

# CONNECTIONS

FALL 1999



## *Saving the Grizzly*

See pages 5-7

Washington State  
 University

Land Grant Day,  
October 2, 1999

See pages 10-11  
Registration Enclosed

# FROM THE CAHE DEVELOPMENT AND ACADEMIC COORDINATOR

*Greetings alumni and friends!*

I am the new Development and Academic Coordinator. I look forward to the many challenges and rewards this position will afford me and am excited for the opportunity to work with alumni, friends and the Board of Directors. In this position, I aim to develop new and innovative ways to more actively involve alumni and friends in annual events around the state. Some of these important events are the Lind, Prosser, Mount Vernon, and Puyallup research field days, as well as Land Grant Day.

To further encourage alumni and friends involvement in annual events, I attended the Summer Institute for Educational Fundraising at Dartmouth College in New Hampshire in July. Attending the Dartmouth summer institute gave me the necessary tools to help Washington State University become competitive in recruiting Washington's best students, graduate students, and distinguished faculty members.

I recognize and appreciate the College's need to enhance recruitment activities in an effort to better attract talented prospective students. Most academically talented students base their decision on where to attend college on the amount of scholarship support they are offered. It's a priority of CAHE to create and develop better ways of increasing scholarship funds in order to assist Washington students in receiving the quality education they will need to become successful in their chosen fields of study.

I look forward to working with alumni, friends, faculty, staff, and students, and am excited for the challenges this job has to offer! I am anxious to meet all of you and to work together to enhance recruitment and fundraising efforts for WSU's College of Agriculture and Home Economics.

**BRODERICK GANT**  
Development and Academic Coordinator

We are pleased to announce that Patrick Kramer, CAHE alumni and development assistant director since February 1998, has accepted the position of director of CAHE alumni and development.



*Patrick Kramer*

*Cover photo and page six photos courtesy of W.C. Storey © 1993. W.C. Storey is a retired Boeing engineer from Bellevue who has devoted a significant portion of his time during retirement to photographing and helping perpetuate grizzly bears. He has enthusiastically shared his expertise and photographs with the WSU bear program.*

## Dates to Remember

### AUGUST

- 14 Puyallup Field Day
- 14 Tree Fruit Field Day (harvest: peaches, pears, plums, early apple), WSU Mount Vernon
- 25 Potato Field Day, WSU Mount Vernon
- 25 Cucumber Twilight Tour, WSU Mount Vernon

### SEPTEMBER

- 4 Football, WSU vs. Utah at Pullman
- 11 Football, WSU vs. Stanford at Stanford
- 11 Tree Fruit Field Day (harvest: apple, pears, plums), WSU Mount Vernon
- 18 Football, WSU vs. Idaho at Pullman
- 25 Football, WSU vs. Arizona at Pullman

### OCTOBER

- 2 Land Grant Day (WSU Homecoming)
- 2 Football, WSU vs. California at Pullman
- 9 Tree Fruit Open House (open house and harvest day), WSU Mount Vernon
- 9 Football, WSU vs. Southwestern Louisiana at Pullman
- 23 Football, WSU vs. Arizona at Tempe
- 30 Football, WSU vs. Oregon State at Pullman (Dad's Weekend)

### NOVEMBER

- 6 Football, WSU vs. Oregon at Eugene
- 13 Football, WSU vs. USC at Pullman
- 20 Football, WSU vs. UW at Seattle (Apple Cup)
- 27 Football, WSU vs. Hawaii at Honolulu
- 25 Cucumber Twilight Tour, WSU Mount Vernon

Look for the CAHE  
Alumni and Development  
Web Site at:  
[www.cahealumni.wsu.edu](http://www.cahealumni.wsu.edu)

# CAHE Welcomes New Staff Members

*Program Specialist,  
Agricultural Land Office*

*Gift and Estate Planning*

In May, Pete Volk became CAHE's program specialist for the Agricultural Land Office. This is a new position created to oversee legal matters and financial management of land acquired by the College.



*Pete Volk*

Volk received a bachelor's degree in journalism from WSU in 1990, and subsequently graduated from the University of Idaho College of Law in 1993, with a juris doctorate. Following law school, he was assigned to active duty for one year in Arizona as an officer in the U.S. Army. In 1994, Volk returned to Pullman to practice law at a local firm, Irwin, Myklebust, Savage and Brown. At the firm, he focused on agriculture law. Born and raised in Spokane, Washington, with grandparents who farmed south of the city, Volk has a firm understanding of farming and ranching in the state. His appointment as program specialist matches well with the College's needs and Volk's expertise and connections to the state's agricultural community.

His primary goal is to increase CAHE's financial productivity of its land holdings and to work with people who are interested in giving to the College.

"I look forward to working with our farmers and ranchers in the state," said Volk, "and helping them make good land choices for the College and themselves."

*Development and Academic  
Coordinator*

Broderick Gant is CAHE's new development and academic coordinator. His appointment will be split equally between alumni development, working with Patrick Kramer, alumni and development director, and as the College's minority graduate student recruitment officer, a position he held prior to becoming the College's development coordinator in June.



*Broderick Gant*

Originally from Baton Rouge, Louisiana, Gant enrolled in WSU's graduate program in animal sciences after receiving a bachelor's degree from Southern University in 1993. Gant graduated in 1996, with a master's degree in reproductive physiology and endocrinology. After working with a cattle feeding company in central Washington and as a veterinary pharmaceutical sales representative in Nampa, Idaho, and as a county Extension agent in Virginia, CAHE offered Gant a position as the College's student recruiter for minorities.

"I wanted to get back to the Northwest," said Gant, "and would have taken any opportunity to do that."

In an effort to increase diversity in the College, Gant will be traveling across the country promoting WSU to minority undergraduates who are interested in pursuing graduate work. Through WSU's proposed new "University Enrichment Program," he will be able to offer prospective students an opportunity to preview CAHE departments through summer internships, where students work with professors on research projects.

In his development role, Gant will be seeking new ways to get alumni more involved, be responsible for annual gifts to the College, and increase the number of scholarships available to students.

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## CONNECTIONS

*Issue Number Five*

*FALL 1999*

*Connections* is published two times a year by the College of Agriculture and Home Economics Alumni and Development Office. Readers are encouraged to share their ideas for articles and to contribute items by writing to:

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Alumni and Development Coordinator  
Washington State University  
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Pullman, WA 99164-6228

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**Mission:** The College of Agriculture and Home Economics Alumni Board of Directors is the catalyst for uniting prospective students, current students, the college administration, faculty and staff, industry, and alumni while upholding WSU's land-grant mission.

**Web Site:** [www.cahealumni.wsu.edu](http://www.cahealumni.wsu.edu)

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## AROUND THE COLLEGE

### AGRICULTURAL ECONOMICS

**Paul Barkley** was selected as editor of *Choices*, the magazine of the American Agricultural Economics Association. His term will run for three years. **Norman Whittlesey**, professor emeritus, was selected as Fellow of the American Agricultural Economics Association. **Maria Loureiro** and **Paula Gutman**, Ph.D. students, received travel grants from the International Food and Agribusiness Management Association to attend the 1999 World Food and Agribusiness Congress and Forum in Florence, Italy, June 1999. Two student teams competed in the Academic Bowl of the student section of the American Agricultural Economics Association in Nashville. Contestants were **Dana Erickson**, **Kelly Meyer**, **Bonnie Schindler**, **Jay Graham**, and **Ray Schmitt**. Schindler and Graham also were participants in the business meetings as officers of the association's student section. **Erika Howell** was selected Aggie of the Year for the College of Agriculture and Home Economics.

### ANIMAL SCIENCES

**Charles Gaskins** won the 1999 Sahlin Faculty Excellence Award for public service.

**Paivi Roozen**, a senior in the department, was awarded a research internship to study at the University of Missouri last summer. She conducted research in animal reproduction. **Paul Kuber** won the Teaching Assistant Excellence Award for 1998-99 in the "supportive category." Kuber received a certificate and a grant co-funded by the GPSA, Graduate School and Alumni Association, worth \$300. **Roger Cady** received an award from the professional Dairy Growers Association to honor his contributions to their organization. **Joe Hillers** received the National Association of Colleges and Teachers of Agriculture Teacher Fellow Award at the NACTA Banquet last summer.

### APPAREL, MERCHANDISING, AND INTERIOR DESIGN

**John Turpin's** research on "Dorothy Draper and the Creation of the Modern Day Design Firm" was recognized as significant to the interior design discipline by being awarded the 1998 Interior Design Educator's Council research grant.

**Carol Salusso** and **Patricia Fischer** have begun work on a third USDA Challenge Grant "Resources supporting fiber, textile, and apparel curricula evolution." This grant expands resources available on the International Textiles and Apparel Association dedicated server ([itaasite.org](http://itaasite.org)), with an emphasis on supporting undergraduate education and the profession.

Undergraduate student awards in the department went to: **Carrie Bauens** and **Naomi Adams**, CAHE Family and Consumer Scientist Award; **Crystalyn Brennan**, National JC Penney Award, Best Internship Notebook International Textiles and Apparel Association Pioneer Student Affiliate Chapter; **Lee Koo**, International Award for Kravet Textile Design Student Competition; **Lori Follette**, National ASID Scholarship Winner (2 nationwide); **Naomi Adams**, first prize winner of the ASID Educational Foundation/Yale R. Burge Competition; and **Tomomi Yashiro**, National ASID Student Design Award.

The following are new faculty members in the department. **Jinsook Cho**, assistant professor, who specializes in consumer behavior, retailing, international trading in the apparel industry, and computer aided design. **Nancy Clark Brown**, assistant professor, joins the tenure-track faculty. **Robert Krikac**, associate professor, focuses on contemporary issues such as the role of technology in the world and workplace performance issues. **Robert Gibson**, instructor, combines exploring digital multimedia in the classroom and in the visual communication network with developing the statewide WE-CAN

multi-media video conferencing system linking WSU research, extension, and academic sites. **John Jacob**, assistant professor, will add sensitivity to nonverbal communication of appearance, identity analysis, and product development to AMID as he joins the department this fall. **Matt Melcher**, assistant professor, investigates and educates students on light and phenomenology along with installation, exhibition, and design.

**Carol Salusso**, associate professor, began a four-year term as chair of AMID June 16. **Catherine Bicknell**, associate professor, began to serve as ID graduate coordinator June 15. She will be located at WSU-Spokane with weekly visits to the Pullman campus to meet with graduate students and honors classes.

### BIOLOGICAL SYSTEMS ENGINEERING

**Denny Davis** won the 1999 Sahlin Faculty Excellence Award for Instruction. This award is a University-wide recognition of excellence in instruction presented annually to a member of the faculty. The Provost said that the University established the award "to recognize in a tangible way the truly outstanding accomplishments and exceptional individual achievements of its faculty." The nomination of Davis is based primarily on his national reputation as a leader in engineering instruction. In addition to having become nationally prominent, he has revitalized existing courses and programs in the Department of Biological Systems Engineering and in the College of Engineering and Architecture. President Sam Smith presented the award at the May commencement.

## CROP AND SOIL SCIENCES

Crop and Soil Sciences (CSS) officially took possession of the Dr. Henry W. Smith Needlepoint Collection, prepared and curated by **Nancy Wriggle**, and shown at the CUB Art Gallery last spring. **Catherine Cross**, executor of the estate, gave the collection to the department. The special frames and pillows prepared by Nancy Wriggle also were given to CSS. The collection will be used again December 31 during the Pullman Millennium celebration and then will be displayed in the department. Smith was professor emeritus of soil science at the time of his death, March 3, 1998. During his retirement, he created over 90 needlepoint pieces often drawing on science as his inspiration. His work is an especially high quality example of the needlepoint art and his unique way of blending art and science is rare.

**Eric Miltner** has been in charge of a major renovation of the irrigation system at the Turfgrass Research Facility at WSU-Puyallup, Farm 5. This important improvement will enable more precise irrigation management than is currently available. The result will be more representative field research on turfgrass used for golf courses, athletic fields, home lawns, parks, and other grounds.

## ENTOMOLOGY

**William J. Turner** was the 1999 recipient of the R. M. Wade Foundation Award for Excellence in Teaching. Turner teaches general entomology, insect taxonomy, and systematics. **Wyatt Cone** received the C.W. Woodworth Award, which recognizes outstanding accomplishments in entomology in the 11 western states served by the Pacific Branch of the Entomological Society of America. **Douglas B. Walsh** joined WSU-Prosser as the agrichemical and environmental specialist last fall. Walsh has been named the statewide IPM coordinator as of July 1, 1999. **David G. James** was appointed the hop and grape entomologist at WSU-Prosser as of April 15,

*continued on page 4*

## College Requests Fare Well in Legislature

When Washington's legislators took their final curtain call in Olympia this past spring, the College of Agriculture and Home Economics was on its figurative feet cheering.

During the 1999 session, the legislature approved full funding for the College's \$7.5 million Safe Food Initiative (SFI). The funding, which will begin July 1, 2000, will enable the College to hire 17 new faculty and 13 new technical support staff deemed critical by the College and the state's agricultural industry.

The state's capital budget for the University included \$2.78 million for design of a building near Hulbert Hall to house the apparel, merchandising and interior design department and landscape architecture faculty. White Hall, AMID's current home, will become the new home for the Honors College and Honors Residence Hall.

The University's operating budget included \$904,000 for three new off-campus learning centers, which WSU will develop in cooperation with Skagit Valley Community College, Walla Walla Community College, and Grays Harbor Community College.

This will bring the total number of learning centers to 11. The college administers them through Cooperative Extension.

The legislature also funded a \$4 million Advanced Technology Initiative (ATI) put forth by WSU and the University of Washington. WSU's share is \$1.5 million. Some of the WSU money is expected to fund a cluster of researchers, mainly from the CAHE, interested in precision agriculture. They will form a Center for Precision Agricultural Systems. Two other clusters of WSU faculty, mostly in other colleges, will focus on reproductive biology and semiconductor manufacturing.

"The concept of ATI is that highly productive focused university research clusters will have a significant positive economic impact on Washington," said Ralph Cavalieri, chair of the Biological Systems Engineering Department.

Also approved was \$300,000 for pre-design of an addition to Johnson Hall for plant biotechnology research and facilities. Separate from the budget, the college received \$75,000 from the University to develop a plan for replacing Johnson Hall with a complex of buildings.

Thanks to funding from the Potato Commission, one SFI position — a vegetable post harvest physiologist in the Horticulture and Landscape Architecture Department — was filled before the College geared up to begin the hiring process. Thanks to industry support, about a third of the positions may be filled early to get researchers on board before the 2000 growing season, according to Pete Jacoby, associate dean of the College.

Jacoby was not surprised that SFI was fully funded.

"I think it happened because it wasn't just WSU asking," Jacoby said. "There was very broad support for this initiative and I think it just made good sense to fund the full package, because certain outcomes were predicted. To break apart the package would have lessened the impact."

He said the college has formed a committee to serve as liaison between the college and public during the hiring process, which normally takes 11 months.

"It's mainly an information-sharing effort to help people understand our hiring procedures and to help keep constituents informed on what we're doing along the way."

—Dennis Brown

*Continued from page 3*

1999. James is from Australia, where he has some 20 years of experience in controlling insects and mite pests in grapes.

## FOOD SCIENCE AND HUMAN NUTRITION

The **Abuela Team** went to Washington, D.C., to receive a special award from the Secretary of Agriculture (USDA).

**Charlie Edwards** last year identified a second novel species of bacteria that causes problems in wine fermentation. He named the bacteria after a past faculty member, Charles Nagle, who was instrumental in helping the wine industry get started in Washington State. Nagle still lives in Pullman and next year will give the first scholarship named after him.

Other news in the department: the Students Nutrition Awareness Club won the outstanding club award this year and also won the best display at the awards banquet. **Barry Swanson** was interviewed live on PBS for the "Talk of the Nation" show. **Dorothy Pond-Smith** won the Outstanding Dietetics Educator Award for the western region of the United States. **Sara Spayd**, from WSU-Prosser, won the Walter Clore Award for outstanding service to the wine industry. **Fred Hoskins** retired in May after 15 years of service to the University.

## HUMAN DEVELOPMENT

After serving for one year as interim chair of AMID, **Joye Dillman** returns to her home department where she will serve as interim chair, while the College conducts a national search.

**Kathleen Rodgers** received a USDA grant to join with **Mary Dean** and **Louise Parker** to research the role of individuals, families and communities in promoting social responsibility among youth. This collaboration among teaching, 4-H, and extension specialist faculty reflects the continuing integration of

departmental efforts to meet the needs of Washington residents.

In December, the Child Development Center will be moving from White Hall as the building begins renovation for the Honors College. Contact **Brenda Boyd** if you would like to participate in an event to celebrate the 60 years of early childhood programs in that facility.

## INSTITUTE OF BIOLOGICAL CHEMISTRY

The Institute of Biological Chemistry (IBC) has a Plant Biochemistry Research and Training Center Undergraduate Research Fellowship Program that awards a one-year stipend to exceptional WSU students who have a serious interest in plant biology. The following students were selected as 1998-99 recipients: **Luke Moe**, biochemistry; **Ann Barthol**, biochemistry; **Jennifer Kleene**, microbiology; **David Near**, biochemistry; **Christopher Sanchez**, biochemistry; and **Jodi Humann**, microbiology. The PBRTC Summer Undergraduate Research Fellowship Program offers students an opportunity to work full-time for nine weeks in an IBC laboratory. This program is open to undergraduates in universities and colleges around the country. The award pays a stipend, housing and travel funds, and culminates with a poster session of the students' projects. The 1999 summer award recipients are: **Jody Creasap**, Hiram College in Hiram, Ohio, majoring in biology; **Susan Emmert**, Southern Illinois University, Carbondale, Illinois, majoring in plant biology/chemistry; **Mike Kerkman**, Northern Arizona University, Flagstaff, Arizona, majoring in botany; **Jason Londo**, Florida Institute of Technology, Melbourne, Florida, majoring in molecular biology; **Allison Miller**, Rochester Institute of Technology, Rochester, New York, majoring in biotechnology; **Charlie Rohwer**, Iowa State University, Ames, Iowa, majoring in agriculture biochemistry and horticulture; and **Bryan Thines**, State

University of New York, Plattsburgh, New York, majoring in biochemistry.

**Rodney Croteau** received a MERIT award from the General Medical Sciences division of the National Institutes of Health for his research with chemical compounds known as terpenoids. These chemicals contribute to the fragrance and flavor of a plant, as well as to its defense system. The "Method to Extend Research in Time (MERIT)" award provides a long-term grant support to principal investigators of proven research competence and productivity. The award allows Croteau an opportunity to extend his grant for three to five years beyond its current recommended project period with only minimal review. The award is based on recommendations of the National Advisory General Medical Sciences Council.

**James Carrington** and co-researcher **Kristin Kasschau** have recently discovered that some plant viruses can turn off a plant's defense mechanism when the virus attacks it. This plant defense system is known as gene silencing, in which the plant actually perceives information from the infecting virus's genome and customizes its response to that particular virus. Carrington and Kasschau found that some viruses have evolved to overcome this plant defense mechanism with a protein known as HC-Pro. This discovery leads scientists to believe that systemic virus infections result only if the virus can successfully suppress or evade the host's defenses.

## RURAL SOCIOLOGY

**Emmett Fiske** has won the Rural Sociological Society's Excellence in Extension Award. This is the second year in a row that a WSU faculty member has won a RSS award. Last year Don Dillman won the Excellence in Research Award.

**Annabel Kirschner Cook** recently received the Friend of Rural Health Award from the Washington Rural Health Association.

—Broderick Gant



*Charles Robbins, professor of natural resource sciences, holds a four-month-old, orphaned black bear cub that was raised by WSU students.*

# Saving the Grizzly

BY JOANNE BUTEAU

**T**he grizzly bear, found only in America's most remote and wild regions, is part of the West's heritage and the source of many of its legends. Standing seven feet tall and weighing up to 800-plus pounds, the grizzly bear is one of America's largest animals.

Over 10,000 years ago, the grizzly bear made its way across the Bering Land Bridge and eventually settled into wilderness areas all the way from Alaska to Mexico. The bear prospered on the continent until waves of settlers gravitated west in the 1800s, causing populations to plummet.

"Historically, there were probably 100,000 grizzly bears in the western U.S. at one time, and now there are less than 1,000," said Charles Robbins, professor of natural resource sciences in WSU's College of Agriculture and Home Economics. "Their numbers dropped largely due to killing and loss of habitat, with the bears now occupying only one percent of their former range in the lower 48."

Today, the grizzly bear is at the crossroads of survival. For the last two decades, it has been categorized as threat-

## WSU's Bear Program is One of a Kind



# Saving the Grizzly

PHOTO BY W.C. STOREY

*The WSU bear center is the only captive grizzly bear research facility in the world.*

ened under the Endangered Species Act. This is a category for a species that is considered likely to become endangered, which means in danger of becoming extinct.

In an effort to learn more about grizzlies and the habitat necessary for their survival, state and federal biologists started contacting Robbins, who is an international authority on wildlife nutrition and published author on the subject. Their interest, and Robbins', eventually led to the creation of the WSU Bear Research, Education and Conservation Program in 1986. The program's central mission is to provide information and the understanding necessary to conserve bears around the world.

"If you want to increase bear populations, you need to understand the relationship between food resources and bear well-being," explained Robbins, "You need to know what foods help bears and what don't. Before we established the program, the practice was to put radiocollars on bears and follow them around. But, that really didn't provide good information on their nutrition or genetics or details on their biology."

The WSU bear center is the only captive grizzly bear research facility in the world.

Scientists and students worldwide come to perform research at the center, focusing on nutrition and ecological topics important to understanding and managing wild bears.

The facility, located on the edge of the

WSU campus in Pullman, currently is home to 10 grizzly bears, from young cubs to 15-year-old males weighing as much as 830 pounds. The bears are the original four cubs rescued by the center in the 1980s and their progeny. (See sidebar for history.)

"We use our bears to generate information we couldn't measure in the wild," said Robbins. "On a daily basis, we can accurately measure blood parameters, determine how much food the bears are digesting and how much weight they're gaining on various foods. This would be more expensive to do in the field and often not possible."

Chuck Schwartz, leader of the Inter-agency Grizzly Bear Study Team in Yellowstone National Park and former Alaska Department of Fish and Game wildlife biologist, said that some of the scientific techniques that Robbins developed at the WSU bear facility would be nearly impossible to develop in the field, especially with bears. With these techniques, scientists are now able to more accurately document information that is leading to better bear management.

"Our goal is to try to recover the grizzly population in Yellowstone," said Schwartz. "In order for that to occur, we need to understand as much as we can about the bear, its habitat, and what that habitat provides in the form of food and cover. Some of the techniques that have been developed at WSU through Dr. Robbins' bear facility are very applicable to understanding these questions here in the park. Charlie's facility is the only place in the country where scientists can work with specific bears on a daily basis to develop new techniques and determine what is nutritionally important for grizzly survival."

One technique that Robbins and his graduate students developed for bear research is stable isotope analysis, which determines the dietary composition of bears through blood samples. Grant Hilderbrand, who graduated with a Ph.D. in zoology from WSU last year

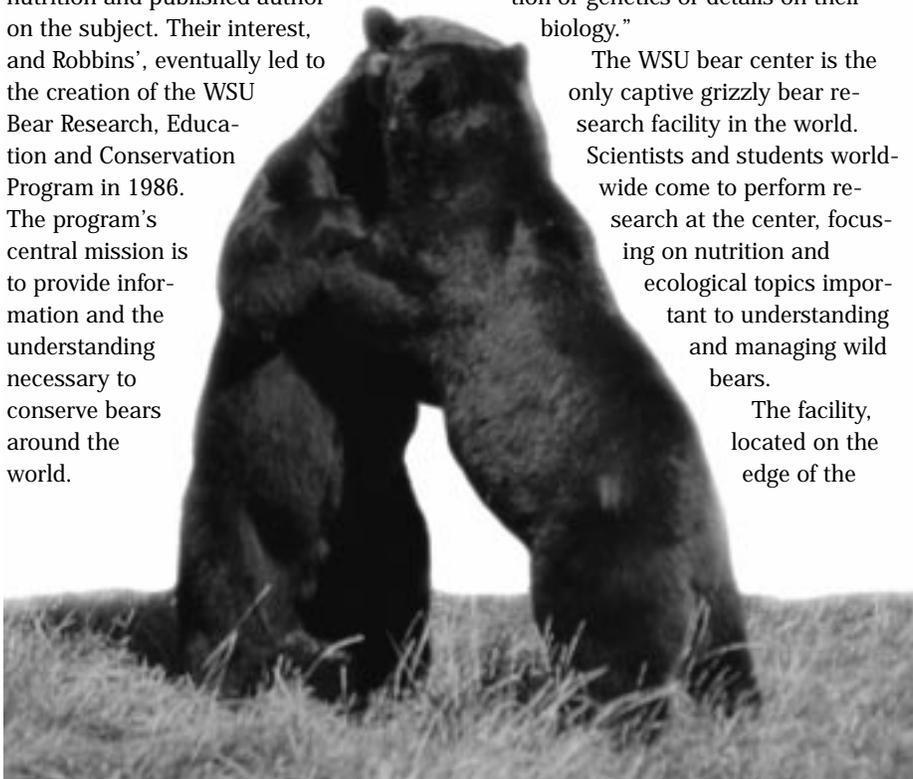


PHOTO BY W.C. STOREY



*The program's central mission is to provide information and the understanding necessary to conserve bears around the world.*

and is now a research biologist with the Alaska Department of Fish and Game, worked with Robbins as a master's student using the WSU bears to test their results using this procedure. Subsequently, Hilderbrand conducted his doctoral research on the bear population of Alaska's Kenai Peninsula using stable isotope analysis.

"This technique allows us to estimate the amount of various foods in the bear's diet, such as salmon, plants, and terrestrial meat," explained Hilderbrand. "We can determine what they're eating and how their diet changes throughout the year. We can find out what foods are important to them before going into the den, coming out of the den, and in July when salmon becomes available to them."

By using radiocollars and helicopters, Hilderbrand and Alaska wildlife biologists were able to track the same bears over the year and take blood samples to determine their diet composition using the stable isotope analysis.

"For the first time, we were able to quantify this information," said Hilderbrand. "This research has helped bears in the Kenai Peninsula and has maintained public support for them. Good data is invaluable when it comes to management decisions."

In addition to Hilderbrand, eight other graduate students have had the opportunity to go through Robbins' bear program over the years. They have either continued in careers working with bears and

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## WSU BEAR CENTER

The WSU bear center is the only facility in the world to house adult grizzlies for research. The program was started in 1986 in response to the compromised nature of many bear populations. Six of the eight species of bears worldwide are threatened or endangered, including the grizzly of North America.

Located on the edge of the Pullman campus, the center encompasses a two-acre exercise yard and six indoor-outdoor pens with temperature-controlled dens. WSU faculty and students, federal and state agency researchers, and scientists from around the world work with the bears.

Currently, there are 10 grizzly bears living in the facility, from cubs to full-grown adults. They include the four original bears rescued by the center and their offspring; "Bo" and "Irving," who originally came from Canada in 1986 as orphaned male cubs; and "June" and "Patches," two orphaned female grizzly cubs from Glacier National Park. While the four original grizzlies are permanent residents at WSU, other bears stay only as long as they are needed for research. Since the WSU grizzlies associate people with food, they cannot be released into the wild, but are instead given to zoos.

In addition to its research and academic focuses, the WSU Bear Program sponsors public presentations on natural history and bear conservation. The University also conducts tours, inviting hundreds of school children every year to visit the center.

The program has been supported by Washington State University, U.S. Fish and Wildlife Service, U.S. Forest Service, National Institutes of Health, National Fish and Wildlife Foundation, several state agencies, Chevron USA, and many individuals concerned about the plight of bears and the education of future wildlife scientists.

*As state and federal funds for wildlife research and conservation are always minimal relative to the needs, private donations are particularly important to the WSU Bear Program in providing better facilities for the bears, supporting both graduate and undergraduate students working at the facility, and assisting in the research program. Current needs in each area include a concrete-lined pool in which the bears could cool off on hot summer days, summer support for students working at the facility, and field support for student research projects. If you would like to become involved in the program or its funding, or wish to know more about the center, contact WSU Bear Program Director Charles Robbins at 509-335-1119 or e-mail to [ctrobbins@wsu.edu](mailto:ctrobbins@wsu.edu).*



Continued from page 7

other large wild animals or are teaching in the wildlife field.

Undergraduates also are included in the program. Each year, Robbins enlists the help of 21 undergraduates to help maintain the bear facility and gain experience working with the animals.

"It's important that undergraduates be involved as well as graduate students," said Robbins. "Instead of spending 20 minutes every morning cleaning and feeding the bears, I'll let the undergraduates help, too. It takes longer, but that's the cost to give them an experience that they'll cherish for the rest of their lives."

With graduate students, Robbins works closely with his students at all levels, from feeding the bears, to conducting research with them, to even taking his turn on 24-hour observations.

"I take an eight-hour shift right along with the graduate students," said Robbins. "The reason I do it is because I'm the luckiest guy in the world to work with both grizzly bears and students."

The feeling is reciprocated. Students also think they are lucky to work with the bears and Robbins.

"The fact that I've had the opportunity to work with Dr. Robbins has undoubtedly shaped the rest of my life and career," said Karyn Rode, a graduate student who came to WSU two years ago from Colorado State University because of the WSU Bear Program. "It has been an extraordinary experience. It's the reason why I got a fellowship at Florida that will now allow me to do research on primates in Africa. Dr. Robbins set my career off for me and it's far better than I ever thought it could be." Rode is completing a master's degree in zoology and has already been accepted for a Ph.D. at the University of Florida in primate nutrition.

Through the WSU Bear Program and the commitment of its researchers and students, the grizzly bear has gained an enormous ally. With their efforts, along with the work of others, perhaps the grizzly has a chance to survive in the 21<sup>st</sup> century.

## Gift Will Support Research at WSU Wilke Farm

**P**roceeds from a performance-based trust established by a Harrington farm couple could provide up to \$13,500 annually over the next 15 years for no-till research at Washington State University's Wilke Research and Extension Farm near Davenport.

The gift from Karl and Lexie Kupers was announced Wednesday, July 7, at Wilke Farm's annual field day.

"It's something we're very proud and pleased to be able to do," said Karl Kupers. "Any knowledge from research that the Wilke Farm can get, we will gain from because we are doing no-till on our farm totally, 100 percent."

The funds will enable faculty working on the Wilke Direct Seeding Project to buy capital equipment that is not usually permitted with grant funds, according to Diana Roberts, WSU Spokane and Lincoln County Cooperative Extension. Roberts has coordinated different aspects of the project since its inception two years ago.

The Wilke Project is a cooperative venture of farmers and WSU with support from various government agencies and agricultural businesses to adapt and develop direct-seeding systems for annual cropping in the 12- to 17-inch rainfall region of eastern Washington. The region includes parts of Lincoln, Adams, Whitman, Grant, Douglas, and Spokane counties.

The Wilke Farm is the hub of the project. Six growers, including the Kupers, are replicating direct seeding rotations on their farms.

"A lot of farmers want to make the transition from the traditional wheat-barley-summer fallow rotation to this system," Roberts said. "We are excited about the project and its potential to assist growers make the transition. The gift will help make it a reality."

The Kupers' decision to go no-till is based on a recognition of a changing national climate for agriculture. "Society at large is demanding a different environment and there is no question about the minority position farmers are in," Karl said.

In his view, more restrictive regulations and laws governing what farmers can do are inevitable. "In addition, I couldn't see how the federal government was going to continue to subsidize agriculture at the level it had been doing. There weren't enough of us to justify how they could spend the money."

With this in mind, the Kupers set a goal 15 years ago to farm without government subsidies in 10 years. "In 1985 we started looking at crop diversity as the way in which we were going to try to overcome the need for subsidization."

It wasn't a decision he could make on his own because he doesn't own a speck of land. "I approached my landlords with that idea. They concurred."

"We started in small increments," Lexie said. We didn't jump in with both feet."

"Some people think we did," Karl laughed.

They first tried canola and then grass seed. "That led us into no-till on its own because we had ground that was in a perennial crop — grass — from 1987 to 1995," Karl said. "I began to see what the soil was doing without tillage."

Other crops have followed, including millet, a component of birdseed.

The last piece of the puzzle fell into place in 1996 when Karl and a group of farmers flew to South Dakota to see research that blends no-till, with annual cropping and intense rotations.

"Combining diversity with no-till seemed to satisfy every environmental condition that I could foresee in the future as being a detriment to the way we normally farm," Karl said.

—Dennis Brown



## Maguire Plants Seeds for Fellowship

Jim Maguire retired from Washington State University three years ago after 39 years on the crops and soils faculty. But, you wouldn't know it.

The former professor and director of the WSU Seed Technology Laboratory has continued to teach part-time and has remained active in such organizations as the International Herbage Seed Production Research Group and American Seed Research Foundation, where he is a member of the Scientific Advisory Council.

He also has stayed in touch with many former students, both in the United States and abroad. Over the years, he taught or advised more than 700 undergraduate students, 30 U.S. graduate students, and 18 scholars from other countries.

In a career filled with achievements, he is proudest of "seeing all these former scholars and students progress in their careers and to be able to mentor them."

Many have become industry leaders. One directs the seed program in Bhutan, a tiny landlocked country between India and the People's Republic of China.

Maguire's commitment to students and the seed industry has led him to establish the Jim Maguire Graduate Fellowship in International Seed Technology. The fellowship will enable graduate students' participation in international seed conferences and to explore seed technology in other countries.

Maguire believes that international experiences will be critical to students' success because seed business doesn't stop at the borders. "You can't be isolated anymore and survive in the seed business.

"At one time the U.S. was the major suppliers of wheat to Saudi Arabia. At that time certified Yecora Rojo wheat

seed was selling at \$32 a bushel. One of the biggest problems was people didn't realize when Ramadan (the Islamic month of fasting) occurred. You couldn't ship seed to that country during Ramadan. Nobody would move it. It would rot on the dock. You can't learn that here."

A minimum goal of \$25,000 has been established to create this fellowship. Maguire will match each dollar given with one of his own. It will qualify for a state match when donations total \$25,000.

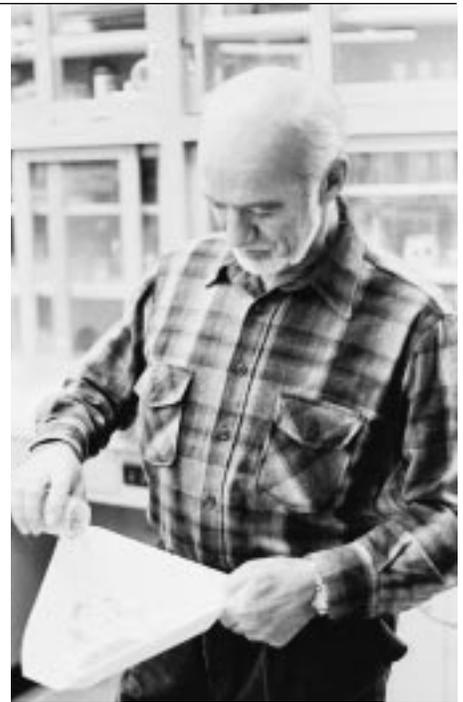
"If it comes to fruition, we could award at least one and maybe two grants a year," Maguire said. "I see this fellowship as one vehicle for me to continue to be involved in student activities, including their research and their development in their occupations. As a native Washingtonian and a graduate of WSU, I am a proud Cougar and believe in supporting academic programs."

Maguire's interest in seed stems back to a job he had with the Bureau of Reclamation as a Settlers' Assistance agent in Pasco from 1954 to 1956. His job was helping farmers convert barren desert into irrigated cropland. "I realized how critical seeds were to developing those farms," he said.

That experience convinced the 1952 WSU graduate (B.S., Agronomy) to pursue a master's degree at Iowa State, and later a doctorate at Oregon State. Maguire returned to WSU in 1957 as an instructor in seed technology.

As a faculty member, he developed and taught courses in seed production and technology, processing, and seed physiology. He team-taught a course on vegetable seed at the University of Idaho.

The role of the seed lab has evolved over the years from basic seed quality testing to creation of new techniques to measure seed quality of wheat, barley,



*Jim Maguire, retired crops and soils professor, is matching gifts dollar-for-dollar to establish a graduate fellowship in international seed technology. The fellowships will enable graduate students to participate in international seed conferences and explore seed technology in other countries. "You can't be isolated anymore and survive in the seed business," Maguire says.*

legumes, alfalfa, Kentucky bluegrass and a variety of vegetables.

A speed-of-germination test that Maguire helped develop in 1962 is still in use. The lab also developed a seed priming technique that gives the seed a head start before it is planted and a seedborne disease detection test for Phoma lingam test that is used internationally for phytosanitary certification and marketing.

For further information about how to make a gift to the Jim Maguire Graduate Fellowship in International Seed Technology, contact Patrick Kramer, director of alumni and development, WSU College of Agriculture and Home Economics, at 509-335-2243, or [kramerp@wsu.edu](mailto:kramerp@wsu.edu).

—Dennis Brown

# LAND GRANT DAY 1999

SATURDAY, OCTOBER 2

*Since its beginning in 1890, Washington State University has kept the rolling hills of the Palouse inspired with continuous growth and change. Land Grant Day 1999 commemorates 109 years of progress at WSU.*

**L**and Grant Day was established to draw attention to WSU's reputation as one of our country's finest land grant institutions. The College of Agriculture and Home Economics is pleased to invite you to this celebration of our heritage.

What better place is there to bring generations of Cougar alumni, students, and the greater WSU community together than where it all started over 100 years ago? Join the College in an all-day celebration of *Land Grant Day 1999* when the Cougars take on California-Berkeley in Martin Stadium Saturday, October 2, 1999.

Activities begin at 10:00 a.m. on the Rugby Field with the CAHE Extravaganza Fair. Explore the College of Agriculture and Home Economics through a series of fun activities and a grand prize drawing. The drawing will be held at the beginning of the CAHE Alumni and Friends Benefit Auction. There will be games, club displays, music, a Cougar Brand smoky lunch, and lots of fun.

After attending the football game, you can enjoy a great barbecue beef dinner followed by the annual CAHE Alumni and Friends Benefit Auction. The Alumni and Friends Benefit Auction raises money for student clubs and

scholarships, as well as many other alumni activities sponsored by CAHE. Then, stay for a toe-tapping, heel-kicking country western dance. What a great way to end the day!

The cost for the dinner is \$7 for adults and \$3 for children 12 and under. Fill out the reply form in the center of this magazine and send us a check made payable to CAHE Alumni and Friends. Please register before September 27. If you would like to make a tax-deductible contribution to the auction, please contact Britta Nitcy at the CAHE Alumni and Development Office at 509-335-2243.



## What is WSU's Land Grant Heritage?

Washington State University was established in 1890 under the provisions of the Morrill Act. The purpose of the law was to develop colleges in each state that would provide a practical education for the public with a special concern for those of a rural background.

The act provided grants of federal land for the support of land grant institutions. Washington accepted two grants of land totaling 190,000 acres to support WSU. The federal land grant program was originated in 1862 by Justin Morrill, a United States senator from Vermont. The land grant mission includes research that can be applied to everyday problems and statewide service to all citizens in fields such as agriculture, home economics, engineering, and mechanical arts.

Land grant institutions, like WSU, are a major factor behind research, which has increased the productivity of American agriculture and enhanced the lives of the nation's citizens.

WSU still holds 149,250 acres of the original 190,000 acres used to fund its establishment as Washington's land grant institution. The University's land grant income is invested in a building fund, which has supported the construction of many of the major buildings on campus.

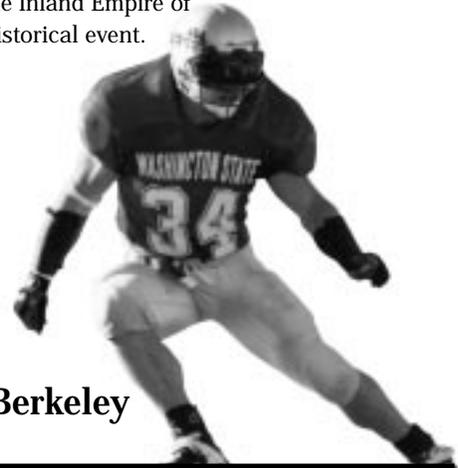
### SCHEDULE OF EVENTS

#### 10:00 a.m. - 12:30 p.m. Extravaganza Fair, Rugby Field

Experience the fun at the CAHE Extravaganza Fair! Explore the College of Agriculture and Home Economics through a series of interesting activities. Enter the grand prize drawing. The drawing will be held at the CAHE Alumni and Friends Benefit Auction. There will be games, club displays, music, a Cougar Brand Smoky Lunch, and lots of fun.

#### 10:00 a.m. - 12:30 p.m. Antique Tractor and Engine Collection

A display of old tractors, engines, and equipment will be on the Rugby Field. Watch the equipment in action as the Inland Empire of Gas Engines presents a wonderful historical event.



#### 1:00 p.m. WSU vs. University of Calif.-Berkeley Football Game

#### After the game, join us for the Washington Beef, Inc., and CAHE Barbecue

Consider yourself invited to the best barbecue in town! Great music. Great food. Thank you to Washington Beef, Inc., Toppenish, Washington, for donating the beef for Land Grant Day last year and also donating the sirloin tip for this year's barbecue.

#### 6:00 p.m. CAHE Alumni and Friends Benefit Auction

Hosted by the Booker Family, the auction will be held under the tents directly following dinner. Last year's items included everything from lots of Cougar paraphernalia to a weekend stay at the Dean's condo at Schweitzer Mountain. We will have great auction items again this year. The Alumni and Friends Benefit Auction raises money for student clubs and scholarships, as well as many other alumni activities sponsored by CAHE. If you would like to make a tax-deductible contribution to the auction, please contact the Alumni and Development Office at 509-335-2243. We look forward to another fun auction. Hope to see you there!

#### 8:30 p.m. Concert and Western Dance

Featuring a live performance. Dance under the night sky on the Rugby Field. Bring one, bring all, this is open to everyone.

*Please note that times are tentative due to the possibility of a change in game time. Check with the Alumni and Development Office, 509-335-2243, prior to the event for any changes.*

The cost for the dinner is \$7 for adults and \$3 for children 12 and under.

*Fill out the reply form in the center of this magazine and send a check made payable to CAHE Alumni and Friends.*

*Please RSVP no later than September 27.*

# Croteau Laboratory

## Benefits Agriculture, Forests, and People

BY JOANNE BUTEAU

**T**ERPENES: an innocuous sounding word for a powerful family of compounds found in all living organisms.

Cholesterol is a terpene as are certain hormones and vitamins. Plants need terpenes, or terpenoids, for many essential functions, including producing odors and resins that attract pollinators and repel predatory insects.

Commercially, plant terpenes have high value and are used in numerous products, such as flavors, perfumes, solvents, agrochemicals, and pharmaceuticals, including the anti-cancer drug taxol.

Plant physiology and biochemistry Professor Rodney Croteau of Washington State University's Institute of Biological Chemistry (IBC), has been intensely studying plant terpenes for the last two decades. From mint to conifer trees to taxol, Croteau Laboratory scientists are conducting research to understand everything from the basic biochemistry

of terpenes to its complex genetic origins. Through genetic manipulation, these researchers hope to ultimately increase mint yields, improve conifers' defense mechanism against bark beetle infestations, and biosynthesize taxol – a potent, relatively new chemotherapeutic drug with growing application.

The Croteau Laboratory, comprised of 30 to 35 WSU scientists and students, and visiting professors and postdoctorates from around the world, started investigating terpenes in the 1970s using the mint plant.

"We were originally interested in the family of compounds called terpenoids from a basic biochemistry point of view," said Croteau, a 1998 inductee into the National Academy of Sciences. "We initially chose mint because it's an important commercial crop in Washington and it produces the smallest terpenoids that are easy to understand in terms of their biosynthesis. It was a logical place for us to start."

Scientists in the Croteau laboratory are attempting to genetically engineer both the plant's oil composition and yield. Their goal is to ultimately double the yield of essential oil produced from mint, which would be a substantial benefit to growers.

While continuing their mint research, these scientists moved on to terpene research in conifer trees – pines, firs, spruces, and other trees including the Pacific yew. Croteau's interest in conifers was sparked by the rapidly increasing bark beetle populations that now destroy millions of

trees in the country annually.

Like mint, conifers also produce terpenes. Among its many purposes, terpene-containing resin acts as a defense mechanism that normally protects the tree from insect attacks. As beetle populations increase, however, trees have greater difficulty defending themselves.

"There are a number of ways we can genetically manipulate resin to improve conifers' defense against bark beetles," explained Croteau. "We can change the chemistry of the resin to attract more predators of the beetle, or we can alter it so beetles can't signal mates, for example. Or, we can make a spruce smell like a pine and confuse the beetle. These are all ways we can reduce the beetle population through genetic engineering."

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*The Institute's scientists are at the point in their research where they soon will be partnering with the timber industry to test their research on a large scale.*

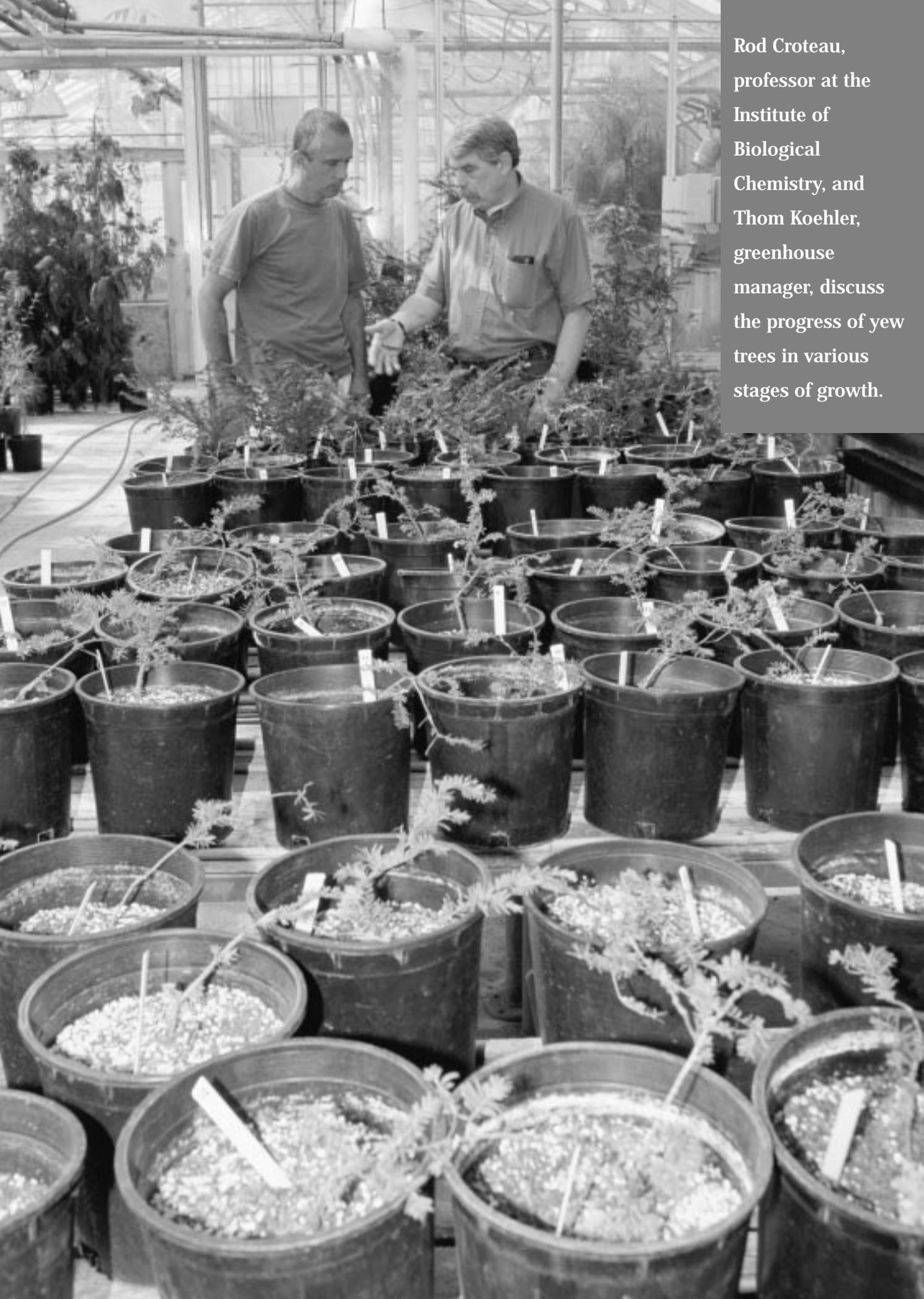
Croteau's research took yet another major turn in the early 1990s. With his experience in the basic biosynthesis of terpenes in mint and genetic manipulation of terpenes in conifers, Croteau and his colleagues were well placed to take on the National Cancer Institute's call for research leading to a quicker, more economical way of biosynthesizing taxol.

Taxol, which Croteau says is the best anti-cancer drug on the market in the last 30 years, currently is only used to treat advanced cases of breast and ova-

1 4

*A sample of crude taxol from a bark extract. Taxol is one of the best anti-cancer drugs on the market.*





Rod Croteau, professor at the Institute of Biological Chemistry, and Thom Koehler, greenhouse manager, discuss the progress of yew trees in various stages of growth.

rian cancer, and certain types of lung cancer. Unfortunately, the drug is used only as a last resort, because its supply is so limited. Originally, it was produced from the bark of the slow-growing Pacific yew tree, requiring three to six trees to treat just one patient. Soon demand far outstripped supply, causing a serious shortage of taxol and creating an urgent need to produce it from other sources. As the drug continues to show promise in treating other types of cancer, as well as diseases such as Alzheimer's, demand will be exacerbated further.

"Today there is no commercial, viable chemical synthesis of taxol," said Croteau. "It's been done, but it's much too costly. Most of the taxol produced now is by semi-syntheses, using needles from the yew tree. But the bulk of the molecule still needs to be made by biosynthetic reactions. And, there are too many steps to do this right now. It's very expensive and not practical to produce it in large amounts."

That was Croteau's challenge from the NCI eight years ago—to speed up the process of biosynthesizing taxol,

hence making it economically feasible to produce in large quantities. Thus far, the Croteau Laboratory scientists have identified a number of key genes along the drug's 14-step biosynthetic pathway.

"I'm optimistic that we'll have a cheap and available source of taxol on the market in six years," said Croteau.

In their quest for a better understanding of the biochemistry and genetics of terpenes, IBC scientists are opening new doors that will significantly benefit agriculture, forests, and people.

## WSU'S INSTITUTE OF BIOLOGICAL CHEMISTRY

**T**he Institute of Biological Chemistry (IBC) was established in 1980, with the primary mission of pursuing fundamental research in molecular biology and biochemistry of plants.

Although studies in a wide variety of areas are conducted, the main thrust of the Institute centers on basic plant research that may have potential applications in forestry and agricultural biotechnology.

Along with the traditional fields of biochemistry, faculty research interests include general areas of plant molecular biology, genetic engineering, photosynthesis, plant defense mechanisms and plant-pathogen interactions, and natural products metabolism.

The Institute consists of over 150 researchers including visiting professors, postdoctoral fellows, graduate and undergraduate students, and technicians in 10 programs.

The programs provide opportunities for students to obtain advanced degrees in biochemistry, chemistry, crop and soil sciences, genetics and cell biology, plant pathology, plant physiology, botany, microbiology, horticulture, and the allied agricultural and biological sciences.

—Joanne Buteau



*Above: Alenka Lovy Wheeler, master's student in plant physiology, and Anastasia Crowell, Ph.D. in plant physiology, prepare an enzyme extract.*

*Below right: Ray Ketchum, post doctorate, analyzes data from a liquid chromatography/mass spectrometer, which separates structures of large molecules.*



## CAHE Honors Students, Faculty, and Staff

Faculty, staff, and students were honored last spring at the 40<sup>th</sup> Annual College Awards Banquet.

### *Faculty and Staff Awards*

**William J. Turner**, professor in entomology and zoology, received the R.M. Wade Excellence in Teaching Award. Turner, a member of the WSU faculty for over 25 years, has dedicated his career to improving how students learn. His experience and research provide the foundation to illustrate diverse principles of dynamic processes and interactive components in natural and agricultural ecosystems.

**Darcel Swanson**, an instructor in food science and human nutrition, received the CAHE Alumni Association Outstanding Advising Award. Swanson also is the faculty adviser of the Student Nutrition Awareness Club (SNAC). She is a very active student adviser and involved with the recruitment activities in both the department and college.

**Gustavo V. Barbosa-Canovas**, a biological systems engineering faculty member, received the College's annual Faculty Excellence in Research Award. He developed an outstanding research program that has been instrumental in establishing WSU as one of the top food engineering programs in the United States and the world. His study is in advanced food processing technologies, known as nonthermal methods of food preservation.

**Richard H. Dougherty**, an Extension food science specialist, received the College's Faculty Excellence in Extension Award. Dougherty has organized 56 seminars, workshops, symposia, and short courses and has made 71 additional presentations at workshops organized by others. In addition, he has responded to at least 2,500 individual requests for assistance and sharing of expertise.

**Sandra Lilligren**, a research technician III in crop and soil sciences, received the CAHE Staff Excellence Award. Lilligren played a vital role as primary assistant in planning, organizing, and hosting the international multi-discipline Dust Aerosol, Loess Soils and Global Change Field Tour and Conference, sponsored in part by the National Science Foundation.

**Karen Jordan**, administrative service manager in the Department of Agricultural Economics, received the College's AP Excellence Award. Jordan has served on various committees and worked on safety issues at all

University levels. A consummate professional, she consistently fulfills her responsibilities at a high level of excellence.

**The Abuela Team** won the College's Team Excellence Award this year. The team was designed to train a targeted 200 people in central Washington who make "queso fresco" (homemade cheese) with unpasteurized milk. This cheese was traced as a source of Salmonella. The Abuela Team provided residents with a safe alternative cheesemaking method using pasteurized milk. As a result, fewer cases of Salmonella have been reported in that area. Because of their success, the project has been expanded to other areas. The members of the team are **Theo Thomas, Anna Zaragoza, Frances Herrera, Lloyd Luedecke, Ryan Bell, Virginia "Val" Hillers, Mike Costello, Stephanie Clark, Betty Meloy, Margaret Viebrock, Lizann Powers-Hammond**, and 30 educators from the community.

### *Student Awards*

**Erika N. Howell**, a senior majoring in agricultural economics, was named the 1999 Aggie of the Year. The award honors the top senior in an agriculture major. She has held various leadership positions, including president of the College of Agriculture and Home Economics Student Ambassadors.

**Naomi S. Adams**, a senior majoring in interior design, was named the 1999 Consumer Scientist of the Year. The award recognizes the top senior in a home economics major. She has served in several leadership positions in the past four years, including being the president of the Washington State University Student Chapter of the American Society of Interior Designers.

**Amanda M. Perkins**, a human nutrition major, was named the Outstanding Junior in family and consumer sciences. Perkins is active in organizations such as the Golden Key National Honors Society, Student Nutrition Awareness Club (SNAC), and the Agriculture and Home Economics Student Senate.

**Jaime R. Meenach**, an animal science major, was named Outstanding Junior in agriculture. Meenach is active in the Student Swine Co-op, Block and Bridle, and Alpha Zeta, and serves as the National Beef Ambassador.

**Tyler M. Cox**, an animal science major, was recognized as Outstanding Freshman for the past academic year. Cox has been actively involved in numerous academic clubs. He also has earned various scholarships and awards.

**Karen L. Payne** ('92 Food Science and Human Nutrition) was awarded "Recognized Young Dietitian of the Year" for Colorado, 1998-99. She and her boyfriend recently bought their first home.

**Ken Dart** ('82 Horticulture) was named as the agricultural chemical/fertilizer general manager at Cascade Agriculture Service in Wenatchee. Dart was raised and educated in Moses Lake and graduated from WSU with a degree in horticulture, with additional course work in business and marketing. He has worked in the crop protection field since 1982, including employment with DuPont, Abbott Labs, and Mycogen.

**Thomas A. Pitts** ('78 Agricultural Economics) was recently added to the Cascade Agriculture Service horticultural consultants group. Pitts was born, raised, and educated in Okanogan County. He is a third generation apple grower. He has worked extensively as a horticulturist for several companies including Custom Apple Packing, Magi Inc., and most recently, 12 years as farm manager for Gebbers Farms Ptr. Inc. in Brewster. Pitts has 21 years of consulting and farm management experience, specializing in apple, cherry, and pear production in the Chelan-Okanogan area. Pitts and his wife, Lisa, have three children. They live north of Brewster and enjoy fishing and snowmobiling.

**Gordon W. Davis** ('68 Agriculture and '69 Agricultural Education) is the founder, president, and CEO of CEV Multimedia. Under his direction, CEV has produced over 700 educational videos for youth. Last year, he purchased Visual Education Productions of San Luis Obispo, California. Before starting his own company, Davis had a successful teaching career. He taught at Deer Park High School in Washington before moving to Texas to get his master's and doctorate degrees from Texas A&M University. While at Texas

A&M, he coached their meats team to a national championship. He then taught for a couple of years at the University of Tennessee before moving back to Texas to teach at Texas Tech University. While at Tech, he coached their meats team to a national championship, the only coach to have done this at two different schools. He helped build the meats program at Tech to the current status as one of the best in the nation. He was recently honored by the American Meat Science Association with a Meritorious Award for Excellence in Meat Judging. Davis continues to give back to education. Every year CEV gives scholarship money to deserving high school students to continue their education in agriculture on the collegiate level. He also established an endowed scholarship at Texas Tech.

**Kathleen Keen Zolber** ('61 Home Economics, Food Science and Human Nutrition) passed away after a long illness on January 29, 1999, in Loma Linda, California. The University honored her with the Distinguished Home Economics Alumnus Award in 1978. Marion Jacobson, Ph.D, commented, "Two words describe Kathleen Zolber's career—dedicated excellence." In 1982, Zolber became the American Dietetic Association President. Zolber was a member of several professional organizations and will be missed by her family, friends, and colleagues.

### Schafer Honored by College

**F**ormer U.S. Ambassador M. Virginia Schafer received the College's first Achievement Award during a statewide satellite videoconference originating in Pullman in March.

The award was presented in recognition of her achievements during a distinguished 30-year career in the U.S. Foreign Service, her financial support of student scholarships at WSU and for her excellent example as an alumnus of the University. In accepting it, she said: "I'm enormously honored to be the first recipient of the award."

Schafer, who received a bachelor's degree in home economics from WSU in 1952, joined the Foreign Service as a file clerk two years later to see the world.

"In 1954, there weren't many ways that a young woman could do that," she said in an interview after the presentation. "There are dozens now, but then there were not. My intention was to go to Europe. I didn't get there for a long time. By then, I had been in the Philippines and some other places."

Several years after joining the Foreign Service, she took an exam to get into the officer corps. "There was a staff officer category. I moved into that almost immediately."

She rose through the ranks, serving in Europe, the Far East, and Africa and in State Department assignments in Washington, D.C. Perhaps the biggest obstacle facing her and other women Foreign Service officers at the time was a prohibition against marriage. "If they got married, they had to resign. It wasn't until the early 1970's that was changed. So, women made specific choices."

Schafer served in some of the world's hot spots during the Cold War, including the Soviet Union at the end of the 1950s. "We were followed all the time," she recalled. "We knew that there were microphones in our apartments and offices."

"It affected all of us in different ways. It was several years before we could say anything that was vaguely sensitive in a political sense in a closed room."

In 1973, she was a member of a select group chosen to open the U.S. Embassy in Beijing. This was after 29 years without U.S. representation in the People's Republic of

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*Ambassadors Meet. Former Ambassador Virginia Schafer meets Julie Holterman, president of the College's Ambassadors, at a reception in Schafer's honor at WSU's Alumni Centre. Holterman is a senior in agricultural communications.*



China. "There weren't very many of us and we knew we were special to be selected for that particular job."

When President Ronald Reagan appointed her ambassador to Papua New Guinea and the Solomon Islands in 1981, she became the 37th woman to serve as chief of a U.S. diplomatic mission.

She held that post until retiring from the Foreign Service in 1984 and returning to Washington state. In 1987, she was named the first director of Seattle's Office of International Affairs.

In 1990, Schafer created a scholarship honoring her mother at WSU: the Margaret Nicholson Schafer Graduate Fellowship in Human Nutrition at WSU. Seven years later she created the M. Virginia Schafer Research Fund in Human Nutrition.

She received the WSU Alumni Achievement Award in 1986 and the Outstanding Service Award in 1998.

While on campus in March, Schafer visited the food science and human nutrition department, met students, and spoke at a reception in her honor at the Lewis Alumni Centre.

What words of wisdom does she have for today's college students?

Get involved in clubs and other student activities.

"I think it's so important that they have the opportunity to work in small groups toward an end they can see. Working in a committee, whether you are the leader or not, getting the committee to go in the direction you want, is something best learned in a situation like this.

"You have to learn how to listen. You have to learn how to negotiate. You don't have to take a formal negotiation course. You just have to go to work in some of those groups you've got. That's what I tell people to do."

—Dennis Brown

## 1999 COLLEGE OF AGRICULTURE AND HOME ECONOMICS GRADUATES

### Welcome New CAHE Alumni

Congratulations to all of you listed below on your recent graduation from WSU. What an accomplishment! Welcome to the College's Alumni and Friends Association. Please stay in touch by attending alumni events and by reading *Connections*.

#### **Bachelor of Science in Agribusiness**

Tyler Don Bowman  
Craig Lance Cherf  
Timothy Alan Dufault  
Johnathan David Eilers  
Maria Angelica Sagrero Espino  
Misti Chantelle Harris  
Owen Robert Hubbs  
Jason Richard Miller  
Jose Miguel Reyna  
Ray C. Schmitt  
Bonnie Jo Shindler  
Corey Lee Stolp

#### **Bachelor of Science in Agricultural Economics**

Clinton James Adamson  
Erik Jon Anderson  
Laney Marie Bernick  
Willie James Bovard  
Erica Christine Brueckner  
Brett Roger Calhoun  
Scott D. Clark  
Robert H. Davis  
Patrick Ryan Dougherty  
Enrique Estrada III  
Christopher Lee Frizzell  
Luis Rey Garza  
Peter Dayl Graves  
Erika Nicole Howell  
Alison C. Jones  
Patrick Jay Kane  
Terry Allen Lensen  
David Rex Meek  
Douglas Winston Olmstead  
Meagan Alyssa Phillippi  
Shannon Lee Ross  
Byron D. Seney  
Scott Harrison Sparman  
Scott Christopher Tweedy  
Matthew J. Wardenaar  
Emily Jane Weber  
Kees Gerard Weyns  
Peter Joseph Wyborney

#### **Bachelor of Science in Agricultural Molecular Genetics and Cell Biology**

Jodi Lynn Humann  
Keri Irene Paulson

#### **Bachelor of Science in Agricultural Technology and Management**

David Randall Brandt  
Michael Lyle Clark  
Mellissa Corinne Ferguson  
Steven Paul Fulfs  
Thomas Lester Herres  
Michael Brian Jenner  
William Larry Kruger  
Kenneth James Labrousse

Sandra LeeAnn Mercer  
Marc Russell Nelson  
Adam Stanley Townsend  
Nikki Marie Wilson

#### **Bachelor of Science in Agriculture**

Scott Kenneth Carver  
Jeffrey Wayne Ediger  
John Russell Ekelmann  
Jessica Ann Franklin  
John Stewart Grubbs  
Adam Dale Hedrick  
Julie Jean Holterman  
Kelly Jean Jasa  
Mandie Johanna Kiel  
J. Kyle Kimble  
Steven Eric Mahitka  
Daniel Curtis Miller  
Eric Reed Murphy  
Neil Jay Musser  
Danielle Nicole Palmer  
Paul Ryan Pardini  
Lisa Gene Penfield  
Nicole Marie Perry  
Heather Michelle Stranberg  
Tony McRae Torretta  
Alison Yvonne Wedin  
Derrick Emil Youngquist

#### **Bachelor of Science in Animal Sciences**

Valerie Lynne Babcock  
Tanya Sue Barnhart  
William Thomas Barry  
Theresa Susan Bell  
Leah Denise Bjerkelund  
Milyssa Fraser Browne  
Darci Lynn Calkins  
Ho-Ming Chan  
Rebecca Lynn Cody  
Aisha Maureen Coon  
Kevin C. Cox  
Michelle M. Cram  
Daisy La Dawn Daubert  
Brian Kenneth Dentler  
Deirdre Elizabeth  
Heather Renee Fraser  
Tod Michael Garred  
Daniel Mark Greene  
Theresa Michele Grospitch  
Matthew Michael Hawley  
Karen Thereasa Headlee  
Trisha Lynn Jones  
Harold Ernest Henry Juergens, Jr.  
Eric Charles Keane  
David Clark Kersey  
Heather Lynne Kinneen  
Amy Jeannette Lagler  
Emily Jane Lubker  
Nathaniel Cervantes Mauer  
Samantha Brose McDonald  
Clinton Allen McKnight

Nada Serena Miller  
Jennie Marie Mock  
Chel Earl Moore  
Kerri Leigh Oakley  
Michael Adam Olsen  
Aaron Dennis Patrick  
Melissa Joan Peters  
Kathy Jean Pretty On Top  
Joanna Lesley Robson  
Jeremy Michael Schultz  
Deborah J. Schwarmann  
Megan Suzanne Scott  
Nancy Lynn Shattuck  
Robert E. Schefner  
Brooke Anna Smith  
Amy Katherine Starr  
Katrina Rebecca Steffen  
Melinda Eve Surian  
Mitchel Trent Thomas  
Adelaide Elizabeth Warsen  
Mary Kate Watson  
Vincent Richard Watters  
Kari Ann Weiss  
Elissa Suzanne Wellhausen  
Patrick Micheal Wolf  
Prudence Dawn Worthington  
Kimberly Ann Young

#### **Bachelor of Arts in Apparel, Merchandising, and Textiles**

Michelle Alexander  
Nicole Rene Alt  
Crystalyn Kae Brennan  
Kimberly Joy Casteel  
Julie Christine Crowder  
Karie Lynn Gandee  
Mariah Lynn Lockwood  
Heather M. Lynch  
Courtney Leigh Martin  
Mari K. Mixon  
Jessica Ellen Prentice  
Rachel Lee Schauble  
Cristina Louise Schrader  
Amy Catherine Sedenquist  
Robin Jeanne Smith  
Melissa Marie Van Liew

#### **Bachelor of Arts in Child, Consumer, and Family Studies**

Deidre Jean Cusimano  
Amie Catharine Fries  
Wendy Kae Heidenreich  
Ingrid Kay Inderlie  
Brenda Marie McGuire  
Angela Raye Newhouse  
Carol Elisabeth Nueske

#### **Bachelor of Science in Crop Science**

Joseph Patrick Courtney  
Steven Richard Elde  
Katherine Idelia Fenn Humphrey  
William Joseph Hutchens

# 1999 COLLEGE OF AGRICULTURE AND HOME ECONOMICS GRADUATES

Samuel James Krautscheid  
Carolyn Irene Kruger  
Erik Joel Everest Linsenmayer  
Peter Glenn Martin  
Brooks L. McCracken  
Eli Robert McGallian  
Wendi K. Nelson  
Adrian William Roozen  
Deric Alvin Schmierer  
Neil Floyd Schwendiman  
William Edward Simons  
Chris Wayne VanBuren  
Erik Edwin Wilkerson

## **Bachelor of Science in Entomology**

Angela Ann Bridges  
Faith Elizabeth Hartman  
Dale Keith Whaley  
John Zachary Williams

## **Bachelor of Science in Food Science and Human Nutrition**

Cynthia Leigh Adams  
Polly Lynn Andresen  
Erin Michele Barckley  
Brenda Jean Birmingham  
Shannon Christine Bloor  
Kirsten Mary Cady  
Lisa Jeanette Chaffee  
Maite Andrea Chauvin  
Craig Alan Clark  
DuBer Diaz  
Jamie Lynn Elfert  
Deborah Michelle Frantz  
Sara L. Guenther  
Erin Orene Hoffman  
Maureen Kirsten Holland  
Joanne Denyse Hunsinger  
Cynthia Denise Huskey  
Molly Ann Klaas  
Kristin M. Ogle  
Khimberly Rose Osborne  
Jennifer Lynn Ott  
Uyen T. Pham  
Sarah A. Redford  
Samantha Anne Spink  
Masami Toyama  
Bridget A. Tyrrell  
Jamie Leigh Wildenberg  
Angela Dawn Woodstock  
Lorna Michelle Wouters

## **Bachelor of Science in Home Economics**

Kristin Paige Ness

## **Bachelor of Science in Horticulture**

Peggy Lou Adams  
Natalia Bonilla  
Arica Kaye Brumfield  
Paul Dennis Brumfield  
Larry Alan Caudill  
Ernesto M. Cazares  
Adrienne Lea Golden  
John Naanep Graganta  
Leroy Groeneweg  
Krista Michele Harbison  
Barbara Lynn King  
Melissa Tiphaine McClendon  
Jonathan Michael McCoy  
Vicki Lynn Holt Newman  
Donald Winston Olmstead III  
Christopher Lee Paganelli  
Grant Jordan Poole  
Brock W. Sutton  
Anthony Villa  
Ryan Chandler Wells

## **Bachelor of Arts in Human Development**

Jill Diane Allen  
Suzanne Michelle Aller  
Deanna M. Anderson  
Lauren Jane Anderson  
Courtney Brooke Bacon  
Katie Brianna Baker  
Alexis Marie Boisseau  
Jon Andrew Burger  
Heather Lynn Burke  
Dawn Renee Cannon  
Katie Melissa Chaffee  
Erin E. Clark  
Janey Susan Clark  
Margaret Kathleen Connolly  
Tamara Ennis Cotie  
Sallie Marie Daggy  
Jennifer R. Dahlquist  
Christine Louise Danielson  
Suzanna Marie DeKay  
Jennifer Jean Dillon  
Susan Elizabeth Drevniak  
Allison Noel Eiesland  
Stephanie Michele Ellis  
Sandra J. Kompara Emanuel  
Shannon Christine Fallon  
Clarence Thomas Fest  
Shani Kiersten Fisher  
LaRae Marie Fletcher  
Kelly Patrice Flynn  
Kristina Ann Gilbert  
Angela Marie Gogerty  
Julie Michelle Goldbeck  
Kimberly Michelle Griggs  
Rosemary Danika Griswold  
Kelley Jo-Ann Groen  
Pamela Annette Caulfield  
Amy Kuuipo Hanson  
Beth Marie Harvey  
Barbara Jean Haugen  
Celeste A. Henson  
Barbara Ann Hinze  
Ayako Inui  
Natalie Hutchcraft Isaacson  
Amy Elizabeth Rafik Itani  
Erin Kristine Jackson  
Kristina Beth Jackson  
Kate A. Jerow  
Melinda K. Jolivette  
Ruriko Kawaguchi  
Amber Dawn Kingman  
Marti Jean Klippert  
Carmelle Marie Kneeland  
Patricia Marie Kreiter  
Rachel Christina Laabs  
Yi-Hui Lai  
Jason Roy Lambert  
Lindie L. Larson  
Shannon Lee MacDonald  
Lisa L. Mayo  
Jennifer Welch McCray  
Janette McGreer  
Annalisa Mickelsen  
Krisa Anne Moller  
Leah Marie Moro  
Katie Irene Morrison  
Charity Leah Murphyn  
Toni Rae Needham  
Amanda Rebecca Nelsen-Bouck  
Teresa Susan North  
Kristina Lee Overgaard  
Tisha Jo Pederson  
Christine Gail Popowich  
Teresa Genelle Ramsey  
Jill Lynn Raper  
Danielle Linn Rasmussen

Eileen Bourke Renfro  
Bridget Jo Rohner  
Selah Sheba Sanchez  
Asha S. Sawyer  
Tamara Mae Schmidt  
Sara Michelle Schneider  
Heidi Kay Scott  
Christa Lynn Seago  
Katy Anne Shaff  
Teresa Lynette Spencer  
Shawn Rene Spittler  
Heather Louise Stansbury  
Mark Anthony Steinberger  
Michelle Diane Sterkowicz  
Shelby A. Stidham  
Linda Ann Suter  
Dale Jason Taylor  
Jael Renee Thompson  
Amber Rae Thomson  
Jason John Twyman  
Carie Anne Upham  
Jacoba Catharina VanderStoel  
Theresa Jane Wunderly Villanueva  
Jennifer Lee Waddell  
Dana Leigh Webber  
Shannon Elizabeth Whitty  
Kristine Kay Wiggen  
Jennifer Christine Windus  
Jessica Lynn Wirth  
Patricia Lynn Womack

## **Bachelor of Arts in Interior Design**

Ryoko Adachi  
Naomi Susan Adams  
Fawzi A. A. Al-Zamil  
Jennifer Brooke Anderson  
LaRayne Arnold  
Cammie Joanne Bierwagen  
Katy Louise Brevik  
Rebecca Lynn Ives Broghammer  
Sonja Anne Carlisle  
Mandy Chan  
Nicole Miranda Davis  
Lori Lee Duman Follette  
Joy Elizabeth Hall  
Janet Ann Harden  
Shigeyuki Hasegawa  
Sara Elizabeth Hegle  
Yukako Horiuchi  
Breann A. Lamb  
Tory JoBryn Lanpheir  
Kimberly M. Larson  
Cristen Marie Linton  
L. Kris Mack  
Meredith Kaye McPoland  
So-Pik Mok  
Janell Kathleen Olney  
Renee Louise Porter  
Sigurd Andrew Ratkoviak  
Rachel Jane Shawen  
Patricia M. Sjahli  
Shannon Elizabeth Stobie

## **Bachelor of Science in Landscape Architecture**

Curtis LeRoy Benson  
Shane Robert Flock  
Thomas Michael Hartzell  
Nathan Lee Krohn  
Shiro Morishita  
Anri Nozaka  
Diana Lynne Pink  
Michael John Riewer  
Lauren Roberta West

## **Bachelor of Science in Natural Resource Management**

Erica Nicole Anderson  
Jon Paul Anderson  
Morphia Nichole Meadow Baker  
Alicia Ann Beardsley  
Kerry Forrest Bearg  
Marla Jo Bennett  
Ty L. Brown  
Joseph James Buchmann  
Christine Michelle Burchfiel  
Susan Maureen Clausen  
Jon Michael Cole  
Timothy Graham Cossel  
Brandon Joel Coville  
R. Terrence Coyle  
Tara L. Davis  
William Martin Dowdy  
Lauri Marie Freist  
Jason Carl Gibbons  
Michael Phillip Glass  
Amanda Leigh Harrison  
Ross Thomas Huffman  
Christopher Michael Hyatt  
Kara Ann Johnson  
Nicholas Warren Jorg  
Travis Alan Keatley  
Erin Marie Kelly  
Dennis James Kester  
Amy Marie Helen Killian  
Timothy Loren Kopf  
Steven Michael Lambert  
Scott R. Lewis  
Jon E. Matye  
Carrie Ann McEachern  
Dennis Crossno McMeans  
Brandon Keith Metcalf  
Joshua Lane Pietz  
Heather Eileen Rider  
Sam A. Salsman  
Alan Neal Sarich  
Michael Allen Stack  
Matthew Richard Stevens  
Eric Alan Thorson  
Steven Michael Vander Ploeg  
Ryan Allen Walker  
Kyle James Watson  
Michael Brenden Whitcher

## **Bachelor of Science in Natural Resource Sciences**

Kristin Nicole Berg  
Leah Denise Bjerkelund  
Anne Christine White Dowdy  
Scott Floyd Fields  
Olivia Ruth Forte-Gardner  
Gay Lynn Goolsby  
Eric Charles Grimes  
Beth Carroll Hayes  
Bryce Douglas Krueger  
Joseph Charles McCollum  
Gabriel Scott Newton  
Kenneth Neal Ostrowski, Jr.  
David Lindsey Shy  
Nicole Janine Siegel  
Ann Marie Winters

## **Bachelor of Science in Soils**

Kent Willis Gephart  
Kimberly Allison Labno  
Gabriel Zepeda Lepez  
Kevin Daniel Scherer  
Mark Bradley Wardell

## Alumni and Friends Support New CAHE Scholarships

### NEIL W. AND EUNICE L. JOHNSON SCHOLARSHIP

*The Neil W. and Eunice L. Johnson Scholarship awards a minimum of \$500 per academic year to juniors and seniors in the field of agriculture, based on academic status and financial need.*

The Johnsons were both graduates of Washington State University (then Washington State College). Neil received a B.S. in horticulture in 1924 and a M.S. in horticulture in 1925. Eunice received her B.S. in education in 1926.

Neil W. Johnson was born in Lincoln, Nebraska, in 1901, and spent his early years near Kennewick. At WSU, he was a member of Phi Kappa Phi fraternity and the agricultural honorary society Alpha Zeta. He worked as a resident consultant at the Lattaer School of Public Administration at Harvard University, an assistant professor at WSU, and was principal agricultural economist in the U.S. Department of Agriculture. Neil passed away December 26, 1983, in Escondido, Calif.

Eunice was born in Huron, South Dakota, in 1900. She spent her early years in the state of Washington, where she taught in elementary schools after obtaining her degree. She spent her later years in Washington, D.C., with her husband, where she was active in the church and taught junior high classes. Since 1959, she has lived in California, mostly in Santa Rosa.

### J. DE WEERD MEMORIAL FELLOWSHIP FOR EXCELLENCE IN POTATO RESEARCH

*The J. de Weerd Memorial Fellowship for Excellence in Potato Research is offered to a graduate student studying potatoes in the departments of plant science, plant pathology, economics, marketing, and other agriculture fields. The fellowship is given on an annual basis, with a two-year commitment to support the potato industry nationwide.*

The fellowship has been set up in memory of Jan de Weerd by Jan W. and Tammy de Weerd and family, friends, and colleagues. Jan de Weerd was born on a dairy farm in the Netherlands and had a love for tending the earth. He eventually started his own dairy and seed potato farm when he was 23 years old. In 1979, he specialized in producing high-generation seed potatoes. His son Jan W. de Weerd also was interested in potatoes and studied them at Washington State University, where he received his doctorate.

### SCOTT B. HAMBELTON MEMORIAL SCHOLARSHIP ENDOWMENT

*The Scott B. Hambelton Memorial Scholarship Endowment is awarded to a student of high academic standing committed to pursuing a career in the tree fruit industry in Washington State.*

Harold and Patricia Hambelton established this scholarship in memory of their grandson Scott B. Hambelton, who died of meningitis in fall 1997 while pursuing a degree in horticulture and business at WSU. His interest was in the business aspect of tree fruit production. Harold received a degree in horticulture from WSU in 1949. His son, Michael received a degree from WSU in 1971 and married a WSU undergraduate, Kathleen. They raised three sons, Jeffrey,

Scott, and Mark. Harold's son David received a degree from WSU in 1975, and David's wife Marilyn received hers in 1977. They have two children, Teresa, who entered WSU in fall 1998, and Alan.

### THE ANNA MAUDE (TAYLOR) ROBERTS SCHOLARSHIP IN FORESTRY AND SOILS

*The Anna Maude (Taylor) Roberts Scholarship in Forestry and Soils is awarded to a sophomore or junior of high academic standing studying forestry or soils. The award will be given annually in the amount of at least \$1,000 and is renewable based on satisfactory academic progress.*

Donald and Ruth Roberts created this scholarship in honor of Donald's mother.

### THE MAX WARD HAMMOND MEMORIAL SCHOLARSHIP FUND

*The Max Ward Hammond Memorial Scholarship Fund award goes to an undergraduate or a graduate student with financial need who has a demonstrated interest in agricultural fields and a commitment to completing a degree.*

This fund was created to honor the memory of Max W. Hammond, agronomist, soil scientist, and crop adviser to Columbia Basin irrigated agriculture for over 20 years. He gave his time to identifying and seeking solutions to agriculture problems in the field and served as a trainer for many commercial crop advisors in central Washington. Max held a courtesy appointment in WSU's Department of Horticulture and Landscape Architecture where he advised both graduate students and researchers. He had a lifetime commitment to agricultural education.

# PRIVATE GIVING

## THE ROBERT AND MYRTLE FULFS ENDOWED SCHOLARSHIP IN ANIMAL SCIENCES

*The Robert and Myrtle Fulfs Endowed Scholarship in Animal Sciences goes to certified majors pursuing a degree in the Animal Sciences Department who have demonstrated financial need.*

Robert Fulfs received a B.S. in animal husbandry from WSU in 1938. From 1938 on, he has been a small grains and livestock farmer in Whitman County. Robert married Myrtle Stout from Uniontown, Washington, in 1945. All his life, Robert has been a strong supporter of agriculture, both at the state and local levels. He is credited with writing the Grange resolution that resulted in a law that allows citizens to pay sales tax only on the difference in value when trading vehicles and farm equipment. He has

been a sponsor of the Pony Club for over 30 years, a member of the board of directors of the Pullman Grange Supply, held local and state offices with the National Farmers Organization, and has been on the Pullman Grain Growers Advisory Board. Robert also has been a loyal supporter of 4-H, FFA, and the WSU Animal Sciences Department.

## THE EDWARD L. AND SALLY A. VEENHUIZEN SCHOLARSHIP ENDOWMENT

*The Edward L. and Sally A. Veenhuizen Scholarship Endowment award goes to students working on careers in animal agriculture.*

Edward and Sally started their lives together at Washington State University in 1956. They left with two degrees and

two children in 1959. After four years in the U.S. Air Force, they spent their lives in animal agriculture careers, as have their three children and spouses.

## THE HOME ECONOMICS SCHOLARSHIP FUND

*This fund is a pool of donations that will help future students in home economics, including food science and human nutrition, human development and the Department of Apparel, Merchandising, and Interior Design. It will be dispensed in different specific scholarships, with the goal being to increase the number of scholarships the College can offer to new students.*

—Jehan Moulton

## Share Your News with Classmates!

What have you done recently? Share your news with classmates by filling out the form below and mailing it to: Connections, CAHE Alumni & Development Office, Washington State University, PO Box 646228, Pullman, WA 99164-6228. Or email your information to: [nitcy@wsu.edu](mailto:nitcy@wsu.edu) Please type or print clearly.

Name: \_\_\_\_\_

Year of graduation from WSU: \_\_\_\_\_ Major: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Your News: (use additional paper if necessary)

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 CLIP AND MAIL

## DEAN'S MESSAGE

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### *Goal 2000: Recruiting, Retaining, and Graduating New Alumni*

**W**hat have we accomplished this past year? What are our goals for next year? What can alumni do to help us achieve those goals?

#### **Accomplishments**

Over 435 CAHE students graduated last spring in nearly every major of the College.

Three new degrees were approved that will increase the availability of our majors statewide. They are in human development, natural resource sciences at WSU-Vancouver, and agriculture with our tri-state partners in Idaho and Oregon. Additional degrees in applied biology and environmental horticulture are currently being developed.

The state legislature funded the Safe Food Initiative, which will add 17 new research and extension faculty in CAHE. We also were funded to add three more Learning Centers in Walla Walla, Skagit, and Pacific/Grays Harbor counties. An initiative in precision agriculture was partially funded.

Recognition of the quality of our programs and faculty and staff continues. Charles Gaskins, animal sciences, received the WSU Sahlin Award for Excellence in Public Service for his work on genetics of Wagyu and for his leadership in Boy Scouts. Denny Davis, biological systems engineering, also won the WSU Sahlin Award for Excellence in Instruction, leading the engineering curriculum through a major restructuring. Robert Bonsall, plant pathology, won the President's Award for Staff Excellence; and 10 CAHE students received the President's Leadership Award. The Abuela Project, in Yakima County, received USDA Secretary Glickman's Award for Team Contributions. The project reduced the number of salmonella infections in Yakima from epidemic proportions to essentially zero by introducing a new recipe for queso fresco cheese.

#### **Goals**

One important goal for the college is to increase enrollment. In the next four years we hope to double our enrollment in CAHE's undergraduate majors. To achieve this, we need to recruit 1,000 new freshmen for September 2000. We need to recruit 200 transfer students, and attract another 200 returning adults who wish to complete their college degree in an agricultural, natural resources, or family and consumer science major.

#### **How can alumni help?**

First, you are the greatest recruiters because of your positive experiences and loyalty to WSU. The Cougar spirit and quality of education you received is communicated daily in the workplace, community, and family. The result has been many sons and daughters, as well as grandchildren, of alumni have returned to WSU. Keep up the Cougar spirit.

Second, your donations in support of scholarships make a college education possible for the many students who received over \$385,000 in scholarship support from CAHE for next year. Thank you and keep up your financial support.

Every alum has an opportunity to be a recruiter in the volunteer roles you undertake in 4-H, FFA, and FHA. These students have leadership experiences, a commitment to more education, and are already connected to WSU and CAHE. Our student Ambassadors and College recruiting team, with Christa Vibbert, are available to assist in helping both high school and community college transfer students learn about the College.

With 29 majors at Pullman, at the branch campuses, and through Extended Degree Programs, we intend to meet the student's needs. With excellent teaching and quality advising, we promise the attention and education that you experienced will continue.



*James J. Zuiches, Dean*

Our graduates get jobs in every area of agriculture and agribusiness, human service agencies, design and architecture firms, natural resource and environmental organizations, as teachers from preschool to high school, and in every type of management position. The food processing industry, food safety, dietetics, and biomedical engineering areas continue to grow. Demand for graduates is high.

We also encourage internships. Industry alumni can contact Christa Vibbert and she will alert current students about such opportunities. Also, when alumni speak at high school career days or workshops, you open up new possibilities to students in CAHE majors.

If every one of the College's 15,000 graduates sends us the name of a prospective student, we will respond and be successful. We hope Alumni Association members will serve as local recruiters and help us know whom to contact. With your help, we can achieve our goal. If you know any prospective students, please send their names to Christa Vibbert by mail: CAHE Academic Programs, PO Box 646243, Pullman, WA 99164-6243; by e-mail: [vibbert@wsu.edu](mailto:vibbert@wsu.edu); or by telephone: 509-335-3359.

**Look for the CAHE  
Alumni and Development  
Web Site at:  
[www.cahealumni.wsu.edu](http://www.cahealumni.wsu.edu)**

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