

CURRICULUM VITAE for PATRICIA S. MUIR
October 2013

RANK: Professor

MAILING ADDRESS: Department of Botany & Plant Pathology
Oregon State University
2082 Cordley Hall
Corvallis, OR 97331-2902

COMMUNICATIONS: **Phone:** 541-737-1745 **FAX:** 541-737-3573
E-mail: muirp@science.oregonstate.edu

EDUCATION AND EMPLOYMENT INFORMATION

EDUCATION:

1984 Ph.D. Plant Ecology, University of Wisconsin, Madison
1975 B.A. Botany/Biology, University of Montana, Missoula

POSITIONS HELD:

2009 – 2012 Director, Environmental Sciences Undergraduate Program
1999 - Present Professor, Department of Botany and Plant Pathology
1993 - 1999 Associate Professor, Department of Botany and Plant Pathology,
Oregon State University, Corvallis
1993 - 2002 Director, Undergraduate Environmental Science Program, Oregon
State University, Corvallis
1991-1993 Assistant Professor, Department of Botany and Plant Pathology,
Oregon State University, Corvallis
1987-1991 Assistant Professor, Department of General Science, Oregon State
University, Corvallis
1985-1987 Research Scientist, Holcomb Research Institute, Butler University,
Indianapolis, IN
1984-1985 Research Associate, Holcomb Research Institute, Butler University,
Indianapolis, IN
1981-1982 Research Cooperator, University of Wisconsin and USDA Forest
Service, Northern Forest Fire Research Laboratory, Missoula, MT
1979-1982 NSF Fellow (pre-doctoral) at University of Wisconsin, Madison

APPOINTMENT: 9-month appointment

FTE DISTRIBUTION: 0.75 FTE College of Agriculture, Botany and Plant Pathology

TEACHING, ADVISING, AND OTHER ASSIGNMENTS:

INSTRUCTIONAL SUMMARY

CREDIT COURSES:

Years	Term	Department	Course Number	Name ¹	% Responsibility	No. of Students
1987-91	Fall	Gen Science	101	General Biology	25%	768-855
1988-92	Win	Gen Science	102	General Biology	33% (C)	682-764
1988-91	Various	Gen Science	507E	Seminar Environmental Sci	50%	8-12
1989-91	Fall	General Science	301	Human Impacts on Ecosystems	100%	40-100
1992-2001	Fall	Biology	101	General Biology	33% (C)	525-611
1993	Win	Bot & Plant Path	691	Research Topics, Plant Ecology	100%	6
1998-2002; 2009-2012	Fall	Env. Sciences	101	Orientation	100%	37-75
2003-2013	Spr	Biology	371	Ecological Methods	100%	17-22
2005	Winter	Botany	691	Ethical Issues in Ecology	100%	12
2007	Winter	Botany	507	Seminar/Web Site Design & Construction	100%	8
2008, 2012, 2013	Fall	Botany	507	Seminar/Communication in Ecology	100%	6-10
2009-2012	All terms	Env. Sciences	410	Internship	100% (oversight)	~ 7 per term

¹(C) indicates course coordinator.

EDUCATION WORKSHOPS:

- 1990 Invited participant, The Freshman Year in Science and Engineering: Old problems, new perspectives for research universities, Workshop sponsored by Alliance for Undergraduate Education; Ann Arbor, MI, April 5-7.
- 1996 Participant, Writing Across the Curriculum in the Biological Sciences, Workshop at Oregon State University, April 13.
- 1996 Participant (via computer), Distance Education and Technology Workshop, University of Maryland, University College, College Park, MD, April 8-25.
- 1996 Participant, Promoting Science Literacy Workshop, Oregon State University, January 31.

2003 Participant, Writing Intensive Course (WIC) Seminar, Oregon State University.
(Involved five 2-hour sessions training faculty to teach WIC courses.)

COPYRIGHTED EDUCATIONAL SOFTWARE

McCune, B. and P.S. Muir. 1991. BUDWORM, An Interactive Simulation Model of the Western Spruce Budworm, its Host Trees, its Predators, Control by Insecticides, and Dollar Costs. Distributed by Biology Program, Oregon State University, Corvallis.

Muir, P. and B. Pedersen. 1991. NATSEL, Natural Selection: A Model of Evolutionary Change. (Copyrighted by Oregon State University.) Distributed by Biology Program, Oregon State University, Corvallis.

CONTRIBUTIONS TO TEXT BOOKS

Muir, P.S. 1996. Is overpopulation the cause of environmental problems? Focus on Scientific Inquiry. Pages 230-233 in Biology: The Network of Life by M.C. Mix, P. Farber and K.I. King, 2nd Edition, Harper Collins Publishers.

Contributed seven activities to "Instructor's Manual to accompany Biology: The Network of Life," Second Ed. Hacker A. and L. Blair. 1996. Harper Collins Publishers [Activity titles: Human Populations (pp. 281-286); Energy Flows in Agriculture (pp. 287-296); Plant/Insect/Human Interactions (pp. 297-298); Inheritance in Corn (pp. 299-307); Natural Selection and Speciation (pp. 349-355); Pace of Evolutionary Change (pp. 356-360); Natural Selection: A Model of Evolutionary Change (p. 361-367)]

INSTRUCTIONAL DEVELOPMENT GRANTS

- 2009 De Loach Scholarship. To support Honors College student, Shayna Rogers', work with me to revitalize ENSC 101, Orientation to Environmental Sciences.
- 2001 L.L. Stewart Faculty Development Award, Oregon State University. Co-investigator with Michael Mix and Lani Roberts.
- 1996 Instructional applications of electronic technologies. Instructional Media Committee, Oregon State University, \$4,500. Principal Investigator.
- 1995 Web-based instructional productivity grant. Oregon State University. \$1,000. Principal Investigator.

GUEST LECTURES AND PRESENTATIONS AT OREGON STATE UNIVERSITY:

- 2013 "Do fuel reduction treatments accomplish restoration in southwest Oregon chaparral and oak ecosystems? FOR/RNG 446, Wildland Fire Ecology
- 2012 (and prior) "The process of developing and writing an Honors College thesis" (invited panel member)
- 2006 "The moss harvest trade in the PNW and Appalachian Regions of the US." BOT 466/566, Oregon State University
- 2005 "Rolling Stones Gather No Moss, But People Do: What do we know about commercial moss harvest?" BPP Departmental Seminar.
- 1999-2002, 2005 "Developing a Successful Advisor-Advisee Relationship in Undergraduate Research," INTL 407, Oregon State University.
- 2002,03,06 - 08 "Seeing the Forest and the Trees," BOT 101, Oregon State University
- 1998 "Ecosystem Management in Pacific Northwestern Forests," INTL 407, Oregon State University.

- 1995 "Teaching in Large Lecture Classes," SED 596, Oregon State University.
 1995 "The *Lobaria* Paradox," BOT 507, Oregon State University.
 1994,95,97-02, 04 "How I got Started in Science," BI198, Oregon State University.
 1994 "Ecosystem Management in Pacific Northwest Forests," BOT 341, Oregon State University.
 1991 "What is Acid Deposition and What Are its Effects?" H344, Oregon State University.

UNDERGRADUATE THESES DIRECTED AND SERVICE ON COMMITTEES:

- Carri J. LeRoy, 1998, Environmental Sciences and International Degree
 Thesis title: Dynamic Culture: An Analysis of the Environmental and Social Changes Affecting the Tsachila People of Western Ecuador. (Mentor)
 Robert Richardson, Honors College, 1999, Environmental Sciences
 Thesis title: Home Power Guide. (Mentor)
 Jessica Brown, Honors College, 1999, Environmental Sciences and International Degree
 Thesis title: The Greens Among the Reds: The Russian Environmental Movement in the Soviet and Post-Soviet Years. (Mentor)
 Kathleen Harding, 2000, Entomology and Honors College
 Thesis title: Novel Laboratory Bioassay Systems Designed to Determine Ecological Risk Posed by Biorational Insecticides. (Committee Member)
 Tasha Ludwick, 2002, Honors College and Environmental Sciences
 Thesis title: Working Towards Sustainable Resource Use in Pniel, S. Africa. (Mentor)
 Amber Holland, 2002, Zoology and International Degree
 Thesis title: Ciguatera and Domestic Animals of the Cook Islands. (Mentor)
 Brett Wolk, 2002, Environmental Sciences and International Degree
 Thesis title: Two Cultures on One Road: Integrating Indigenous Environmental Values with Modern Land Management. (Mentor)
 Rhiannon Thomas, 2004, Honors College, Environmental Sciences, and International Degree
 Thesis title: Cultural Uses of "Wild Onion" in Camaroon, Africa. (Mentor)
 Kate Norman, 2004, Honors College, Environmental Sciences, and International Degree
 Thesis title: Prescribed Burning in Ponderosa Pine Forests: A Historical and Ecological Discussion of the Blue Mountain Region of Oregon. (Mentor)
 Andrea Lawrence, 2006, Honors College, Environmental Sciences. (Committee member)
 Dan Irvine, 2007, Honors College, Environmental Sciences (Committee member).
 Jennifer (Whitney) Goodell, 2007, Honors College, Environmental Sciences
 Thesis title: Invasion of *Brachypodium sylvaticum* in prairie and forest habitats: difference in community structure between invaded and uninvaded systems in Bald Hill Park, Corvallis, OR (Mentor)
 Lea Wilson, 2008, Honors College, Environmental Sciences (Committee member)

GRADUATE THESES DIRECTED:

- Barbara Moritsch, M.S. 1992, General Science
 Thesis title: Subalpine revegetation on backcountry campsites near Tuolumne Meadows, Yosemite National Park, CA; third year results.
 Current Employment: Plant Ecologist, Yosemite National Park, CA.
- Mette Hanson, M.S. 1993, General Science
 Thesis title: Sharing the land: a 5th and 6th grade curricular unit for Minto-Brown Island Park, Salem, OR.
 Current Employment: Interpretive Specialist, Washington Park Zoo, Seattle, WA.
- Coulter Rose, M.S. 1994, General Science
 Thesis title: Relationships of green-tree retention following timber harvest to forest growth and species composition in the western Cascade Mountains.
 Current Employment: Middle school science teacher, Corvallis OR
- Elizabeth Traut, M.S. 1995, Botany and Plant Pathology
 Thesis title: Effects of variation in ecosystem carryover on biodiversity and community structure of forest floor bryophytes and understory vascular plants: a retrospective approach.
 Current Employment: Instructor in Biological Sciences, City College of San Francisco, CA.
- Thomas Rambo, M.S. 1997, Botany and Plant Pathology
 Thesis title: Ecology of forest floor bryophytes in *Pseudotsuga menziesii*-*Tsuga heterophylla* stands of western Oregon: implications for forest management.
 Current Employment: PhD Candidate in Ecology, U.California Davis, Davis, CA.
- A.L. Rosso, PhD. 2000. Botany and Plant Pathology
 Thesis title: Shrub epiphyte communities in relation to stand management in forests of western Oregon.
 Current Employment: Self-employed, contracting as lichenologist/bryologist.
- D.B. Keon. M.S. 2001. Botany and Plant Pathology
 Thesis title: Factors limiting the distribution of the sensitive lichen *Usnea longissima* in the Oregon Coast Range; habitat or dispersal?
 Current Employment: Faculty Research Assistant, NACSE, Oregon State University, Corvallis, OR.
- T.N. Kaye. Ph.D. 2001. Botany and Plant Pathology. (Co-major professor with D. Pyke)
 Thesis title: Population viability analysis of endangered plant species: an evaluation of stochastic methods and an application to a rare prairie plant.
 Current Employment: Director, Institute for Applied Ecology.
- C.A. Menke. M.S. 2003. Botany and Plant Pathology.
 Thesis title: Relationships of exotic species and wildfire to the threatened plant *Silene spaldingii*.
 Current Employment: Botanist, Institute for Applied Ecology, Corvallis, Oregon.
- B.C. Lindh. Ph.D. 2003. Botany and Plant Pathology
 Thesis title: Understory herb and shrub responses to root trenching, pre-commercial thinning, and canopy closure in Douglas-fir forests of the western Cascades, Oregon.
 Current Employment: Instructor, Biology Department, Willamette University, Salem, Oregon.
- S. Bekedam. M.S. 2004. Botany and Plant Pathology. (Co-major professor with D. Pyke)

Thesis title: Establishment tolerance of six native sagebrush steppe species to Imazapic (PLATEAU®) herbicide: implications for restoration and recovery.

Current Employment: Ecologist, Glen Canyon National Recreation Area.

K. G. Sikes. M.S. 2005. Botany and Plant Pathology

Thesis title: Effects of two fuel reduction treatments on chaparral communities in southwest Oregon.

Current Employment: Botanist, Native Plant Society of California

K. Perchemlides. M.S. 2006. Botany and Plant Pathology

Thesis title: Impacts of Fuel Reduction Thinning Treatments on Oak and chaparral communities of southwestern Oregon.

Current Employment: Ecologist, The Nature Conservancy of Oregon, Medford, Oregon

K. Norman. M.S. 2008. Botany and Plant Pathology

Thesis title: The effects of site preparation on native forb establishment in a wet prairie, Willamette Valley, Oregon.

Current Employment: Botanist, US Fish and Wildlife Service, Portland, OR

O. Duren. M.S. 2009. Botany and Plant Pathology

Thesis title: Chaparral history, dynamics and response to disturbance in southwest Oregon: insights from age structures.

Current Employment: Research Assistant, Botany & Plant Pathology, Oregon State University

L. Gilligan. M.S. 2010. Botany and Plant Pathology

Thesis title: Stand structures of Oregon white oak (*Quercus garryana*) woodlands and their relation to the environment in southwestern Oregon.

Current Employment: Ecologist, Colorado Natural Heritage Program, Ft. Collins, CO

E. Gray. MS 2010. Botany and Plant Pathology

Thesis title: An evaluation of the invasion potential of *Kochia prostrata* (forage Kochia) in southwestern Idaho, USA.

Current Employment: Ecologist, Institute for Applied Ecology, Corvallis, OR

NON-THESIS GRADUATE STUDENTS DIRECTED:

Alice Smith, M.S. 1994, Botany and Plant Pathology

Current Employment: Botanist, Sweet Home District, Willamette National Forest, Sweet Home, Oregon

Rebecca Durham, M.S. 2005, Botany and Plant Pathology

Current Employment: Botanist, Flathead National Forest, Montana

Jennifer Krebs, MS (PSM) 2012 Environmental Sciences

Current Employment: PhD student in Forestry, OSU

MINOR PROFESSOR AND GRADUATE COMMITTEE MEMBERSHIPS:

PhD Students:

Carol Greitner, PhD, General Science, 1991

Brian Pedersen, PhD, General Science, 1992

S. Tangmonkollert, PhD, Education, 1993

Chris Daly, PhD, General Science, 1994

Deborah Clark, PhD, Botany & Plant Pathology, 1996

Tom Pfleeger, PhD, Botany & Plant Pathology, 1998
Eric Zenner, PhD, Forest Science, 1998
Robert Deal, PhD, Forest Science, 1999
Eric B. Peterson, PhD, Botany and Plant Pathology, 2000
Jane Smith, PhD, Botany and Plant Pathology, 2004
Susan McDowell, PhD, Environmental Sciences Program, 2002
Shanti Berryman, PhD, Botany and Plant Pathology, 2002
Julie Spears, PhD, Botany and Plant Pathology, 2002
Alejandra Ghersa, PhD, Forest Science, 2004
Sarah Jovan, PhD, Botany and Plant Pathology, 2005
Erin Martin, PhD, Botany and Plant Pathology, 2005
Susan Crow, PhD, Botany and Plant Pathology, 2006
Emily Holt, PhD, Botany and Plant Pathology, 2007
Jeri Peck, PhD, Forest Resources, U. MN, 2007
Lori Kaye, PhD, Forest Science, 2008
Ryan Keppler, PhD, Botany & Plant Pathology, 2010
Upekala Wijayratne, PhD, Botany & Plant Pathology, 2012 (co-major professor with Dr.
David Pyke)
Hathai Sangsupan, PhD, Forest Ecosystems and Society, expected 2014
Alisha Owensby, PhD, Botany & Plant Pathology, expected 2013
Martin Hutten, PhD, Botany and Plant Pathology, expected 2013
Matthew Reilly, PhD, Forest Ecosystems and Society, expected 2014

M.S. Students:

Ellen Deehan, MS, General Science, 1990
Barbara Toth, MS, General Science, 1991
Ann DeBolt, MS, General Science, 1992
Rachel Miller, MS, Forest Science, 1993
Peter Ziminski, MS, General Science, 1993
Chiska Derr, MS, General Science, 1995
Shannon Fitzpatrick, MS, Botany & Plant Pathology, 1995
Scott Ketchum, MS, Forest Science, 1995
Phillip LePage, MS, Forest Science, 1995
Bill Daly, MS (non thesis), Botany & Plant Pathology, 1996
Catherine Klier, MS, Botany & Plant Pathology, 1996
Heather Miller, MS, Rangeland Resources, 1996
Cynthia Page, MS (non thesis), Botany & Plant Pathology 1996
Jerilyn Peck, MS, Botany & Plant Pathology, 1996
Lori Trummer, MS, Botany & Plant Pathology, 1996
Lisa Lantz, MS, Botany & Plant Pathology, 1997
Jean Ponzetti, MS, Botany & Plant Pathology, 2000
Andrea Rutchy, MS, Botany & Plant Pathology, 2001
Jennifer Hutchinson, MS, Botany and Plant Pathology, 2001
Liane Beggs, MS, Forest Science, 2004
Robert Fahey, MS, Forest Science, 2005
Lora Perkins, MS, Botany & Plant Pathology, 2007
Dominic Maze, MS (non thesis), Botany & Plant Pathology, 2007

Maria Lopez, MS, Forest Science, 2007
Jessi Brunson, MS, Botany & Plant Pathology, 2008 (co-major prof. with D. Pyke)
Rebecca Currin, MS, Botany & Plant Pathology, 2008
Ian Silvernail, MS, Botany & Plant Pathology, 2008
Erin Shroll, MS, Horticulture, 2009
Gabrielle Snider, MS, Forest Resources, 2010
Jayson Frentress, MS, Botany & Plant Pathology, 2010
Mike Messier, MS, Forest Science, 2009
Robin Mulvey, MS, Botany & Plant Pathology, 2010
Katie Gallagher, MS, Botany & Plant Pathology, 2012 (co-major professor)
William Pollock, MS, Forest Engineering, Resources and Management, expected 2013
Caitlin Lawrence, MS, Botany & Plant Pathology, expected 2014 (co-major professor)
Stacey Frederick, MS, Forest Ecosystems and Society, expected 2013

M.A.T. and M.S. in Science and Mathematics Education Students:

Kate Worster, MS, Science and Mathematics Education, 2004
Katherine James, MS, Science and Mathematics Education, 2005
Jennifer Allen, MS, Science and Mathematics Education, 2005
Lara Fritz, MS, Science and Mathematics Education, 2005
Erin Chamberlain, MS, Science and Mathematics Education, 2006
Lea Goodrich, MS, Science and Mathematics Education, 2006
Laura Syring, MS, Science and Mathematics Education, 2006
Marie Burns, MS, Science and Mathematics Education, 2007
Willow Wegner, MS, Science and Mathematics Education, 2007
Andrea Meadows, MS, Science and Mathematics Education, 2008
Serene Granstom, MS, Science and Mathematics Education, 2008
Mary Bowen, MS, Science and Mathematics Education, 2008
Sonja McMackin, MS, Science and Mathematics Education, 2009
Larissa Laselle, MS, Science and Mathematics Education, 2009
Christine Molina, MS, Science and Mathematics Education, 2011
Christine McAtee, MS, Science and Mathematics Education, 2012

GRADUATE SCHOOL REPRESENTATIVE:

Angie Evenden, PhD, Bot & Plant Path, 1990
Shafiqur Khan, PhD, Forest Science, 1992
Bruce McIntosh, MS, Forest Science, 1992
Ian MacRae, PhD, Entomology, 1995
Bruce McIntosh, PhD, Forest Science, 1996
Ari Jumpponen, PhD, Forest Science, 1998
Richard Konig, MS, Forest Science, 1998
John Gray, MS, Forest Science, 1998
Mark Martinez, PhD, Rangeland Resources, 1999
Steven Fontes, Forest Science, 2003
Joan Hagar, Forest Science, 2003
Brett Butler, Forest Science, 2005
Joe Kaser, Crop & Soil Science, 2009

Matthew Reilly, Forest Ecosystems and Society, expected 2014

ADVISING

Undergraduate Advising

- 2009 – 2012 Environmental Sciences, Summer Orientation and Advising Programs
- 2007 – 2009 Biology Program, ~ 10 advisees
- 2004 – present: Many undergraduates per year, Environmental Sciences Program
- 1993 - 2003: Assigned advisor for 30-150 undergraduates per year, Environmental Sciences Program, and meet with 10-15 additional “drop-in” students each week.
- 1988 - 1994: 10-25 undergraduates per year; General Science, Biological and Environmental Sciences Options.
- 1993 - 2002: Environmental Sciences, Summer Orientation and Advising Programs.

EVALUATIONS OF ADVISING PERFORMANCE:

Numerical evaluations have not been collected in a systematic fashion; however, success in advising is attested to by receipt of the Boedtker Award for Excellence in Advising from the College of Science, Oregon State University (1992; also a finalist in 1995) and Oregon State University’s Dar Reese Excellence in Advising Award (1997).

PROGRAM DEVELOPMENT AND ADMINISTRATION:

I was Director of the Undergraduate Environmental Science Program at Oregon State University from Fall 1993 until June 2002, and resumed Directorship in April 2009, stepping down again in June 2012. This interdisciplinary program grew rapidly from approximately 100 majors in Fall 1993 to 250 majors by Spring 2002. As of spring 2012, there are approximately 500 majors; some on-campus and some completing the degree from a distance through e-campus. Duties associated with this position (including advising) occupied approximately forty percent of my time during 1992 – 2002, and are estimated at twenty five percent of my time, as of spring 2009. My responsibilities and activities included:

- Oversight, updating, and revision of the core curriculum and curricula for the 30 Minors, Options, or Certificates completed by Environmental Sciences majors as their area of specialization.
- Development of new curriculum Options as needs became apparent. This effort involved proposing curricula, carrying out appropriate liaison, and following established procedures for obtaining approval of the new curricula. Most recent additions include Options in Environmental Communication, Environmental Sociology, Environmental Geosciences, Water Science and Resources, and Pre-education.
- Communicating with the 30 faculty members who advise students in the Environmental Sciences Program. These faculty come from the Colleges of Science; Agricultural Sciences; Forestry; Engineering; Oceanic and Atmospheric Sciences; and Health and Human Performance. All were informed by me about changes in curricula, rules and regulations, and other matters.

- Recruiting additional faculty to serve as advisors in existing Options or Minors, and for newly created Options.
- Establishing positions for, hiring and supervising three Advising Specialists who work with this program, one at 0.75 FTE and two at 0.25 FTE. In addition to advising, these people gather and disseminate information on internships, job opportunities, scholarships, international opportunities, and so forth. I provided guidance on sources of information and methods for dissemination of this information.
- Advising Environmental Sciences majors. I was the assigned advisor for 30-150 majors per year (depending on availability of other advisers) during 1993 -2002, and I met with 10-15 additional students per week on a “drop-in” basis (new majors, potential transfer students from other departments or Universities, etc.).
- Establishing Environmental Sciences prefix (ENSC) for the program, and obtaining approval for courses to be offered under the prefix, including ENSC 101 (Orientation to Environmental Sciences), ENSC 401 (Research), ENSC 405 (Reading and Conference), ENSC 406 (projects), and ENSC 410 (Internship).
- Providing approval and oversight for all students wishing to participate in Research, Reading and Conference, or Internship activities for academic credit. For example, during the summer of 1997 and the 1997-98 academic year, 55 Environmental Sciences majors completed internships for academic credit (ENSC 410), and I met with each, discussed and approved their proposed internship, and administered final grades.
- Initiation of new activities designed to build cohesiveness among Environmental Sciences majors. Examples include creation of the Environmental Sciences Association (the club for undergraduate Environmental Sciences majors) and a computer list server, to which most of the Environmental Sciences majors subscribe. The list server is used to post information about new courses, changes in curricula, relevant lectures on campus, scholarships, and internship and career opportunities.
- Establishing professional advising positions (sought and obtained some funding for this from OSU’s Ecampus) and overseeing advisors (as of spring 2012, 3.5 FTE).
- Serving as contact person for institutional and public liaison with the Environmental Sciences Undergraduate Program.
- Serving as contact person for, and Program participant in, Oregon State University’s major effort to make the BS degree in Environmental Sciences available to students at Oregon community colleges and elsewhere in the world via distance education.
- Assisting with writing a proposal to fund a new effort to produce International Environmental Sciences majors who will receive a Minor in North American Environmental Sciences. This proposal was funded by the U.S. Department of Education’s “Fund for the Improvement of Post-secondary Education,” and recruitment of students and program development began under the leadership of the Dean for International Education and me, in Fall, 1998.
- Completing graduation audits for approximately 50 seniors per year.
- Assisting with writing a proposal to fund an effort to provide Environmental Sciences majors and other students at Oregon State University with the opportunity to conduct research in nations that are high priority for the U.S. National Security Education Program (NSEP). Recruitment of students and program development began under the leadership of the Dean for International Education, a faculty member from the Department of Public Health, a faculty member from Political Science, and me, in Fall 2000.

- Hiring a full-time academic advisor to work with students who are completing the Environmental Sciences degree through OSU's e-campus (distance education) (summer 2009)
- Hiring an academic advisor (1.0 FTE) to work with on-campus Environmental Sciences, General Sciences pre-education majors, and Biology majors (fall 2010). Hiring another advisor (1.0 FTE) to work with e-campus Environmental Sciences and Earth Sciences majors (spring 2011). Hiring another advisor (0.5 FTE) to work with e-campus Environmental Sciences advisors (spring 2012), and another (1.0 FTE) to focus on developing internship opportunities for Environmental Sciences and Earth Sciences majors (spring 2012).
- Participating in numerous meetings about the future alignment of the Environmental Sciences Undergraduate Program (summer 2009 – present) and overseeing its move from College of Science to College of Earth, Ocean and Atmospheric Sciences (2011-2012 academic year)

• **SCHOLARSHIP AND CREATIVE ACTIVITY**

MAJOR AREAS OF CURRENT RESEARCH:

Research focuses on effects of stress and disturbance on plants. The majors stresses studied are air pollutants (most recently, formaldehyde) and changes in abiotic environment associated with canopy removal in forests. This research is conducted in the field and in controlled environments, and emphasizes effects on growth and physiological indicators such as nitrogen fixation and electrolyte leakage. The major disturbances being studied are forest harvesting and fuel reduction practices in grasslands, shrublands and oak woodlands. Studies related to forests include effects of varying harvesting practices on timber production; diversity and growth of vascular plants, bryophytes, and lichens; and assessments of impacts and sustainability of commercial "moss" harvesting in Pacific Northwest forests. Assessments of commercial moss harvest issues also include Appalachian forests. Studies assessing consequences of various fuel reduction practices for native plant communities and invasion by exotic plants began in 2003 and are on-going, focused in SW Oregon. Also in SW Oregon, research focuses on elucidating age structures of chaparral shrub species and *Quercus garryana* to advance basic understanding and obtain insights into past disturbance histories and consequences of fire suppression on disturbance regimes. In addition, a project focused on assessing the invasibility of the planted non-native species, *Kochia prostrata* in Idaho is underway. Long-term studies of reproduction in *Pinus contorta* spp. *latifolia* and of forest response to a simulated burn are also in progress.

PUBLICATIONS:

Refereed Journal Articles

- Muir, P.S. and J.E. Lotan. 1985a. Site disturbance history and serotiny of *Pinus contorta* in western Montana. *Ecology* 66:1658-1668.
- Muir, P.S. and J.E. Lotan. 1985b. Serotiny and the life history of *Pinus contorta* in western Montana. *Canadian Journal of Botany* 63:938-945.

- Muir, P.S., K. Wade, B. Carter, T.V. Armentano, and R. Pribush. 1986. Fog chemistry in an urban midwestern site. *Journal of the Air Pollution Control Association* 36:1359-1361.
- Muir, P.S. and B. McCune. 1987. Index construction for foliar symptoms of air pollution injury. *Plant Disease* 71:558-565.
- Muir, P.S. and B. McCune. 1988. Lichens, tree growth, and foliar symptoms of air pollution: Are the stories consistent? *Journal of Environmental Quality* 17:361-370.
- Muir, P.S. and T.V. Armentano. 1988. Evaluating oxidant injury to foliage of *Pinus ponderosa*: A comparison of methods. *Canadian Journal of Forest Research* 18:498-505.
- Muir, P.S. and M. Böhm. 1989. Cloud chemistry and occurrence in the Western United States: A synopsis of current information. Pages 73-101 in R.K. Olson and A.S. Lefohn, eds., *Effects of Air Pollution on Western Forests*. Air and Waste Management Association, Pittsburgh, PA.
- Muir, P.S. 1990. Influences of mist pH and acid anion on cation efflux from pinto bean foliage. *Water, Air, and Soil Pollution* 49:389-407.
- Muir, P.S. 1991. Fogwater chemistry in a woodburning community, western Oregon. *International Journal of the Air and Waste Management Association* 41:32-38.
- Muir, P.S. 1992. Effects of ambient acidic rain on cation concentrations in leaves of *Acer saccharum* and *Cornus florida*. *Canadian Journal of Forest Research* 22:490-496.
- Muir, P.S. and B. McCune. 1992a. A dial quadrat for mapping herbaceous plants. *Natural Areas Journal* 12:136-138.
- Muir, P.S. and B. McCune. 1992b. Simulating ecological complexity using the example of pesticides in ecosystems. *American Biology Teacher* 55:165-169.
- Muir, P.S. 1993. Disturbance effects on structure and tree species composition of *Pinus contorta* forests in western Montana. *Canadian Journal of Forest Research* 23:1617-1625.
- Moritsch, B.J. and P.S. Muir. 1993. Subalpine revegetation on backcountry campsites in Yosemite National Park, California: Changes in vegetation after three years. *Natural Areas Journal* 13:155-163.
- Muir, P.S. and R. Moseley. 1994. *Primula alcalina*, a threatened species of alkaline seeps, in relation to site and grazing. *Natural Areas Journal* 14:269-278.
- McCune, B., C.C. Derr, P.S. Muir, A. Shirazi, S.C. Sillett, J.E. Peck, and W.J. Daly. 1996. Lichen pendants for transplant and growth experiments. *The Lichenologist* 28:161-169.
- Shirazi, A.M., P.S. Muir and B. McCune. 1996. Environmental factors influencing the distribution of the lichens *Lobaria pulmonaria* and *L. oregana* in Oregon. *The Bryologist* 99:12-18. (Received The Bryologist's Edward Tuckerman Award for best paper in lichenology from 1996 for this paper.)
- Rose, C. and P.S. Muir. 1997. Green-tree retention: consequences for timber production in forests of the western Cascades, Oregon. *Ecological Applications* 7(1):209-217.
- Muir, P.S. and A.M. Shirazi. 1996. Effects of formaldehyde-enriched mists on *Pseudotsuga menziesii* (Mirbel) Franco. and *Lobaria pulmonaria* (L.) Hoffm. *Environmental Pollution* 94:227-234.
- Muir, P.S., A.M. Shirazi, and J. Patrie. 1997. Seasonal growth dynamics in the lichen *Lobaria pulmonaria*. *The Bryologist* 100: 458-464.
- Rambo, T.R. and P.S. Muir. 1998a. Forest floor bryophytes of *Pseudotsuga menziesii*-*Tsuga heterophylla* stands in Oregon: influences of substrate and overstory. *The Bryologist* 101:116-130
- Shirazi, A.M. and P.S. Muir. 1998. *In vitro* effect of formaldehyde on Douglas-fir pollen. *Plant, Cell and Environment* 21: 341-346.

Rambo, T.R. and P.S. Muir. 1998b. Bryophyte species associations with coarse woody debris and stand ages in Oregon. *The Bryologist* 101: 366-376.

Trummer, L. M., P.E. Hennon, E.M. Hansen, and P.S. Muir. 1998. Modeling the incidence and severity of hemlock dwarf mistletoe in 110-year-old wind-disturbed forests in Southeast Alaska. *Canadian Journal of Forest Research* 28:1501-1508.

Since last promotion:

Traut, B. and P.S. Muir. 2000. Relationships of remnant trees to vascular undergrowth communities in the western Cascades: A retrospective approach. *Northwest Science* 74 : 212-223.

Peck, J.L. and P.S. Muir. 2001a. Harvestable bryophytes and their accumulation in Central Western Oregon. *The Bryologist* 104:181-190.

Peck, J.L. and P.S. Muir. 2001b. Estimating the biomass of harvestable epiphytic moss in central western Oregon. *Northwest Science* 75:99-106.

Rosso, A.L., P.S. Muir, and B. McCune. 2001. Using transplants to measure accumulation rates of epiphytic bryophytes in forests of western Oregon. *The Bryologist* 104: 430-439.

Keon, D.B. and P.S. Muir. 2002. Growth of *Usnea longissima* across a variety of habitats in the Oregon Coast Range. *The Bryologist* 105: 233-242.

Lindh, B.C. and P.S. Muir. 2004. Understory vegetation in young Douglas-fir forests: does thinning help restore old-growth composition? *Forest Ecology and Management* 192:285-296.

Menke, C.A. and P.S. Muir. 2004a. Patterns and influences of exotic species invasion into the grassland habitat of the threatened plant *Silene spaldingii*. *Natural Areas Journal* 24:119-128.

Menke, C.A. and P.S. Muir. 2004b. Short-term influences of wildfire on the threatened plant *Silene spaldingii* and its canyon grassland plant community. *Northwest Science* 78: 192-203.

Muir, P.S., T.R. Rambo, R.W. Kimmerer, and D.B. Keon. 2006a. Influence of overstory removal on growth of epiphytic lichens and mosses in western Oregon. *Ecological Applications* 16(3): 1207-1221

Muir, P.S., K. Norman and K. Sikes. 2006b. Quantity and value of commercial moss harvest from forests in the Pacific Northwestern and Appalachian regions of the U.S. *The Bryologist*. 109(2): 197-214.

Peck, J.L. and P.S. Muir. 2007. Conservation management of the mixed species nontimber forest product of "moss" - Are they harvesting what we *think* they're harvesting? *Biodiversity and Conservation* 16: 2031-2043.

Peck, J.E., H.M. Hoganson, P.S. Muir, A.R. Ek, and L.E. Frelich. 2008. Using inventory projections to evaluate management options for the nontimber forest product of epiphytic moss. 2007. *Forest Science* 54 (2): 185-194.

Perchemlides, K.A., P.S. Muir, and P. Hosten. 2008. Responses of chaparral and oak woodland plant communities to fuel-reduction thinning in southwestern Oregon. *Journal of Range Ecology and Management*. 61: 98-109.

Peck, J.E. and P.S. Muir. 2008. Biomass inventory and regrowth rate of harvestable tree and shrub moss in the Oregon Coast Range. *Western Journal of Applied Forestry* 23: 34-39.

Sikes, K.G. and P.S. Muir. 2009. Influence of two fuel reduction treatments on chaparral communities of southwestern OR. *Madrono* 56: 8 – 22.

Duren, O.C. and P.S. Muir. 2010. Does fuels management accomplish restoration in southwest Oregon chaparral? *Insights from age structure*. *Fire Ecology* 6(2): 76-96.

- Gilligan, L.A. and P.S. Muir. 2011. Stand structures of Oregon white oak woodlands, regeneration, and their relationships to the environment in southwest Oregon. *Northwest Science* 85 (2): 141-158.
- Duren, O.C., P.S. Muir and P.E. Hosten. 2012. Vegetation change from the Euro-American settlement era to the present in relation to environment and disturbance in southwest Oregon. *Northwest Science* 86: 310 - 328.
- Gray, E.C. and P.S. Muir. 2013. Does *Kochia prostrata* spread from seeded sites? An evaluation from southwestern Idaho, USA. *Rangeland Ecology and Management* 66(2): 191 – 203.

Peer-reviewed Reports

- Muir, P.S., R.L. Mattingly, J.C. Tappeiner, J.D. Bailey, W.E. Elliot, J.C. Hager, J.C. Miller, E.B. Peterson. 2002. Managing for Biodiversity in Young Douglas – fir Forests of Western Oregon. USGS Biological Science Report BSR 2002-0006. 90 pages.
http://fresc.usgs.gov/products/papers/mang_bio.pdf
- Muir, P.S. 2004. An Assessment of commercial “moss” harvesting from forested lands in the Pacific Northwestern and Appalachian regions of the United State: how much moss is harvested and sold domestically and internationally and which species are involved? Final report submitted to U.S. Fish and Wildlife Service and USGS Forest and Rangeland Ecosystem Science Center. 80 pages. On file at USGS/BRD/FRESC, Corvallis, Oregon.
<http://oregonstate.edu/~mccuneb/Muir2004.pdf>.

Other Reports

- Muir, P.S. and P.E. Hosten. 2007. Fuels reduction in oak woodlands, shrublands, and grasslands of southwestern Oregon: Consequences for native plants and invasion by non-native species. Final Report submitted to Joint Fire Science Program. (see also <http://oregonstate.edu/~muirp/FuelsReductionSWOregon/>)

Peer-reviewed Videotapes

- Muir, P.S. 1997. Enhancing lichens and bryophytes in young forests. Produced and distributed by Forestry Media Center, Oregon State University, Corvallis (16 min. running time).
- Tappeiner, J., J. Hagar, J. Miller, E. Peterson, A. Rosso, J. Lint, P. Muir, and M. Reed. 2000. Managing for Biodiversity in Young Forests. Produced and distributed by Forestry Media Center, Oregon State University (28 min. running time).

Abstracts of Papers and Posters Presented at Professional Meetings (since promotion to Associate Professor; seven prior to that promotion)

- Muir, P.S. 1993. Status of *Primula alcalina* populations in relation to grazing in east-central Idaho. *Bulletin of the Ecological Society of America* 74:368.
- Shirazi, A.S. and P.S. Muir. 1995. *In vitro* effects of formaldehyde on Douglas-fir pollen. *HortScience* 30:897.
- Muir, P.S., J. Patrie, and A.S. Shirazi. 1996. Seasonal growth dynamics in the lichen *Lobaria pulmonaria*. *American Journal of Botany* 83(6):15.
- Rambo, T.R. and P.S. Muir. 1996. Diversity and ecology of forest floor bryophytes in *Tsuga heterophylla* zone stands of western Oregon. *American Journal of Botany* 83(6):18.
- Rosso, A.L., P.S. Muir, and B. McCune. 1996. Diversity of shrub epiphytes in relation to stand management in the Coast Range, Oregon. *American Journal of Botany* 83(6):18.

- Muir, P.S. and J.E. Peck. 1997. Commercial moss harvest: Inventory and monitoring challenges. Final Program and Abstracts for the 70th Annual Meeting of the Northwest Scientific Association.
- Muir, P.S., B. McCune, E.B. Peterson, T.R. Rambo, and A.L. Rosso. 1997. Lichen and bryophyte responses to forest management practices in the Pacific Northwestern U.S. *Bulletin of the Ecological Society of America* 78(4):151.
- Muir, P.S. and T.R. Rambo. 1998. Enhancing lichens and bryophytes in young forests. Final Program and Abstracts of the Annual Meeting of the Northwest Scientific Association, A-88.
- Rambo, T.R. and P.S. Muir. 1998. Forest floor bryophytes as indicators of substrate and stand age. Final program and Abstracts for the Annual Meeting of the Northwest Scientific Association, A-108.
- Since last promotion:
- Keon, D.B. and P.S. Muir. 1999. Predicting presence of the sensitive lichen *Usnea longissima* in managed landscapes. *Ecological Society of America Annual Meeting Abstracts* pg. 268.
- Keon, D.B. and P.S. Muir. 2000. Factors limiting the distribution of the sensitive lichen *Usnea longissima* in the Oregon Coast Range: Habitat or dispersal?" Poster presented at Botanical Society of America meetings, August 2000, Portland, OR.
- Olson, D.H., S.S. Chan, P. Cunningham, B. Hansen, A. Moldenke, R. Progar, P.S. Muir, B. McCune, A. Rosso, and E.B. Peterson. 2000. Characterizing managed headwater forests: Integration of stream, riparian, and upslope habitats and species in Western Oregon. *Proceedings, Society of American Foresters 1999 National Convention, Portland, OR, Sept. 11-15, 1999*; p. 539.
- Olson, D.H., S.S. Chan, G. Weaver, P. Cunningham, A. Moldenke, R. Progar, P.S. Muir, B. McCune, A. Rosso, and E.B. Peterson. 2000. Characterizing stream, riparian, upslope habitats and species in Oregon managed Headwater forests. *Proceedings International Conference on Riparian Ecological and Management in Multi-use Watersheds. August 2000. American Water Resources Association.*
- Muir, P.S. and T.R. Rambo. 2001. Enhancing lichens and bryophytes in young forests. Northwest Scientific Association, Annual Meeting, Arcata, CA; March 21-24, 2001. (<http://www.humbolt.edu/~scs6/session3abs.html>)
- Muir, P.S. and T.R. Rambo., D.B. Keon and R.W. Kimmerer. 2003 Influence of overstory removal on growth of epiphytic mosses and lichens in western Oregon. Fourth Annual North American Forest Ecology Conference, Corvallis, Oregon, June 16-19, 2003. (http://wwwdata.forestry.oregonstate.edu/nafewabs/display_select.aspx)
- Lindh, B.C. and P.S. Muir. 2003. Testing the effect of pre-commercial thinning on understory herb and shrub communities – does thinning help restore old-growth composition? Fourth Annual North American Forest Ecology Conference, Corvallis, Oregon, June 16-19, 2003. (http://wwwdata.forestry.oregonstate.edu/nafewabs/display_select.aspx)
- Menke, C.A. and P.S. Muir. 2003. Relationships of fire and exotic species to the rare plant *Silene spaldingii* in an Idaho grassland. Poster presented at conference, Native Plant Restoration and Management on Public Lands in the Pacific Northwest, Oregon State University, Corvallis, Oregon, Feb. 11-13. 2003. Abstract in Proceedings at <http://www.applied.eco.org>.
- Muir, P.S. 2003. Enhancing lichens and bryophytes in young forest of western Oregon: Transferring science finding to land managers. Invited talk given at conference, Native Plant Restoration and Management on Public Lands in the Pacific Northwest, Oregon State

- University, Corvallis, Oregon, Feb 11-13, 2003. Abstract in Proceedings at <http://www.applied.eco.org>.
- Muir, P.S. 2004. Appalachian and Pacific Northwestern bryophytes as a nontimber forest product: how much is being harvested? Paper presented at annual meeting of the Ecological Society of America, Portland, Oregon, Aug.1 – 6, 2004. Abstract in Proceedings at <http://abstracts.co.allenpress.com/pweb/esa2004/document/?ID=37129>
- Hosten, P., P.S. Muir, K. Perchemlides, E. Pfaff and K. Sikes. Fuels reduction in oak woodlands and shrub lands of SW Oregon: consequences for native plants and invasion by non-native species. Oral Presentation at Joint Fire Science Program Principal Investigators Workshop. San Diego, CA., Nov. 2005 (Presenter)
- Perchemlides, K. and P.S. Muir. 2006. Impacts of fuel reduction thinning on oak and chaparral vegetation communities of southwestern Oregon. Paper presented at annual meeting of Northwest Scientific Association, Boise, ID, March 6 – 8, 2006.
- Perchemlides, K. and P.S. Muir. 2006. Impacts of fuel reduction and restoration thinning on oak and chaparral plant communities of southwestern Oregon. Poster presented at annual meeting of the Ecological Society of America, Memphis, TN, Aug. 6 – 11, 2006. Abstract in Proceedings at <http://abstracts.co.allenpress.com/pweb/esa2006/document/?ID=62554>
- Perchemlides, K. and P.S. Muir. 2006. Impacts of fuel reduction thinning treatments on oak and chaparral vegetation communities of southwestern Oregon. Poster presented at 3rd International Fire Ecology and Management Congress, San Diego, CA, Nov. 13 – 17, 2006. Abstract in proceedings at: <http://www.emmps.wsu.edu/2006firecongressproceedings/authorposters/index.htm>
- Duren, O.C. and P.S. Muir. 2008. Born of fire: Chaparral age structure as a clue to disturbance regimes and vegetation community change in Southwest Oregon. Oral presentation at 2008 Annual Meeting of the Ecological Society of America, Milwaukee, WI, Aug. 6, 2008. Abstract in program at <http://eco.confex.com/eco/2008/techprogram/P10571.HTM>
- Gilligan, L. and P.S. Muir. 2009. Stand structure and disturbance effects in southwestern Oregon *Quercus garryana*-dominated woodlands. Oral presentation at 2008 annual meeting of the Northwest Scientific Association, Seattle, WA, March 25 – 28, 2009. Program and Abstracts, Session 15.
- Gilligan, L.A. and P.S. Muir. 2009. Stand structure of *Quercus garryana*-dominated woodlands in relation to environment and disturbance history in southwestern Oregon. Oral presentation at 2009 Annual Meeting of the Ecological Society of America, Albuquerque, NM, Aug. 6, 2009. Abstract in program at <http://eco.confex.com/eco/2009/techprogram/P19587.HTM>
- Duren, O.C. and P.S. Muir. 2009. Cows, fire suppression, and fuels mitigation: Klamath chaparral response to disturbance and re-evaluating management objectives. Oral presentation; Klamath-Siskiyou Ecology conference, May 28 – 29, 2009, Ashland, OR
- Gilligan, L.A. and P.S. Muir. 2009. Stand structure and disturbance effects in southwestern Oregon *Quercus garryana*-dominated woodlands. Poster presentation; Klamath-Siskiyou Ecology conference, May 28 – 29, 2009, Ashland, OR
- Gilligan, L.A. and P.S. Muir, 2010. Oregon white oak woodland stand structures in southwestern Oregon: insights into recruitment trends and implications for restoration and management. Oral presentation; 82nd Annual Meeting of the Northwest Scientific Association, Centralia, WA, March 24-27, 2010.

Gray, E.C. and P.S Muir. 2011. Forage kochia (*Kochia prostrata*): Rangeland rehabilitator or exotic invader? Poster presentation. Range Society of America meeting, Billings, MT, March 2011.

PROFESSIONAL MEETINGS AND SEMINARS:

Workshops and Conferences

- 2004 Invited speaker and tour leader, Density Management Studies by the BLM in western Oregon (for BLM and Forest Service Personnel).
- 2001 Invited participant and tour leader, Delph Creek Density Management Site Tour (for BLM and Forest Service Personnel).
- 2000-2005 Participant, Spring Creek Project, Department of Philosophy, Oregon State University (various workshops).
- 1997 Participant. Denmark's International Study Program Conference; "Environmental Science at D.I.S." Copenhagen, Denmark, June 3-9.
- 1991 Invited participant, Region 1 Air Quality Screening Workshop (U.S. Forest Service), Terrestrial Subgroup, Yellow Bay, MT, April 29-May 2.
- 1986 Invited Participant, Cloud Water Project Meeting and Synoptic Discussion, Institute of Ecosystem Studies, NY Botanical Garden, Millbrook, March 4.
- 1986 Organizer and Participant, Methods of Evaluating Visible Air Pollution Effects on Broad-leaved Plants, Holcomb Res. Institute, Indianapolis, IN, Apr. 3-4.
- 1985 Participant, 17th Annual Air Pollution Workshop, Raleigh, NC, April 15-18.
- 1984 Participant, National Atmospheric Deposition Program Technical Committee Meeting, Asheville, NC, October 29-November 2.
- 1984 Participant, Sixteenth Annual Air Pollution Workshop, Banff, Alberta, Canada, April 30-May 4.

Invited Papers and Seminars

Since last promotion:

- 2013 Keynote speaker, College of Forestry Graduate Student Research Symposium, Oregon State University, "Delivering your message: beyond the peer-reviewed journal article."
- 2007 Dept. of Forest Science, Oregon State University, "Fuel reduction treatments in non-conifer systems of southwestern OR: rationale and consequences." Jan. 11, 2007
- 2005 Joint Fire Science Program Principal Investigators Workshop, San Diego, CA, "Fuels Reduction in Oak Woodlands Shrub Lands, and Grasslands of SW Oregon: Consequences for Native Plant and Invasion by Non-native Species."
- 2005 West Virginia University, Morgantown, "Rolling Stones Gather No Moss, But People Do: Is Moss Harvesting a Problem?"
- 2003 University of Northern Arizona, Flagstaff, "Can Creative Silviculture Enhance Lichens and Bryophytes in Young Pacific Northwest Forests?"
- 2003 Thinning Young Forests in Western OR; conference and field tour for OR Dept. of Forestry Personnel, Alsea, OR, "Can Creative Silviculture Enhance Lichens and Bryophytes in our Forest?"

- 2003 Conference on Native Plant Restoration and Management on Public Lands in the Pacific Northwest, Corvallis, OR, "Enhancing Lichens and Bryophytes in Young Forest of Western Oregon: Transferring Science Findings to Land Managers."
- 2003 64th Annual Biology Colloquium, Oregon State University, Corvallis, "Writing Essays of Place" (co-presenter with John Daniel).
- 2001 University of Minnesota, Duluth, "Ecosystem Management in Forests of the Pacific Northwest."
- 2000 Spelman College, Biology Department, Atlanta, GA, "Seeing the Forest and the Trees: Ecosystem Management in Forests of the Pacific Northwest."
- 2000 Eugene District, Bureau of Land Management, "Commercial Moss Harvesting: Is it Sustainable?"

Prior to last promotion:

- 1996 Willamette National Forest Supervisor's Office, Eugene, OR, "Effects of Variation in Ecosystem Carryover on Biodiversity and Community Structure of Forest Floor Bryophytes and Understory Vascular Plants: A Retrospective Approach,"
- 1994 Oregon Academy of Sciences Visual Triptych of Science, Corvallis, "The Chemistry of Fog."
- 1992 Carleton College, Biology Department, Northfield, MN, "The Fog Comes on Little Cat Feet: But What Does it Bring?"
- 1991 Botany and Plant Pathology Department, Oregon State University, "What is Polluted Fog, How Does it Form, and How Does it Affect Plants?"
- 1989,90, 92 Visual Cascade of Science, Oregon State University, "The Chemistry of Fog,"
- 1986 Indiana Forest and Woodland Owners Association, McCormick Creek State Park, IN, "Tree Growth Responses Along SO₂ Gradients in Southern Indiana,"
- 1986 Indianapolis Environmental Action Club, Indianapolis. "Air Pollutants and Plants in Indiana."
- 1985 Ohio Valley Acid Rain Symposium, Evansville, IN, "Measurements of Vegetation Decline in the Ohio Valley and An Assessment of Causal Mechanisms."
- 1984 Hoosier Environmental Council, Indianapolis, "Acid Deposition in Indiana."

GRANT AND CONTRACT SUPPORT:

Awarded or active since last promotion:

- 2009-2011 USGS; \$10,032; PI. Supplemental funds to support research on invasibility of *Kochia prostrata* in Idaho. (Wrote proposal and oversee research and writing)
- 2009-2011 USDI/BLM, \$43,500; PI; An evaluation of the invasibility of *Kochia prostrata* in Idaho. (Wrote proposal and oversee all research and assist with writing.)
- 2006-2010 Joint Fire Science Program, \$224,995; Co-PI with Dr. Paul Hosten (USDI/BLM); A comparison of presettlement vegetation and fire regimes with current patterns in oak woodlands and shrublands of southwestern Oregon. (Wrote bulk of proposal, developed research plan, oversaw research and analysis jointly with Co-PI until he took a new position; as of 2009, sole responsibility.)
- 2004-2005 USDI/BLM, \$26,005; co-investigator with K. Sikes; Effects of fuels reduction treatments on native plant communities in the Butte Falls Resource Area. (Assisted with writing and provide advice on data collection and analysis.)
- 2004-2007 Joint Fire Science Program, \$236,519; Co-P.I. with Dr. Paul Hosten (USDI/BLM); Fuels reduction in oak woodlands, shrub lands and grasslands of SW Oregon:

- Consequences for native plants and invasion by exotic species. (Wrote bulk of proposal, developed budget, oversee research and analysis jointly with Co-P.I.).
- 2002-2003 USFWS/USGS; \$20,000; P.I.; An assessment of commercial “moss” harvesting from forested lands in the Pacific Northwest and Appalachian Regions of the United States. (Wrote proposal, oversaw research and wrote final report).
- 2002-2003 USDI/Bureau of Land Management; \$19,360; Co-investigator with C. Menke; Relationships of exotic species and fire to *Silene spaldingii* populations in Idaho: Year 2. (Assisted with writing and provided advice on data collection and analysis.)
- 2001-2002 USDI/Bureau of Land Management; \$16,161; Co-investigator with C. Menke; Relationships of exotic species and fire to *Silene spaldingii* populations in Idaho. (Assisted with writing and advised on data collection and analysis.)
- 2000-2004 National Security Education Program; \$267,646; Co-investigator (P.I. Dr. Jack VandeWater), The Oregon State University International Undergraduate Research Program (Participated in proposal writing and served as one of the three primary faculty consultants to the project director. This award enabled undergraduate OSU students from the International Degree Program, the University Honors College, or the University Research, Innovation, Scholarship and Creativity Program to conduct research related to environmental sciences, public health, or political science in several nations that are viewed by the National Security Education Program as being critical to U.S. national security.)
- 1998-2002 U.S.G.S./Biological Resources Division; \$7,800; P.I., Integration and Synthesis for the Diversity of Young Stands Project. (Controlled budget, oversaw data analysis to assure consistent procedures, responsible for all writing.)
- 1998-2000 U.S.G.S./ Biological Resources Division; \$50,000; P. I., Dr. Bruce McCune co-P. I.; Predicting the presence of sensitive lichen species in a managed landscape. (Controlled budget and oversaw research of two graduate students jointly with McCune.)
- Prior to last promotion:
- 1997-99 USDI/Bureau of Land Management and USDA/Forest Service; \$30,000; P.I.; Commercial “moss” harvesting: Estimating the size of the resource and accumulation rates. (Controlled budget and oversaw research and writing.)
- 1997-98 USDI/Bureau of Land Management; \$10,000; P.I.; Towards a sustainable commercial “moss” harvest: Development of a protocol for inventory of the resource. (Controlled budget and oversaw research and writing.)
- 1997-98 USDI/Bureau of Land Management; \$17,329; P.I.; Growth and establishment of lichens and bryophytes in relation to microclimate and density management. (Controlled budget, oversaw research, responsible for analysis and writing.)
- 1995-98 National Biological Service; \$109,200; Co-investigator with B. McCune for bryophyte and lichen sub-project, E. Starkey and J. Tappeiner P.I.’s for entire \$626,000 project; Biodiversity of young forests. (McCune and I controlled sub-project budget and oversaw research, which was conducted by two graduate students.)
- 1995 National Biological Service, Forest and Rangeland Ecosystem Science Center; \$7,787; P.I.; Diversity of bryophytes in managed forest stands, Western Oregon. (Controlled budget and oversaw research and writing.)

- 1994-95 Bureau of Land Management; \$6,400; P.I.; Diversity of bryophytes in managed stands: Influence of legacy attributes and response to density management. (Controlled budget and oversaw research and writing.)
- 1993-94 Willamette National Forest; \$100,000; Co-P.I. (with S. Acker, T. Spies, B. Caldwell, R. Griffiths, B. McCune, A. Moldenke, and R. Molina). Retrospective studies of the effects of green tree retention on conifer production and biodiversity on the Willamette National Forest. (Oversaw research and writing for one graduate student's work on this project and maintained integration among participants.)
- 1992-94 U.S. EPA Research Grants Office, Exploratory Biology; \$118,000; P.I.; Effects of formaldehyde-enriched mists on *Pseudotsuga menziesii* and *Lobaria pulmonaria*." (Controlled budget, participated in and oversaw research; responsible for all analysis and writing.)
- 1991 U.S. Bureau of Land Management and Oregon State University (challenge Cost Share Program); \$10,213; BLM share \$4,420. P.I.; Population distribution, trends, and habitat requirements of *Primula alcalina*. (Controlled budget, conducted research, analysis and writing.)
- 1988 Oregon State University Research Council; \$6,521; P.I.; Fog chemistry in the Willamette Valley, Oregon. (Controlled budget, conducted all research, analysis, and writing.)
- 1986 National Park Service; \$10,000; Co-P.I. (with T.V. Armentano); Methodology for assessing ozone-induced visible injury on foliage of ponderosa pine and white pine. (Conducted field research with Armentano but did all design analysis, and writing alone.)
- 1985-88 U.S. Air Force Office of Scientific Research; \$300,000; Co-P.I. (with T.V. Armentano); Emissions scavenging by fog, dew and foliage: Foliar uptake, and consequences for plants. (Participated in and oversaw research, completed all data analysis and writing.)
- 1985 B.F. Goodrich Company; \$10,000; P.I.; Experimental design and protocol -- studies of foliar protectants.(Conducted all research, data analysis, and writing.)
- 1981-82 U.S.D.A. Forest Service, Northern Forest Fire Research Laboratory and University of Wisconsin, Cooperative Research Grant; \$4,000; P.I.; (Conducted all research, data analysis, and writing.)

OTHER CREATIVE ACTIVITY

Sabbatical Leave:

2003-2004; primarily for research and writing, particularly related to moss harvest issues.

1996-97; primarily for research; also developed World Wide Web supplement for BI 301, Human Impacts on Ecosystems.

2010-2011; primarily for research and working on manuscripts with current and past graduate students; also accomplished major curricular revisions and a survey of alumni for the Environmental Sciences Undergraduate Program

Contributed Article:

2003. Beyond the field notebook in *Biology 371: Fitton Green Haiku*. Teaching with Writing 12(3):4-5.

MEDIA ATTENTION (Since last promotion)

My work on “moss” harvest issues attracted considerable media attention, including a story on *Jefferson Public Radio* (Ashland, OR) and articles in the *Eugene Register Guard* (www.registerguard.com/news/2004/08/30/b1.cr.moss.0830.html); *New York Times* (“Moss hunters roll away nature’s carpet and some ecologists worry.” J. Tompkins, Nov. 30, 2004); *New Scientist* (“Dreaming of a green Christmas?” G. Vines, 24 Dec. 2004/1 Jan. 2005, pp. 59-61); *Charleston Gazette*, March 10, 2005 [Charleston, WV]; *Conservation in Practice* (“Moss conservation behind bars.” A. Fischer, July-September 2005, pp. 35-36); *Sustainable Industries Journal*; and Oregon State University’s *Research Office Newsletter* (<http://oregonstate.edu/research/News/04decnews.html>). An Associated Press release in mid-October spurred coverage in many newspapers, including *The Oregonian*, *Chicago Sun-Times*, *Pittsburgh Post Gazette*, and papers from San Diego, Fort Worth, Charlotte, N.C., and elsewhere.

My work on consequences of fuel reduction treatments in SW OR has also attracted attention, most notably the publication in Jan 2010 of a Fire Science Brief by the Joint Fire Science Program: To Thin or Not to Thin: Assessing the Consequences of Fuel Reduction Treatments for the Non-coniferous Ecosystems of Southwestern Oregon. Fire Science Brief 87: http://www.firescience.gov/projects/briefs/03-3-3-36_FSBrief87.pdf

My work on potential invasibility of *Kochia prostrata* (with Erin Gray) attracted attention in several western newspapers, including the Idaho Statesman <http://www.idahostatesman.com/2013/09/22/2774967/western-native-plant-socities.html>

SERVICE

UNIVERSITY COMMITTEES AND SERVICE

University

2013	Affiliated Faculty Member, Environmental Arts and Humanities MA Program, OSU
2013	Search Committee, Student Sustainability Initiative Advisor
2012	OSU Campus Evaluation Committee for the Fulbright U.S. Student Program
2011	Search Committee – Admin. Program Specialist in Facilities Services
2011	Search Committee - Service Learning Faculty Development Coordinator
2011-present	International Degree Advisory Committee
2010-present	Sustainability Advocate, representing Env Sci Program
2009-present	Udall Scholarship faculty representative
2008-2009	Willamette Valley Native Prairie and Woodland Restoration Workshop Organizing Committee
2008-2010	Baccalaureate Core Ad Hoc Review/Revision Committee
2008	Environmental Soil Scientist Search Committee
2008	Invited panelist, Writing Intensive Program Luncheon
2005	Invited panelist, WS 340, Gender & Science
2005	Campus Fulbright Committee

2004-2007 Faculty Senate Baccalaureate Core Committee (Co-Chair for 2006-2007)

2003 Post-tenure Review Committee for Kathleen Dean Moore (Philosophy)

2003 Organizing Committee, 64th Annual OSU Biology Colloquium (“Under the Tangled Bank”)

2002-2005 Editorial Board, Oregon State University Press

2001-2003 Assistant Chief Commencement Marshall

2000,2001 Richard Chambers Environmental Grant – selection panel

2000 Environmental Soil Scientist Search Committee

2000 Co-Assistant Chief Commencement Marshall

1999 Dean of Distance and Continuing Education Search Committee

1999 Annual Graduate Student Conference, Poster Judge

1998 Faculty Senate ad hoc Committee on Distance Education

1998-2002 Statewide Degree Program Council

1996,1998,1999 Commencement Marshall

1996 Steering Committee for Fall Celebration, Association for Women in Science

1994-1997 Faculty Senate Panel for Hearings Committee

1994 Moderator, Symposium on Re-authorizing the Endangered Species Act

1993-1996 Student Activities Committee

1993 Gender Bias Committee

1993 Testified before a committee of the Oregon Senate on the relationship between teaching and research

1990-present Women Studies Faculty

1990-1992 Faculty Senate (elected position)

1988-1990 OSU/EPA Seminar Committee, Co-Chair (Biodiversity Seminar Series, 1989; Earth Day Seminar Series, 1990)

College

2013 College of Earth, Ocean and Atmospheric Sciences Scholarship Committee

2013 College of Agricultural Sciences Scholarship Committee

2011 – 2012 College Advisory Council; Instructional Programs Committee; Geography, Environmental Sciences and Marine Resource Management sub discipline group – member of each; all in CEOAS

2012 Search Committee, Associate Dean for Academic Programs, CEOAS (committee member)

2012 Search Committee, Internship Coordinator/Academic Advisor, CEOAS

2012 Search Committee, Program Director, Environmental Sciences Undergraduate Program, CEOAS

2012 Search Committee (Chair), Academic Advisor, Environmental Sciences Undergraduate Program, CEOAS

2010-present Member, Academic Programs Sub-committee; COAS-GEO-ES affiliation unit

2009 – present	Participant in numerous meetings re re-organization in College of Science and beyond
2009	Search Committee, Environmental Sciences, Biology, and General Science pre-education advisor (Committee Chair)
2009	Search Committee, Environmental Sciences e-campus advisor (Committee Chair)
2008-present	Biology Curriculum Committee
2008-2013	Mentoring committee for Dr. Shawn Rowe, Science and Mathematics Education
2008-2009	Environmental Sciences Undergraduate Program Faculty Advisory Committee
2007-2008	Life Science Curriculum Review Committee
2006, 2007, 2008, 2009	Panelist for Life Science Club, “Is graduate school for me?”
2001-2002	Search Committee, Environmental Sciences and Biology Advising Specialists
2001-2002	Biology Workgroup
2001,2002	College of Science Dean’s Scholarship Selection Committee
2001	Chair and Initiator, Nomination Committee – R.M. Bressler Senior Faculty Teaching Award for Michael Mix (successful nomination)
2000,2001	Fred Horne Award for Excellence in Teaching Science Committee
2000	Science Connections Lecturer, Cleveland High School, Portland, OR, “Human Influences on the Global Atmosphere.”
1999	Screening Committee, Interim Dean of College of Science
1999	Dean Horne Retirement Committee
1998	Dean’s Administrative Assistant Search Committee
1998-present	College of Science Curriculum Committee
1998	Steering committee, International Environmental Science Program
1998	College of Science’s “Science Connections” Program (participant)
1997-1998	College of Science Board of Visitors (participant in meetings)
1997	Environmental Sciences and Biology Advising Specialist Search Committee (chair)
1996	Discussion Leader, Kaleidoscope of Science for Minority Students
1995	Zoology Chair Search Committee
1995	Environmental Sciences Advising Specialist Search Committee (Chair)
1994-present	Environmental Sciences Interdisciplinary Degree Committee
1994-1997	Dean’s Scholarship in the Natural Sciences Committee
1994-1997	Carter Award Committee
1994-96, 1998	Participant, Symposium on Graduate Study in Science for Undergraduate Women
1993	Undergraduate Environmental Sciences Faculty Advisory Group
1992-1994	Biology Introductory Course Evaluation and Curriculum Committee
1992	Advisory Committee, Symposium for Graduate Study in Science for Undergraduate Women

Departmental

Botany & Plant Pathology

2013 Chief Compost Maven
2013 Chair, Teaching Mentoring Committee for Molly Megraw
2013 Teaching Mentoring Committee for Andy Jones
2011-2013 Curriculum Committee
2009 "BPP 100-Year celebration Committee," participant
2009, 2012 Chair, Teaching Mentoring Committee, Carol Rivin
2008 Search Committee for Chair, Botany and Plant Pathology
2008 Committee to develop proposal for future College alignment of Botany and Plant Pathology

2007-2008 P & T Executive Committee, Chair
2007-2011 Roth Forest Committee
2007 Student Awards Committee -- Chair
2007 Post-tenure review Committee for Richard Halse (Chair)
2006 Mentoring Committee for Richard Cronn (Chair)
2006-2008 P & T Executive Committee (elected position)
2005-2009 Faculty Adviser, Botany Club
2004-2005 Post-tenure Review Committee for Chris Mundt (Chair)
2004-2005 Seminar Committee (Co-chair winter, Chair spring)
2004-2005 Curriculum Committee
2003 Search Committee for Temporary Instructor, Analysis of Environmental Issues(BOT 479/579, 489/589)

2002-2003 Curriculum Committee
2002 Search Committee for Temporary Instructor, Plant Anatomy
2002 Faculty Mentoring Committee for Mark Patterson (chair)
2001 Faculty Mentoring Committee for Steve Cluskey (chair)
2001-2002 Curriculum Committee (chair)
2000-2001 Plant Ecology Curriculum Committee (chair)
2000 Seminar Committee (Lead, fall term)
2000-2003 Promotion and Tenure Executive Committee
(elected position; 3 year term; chair for 2002-03)
1999,2001,2003 Faculty Mentoring Committee for Luis Sayavedra-Soto
1999 Search Committee for Personnel Specialist
1998, 1999 Chairperson's Advisory Committee (elected position)
1998 Awards Committee
1997 Roth Forest Committee
1995 Awards Committee (Chair)
1995 Chairperson's Advisory Committee (elected position)
1994 Mycologist Search Committee
1993-2002 Teaching Evaluation Committees for Aaron Liston (twice), Tom Wolpert, Lynda Ciuffetti, Kate Lajtha (annual and promotion), Mark Wilson (twice)

1993 Long-Range Planning Committee
1992 Ad hoc Teaching Evaluation Committee
1991-1993 Curriculum Committee

General Science Department

1991 Acting Chair, 9/3-9/26
1991 Biology Instructor Search Committee (co-chair)
1991 Biology Program Chairperson Search Committee
1989-1992 Fellowship Screening Committee (U.S. EPA-sponsored undergraduate fellowships)
1989 Screening Committee for NSF-sponsored Research Experiences for Undergraduates
1988-1991 Undergraduate Curriculum Committee

SERVICE TO THE PROFESSION

Editorial Service:

2005-2008. Associate Editor, 3-year term, Canadian Journal of Forest Research (resigned at end of 3-year term, owing to time conflicts)

Panels:

National Research Council and Ford Foundation, Ford Foundation Predoctoral Fellowships Program review, Washington, D.C., 1998, 1999, 2001, 2004 (invited repeatedly since last service, but conflicted with teaching commitments)
National Science Foundation's Course, Curriculum, and Laboratory Improvement (CCLI) program, Type 1 competition, review and serve on panel -- invited 2007, 2008, 2009 but conflicted with teaching commitments)

Meetings and Workshops:

2008-2009. Organizing Committee, Native Woodland and Prairie Restoration at OSU -- Workshop
2004-2005. Symposium Organizer, Northwest Scientific Association's 78th Annual Meeting. (Symposium title: "The science of salvage, fuels management, and other hot topics")
2002-2003. Organizing Committee, 4th North American Forest Ecology Workshop
2002-2003. Field Trips Committee, 4th North American Forest Ecology Workshop
2003. Field Trip Co-Leader, 4th North American Forest Ecology Workshop (Young stand field trip)

Review Committees:

- 2008 Scientific Peer Reviewer for U.S Fish and Wildlife Service's Draft Recovery Plan for the Prairie Species of Western Oregon and Southwestern Washington
- 2006 External Reviewer for South Africa's National Research Foundation evaluation and rating of Associate Professor T.A. J. Hedderson, Department of Botany, University of Cape Town, South Africa
- 2004 Cascade-Siskiyou National Monument Livestock Study Science Review Committee
- 2003 External Reviewer for R.W. Kimmerer's promotion to Full Professor, State Univ. of NY, College of Environmental Science and Forestry.

Manuscript and Proposal Reviews (numbers following hyphens indicate number reviewed; I stopped keeping track of these several years ago)

Journals:

Ecology 1999-1; Environmental Pollution 1998-2; Ecological Monographs 1996-1; Journal of Vegetation Science 1995-1; The Bryologist 1995-1, 1998-1, 2000-1, 2002-1, 2003-1, 2006-1; Ecological Applications 1994-1, 2003-1, 2007-1; Canadian Journal of Forest Research 1993-1, 1995-1, 1998-1, 2000-1, 2003-2, 2005 - 5; 2006 – 7; 2007 – 10; 2008 – 8; Water, Air, and Soil Pollution 1992-1, 1994-1; Botanical Gazette 1990-1; Natural Areas Journal 1989-1; Forest Science 1986-1; Mycologia 2000-1; Atmospheric Research 2001-1; Conservation Biology 2000-1, 2001-1; Plant Ecology 2001-1; Canadian Journal of Botany 2001-1; Forest Ecology and Management 2002-1, 2005-2; 2006-2; Northwest Science 2003-2; Annals of Forest Science 2008-2.

Government Agency Publications:

USDA Forest Service 1995-1, 2000-1, 2003-1; U.S. Environmental Protection Agency 1988-1, 1989-1, 1990-1, 1993-1, 1998-1, 2000-1; National Park Service, Air Quality Division 1989-1, 1990-1, 2000-1

Research Proposals:

USDA Competitive Grants Program (SBIR) 1991-present (1-2 per year); Idaho State Board of Higher Education, Specific Research Grants Program 1990-1; National Science Foundation: Population Biology and Physiological Ecology; Ecology; Integrative and Theoretical Ecology; and Microbial Observatories and Microbial Interactions and Processes Program 1986-1, 1987-1, 1990-1, 1993-1; 2005-2; 2006-1; Natural Environment Research Council (U.K.) 2001-1; USDA NRI Managed Ecosystems Research Programs 2002-1.

Book Publishers:

Essential Biology (Addison, Wesley, Longman) (2000, 2001)

PROFESSIONALLY-RELATED SERVICE TO THE PUBLIC

- 2012- present – Volunteer with “Edible Corvallis Initiative” preparing foods for tasting tables program in public schools, Benton County
- 2013 Volunteer produce hauler from Starker Arts Garden for Education (SAGE) to the South Corvallis Food Bank (weekly)

- 2012-present – Volunteer with “Edible Corvallis Initiative,” preparing foods for local tasting tables program in public schools, Benton County
- 2005-2009 Natural Heritage Advisory Council, Member (Governor-appointed position. Council is advisory to the State Land Board, which is comprised of the Governor, Secretary of State, and the Treasurer.)
- 2003-2009 Institute for Applied Ecology, Secretary of the Board
- 2002, 2005 Invited lecture in Crescent Valley High School’s Cell and Molecular Biology course. “Risk and Benefits of GMO’s in Agriculture.”
- 2001-2009 Institute for Applied Ecology, Board Member
- 1996-1999 Consultant to Fairplay Elementary School teachers on project creating a forest ecosystem on the school grounds.
- 1994, 1995 Tour Leader, Expanding Horizons in Science and Mathematics; 7th & 8th Grade Girls Workshop, Corvallis
- 1993, 1994 Judge, Science, Math and Technology Exposition, Corvallis School District 509J
- 1993 Inventor Mentor, Highland View Middle School, Corvallis
- 1991 "My Career in Biology," invited lecture for Corvallis High School Biology class
- 1990 "Climate Change and Stratospheric Ozone Depletion," invited lecture at First Presbyterian Church, Corvallis, OR

HONORS AND AWARDS

National and International

- The Bryologist’s Edward Tuckerman Award for best paper from 1996 in lichenology (Shirazi; A.M., P.S. Muir, and B. McCune 1996. Environmental factors influencing the distribution of the lichens *Lobaria pulmonaria* and *L. oregana* in Oregon. The Bryologist 99:12-18), 1997
- 19th Annual E.S.R.I G.I.S. International User Conference, San Diego, CA. July 1999 – 2nd place in "Most Analytical" category for Keon, D.B. and P.S. Muir's poster, "Predicting suitable habitat for the sensitive lichen *Usnea longissima* in the Oregon Coast Range."

University and College

- Family Friendly Faculty Award recipient, 2010 (Childcare and Family Resources, OSU)
Featured on “My OSU” Faculty Showcase Poster, 2008
- Frederick H. Horne Award for Sustained Excellence in Teaching Science, College of Science, Oregon State University, 1999
- Elizabeth P. Ritchie Distinguished Professor Award, Oregon State University, 1998
- Dar Reese Excellence in Advising Award, Oregon State University, 1997
- Featured as “Innovator,” in Corvallis Gazette-Times, May 18, 1997
- Burlington Resources Foundation Faculty Achievement Award (recognizes outstanding teaching), Oregon State University, 1994
- Carter Award for Outstanding and Inspirational Teaching, College of Science, Oregon State University, 1993 (also a finalist in 1991, 1992, 1996, 2000, 2007, 2009)
- Boedtke Award for Excellence in Advising, College of Science, Oregon State University, 1992 (also a finalist in 1995)

