal, Inc., in Montreal, Canada. He now heads up the Quantum Dots division at InVitrogen in Eugene, Oregon (stephen.chamberlain@invitrogen.com). He was funded by an NIH Postdoctoral Fellowship while in my lab.

### Former Graduate Students (12)

- Bill Gillis, Ph.D., 2004-2008(working with Stephan Schneider; IGERT training grant 2005-July 2008). Graduated in August 2008; will continue as a temporary post-doc until end of 2008.
- John Willis, Ph.D. 1999-2004; NIH Molecular Biology Training Grant (). Employed as a Research Scientists at Rod Capaldi's Mitosciences in Eugene, Oregon. (jwillis@mitosciences.com)
- Sandra Encalada, 1998-2004; NIH Molecular Biology Training Grant (). Now a Damon-Runyon Postdoctoral Fellow in Dr. Larry Goldstein's lab at UC San Diego (sencalada@ucsd.edu).
- Jennifer Phillips, 1999-2004; NIH Genetics Training Grant (NIH 5T32 GM07413). Now a postdoctoral fellow in Dr. Monte Westerfield's lab in the Institute of Neuroscience at the University of Oregon (phillips@uoneuro.uoregon.edu).
- Ze Eduardo Gomes; Ph.D. student, 1999-2004, via Faculty of Medicine, Lisbon, Portugal. Now a postdoctoral fellow in Dr. Francois Schweisguth's lab in Paris, France (gomes@wotan.ens.fr).
- Thimo Kurz; Ph.D. student, 1999-2004, via the University of Tübingen in Germany. Did a postdoc in Dr. Mathias Peter's lab at the ETH in Zurich, Switzerland ([thimo.kurz@bc.biol.ethz.ch](mailto:thimo.kurz@bc.biol.ethz.ch)). Now a member/PI of the Scottish Institute for Cell Signaling, Ubiquitination Unit, Dundee, Scotland.
- Gregory Ellis, 1998-2003; IGERT Training Grant. Now a postdoc in Dr. David Stokoe's laboratory at the Cancer Research Institute at UCSF. Enrolled in U. Washington School of Law, Fall 2005 ([gcellis@u.washington.edu](mailto:gcellis@u.washington.edu)). As of October 2007, Greg is working as a associate biotech patent lawyer at Townsend and Townsend and Crew in San Francisco, CA (they hire only PhD's for biotech patent law).
- Aaron Severson, 1996-2001; NIH Development and Evolution Training Grant (NIH 5T32 HD07348). Now a post-doctoral fellow at UC Berkeley/HHMI, with Dr. Barbara Meyer (afsevers@uclink.berkeley.edu).
- Marc Meneghini, 1995-2000; NIH Genetics Training Grant (NIH 5T32 GM07413). Marc was a Damon-Runyon and Burroughs-Wellcome postdoctoral fellow at UCSF as of 2000 (laboratory of Dr. Hiten Madhani). Marc is now an Assistant Professor in the Graduate Department of Molecular and Medical Genetics at the University of Toronto, in Toronto, Ontario, Canada (marc.meneghini@utoronto.ca).
- Ann Schlesinger, 1994-1999, NIH Genetics Training Grant (NIH 5T32 GM07413). Was a postdoctoral fellow at MIT (laboratory of Dr. Richard Young) for 2 years; now a postdoctoral fellow with Dr. Judy Lieberman at Harvard Medical School (schlesin@cbr.med.harvard.edu).
- Chris Thorpe, 1993-1998, NIH Development and Evolution Training Grant (NIH 5T32 HD07348). Now a post-doctoral fellow at University of Washington (laboratory of Dr. Randall Moon), as of August, 1998-June 2005. June 2005 will begin job as an Assistant Professor in the Division of Biology at Kansas State University in Manhattan, Kansas (thorpe@ksu.edu).
- Bill Maske, graduated with Master's Degree in 1995; employed as Research Assistant with Dr. Rik Dyrnck at UCSF until 1998; now employed as a Research Associate at Exelixis Pharmaceuticals, Inc., 260 Littlefield Avenue, South San Francisco, CA 94080.

**Research Assistant:**

Clayton Carter (1993-present). Graduated from the University of Oregon with a bachelor's degree in June, 1997. Worked 3.5 years as work study in my lab, as the lab technician since 1996.

Valerie Davis Huag, Summer 2007-present. Working on recombineering of meiosis genes and other genes for Goulding/O'Rourke. From Meg Titus lab, U. Minn.

Luke Carter (Summer 2008-present). Working on mapping and sequencing mutant alleles.

**Former technicians.**

Noushin Shikaba (2002-2003). Did her Arts & Sciences Honor's Thesis in my lab from 2000-2002. Lab research assistant beginning in June 2002. OHSU Dental School, 2003.

**Undergraduate students (35)**

Kathleen Dehen, 1.5 yrs in lab (1992-1994), now a graduate student at Stonybrook.

Marka Crittenden, 1.5 yrs in lab (1993-1995), applying for MSTP programs.

Pilchung Baik, 1.5 yrs in lab (1995-1997, now a medical student at Oregon Health Sciences University in Portland.

Malene Ingram, Summer Minority Student Research Program in 1995, now a medical student at Michigan State University in Lansing.

Ariel Sainz, Summer Minority Student Research Program in 1996, an undergraduate student at Williams College; high school teacher; now a research technician.

RoseMary Reed, 1 yr in lab (1996-1997), graduates Jan 1997, Research Assistant with Dr. Ken Stuart at the Seattle Biomedical Research Institute in Seattle, WA. Attending Univ. of Washing Law School starting in Fall 2000 with an interest in science-related law. Now a lawyer in Seattle.

Christina Shipp, 1 yr in lab (1996-1997). Biology major; graduated in June 1997.

Brooke Gaynor, November, 1997-April, 1998. Applying for medical school.

Barbie Bowling, April-August, 1999; Spurs Summer Research Student, Summer.

Nathalie Hernandez, Summer 1999, Summer Minority Student Research Program. Worked with Danielle Hamill, a postdoc in the lab.

Kelly Finnegan, 1999-2001, Work-Study student (freshman and sophomore years so far), doing lab chores and also is learning molecular biology (plasmid/cosmid preps and other techniques).

Ryan O'Connor, 1999-2000. Worked part-time with Clayton Carter on a collaborative project to generate cDNA-derived RNAs to screen for mutant phenotypes using "RNA interference."

Plans to attend veterinary medical school once she graduates.

Matthew S. Cook, summer 2000-present. Lab project involves characterizing new mutants with respect to their phenotypes and cloning of the genes. Accepted position as research technician in Dr. Debbie Lewinsohn in the Department of Pediatrics at Oregon Health Sciences University in Portland, Oregon.

Sarah Kirkegaard, fall 2000 – present. Plans to work for two years in lab, doing genetic mapping for positional cloning, and phenotypic analyses of two mutants.

- Noushin Shakiba, Summer 2001-Summer 2002. Honor's Thesis Project: phenotype analysis of one mutant positional cloning of the wild-type gene. Now a research associate in my lab. Will attend dental school beginning in the Fall of 2003.
- Carmen Echols, Summer 2001. Summer Minority Student Research Program. Phenotypic analysis of a cytokinesis-defective mutant; genetic mapping of mutant locus to a single chromosome. Carmen is an undergraduate at Xavier University in New Orleans and plans to attend either medical school or graduate school.
- Rita Patel, Fall 2001-present. Work-study student for lab supplies.
- Nathan Sandberg, Fall 2002-04. Part-time work-study student; lab maintenance. Now teaching Biology in Lane High School in Eugene, Oregon.
- Megan Kuhn, Summer 2002-2003; research project. Now in another lab.
- Damien Kemp, Fall 2002-2006; research project helping with mutant screen. CAS Honors Student.
- Catherine Patricolo, Spring 2003-2004; research project. Decided not to pursue bio research.
- Sabine Steiner, Fall 2003-Spring 2007; research project working on mutants screens. Now a medical student in Buenos Aires, Argentina.
- Aleena Garner, Spring 2004-Summer 2007; undergraduate working positional cloning of ts mutants. Now a Ph.D. graduate student in Neurosciences at UC San Diego.
- Chris Castorena, undergraduate student from Texas; participated in our Summer 2004 undergraduate research program; worked on projecting involving generating antibodies to proteins under study in lab.
- Hadley Otto, Fall 2004 to Summer 2005. Working on our mutant screens as a work-study student.
- Gavin Place, Summer 2004-present, maintain *Platynereis dumerilii* colony (with Stephan Schneider).
- Jamie Kersenbrock, work-study undergraduates: Summer 2004-present, colony maintenance and gene cloning in *Platynereis dumerilii* (with Stephan Schneider) .
- Kristen-Marie Bowerman, Fall 2005-2007: research project working on meiosis-defective mutants.
- Krysta Hrdlichka, Summer 2006 SPUR student (Winona State University, Winona, MN). Working on a meiosis-defective mutant.
- Ronald Kwong working with Sean O'Rourke on dhc-1 suppressors, Spring 2007-present.
- Luke Carter, undergraduate working on ts mutants, Spring 2007-Spring 2008. Also working as a technician in lab for 2-3 years.
- Felicia Tawah Che, SPUR student working on atn-1 RNAi, Summer 2007.
- Brandon Pike, undergraduate working with Sean O'Rourke on spd-2/5 modifiers, Summer 2007-present. Switched to plate pouring seeding, summer 2008.
- Sara Christensen, undergraduate working with Val on new mutants. June 2008-present.
- Sina Rahimi, SPUR student from New Jersey. Worked with Luke Carter characterizing two new mutants. Summer 2008.

**RESEARCH PUBLICATIONS (54 published)**

- Brown, P.O., **Bowerman, B.**, Varmus, H.E. and Bishop, J.M. (1987). Correct integration of retroviral DNA in vitro. *Cell* 49: 347-356.
- Bowerman, B.**, Brown, P.O., Bishop, J.M., and Varmus, H.E. (1989). A nucleoprotein complex mediates the integration of retroviral DNA. *Genes and Development* 3: 469-478.
- Brown, P.O., **Bowerman, B.**, Varmus, H.E., and Bishop, J.M. (1989). Retroviral integration: structure of the initial covalent product and its precursor, and a role for the viral *In* protein. *Proc. Natl. Acad. Sci. U.S.A.* 86: 2525-2529.
- Bowerman, B.** (1989). Ph.D. Thesis. A Nucleoprotein Complex that Mediates the Integration Reaction of the Moloney Murine Leukemia Virus. University of California.
- Bowerman, B.**, Eaton, B.A., and Priess, J.R. (1992). *skn-1*, a maternally-expressed gene required to specify the fate of ventral blastomeres in the early *C. elegans* embryo. *Cell* 68: 1061-1075.
- Bowerman, B.**, Tax, F., Thomas, J.H., and Priess, J.R. (1992). Cell interactions involved in development of the bilaterally symmetrical intestinal valve cells during embryogenesis in *C. elegans*. *Development* 116: 1113-1122.
- Bowerman, B.**, Draper, B.W., Mello, C.C., and Priess, J.R. (1993). The maternal gene *skn1-1* encodes a protein that is distributed unequally in early *C. elegans* embryos. *Cell* 74: 443-452.
- Mango, S.E., Thorpe, C.J., Martin, P.M., Chamberlain, S.H., and **Bowerman, B.** (1994). Two maternal genes, *apx-1* and *pie-1*, are required to distinguish the fates of equivalent blastomeres in the early *C. elegans* embryo. *Development* 120, 2305-2315.
- Blackwell, T.K., **Bowerman, B.**, Priess, J.R., and Weintraub, H. (1994). The Skn-1 protein binds to the major and minor grooves of DNA through a novel motif. *Science* 226, 621-628.
- Shelton, C.A. and **Bowerman, B.** (1996). Time dependent response to *glp-1* mediated signaling in early *C. elegans* embryos. *Development* 122, 2043-2050.
- Draper, B.W., Mello, C.C., **Bowerman, B.**, Hardin, J., and Priess, J.R. (1996). MEX-3 is a KH domain protein that regulates blastomere identity in early *C. elegans* embryos. *Cell* 87, 205-216.
- Thorpe, C., Schlesinger, A., Carter, J.C., and **Bowerman, B.** (1997). Wnt signaling polarizes an early *C. elegans* blastomere to distinguish endoderm from mesoderm. *Cell* 90, 695-705.

- Bowerman, B.**, Ingram, M.K. and Hunter, C.P. (1997). The maternal *par* genes and the segregation of cell fate specification activities in early *Caenorhabditis elegans* embryos. *Development* 124, 3815-3826.
- Rupert, P.B, Daughdrill, G.W., **Bowerman, B.**, and Matthews, B.W. (1998). The binding domain of SKN-1 in complex with DNA: a New DNA-Binding Motif. *Nature Structural Biology* 5, 484-491.
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