

POSIES & PATHOGENS



Department of Botany and Plant Pathology

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Seventeenth Edition

April 2006

FROM THE DEPARTMENTAL CHAIRPERSON

I hope you enjoy this, the 17th edition of Posies and Pathogens! As you will see from the pages inside, the Department of Botany and Plant Pathology remains vibrant and on the move. We were excited to have Jeff Chang, Assistant Professor, join the Department in March of this year. You can learn about Jeff on Page 2. Todd Mockler from the Salk Institute will join us as an Assistant Professor in July. His research will take a genomic approach to understanding RNA-binding proteins. News about other members of the Department is also in this edition of our Newsletter.

Our undergraduates continue to impress us with their enthusiasm and energy. The opportunities for students continue to grow and change and we continue to do our best to try and keep up with the changing world. The Botany Club provides a focal point for students interested in the plant sciences.

The graduate students reflect the diversity of the Department. They are earning degrees in five different graduate programs, working on and off campus, funded by a variety of sources, and "doing us proud" in the classroom, laboratory, field, and workplace. The students initiated a cookies and coffee social just before seminars on Thursdays that has been a big hit.

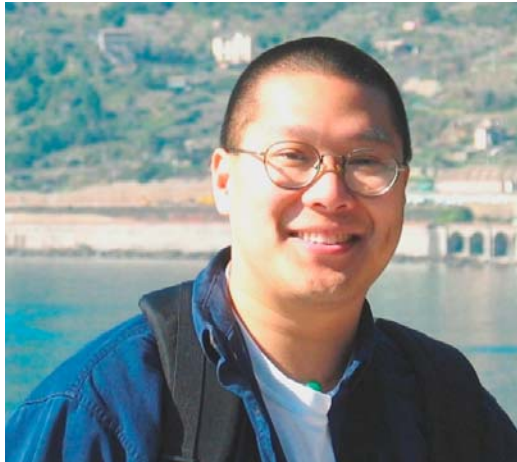
The world of competitive grants and contracts becomes ever more competitive. Nonetheless, the Department has once again set a new record in grant expenditures, now exceeding \$5 million per year. Almost every major federal agency has awarded grants to researchers in the Department. The breadth of the Department's research enterprises continues to amaze me. We cover all the way from molecules to ecosystems; from forests to oceans to croplands; and from microorganisms to plants and insects.

The Department is blessed with a terrific office and research staff. They keep things moving even when the bureaucracy is conspiring to bring things to a halt! We did lose Edith Birky, the Office Specialist who handled Human Resources and travel, to another position on campus where we wish her well.

Throughout the year, I have enjoyed visits from alumni and friends of the Department. If you find yourself in Corvallis, please stop in. And if you are not in Corvallis, send me an email. It's always good to hear from friends and supporters of the Department!

Dan Arp
Professor and Chairperson
arpd@science.oregonstate.edu

WELCOME NEW FACULTY



Jeff Chang joined the Department of Botany and Plant Pathology on March 1, 2006 and was one of the Computational and Genome Biology Initiative hires for the Center for Genome Research and Biocomputing. He traversed the country from Minnesota to California to North Carolina, before comfortably settling down in Oregon. His PhD work was in plant-pathogen interactions. In his postdoctoral work, he used a functional genomics approach to identify genes of phytopathogenic bacteria necessary for the disease process. At OSU he plans on characterizing how these genes function to cause disease. Another facet of his work is to understand how Rhizobia use these same types of genes to build symbiotic relationships

with plants. Jeff is joined by his wife, also a scientist at OSU and their one and a half year old son. They are overjoyed to be Oregon and look forward to their future here.

FACULTY NEWS

Mike Behrenfeld joined the Botany and Plant Pathology Department in early 2005 and his research team has been steadily growing since. **Robert O'Malley** and **Julie Arrington** made the move from the College of Oceanographic and Atmospheric Sciences (COAS) to join the lab in early spring. Robert O'Malley is doing work on satellite remote sensing of ocean



photosynthesis, including basic research and developing a Ocean Productivity Website for distributing data products. Julie Arrington has also been extremely busy, but her attention has been on setting up the lab, preparing for 2 research cruises in the tropical Pacific and spending 5 weeks at sea collecting data. In mid-summer, **Toby Westberry** joined the group as a post-doctoral associate, coming from the University of California, Santa Barbara. Toby has been on a steep learning curve, but is making tremendous progress in developing a new carbon-based model of phytoplankton productivity. Dr. Allen Milligan from Zoology has also been working closely with Dr. Behrenfeld. Their efforts are focused on studying initial electron transport pathways following oxygen evolution in photosynthetic

membranes. Finally, a new post-doctoral associate, **Giorgio Dall'Olmo**, will be joining the group in April-May 2006. We are very much looking forward to his arrival and contribution to the field effort.

David Gent joined the USDA-ARS Forage and Cereal Seed Research Unit in early 2005 and became a courtesy faculty member of the department. Over the past year, he has begun studies on the epidemiology and management of hop downy mildew and has identified previously unknown environmental conditions and grower cultural practices that favor the disease.



Lynda Ciuffetti and Faculty Research Assistant **Viola Manning**, together with Andrew Karplus of the Department of Biochemistry and Biophysics, made a major discovery in basic plant biology that may set the stage for profound advances in plant genetics. They identified a protein that can cross plant cell membranes, where it functions as a toxin to kill the cell. This may provide a new tool to penetrate plant cells and possibly manipulate their behavior in some beneficial way. This research was published in two articles in the November 2005 edition of *The Plant Cell*.

Phil Hamm was appointed Superintendent at the Hermiston Agricultural Research and Extension Center in April 2005.

This has been a traveling year for **Everett Hansen**. A short trip north to Sweden as Opponent



on a PhD defense was quickly followed by a month long trip to the other end of the world- the Patagonian Andes. He was working with Dr. Alina Greslebin to find the causal agent of Mal Del Ciprés, an alarming disease of their native *Austrocedrus*. That trip ended with tantalizing ELISA results suggesting involvement of a *Phytophthora* species. They soon had *Phytophthora* DNA from diseased trees, but there was still nothing in culture when he left. A couple of

months later he was off to China with **Nik Grunwald** and Ellen Goheen, looking for the origins of the Sudden Oak Death pathogen, *P. ramorum*. He had no idea there were such magnificent conifer forests in China! They had to travel to the far end of Yunnan Province, and above 10,000 feet elevation to find them, but they were spectacular. As were the tree-sized rhododendrons. No surprise, they found no *P. ramorum*. He started 2006 with a return trip to Argentina. In the interim Alina had succeeded in culturing the *Phytophthora*. It is an undescribed species, of course, and one of the slowest growing he has ever encountered. It is a real challenge to work with. The damage in the forest is dramatic, however, on the scale of Port-Orford-cedar root disease in the Oregon and northern California.

Sarah Jovan graduated last July from **Bruce McCune's** lichen lab. Now they are collaborating for a postdoc she is working on with OSU and the Forest Inventory and Analysis Program (USDA). They have several projects underway involving data from the national FIA lichen indicator program, which are used for monitoring various aspects of forest health (although its best known for its application to air quality biomonitoring).



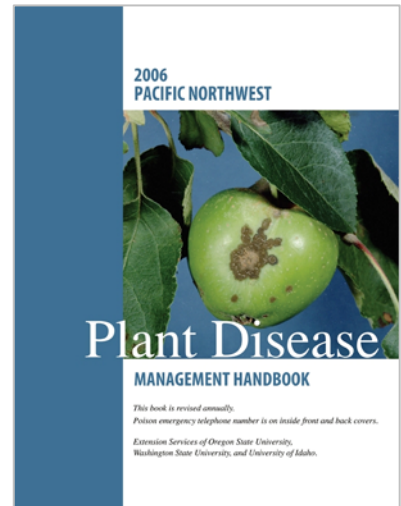
Bob Martin has been appointed as the Research Leader of the USDA-ARS Horticultural Crops Research Laboratory. He has served as Acting Research Leader since October 2004. Bob is known internationally for his expertise in viral diseases of small fruits. He is a courtesy faculty member of the Department of Botany and Plant Pathology.

2005 was a big year for **Bruce McCune** – he had two PhD students finish. These were model graduate students in two ways – “model students” in the way you thought he meant it, as well as student modelers. Both completed empirical models of lichen distribution in relation to regional-scale ecological factors. **Sarah Jovan** modeled lichen communities in relation to air quality in California. Lichen communities seem to ignore high ozone levels, but clearly show the effects of eutrophication by nitrogen. Widespread, weedy N-loving epiphytic lichens are abundant in and around the big valleys and foothills of California. The permanent plots are part of the national forest inventory program, so they will be able to track changes in lichens in the future. **Erin Martin** modeled lichen communities and habitats of selected old-growth associated lichens on the west slope of the Cascades in Oregon. Of course lichens change dramatically on an elevation gradient. More surprising was higher lichen diversity toward the south. Initially they suspected a suppression of lichens by poor air quality downwind of Portland, but comparison to Forest Service models of air quality showed this to be an insufficient explanation for the diversity pattern. An alternative explanation invokes the suppression of lichens by hemlock and bryophytes, both of these more abundant in the higher precipitation to the north. Bruce is happy to report that both recent PhDs quickly obtained jobs, Sarah with a postdoc with Forest Service scientists in Portland, and Erin with a tenure-track position at Shasta Community College in California. Way to go, model students!

Pat Muir's research focused this year on consequences of fuel reduction treatments for native plant communities – and invasion by exotic plant species -- in oak woodlands and chaparral of southwestern Oregon. Thousands of acres are treated each year in that region, but no monitoring of treatment consequences for plants had occurred previously. With funding by the Bureau of Land Management and the interagency Joint Fire Science Program, graduate students **Kendra Sikes** and **Keith Perchemlides** centered their MS research on this question. Kendra worked on sites that were treated 1–2 years prior to her sampling, and Keith on sites that were treated longer ago. Stay tuned for results!

It has been a year of change for **Walt Mahaffee**. His research on hop powdery mildew is ending due to the hiring of **David Gent** (ARS Forage Seed Unit). However, this void was immediately filled by blackberry rust (*Phragmidium violaceum*). The pathogen was discovered for the first time in the US on the Oregon Coast in April 2005 and subsequently found from San Francisco Bay area to just before the Canadian Boarder. The pathogen is used as a biocontrol agent of Himalaya blackberries in Australia and is devastating on Evergreen type commercial varieties in Oregon and Washington. He is collaborating with **Ken Johnson's** group to examine environmental factors suitable for disease development and population diversity and distribution along the west coast. This year has also been one of good fortune. Walt was awarded the Order of the Hop Knight level by the Internal Hop Growers Association for his research on the epidemiology and management of Hop Powdery Mildew. He spent a week in Oxford England at the 8th International Phyllosphere meeting presenting a talk on the use of compost teas for disease control. He happened to arrive just as the subway system shut down due to a second bomb scare. He became involved with a group of researchers (Western IPM Center Weather System Workgroup) that are working to change how weather data is gathered, used, and redistributed to enhance pest forecasting and agriculture production. The group consists of climatologists, entomologists, meteorologists, plant pathologists, and aerobiologists from private and public sectors. They were just awarded a Plant Biosecurity NRI grant to begin developing methodologies for interpolating weather data and forecasts and pest models and risk indexes that account for climatological and topographical aspects while dealing with limited data availability.

At this writing **Jay Pscheidt** is looking over another *PNW Plant Disease Management Handbook*. This edition has nice color cover which is a first in its 52 year history. It also is so large (607 pages) that it now doubles as a plant press. Other things are just as busy as always. He has a small break from 18 presentations in 9 weeks (from British Columbia to Arizona) to get 15 trials ready for spring. Compared to home life these days, work is quiet and sedate.



The field crops pathology program directed by **Richard Smiley** at the Columbia Basin Agricultural Research Center, at Pendleton, continues to focus on the biology and control of plant-pathogenic fungi and plant-parasitic nematodes that cause economic losses in dryland wheat and barley. Their field experiments are located throughout eastern Oregon and Washington, on commercial farms as well as at several experiment stations. Field and greenhouse experiments are supported by a laboratory that is well equipped for traditional and molecular procedures. Current emphasis is on breeding wheat varieties with resistance and/or tolerance to locally-important species of *Fusarium*, *Pratylenchus* and *Heterodera*, developing DNA-based diagnostic procedures, and developing molecular markers to detect resistance

genes in seedlings. The program's activities are closely coordinated with comparable research in other states and in Australia, Kazakhstan, Mexico, Syria and Turkey. You are invited to view additional information about their program, staff, and publications on their website.

<http://cbarc.aes.oregonstate.edu/cbarc/plantpathologyhome.php>



The **Electron Microscope Facility**, managed by **Al Soeldner** and **Michael Nesson**, enjoyed a busy year. In the 2005-2006 academic year the Facility operated with a small financial profit, provided research services for over 130 senior faculty, graduate students, and collaborators, and gave three dozen instructional tours and instrument demonstrations supporting several University courses, University recruitment efforts, and a half dozen regional K-12 school science programs. A less than ideal side of being a busy and essential instructional and research support service facility is that scheduling instrument and support staff time has become increasingly difficult for Facility clients, with instrument or staff time often fully booked two or three weeks in advance. The age of the facilities electron microscopes and the costs to replace these tools is also a serious concern.

FROM A FORMER CHAIRPERSON

Can another year have passed already? Indeed, this annual issue of Posies and Pathogens suggests that it has indeed flown by. As of January 12, I am officially finished with my time on the Faculty Senate Executive Committee and have now settled into having a single set of responsibilities as an associate dean in the College of Agricultural Sciences. My office moved again in fall 2005 and I am now housed in the 138 Strand Ag Hall complex where one can find much of our college's administrative services. The pictures are not yet on the wall but I promise they will be by next year. As of September, I have added two departments (Environmental and Molecular Toxicology and Fisheries and Wildlife), the Coastal Oregon Marine Experiment Station, and several programs to my list of units for which I'm responsible. It is wonderful to learn about many outstanding programs we house---and the group of new faculty that have been hired over the last year are a remarkable set.

In October 2005, I traveled to Tucson to participate in the memorial service celebrating the life of **John S. Niederhauser**, almost 89 years young at the time of his death on August 12, 2005. As many of you know, John was a special friend to Botany and Plant Pathology as well as having received an honorary doctorate from Oregon State University in 2002. We miss him. Fortunately, our memories of John will live on through the annual awards made from the Anita S. Summers Graduate Student Travel Fund, an endowment that he and **Anita Summers** co-sponsored.

I had the good fortune of meeting up with several of our alumni during my travels over the past year in addition to serving as host for OSU Distinguished Alumni **Roy Saigo**

(PhD 1969) and his wife, Barbara, in October during Homecoming. In November 2005, OSU President Ed Ray hosted a reception in the Rayburn House Building in Washington, D.C. and I had the good fortune of having **Hiram Larew** (MS 1977), **Doug Ripley** (PhD 1984) and **Roger Lawson** (PhD 1963) and his wife Mary join us for that evening. In February, while attending the AAAS meetings in St. Louis, Jim and I had the pleasure of being taken to lunch by **Ernie and Pauline Jaworski**, the generous creators of the Scholarships for Underserved Undergraduates in Plant Sciences that bear their name and support two to three students for summer research projects each year.

The highlight of our family's year was the twelve days we spent on Maui immediately after Christmas. Our oldest daughter, Sarah and her husband, Charles Lewis had a belated honeymoon (they eloped in November) while also sharing time with the rest of us---Jim and I enjoyed having the grandchildren (James, then 10 months and Moira, 3 ½) along with our other daughters (Martha and Miriam) and son-in-law, Darin Riherd for such a nice stretch of warm picture perfect weather---and we missed 12 straight days of rain in Oregon as well so that was really special! My many travels through Portland allow me to see our grandchildren fairly often and that is a strong motivation to be sure to add a few hours going or coming. Please let me know if you are coming to campus: stella.coakley@oregonstate.edu or 541-737-5264; short-notice is fine and I'll walk to Cordley Hall to meet you if you are short on time. I'd love to hear from you!

by Stella Melugin Coakley

LEWIS ROTH DWARF MISTLETOE TRAIL

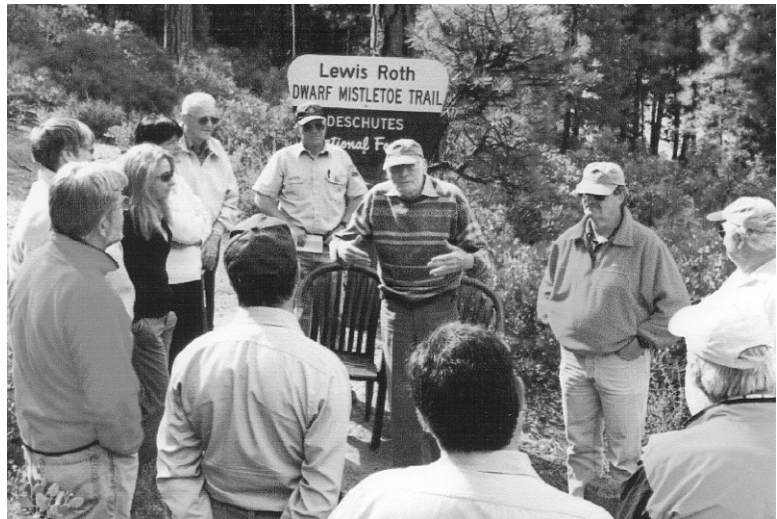


In recognition of his pioneering dwarf mistletoe research at Pringle Falls Experimental Forest, **Lewis F. “Lew” Roth**, Professor Emeritus of Botany and Plant Pathology, Oregon State University, officially opened this new interpretive trail on August 29, 2005. Professor Roth’s long-term research began at this location in 1952 and continued long after his retirement in 1972.

To get to the trail turn off US HWY 97 onto Vandervert Rd (Deschutes County Road 42), cross the railroad tracks and go

west just over one mile; turn left onto Huntington Rd and go one mile south; turn right onto Fall River Rd and drive west about 18 miles; at sign to Twin Lakes turn left onto Forest Rd 4260 and left again into the Twin Lakes Campground. Go slowly through the campground to the end of the road where you will see the Dwarf Mistletoe Trail parking area on the left.

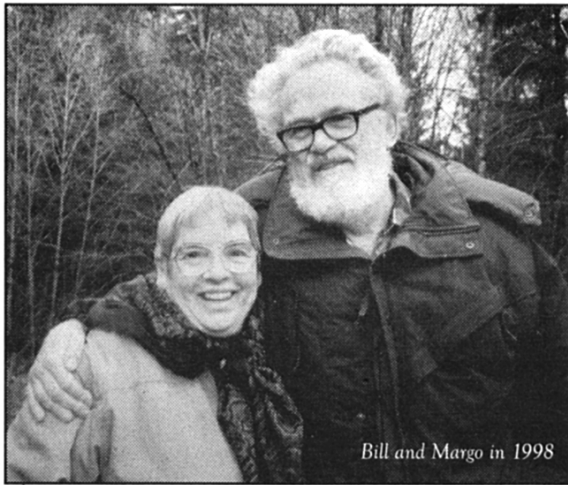
Western dwarf mistletoe (*Arceuthobium campylopodium*) is a parasite in western forests where it causes a great deal of damage to ponderosa pine (*Pinus ponderosa*). Along the trail there are information posts which describe Western dwarf mistletoe biology, the limits on it’s spread, halting it’s spread in the absence of fire, the change in flora as ponderosa pines are killed, and disease resistant ponderosa pines.



IN MEMORIUM

William C. Denison passed away on 8 April 2005 at the age of 76 in Corvallis. He was born in Rochester, NY to Glenn Morris Denison and Rhoda Taylor Torrance Denison. He married Margaret Roxanne Mellinger in Chicope, MA in 1948. He received bachelor’s and master’s degrees in botany from Oberlin College in 1950 and 1952 and a doctoral degree in mycology from Cornell University in 1956. In 1955 he was appointed as Assistant Professor at Swarthmore College, New York. In 1966 he

became Associate Professor in the Department of Botany and Pathology at Oregon State University where he stayed until his retirement in 1993. He taught general botany, mycology, plant ecology and plant pathology. Many of his students received their doctoral degrees and became scientists, professor and mycologists. In 1992, OSU presented with the Loyd Carter Award for Outstanding and Inspirational Teaching. Bill founded the Northwest Mycological Consultants in 1985 which has



been involved with mushroom research, contracts, and consulting farmers throughout the world. He contributed to the Forest Ecosystem Management Assessment Team, which wrote the Northwest Forest Plan. He co-founded the Willamette Institute of Biological Control, a

non-profit organization dedicated to developing practical environmentally friendly pest control solutions. In the late 1960's he served as mentor to the Association of Conscientious, Thoughtful Students at OSU which started the First Alternative Natural Foods Co-op in Corvallis, and one of his four children, Tom, has provided produce from the Denison farm ever since. Bill also helped form the Adair Volunteer Fire Department. Bill is survived by his wife Margo, their four children, and several grandchildren.

extracted from Corvallis Gazette Times (April 2005) and The Thymes (June 2005)

John S. Niederhauser passed away on August 12, 2005 at his home in Tuscon, Arizona. He was born on September 27, 1916 in Seattle, Washington and grew up in Menlo Park, California. He graduated from Cornell University in 1936 with a PhD in plant Pathology.



John was a pioneer in international cooperation for the improvement of agricultural production and productivity throughout the world. Known worldwide as "Mr. Potato" his work has impacted agricultural production in over 60 countries. In 1990, in recognition of his significant contributions to improving the world food supply and alleviating hunger and malnutrition, John was awarded the prestigious World Food Prize, the equivalent of the Nobel Prize in agriculture. In 1946, John joined the newly formed Rockefeller Foundation Mexican Agricultural Program and spent 15 years working on corn, wheat, bean and potato. In 1971, he was one of the

founders of the International Potato Center, Peru, and in 1978 he established the Regional Cooperative Potato Program (PRECODEPA) in Mexico, Central America, and the Caribbean. One of John's scientific contributions was the development of potato varieties with resistance to late blight disease, caused by the fungal pathogen *Phytophthora infestans*. He was an adjunct Professor in plant pathology at the University of Arizona since 1985. Among his many honors, he was awarded an Honorary Doctorate by Oregon State University in 2002. He was a frequent visitor to the Department of Botany and Plant Pathology, and together with Anita Summers established the Anita S. Summers Graduate Student Travel Fund for the benefit of students in the Department. John was married to Ann Faber and they devoted their lives to cooperative activities and projects all over the world until she passed away in 2000. He referred to Ann as a constant source of support and encouragement and recognized "how vital she was to whatever might have been accomplished". John is survived by 7 children and several grandchildren.

extracted from Phytopathology News (Oct. 2005)

UNDERGRADUATE STUDENT NEWS

Congratulations to the following students who received a B.S. in Botany in 2005:

Timothy Bradley
Lacey Wolf
Inga McLaughlin
Logan Sander
Cedar Hesse
Basho Parry

Andrew Murison
Peter Stocking
Bethany Lund
Lourdes Irwin
Lacey Yarbrough
Katherine Van Wormer

Barbara McAdams
Carl Wiese
Eric Welch
Ian Niktab
Jessica Thompson
Stewart Heath

Congratulations to our Honor Roll Students Spring and/or Fall terms 2005, and/or Winter 2006:

Emma Bradford
Casey Corbett
Morgan Curtis
Kathleen Farrell
Hansel Hallman
Rachael Kofahl

Kathleen Kramer
Alicia Leytem
Stephanie McKnight
Laura Mills
Basho Parry
Nancy Pierce

Abbiegail Shadrick
Anthony Shireman
Jessica Thompson
Tri Tran
Amanda Wood

GRADUATE STUDENT NEWS

The graduate students began the 2005-2006 year with the annual trip to the coast, courtesy of Dan Arp. The weather was conducive to a great time, which allowed the continuing graduate students to show the incoming graduate students how fun the Oregon coast can be. More people ventured into the chilly ocean waters the first night than ever before. We caught and cooked up record numbers of crabs, found enough chanterelles for a feast, and played mystery games. The weekend provided an opportunity for friendships to form, and lead to the beginning and continuation of an important network of support which graduate students greatly benefit from during their time here at Oregon State University.

Amy Peetz (President), **Elizabeth Martin** (Vice President), **Ann Willyard** (Treasurer), and **Jennifer Krenz** (who replaced **Ben Lakowsky** - Marketing Manager) were elected to lead the Graduate Student Association this year. In an attempt to facilitate a more cohesive atmosphere around the department, the GSA began hosting a coffee/tea and cookie session just before the weekly seminars every Thursday, and expects to continue to do so for the duration of the 2006 school year. The creative talents of **Nate Miller** were used and inspired the design for this year's fundraising shirt. In addition to the shirt sale the GSA hosted an auction during the department holiday party. Along with a donation for graduate participation in Museum Days, the total funds raised to date are \$732.00. These funds will be used to award travel grants for graduate students presenting at scientific meetings for the upcoming year.

Many students had the opportunity to travel and share their work at meetings during this past year. Those awarded GSA travel funds last year include **Kristin Carroll**, **Susan Crow**, **Anne Halgren**, **Beth Lawrence**, **Amy Peetz**, and **Ann Willyard**. **Anne Halgren** was also awarded the American Phytopathological Society Robert W. Fulton Student Travel Award and the Anita Summers Travel Award. **Jessica Brunson** was nominated and received the Oregon Sports Lottery Scholarship.

Many of us had the opportunity to share our research and results at various scientific meetings throughout the year. The 2005 Pacific Division Meeting of the American

Phytopathological Society was held in Portland, and **Nate Miller** and **Amy Peetz** gave oral presentations at this meeting. **Jill Calabro**, **Anne Halgren**, **Nate Miller**, and **Amy Peetz** all presented information at the annual American Phytopathological Society meeting, which was held in Austin, TX. **Anne Halgren** also presented her work at the Northwest Center for Small Fruits Research annual conference. **Ann Willyard** gave an oral presentation at the Western Forest Genetics Association in Corvallis, and again during the meeting for the Botanical Society of America, in Austin, TX. **Matt Blakeley-Smith** was invited to present information at the Pacific Northwest Integrated Vegetation Management Association meeting.

Congratulations to recent graduates **Kentaro Hosaka** (PhD, Spatafora), **Rebecca Durham** (MS, Muir), **Carrie Lewis** (MS, Parke), **Heather Lintz** (MS, Kentula/Wilson), **Erin Martin** (PhD, McCune), **Sage La Croix** (MS, Stone), **Kendra Sikes** (MS, Muir), **Michelle Buonopane**, (MS, Liston), **Christine Carlson** (MS, Patterson), **Clifton Cooper** (PhD, Thompson), **Kent Davis** (MS, Zobel), **Sarah Jovan** (PhD, McCune), **Beth Lawrence** (MS, Kaye), **Gi-Ho Sung** (PhD, Spatafora), **Anne Halgren** (PhD, Martin), **Susan Crow** (PhD, Lajtha). May you all find jobs that fulfill both your passion for science, and the space in your wallets!

Nine prospective graduate students attended the recruitment weekend this year. After a full day of interviews with various professors in the department, they attended a joint poster session catered and hosted by the Center for Genome Research and Biocomputing. Current graduate students took the recruits to see the beautiful Oregon coast. We checked out the tide pools, relaxed by the ocean, and the trip was topped off with a hike up Cape Perpetua. We hope to see many of the recruits next fall. We plan to finish this year with the annual barbeque this spring at Avery Park after finals. We had a great turn out last year, and we hope to see the same numbers this year for our final hoorah before we depart for an exciting and busy field season.

by Amy Peetz

RECENT THESIS TITLES

Sarah Jovan (PhD with Bruce McCune) Bioindication of air quality in forests of northern and central California using epiphytic macrolichen communities.	Lichen response to the environment and forest structure in the western Cascades of Oregon.	Kentaro Hosaka (PhD with Joey Spatafora) Systematics, phylogeny and biogeography of the Hysterangiales and related taxa (Phallomycetidae, Homobasidiomycetes)	Beth Lawrence (MS with Tom Kaye) Studies to facilitate reintroduction of golden paintbrush (<i>Castilleja levisecta</i>) to the Willamette Valley, Oregon.
Kent Davis (MS with Don Zobel) Comparison of the water relations characteristics of woody plants in western Oregon.	Kendra Sikes (MS with Pat Muir) The effects of two fuel reduction treatments on chaparral communities in southwest Oregon.	Carrie Lewis (MS with Jennifer Parke) Pathways of infection of <i>Phytophthora ramorum</i> in Rhododendron.	Gi-Ho Sung (PhD with Joey Spatafora) Systematics and phylogeny of <i>Cordyceps</i> and the Clavicipitaceae with emphasis on the evolution of host affiliation.
Erin Martin (PhD with Bruce McCune)	Clifton Cooper (PhD with Bill Winner) Foliar respiration in an old growth coniferous forest.		

AWARDS AND PROMOTIONS

Faculty

Dr. Joyce E. Loper
American Phytopathological Society
Outstanding Volunteer Award

Dr. Luis Sayavedra Soto was promoted to
Senior Research Associate Professor
effective July 2005.

Students

Jill Calabro was awarded The Richard L.
Gabrielson American Phytopathological
Society Council Award

The 2006 **Bonnie C. Templeton Award for
Plant Systematics Research** was awarded
to **Jason Alexander**.

Anne Halgren was awarded the Robert W.
Fulton Student Travel Award from the
American Phytopathological Society

The 2006 **Moldenke Fund for Plant
Systematics Travel** was awarded to **Stephen
Meyers**.

Jessica Brunson was nominated and
received the Oregon Sports Lottery
Scholarship.

The 2006 **Outstanding Senior Award** made
possible by the **Bill and LaRea Johnston
Endowment** was awarded to **Emma
Bradford** and **Alicia Leytem**.

The 2006 **Anita Summers Graduate Student
Travel Awards** were presented to: **Ann
Willyard** and **Brian Knaus**.

The 2006 **Charles and Helen Fulton
Memorial Scholarship** was awarded to
Rachael Kofahl and **Tri Tran**.

The 2006 **Larry Moore Award for Graduate
Education in Plant Pathology** was presented
to: **Don Campanella** and **Jennifer Krenz**.

The 2006 **Jean L Sidall Memorial
Scholarship** was awarded to **Therese
Biboux**.

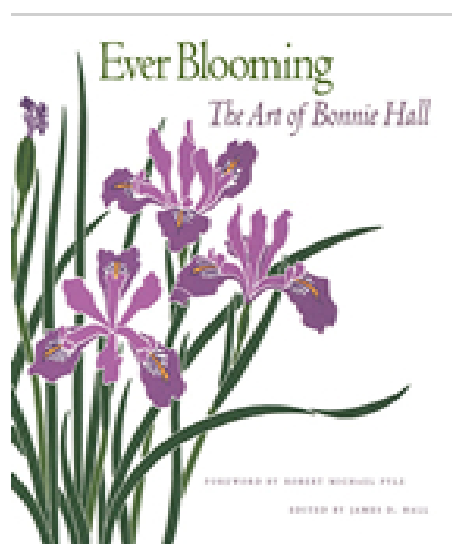
The 2006 **Katherine R. Pamplin Scholarship**
from the **Portland Garden Club** was awarded
to undergraduate **Emma Bradford**.

The 2006 **Thomas C Moore Memorial
Scholarship** was awarded to **Tri Tran**.

The 2006 **Hardman Foundation Award for
Native Plant Research** was awarded to
Jason Alexander.

Ever Blooming: The Art of Bonnie Hall

After a long and accomplished career in scientific illustration, Bonnie Hall turned with wonder and determination to the art of screenprinting. Resolved to "share the privileged close scrutiny of nature" that she had enjoyed, Hall created her first screenprint in 1992 while undergoing chemotherapy for breast cancer. Over the next twelve years, she created screenprints of Pacific Northwest wildflowers, ferns, and butterflies-natural history portraits in simple, sharp-edged planes of brilliant color. Inspired by old botanical prints and motivated by a desire to draw attention to "the overlooked, undervalued, or threatened wild things native to our Pacific Northwest landscape," Hall produced scientifically accurate prints that revealed the personality, life stages, and the very essence of her subjects - what a fellow artist aptly called the "gesture" of each plant.



By Bonnie Hall
Edited by James D. Hall
Foreword by Robert Michael Pyle

2005. 9 x 9 inches. 104 pages. Full color.
ISBN 0-87071-116-4. Hardcover, \$25.00.

Ever Blooming collects the thirty-three large serigraphs and five smaller ferns that Hall created in the last years of her life, along with the artist's own text describing each plant and butterfly. Her narratives are rich in detail and informed by thorough study into plant distribution, life histories, use by Native Americans, taxonomic discoveries, and conservation issues. Taken as a whole, the work is a sparkling confluence of science and art.

For botanists, wildflower enthusiasts, gardeners, and artists, as well as anyone who loves the Pacific Northwest wilderness, *Ever Blooming* offers a singular glimpse of the natural world as seen through the eyes of a gifted and inspired artist.

Published by the Oregon State University Press, 500 Kerr Administration Building, Corvallis, OR 97331 (Phone 541-737-3166), *Ever Blooming* can be ordered online at: <https://www.uapress.arizona.edu/scripts/secure/orderosu.pl>
It is also available in local bookstores.

THANK YOU DONORS

The following individuals and organizations generously supported the Department with donations received between 4/12/2005 and 4/12/2006.

Edward Alverson & Angela Ruzicka	Michael Holmes	Amy Rossman
James & Deanna Anderson	Deven Holmgren & Eleanor Vandegrift	Andrea Ruchty
Daniel & Wanda Arp	Mary Hough	Roy & Barbara Saigo
Gerald Baker	Jon & Eve Lynn Howe	John Savage
Sara Barnum	Rebecca Huot	Loyd & Margaret Schaad
Wilbur & Mary Bluhm	Institute for Applied Ecology	James & Jan Schlachter
James & Carol Bluhm	Donald Jacobson	Denise Seliskar
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ALUMNI NEWS

Roy Hirofumi Saigo (PhD 1969) was honored during Homecoming week as a 2005



Alumni Fellow. The Alumni Fellows program, sponsored by the OSU Alumni Association, annually brings distinguished alumni back to campus to share their experiences. This year during Homecoming week, the fellows met with students and staff and spoke at the Alumni Association's "Classes Without Quizzes" program.

Roy Hirofumi Saigo has served as president of St. Cloud State University, Minnesota's second largest university, since 2000. Before Minnesota, Saigo was chancellor of Auburn University, Montgomery, Ala.

He also has been provost and vice president for academic and student affairs at Southeastern Louisiana University; dean of the College of Natural Sciences at the University of Northern Iowa; and a biology faculty member and assistant dean at the University of Wisconsin-Eau Claire.

Saigo earned his bachelor's degree in biological science from the University of California-Davis and his doctorate in botany and plant pathology from OSU. He also has completed the College Management program at Carnegie Mellon University.

He and his wife, Barbara Woodworth Saigo, '69, met in graduate school at OSU. They were married and moved to Wisconsin, where they nurtured their careers and their family for 17 years before moving to Iowa. They have been a strong team through the years — personal and professional partners in every sense.

Over the years, Saigo has distinguished himself as a biologist and educational leader, receiving special awards from the American Institute of Biological Sciences, Botanical Society of America, UC-Davis, and Alpha Gamma Rho Fraternity, among others. He was selected as a Fellow of the American Association for the Advancement of Science.

A unique recognition was the awarding of an eagle feather for his national leadership on the issue of Indian mascots, logos and nicknames by non-Indian sports teams at colleges and universities.

Saigo said he is motivated by a love of family, a strong sense of fairness, a belief in the necessity of public education as the basis of a democratic society, and the imperative of creating a university environment in which every person feels welcome and has an opportunity to succeed.

He called coming to OSU a "watershed moment" and expressed gratitude for the opportunities and encouragement he received from the university and its faculty. *from Oregon Stater 12/2005*

Stephen C. Sillett (PhD 1996) Suspended by ropes and harnesses, a Humboldt State



University botanist explores the canopies of the world's tallest trees. Now, thanks to a new chair — specifically the Kenneth L. Fisher Chair in Redwood Forest Ecology — he

will be able to take this research to new proverbial heights.

Announced by the university Feb. 3, 2005 the establishment of the first endowed chair to support the study of the redwood forest — and the first named chair at Humboldt State — will allow Stephen C. Sillett, an HSU biology professor, to explore more aggressively the ecology of the coastal redwoods. With giants eclipsing 360 feet, the redwoods are the tallest trees in the world.

Sillett specifically focuses on the complex — and heretofore unknown — communities of organisms that live hundreds of feet up in the redwoods and on the biophysical limits to tree height in an attempt to answer the question, "How tall can trees grow?" Recently, he has begun considering how second-growth redwood forests might be managed to accelerate the development of old-growth forest complexity and biodiversity.

Sillett, who began teaching at Humboldt in 1996 after earning a doctorate at Oregon State University, has explored the stratified – and rarefied – biodiversity among the crowns of redwood forests in national and state parks in Humboldt County, Calif., for a decade. He has also extensively studied old-growth giant Sequoia redwoods in the Sierra Nevada mountains, Douglas fir forests in Oregon and Washington, and the tallest eucalyptus in

Australia. He is currently considering what it would take to restore the health of some of the ancient redwood groves along the Avenue of the Giants in which the tops of many trees are dying.

Sillett completed his PhD with major professor **Bruce McCune**.

extracted from Humboldt State University News (4/2006)

2005 AWARD CELEBRATION AND DONOR RECOGNITION BANQUET

Last May 20, we hosted an appreciation dinner at The Valley Clubhouse, Adair Village. The occasion allowed us to personally thank some of our friends who have generously supported the programs in our department. It also enabled them to meet the undergraduate and graduate students who have benefited from their generosity.

Dan Arp presented a slide show describing the various honorary, memorial and special endowments which we have been able to establish through the OSU Foundation. Through the growth of these funds we are able to enhance support for our students and programs. Some examples of support that would not otherwise have been possible have included: travel expenses for student research, or for travel to present a poster or paper at a national or international meeting; support for student research under the mentorship of a faculty member in their laboratory; purchase of specialized equipment; improvement of facilities, inviting academics from outside OSU to lecture in our seminar series and to meet students. These are just few of the enhancements that make the quality difference for our students' experience in this department. We have published a booklet which describes these funds in detail and we gave copies to those who were able to attend the celebration.

The occasion also allowed us to congratulate our faculty who received professional honors, awards, and promotions during the preceding year.

It was delightful that so many were able to attend this celebration and we hope to make it an annual event.



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Thanks are due to **Sue Jepson** for collecting the information, layout, editing and handling the mailing list; **Dianne Simpson** for proof reading; **Tom Allen** for the logo and **Ken Chambers** for the name.



CONTRIBUTIONS may be sent to **The Oregon State University Foundation, 850 SW 35th Street, Corvallis, OR 97333**

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