

CONNECTIONS

FALL 1998



See pages 11-14

Ferdinand's



Washington State
 University

Land Grant Day,
October 10, 1998

See pages 8-9
Registration Enclosed

FROM THE ALUMNI BOARD PRESIDENT

*Keep the Alumni Voice Alive through
Alumni and Friends*

Hello again fellow alumni! It's that time again. Land Grant Day is just around the corner. This year's event will be held October 10—the same day as WSU's homecoming football game. We have a lot of fun and interesting events, including the football game, planned for the entire day. The festivities get started at 10 a.m. and continue through the evening.

The day commences with our Extravaganza Fair in the morning. We'll have lots of prizes to give away, games to play, music to hear, and a Cougar Brand Smoky lunch for all to enjoy. And it's always fun to see the antique tractor exhibit, which will start in the morning as well.

We would like to encourage as many alumni to attend, especially since the football game could prove to be a good match against the Ducks of Oregon. If this year's event proves to be as much fun as last year, we are all in store for a whooping good time! WHOA! Did I detect a bit of country back there? But seriously, we have many events planned around the family so please bring the young ones. It's truly an event for all ages.

After the game, we'll have a social hour and a dinner barbecue. Afterwards

we will start right in with our benefit auction. Remember last year's? We auctioned off everything from a weekend stay at the dean's condo at Schweitzer to a trip on the Washington Dinner Train. The day will end with music and dancing. It'll be a lot of fun, so don't miss it!

We would also like to thank all of our alumni and friends who attended our annual June event at the Prosser Research and Extension Station. It was one of the best events we have had in the past years. So how can we top such a stellar event at this year's Land Grant Day? Simply by telling yourself that this is the year that we all can help the College celebrate its long history, and more importantly, to celebrate friendships from the good ole' days and to also have a chance to meet new friends for the next century.

I encourage all of you to bring your family and meet other alumni families. I'd like you to meet mine. I promise that it will be a great time to be had by all. SEE YA THERE!!!!

Michael E. Dalziel
President, CAHE Alumni Board



Michael E. Dalziel

DATES TO REMEMBER

September

- 9 Future Cougar Day/FFA Day/FHA Day at WSU/UI Football Game.

CAHE will host a Leadership Day for FFA/FHA and Family and Consumer Science Students.

- 19 Cougar football vs. University of Idaho

October

- 1-2 CAHE Ambassador Sweep
- 9 CAHE Dean's Merit Scholarship Banquet
CAHE Advisory Council Meeting
- 10 Cougar football vs. University of Oregon, Land Grant Day and Homecoming
- 12 Cougar Monday
- 17 Cougar football vs. USC
- 22-23 Agriscience Leadership Experience
- 26 Cougar Monday
- 31 Cougar football vs. Arizona State University, Dad's Day

November

- 21 Cougar football vs. University of Washington, Apple Cup

On the Cover: From top to bottom—Campus visitors line up outside Ferdinand's former location in Fulmer Hall, circa the mid-1960s. Professor Lloyd Luedecke's dairy products class makes ice cream, circa the mid-1980s. The creamery acquired this truck in the mid-1970s. Students sample the creamery's products shortly after Ferdinand's moved to its present quarters in the Food Science Human Nutrition Building in the summer of 1992.

Michael Tate New CAHE Administrator

Michael J. Tate has been appointed to replace retired Harry Burcalow as associate dean of CAHE and associate director of WSU's Cooperative Extension. Tate came from Michigan State University where he was assistant director of extension. He assumed his duties at WSU in July.

Tate has 25 years experience in extension, including 15 years as an administrator. His career in extension began in MSU's 4-H program, starting as a field agent in the 1970s to eventually becoming its director in 1983. He holds three degrees, all from MSU: a bachelor's degree in food science and human nutrition ('72), a master's in adult and continuing education ('82), and a doctorate in extension education and administration ('96).

At WSU, Tate has already laid out an ambitious agenda. His ultimate goal is to better serve the adult, nonformal educational needs of Washingtonians. He brings skills that helped him make the many successes he realized in Michigan, including integrating computer technology into the educational system, building government and community partnerships, and creating a professional development program for extension personnel.

"There is great opportunity at WSU to put together a system for professional development training in Cooperative Extension," said Tate. "There currently isn't such a system here and that is how you increase the effectiveness of your staff. No one is going to succeed now or in the future if they don't have a solid



Michael J. Tate

process for professional development. We need to invest in our human resources. People come to extension with education, skills, and credentials, but they need to have training to help them grow, to reach their potential, and to keep them up-to-date. That will be one of my first priorities here."

In addition to professional development, Tate also aims to work closely with counties and communities to more specifically identify their needs. He also wants to build stronger partnerships with organizations and other colleges in the state. Another high priority, he said, will be to capitalize on the wealth of communication technologies in the state, such as computers, satellites, and desktop conferencing, and use them in extension educational programs.

Tate said, "Washington state is probably one of the few places in the world where you have such a high concentration of software development. Cooperative Extension can really take advantage of that technological know-how and use it to provide information and learning. It will give us a competitive edge and help us better serve the state."

The state's mecca of communication technologies was a major draw for Tate when he was considering leaving Michigan for WSU. "Washington state is on the move in so many ways," he said. "That, and the research and excellent faculty at WSU, were all factors that led to my decision to come here. There is such great potential for this university."

CONTENTS

Around the College	2-4
1998 CAHE College Awards	5
Private Giving	6-7
Land Grant Day	8-9
A Time of Challenge for Pacific Northwest Wheat Growers	10
Cover Story	11-13
Ferdinand's Celebrates 50 Years	
WSU's Safe Food Initiative	14
Welcome New Alumni	15-16
Alumni Notes	16
Dean's Message	17

CONNECTIONS

Issue Number Three

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:

College of Agriculture and Home Economics
Alumni and Development Coordinator
Washington State University
PO Box 646228
Pullman, WA 99164-6228

Connections Staff

Publisher: James J. Zuiches, Dean, CAHE

Alumni and Development Assistant Director:
Patrick Kramer

Writer/Editor: Joanne Buteau, Jill Welchel, Anna Sherwood

Graphic Designer: Doug Garcia

Clerical Assistant: Tiffany Ross

Program Coordinator: Britta Nitcy

CAHE Alumni Board of Directors

President: Michael Dalziel '92

Vice President: Alison (Strotz) Lane '93

Secretary: Kristi (Rightmire) Harting '95

Board Members: Nancy Boettcher '75, Chuck Chambers '59, Lil Freese '48, Gayle Jacklin '86, Andy Moberg '86, Ginger Scobie '71, Clay Sprague '80, Mary Palmer Sullivan '88, Tedd Wildman '84

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: cahe.wsu.edu/~alumni/

AROUND THE COLLEGE

AGRICULTURAL ECONOMICS

Jill McCluskey is a new assistant professor in the department. She received a Ph.D. in August 1998 from the University of California, Berkeley. **Hong (Holly) Wong** is another new assistant professor in the department. Wong received a Ph.D. from Michigan State University in 1996.

Other faculty in the department this year will be temporary instructor **Bruce Walton**, who will teach Agricultural Economics 210, and visiting professor **David Smith**, from Fresno State University.

Staff member **Janet Cooper** will be retiring after 31 years with Agricultural Economics and Cooperative Extension.

Departmental awards this year went to: **Traci Schoessler**, Outstanding Senior in Agricultural Economics, and **Ryan Ells**, Outstanding Senior in Agribusiness.

ANIMAL SCIENCE

Phil Senger will receive the 1998 Distinguished Teacher Award at the American Society of Animal Science annual meeting in Denver.

Roger Cady is the co-recipient of the 1998 Alfa Laval Dairy Extension Award to be presented at the American Society of Dairy Science annual meeting in Denver.

Hong Wook Kim, graduate student of Boon Chew, received the Carotenoid Research Group Travel Award for his abstract at the 1998 Experimental Biology Meeting.

APPAREL, MERCHANDISING, AND INTERIOR DESIGN

Joye Dillman, associate professor of human development, is serving as interim chair of the department. Dillman, a family and consumer scientist, has advised new AMID students and served on departmental committees before being appointed as interim chair. Two new faculty members have joined the

department this fall. **Jinsook Cho-Che** is an assistant professor who received her Ph.D. from the University of Wisconsin-Madison in retailing and consumer science. In addition to teaching courses in apparel merchandising, she will pursue research interests related to computer applications in the apparel industry and global sourcing in retailing.

Robert Krikac is an associate professor who completed a bachelor's and a master's degree in design at Arizona State University. Krikac's teaching will

reflect 15 years of professional experience in architecture and commercial interior design.

BIOLOGICAL SYSTEMS ENGINEERING

Shulin Chen, a faculty member in the Department of Biological Systems Engineering, is the supervisor of the WSU Water Quality and Waste Analysis Lab, which is now certified by the state Department of Ecology. The lab is certified

COOPERATIVE EXTENSION

The Abuela Project Grandmothers helping to make food safe

Queso fresco is a soft fresh cheese used widely in Latin American dishes. Raw, unpasteurized milk is traditionally used when this cheese is made at home. Queso fresco made with raw milk has been the source of several outbreaks of salmonella infection, including one in Yakima County where more than 90 illnesses were reported in the first six months of 1997.

Extension food safety educators in Yakima and Pullman collaborated with the Yakima County Health District, the Washington State Dairy Products Commission, and the Washington State Department of Agriculture to educate the public about the dangers of consuming raw milk products and to encourage home cheese makers to use a modified recipe substituting pasteurized milk for raw milk.

Extension educators taught 15 abuelas (grandmothers) how to make the new recipe. Abuelas were chosen because they hold positions of respect and authority in the Hispanic community. In turn, the abuelas agreed to train at least 15 others. More than 200 people attended safe cheese workshops presented by the abuelas. A follow-up survey indicated that all



workshop attendees now use pasteurized milk to make queso fresco.

One indication of the project's effectiveness is the rapid decrease in salmonella infections. Only 14 infections were reported in the last six months of 1997. And just two cases were reported in the first five months of 1998.

Co-project leaders for the Abuela Project are Val Hillers, extension food specialist, and Theo Thomas, Yakima County Cooperative Extension educator.

to perform almost three dozen tests that analyze solids, nutrients, water quality parameters, microbial activity, and air quality. The rate structure allows the lab to charge only half the normal price to agencies within the University. More information is available from the department by mail or by sending electronic mail to bsyse@wsu.edu.

COOPERATIVE EXTENSION

Jim Freed, special forest project coordinator, received national recognition for an innovative environmental education program that teaches public and private land managers about managing non-timber forest products as an environmentally and economically sustainable enterprise. Freed's program was one of three across the nation to receive the U.S. Department of Agriculture's Environment Award.

Freed is on special assignment working with the U.S. Forest Service at its Olympic National Forest headquarters in Olympia, where he manages the Pacific Northwest Special Forest Products Extension Education and Research Program.

The **Abuela Project** is the recipient of the first Dannon Institute Award for Excellence in Community Nutrition. The project will receive \$5,000 for use in further developing and expanding the project to other eastern Washington counties. The Abuela Project originated last year in Yakima County. See accompanying article for a description of the project.

CROP AND SOIL SCIENCES

Mary K. Walker Simmons and **Ann C. Kennedy**, both research leaders, USDA/ARS, received national honors for research. Simmons received the Arthur S. Flemming award in Washington, D.C., for discovering new plant genes that help wheat and other plants survive drought and cold temperatures. Kennedy received a Scientific Achievement Award

CROP AND SOIL SCIENCES

Scientists Win National Awards

Mary K. Walker Simmons and Ann C. Kennedy, both with USDA's Agricultural Research Service here, have won national awards for their scientific achievements.

Simmons, a plant physiologist, received the Arthur S. Flemming award June 11 in Washington, D.C., for discovering new plant



Ann Kennedy

genes that help wheat and other plants survive drought and cold temperatures.

Kennedy, a soil microbiologist, received a Scientific Achievement Award in May from Women in Science and Engineering (WISE) for developing unique soil conservation practices and actively encouraging young women to pursue careers in science.

"Drs. Simmons and Kennedy represent the best in scientific excellence, leadership, and community service, and we're proud they've been recognized by these award programs," said Floyd Horn, administrator of USDA's Agricultural Research Service.

The Flemming award, named for distinguished federal employee and educator Arthur Sherwood Flemming, was established in 1948 to honor outstanding men and women in the federal government. Twelve awards are given annually, four for scientific achievement.

The WISE program, now in its 14th year, recognizes federal women scientists and engineers. The recipients are honored for their technical achieve-

ments as well as commitment to fostering women in science and engineering careers. WISE is a federal interagency committee of women scientists and engineers. WISE gives



Mary Walker Simmons

three awards annually, one each to a young scientist, engineer, and one lifetime award.

As a Flemming recipient,

Simmons was recognized for scientific discoveries in the hormonal regulation of seed germination and environmental stress tolerance in cereal plants. Her research group discovered a new subfamily of plant protein kinases that respond to drought and cold temperature. They also made significant advances in lab analysis of plant hormones. Simmons leads the ARS Wheat Genetics, Quality, Physiology and Disease Research Unit in Pullman. She is one of three ARS scientists receiving the Flemming award this year.

Kennedy discovered biological control organisms to fight the weeds jointed goatgrass and downy brome and developed new methods for detecting the source of airborne soil particles. Each year, she mentors local elementary and high school teachers and students to increase scientific literacy and works with graduate students at WSU. She leads the ARS Land Management and Water Conservation Research Unit in Pullman. Kennedy is the fifth ARS scientist to win the WISE award.

in May from Women in Science and Engineering (WISE) for developing unique soil conservation practices and actively encouraging young women to pursue careers in science. See accompanying story for more details.

Stephen M. Dofing has been hired as a Cooperative Extension specialist/assistant crop scientist, effective December 1, 1998. Dofing replaces Baird Miller who resigned July 31. Also new to the department in 1998 are **Eric Gallandt**, teaching and research in weed ecology, **Eric Miltner**, turf management research, Puyallup, **Tim Miller**, weed science research and extension, Mt Vernon, **Dave Huggins**, soil science, cropping systems, USDA-ARS, and **Camille Steber** molecular genetics research, USDA-ARS.

John Burns, Whitman County Cooperative Extension leader, was acknowledged as this year's recipient of the Kenneth J. Morrison Extension award at the annual Spillman Farm/Conservation Farm Field Day July 9. This award, established in 1987, recognizes an extension faculty member who has made outstanding contributions to Washington's agriculture.

Dwane Miller received the 1997 O.A. Vogel/WSCIA Award. At the annual Washington State Crop Improvement Association banquet last November, Miller was recognized for his leadership, personal and professional achievements, and contributions to the agricultural industry in Washington. The crop improvement award was created in 1973 in honor of Orville A. Vogel's achievements and contributions in agriculture. Miller announced he will retire in May 1999.

In April 1998 **R. James Cook** was appointed as the new R. James Cook Endowed Chair in wheat research.

James Anderson, USDA/ARS, was selected as the 1998 Young Crop Scientist by the Crop Science Society of America of Spokane, Washington.

HUMAN DEVELOPMENT

Jerry Newman, Deb Nelson, and Jan Hiller conducted the 1997 Summer Science Institute Program Evaluation. Fifty-four elementary teachers participated in two, one-week elementary science curriculum workshops at WSU. Teachers explored the elementary sciences processes and were exposed to hands-on experiential curriculum in food safety, watersheds, chemicals, and food and fiber for elementary children. They also identified the Essential Learning objectives taught in each of the curricula. The workshop evaluation showed, on a 1 to 10 point scale, that 54 teachers significantly increased their knowledge of science processes by 3.32; watersheds by 5.53; chemicals by 5.31; food safety by 5; food and fiber by 2.95; and understanding of the Essential Learning by 5.83. A follow-up survey showed that 26 teachers implemented the curriculum in their classroom. The Summer Science Institute was held again this summer.

IMPACT CENTER

Juming Tang of the Department of Biological Systems Engineering recently visited Shanghai and Beijing, China, for on-site visits to processing plants and research facilities. Tang has IMPACT Center funding for research on microwave drying and fumigation of Washington fruits and vegetables. He visited SIAN, the Microwave Application Research Institute, and presented papers at several universities in Beijing.

Tom Wahl, Department of Agricultural Economics and IMPACT, recently participated in the Pacific Basin Economic Cooperation meetings in Santiago, Chile. He attended the sessions of the working committee on food products, representing the APEC Study Center for Food Systems at WSU, of which he is interim director. He also met with administrators and faculty at the University of Chile, including the department of agricultural economics, to look

at collaborative efforts between the two universities.

Wahl also presented a paper at the International Symposium on Agricultural Policy for the 21st century in Taipei, Taiwan, in June. The group met with Taiwan's President Lee who is a former faculty member at National Chung Hsing University.

NATURAL RESOURCE SCIENCES

Robert Wielgus received \$150,000 per year for four years to study the effects of cougar and forest management on predation of endangered mountain caribou. Current research partners/collaborators include the Columbia Basin Fish and Wildlife Compensation Program of British Columbia, U.S. Fish and Wildlife Service, U.S. Forest Service, and the Washington Department of Fish and Wildlife. Team members include numerous agency personnel, two Ph.D. students, one M.S. student, and up to three undergraduate assistants from WSU. The research team has already captured, radiocollared, and monitored about 30 caribou, 30 mule deer, 20 white-tailed deer, and will begin capturing up to 30 cougars this winter. Results could be used to change predator and forest management to achieve caribou recovery from endangered status.

PLANT PATHOLOGY

Guillermo Pimentel, graduate student in plant pathology, won the 1998 M.P. Backus Award from the Mycological Society of America (MSA).

Timothy Murray, a WSU plant pathologist, is one of three authors of a new book, *A Color Atlas of Diseases of Small Grain Cereal Crops*, recently published by Manson Publishing and is available through Iowa State University Press (1-800-862-6657). The other two authors are David Parry, East Malling Research Station, and Nigel Cattlin, Holt Studios.

CAHE Honors Students, Faculty, and Staff

Students

Five outstanding students were honored April 18, 1998, at the College's 39th Annual Awards Banquet.

Melissa Ann Davis, a senior majoring in agricultural education, was named the 1998 Aggie of the Year. The award honors the top senior in an agriculture major. She has earned numerous academic honors and also been active in many organizations during her academic career. She is a four-year member of the University's honors program, a Glenn Terrell Scholar, has been named to the University president's honor roll seven semesters, and has been inducted into the Golden Key National Honor Society. She has also held several offices in the Elliott Chapter of the Alpha Zeta honorary fraternity.

Carrie Bauwens, a senior majoring in apparel, merchandising and textiles, was named the 1998 Consumer Scientist of the Year. The award recognizes the top senior in a home economics major. During four years at WSU, Bauwens has served as a student recruitment ambassador for the College, has been active on her department's advisory board, and has held key leadership positions in the Apparel Merchandising Student Association.

Sherrie Casteel, a human development major, was named the Outstanding Junior in family and consumer sciences. Casteel is a member of the Golden Key National Honor Society, serves as president of the Human Development Student Club and is a member of the Alpha Zeta academic fraternity.

Erika Howell, an agricultural economics major, was named Outstanding Junior in agriculture. Howell, who is enrolled in the University's honors program, has been named to the president's honor roll and is a Mortar Board Freshman Scholar. She is president of the CAHE Student Ambassadors and has been active in the Agribusiness-Agricultural Economics student club.

Jamie Meenach, a sophomore in animal sciences, was recognized as Outstanding Freshman for the past academic year. Meenach has served as herds manager for the Student Swine Cooperative, secretary of the Block and Bridle Club, and was initiated into the Alpha Zeta honor society this spring.

Faculty and staff

Eleven faculty and staff in the College were also honored at the banquet.

Gaylon S. Campbell, professor of soil sciences, received the R.M. Wade Excellence in Teaching Award. Campbell, a member of the WSU faculty since 1971, teaches upper-level classes in environmental physics, upper-level and graduate courses in soil physics, and a course that helps students prepare scientific presentations.

Campbell, who has written or co-authored three texts and two lab manuals, has been a pioneer in the field of computer-aided instruction since his text *Soil Physics With Basic* was published in 1985. His texts have been translated into Spanish and Japanese. He has taught short courses in Italy, South Africa, and Spain.

James Durfey, an instructor in biological systems engineering, received the CAHE Alumni Association and Friends Outstanding Undergraduate Advising Award. Durfey, a member of the faculty since 1992, advised 81 students during the 1997-98 academic year. Since 1993, he has developed internships for students at nine companies. He serves as adviser to the Agricultural Technology and Management Club and co-adviser to the Collegiate Postsecondary Agricultural Student Club.

Zuzanna Czuchajowska, associate food scientist and leader of the Grain Science Group in the Food Science and Human Nutrition Department, received the College's annual Faculty Excellence in Research Award. Czuchajowska has published or submitted for publication 55 articles since coming to WSU in 1986. Two U.S. patents were recently granted for her work on the fractionation of wheat flour and legumes.

Elizabeth Beers, extension entomologist at the WSU Wenatchee Tree Fruit Research and Extension Center, received the College's Faculty Excellence in Extension Award. She has carried

on a sustained program in integrated pest management in tree fruit over the past 12 years. In 1997, Beers won the Entomological Society of America's Distinguished Achievement Award for Extension Activities and the Award for Women's Leadership through Science in the Washington Tree Fruit Industry. She has been a member of the WSU faculty since 1985.

Richard Rupp, a staff member in the Crop and Soil Sciences Department since 1991, received the college's Staff Excellence Award. He works with two soils faculty doing research on remote sensing, geographic information system, and land use. His current projects include developing software that will provide an interactive web-based Washington soils map.

This year, the College's Team Excellence Award went to six researchers and extension faculty who successfully promoted the use of pheromones to disrupt the mating activity of the codling moth. The codling moth is a major insect pest of apples. Since 1990, use of mating disruption by Washington orchardists has expanded from 1,500 to 32,000 acres, or about 20 percent of the apples grown in the state. As a result, the use of broad-spectrum pesticides has been greatly reduced.

The members of the team are **Betsy Beers**, extension entomologist; **Jay Brunner**, entomologist and interim superintendent; **John Dunley**, extension entomologist; **Gary Grove**, plant pathologist; **Tim Smith**, WSU Chelan County Cooperative Extension faculty; and **Ted Alway** codling moth IPM coordinator with the Chelan County Cooperative Extension office. Beers, Brunner, Dunley, and Grove all work at the WSU Wenatchee Tree Fruit Research and Extension Center.

Two New Gifts Benefit College of Agriculture and Home Economics Students

RETIRED RANCHERS DONATE \$500,000 FOR SCHOLARSHIPS

During 60 years of raising sheep and cattle in the rugged terrain of Okanogan County, Ernest and Stanley Berg often got through tough times with a little



Stanley, left, and Ernest Berg will help future generations of WSU students.

help from their friends. To help future generations of college students achieve their goals, they have created a \$500,000 scholarship endowment at WSU. "We wanted to do something good for the kids with our ultimate and final gift," Stanley said. "This is it for us, and there couldn't be a better way to do it."

The first four scholarships, from the Berg brothers each worth \$2,500 annually, were awarded in April at the College's 39th annual awards banquet. Eventually, income from the Berg Endowment is expected to provide eight scholarships a year to students in the College. All are renewable for up to four years. Half will be awarded to animal sciences majors; half to other students in the College. First consideration will be given to high school graduates from Okanogan County.

"This extraordinary gift comes at a most opportune time," said Jim Zuiches, dean of the College. "With rising tuition and increasing need for financial assistance, the Ernest and Stanley Berg Scholarships will help four to eight students from rural communities attend WSU every year."

The Bergs have come a long way since they joined the family sheep business in Yakima 60 years ago to herd sheep for their father, Ernest F. Berg, Sr. Stanley recalls those days as some of his happiest.

"I packed mules and

herded sheep every winter and I packed every summer until 1956," Stanley said. He remembers trailing sheep at the bottom of the Grand Coulee Dam when it was under construction.

The Berg brothers eventually bought out their father's share of the ranch and began acquiring land on the Colville Indian Reservation on the north bank of the Columbia River. Eventually, they pieced together a 6,000-acre ranch midway between Chief Joseph and Grand Coulee Dam. In addition to cattle ranching, the Bergs also grew dryland wheat and 225 acres of alfalfa under irrigation.

They started selling off their cattle in the early '90s. Their ranch has since become

a wildlife refuge. The Bergs now make their home on seven-and-half acres outside of Omak.

GIFT WILL SUPPORT AGRICULTURAL RESEARCH AND STUDENTS

A \$763,000 gift from Mel and Donna Camp will benefit the College of Agriculture and Home Economics and the Whitman Hospital and Medical Center in Colfax. The donation to the University was announced June 11 at the annual field day at WSU's Lind Dryland Research Station.

Part of the funds— about \$168,000— will be deposited in the Lind Dryland Research Station Endowment. The gift also will support weed research and field trips for crops and soils students.

"This gift is an extraordinary legacy from Mel and Donna Camp," said Jim Zuiches, CAHE dean. "It will enhance dramatically the funding for research at Lind and increase the ability of faculty to take students on valuable field trips."

see **Camps** on page 7



Mel and Donna Camp



Camps *from page 6*

The Camps farmed east of Lacrosse for 40 years before retiring and moving to Post Falls, Idaho, in 1985. Last year they deeded 1,000 acres of farmland to the WSU Foundation. The land was sold this year. The proceeds were put into a trust which will provide the Camps with an income for 20 years. After 20 years, the trust will be terminated. The remaining amount will be divided, with 55 percent going to WSU and 45 percent to the Whitman Hospital and Medical Center in Colfax.

In deciding to make a gift to WSU, the Camps felt they owed a debt of gratitude to Orville Vogel, who led a team of scientists in developing winter wheat varieties that dramatically increased yields in the 1960s.

Both Camps attended WSU for a short time, then married and started farming. They credit Vogel's wheat breeding and Gaines wheat as a main reason they were successful in farming. These varieties greatly improved yields.

The Camps decided to put their money to work in areas that haven't attracted much support in the College. "The Lind station not very long ago was hurting really bad," Camp said. "I didn't realize it until it came out in the newspaper."

New Home Economics Scholarship Fund Initiated

The need for scholarships has never been greater. Escalating costs of higher education have closed the doors to many students seeking college degrees. At WSU, in-state tuition has tripled in just the last five years.

To help departments in the College of Agriculture and Home Economics that have fewer scholarships, the College has initiated a new scholarship drive. It is specifically for students in the departments of Food Science and Human Nutrition, Human Development, and Apparel, Merchandising and Interior Design.

Currently, the College is only able to award 12 to 18 scholarships a year to nearly 500 certified majors in these programs. Last year more than 10 well-qualified students applied for a Dean's Merit Scholarship, the College's premiere freshman scholarship, but funds can only support one to five a year.

People have recognized the need to support students in WSU home economics fields and have contributed to existing scholarships or have established their own, such as Sherrill Richarz. A retired professor in WSU's Department of Human Development, Richarz established the Sherrill Richarz Scholarship in Human Development last year.

"It is my hope that this scholarship will help more students have the opportunity to enroll in WSU's Early Childhood Development Program so

they'll be better prepared in a world where we have so many children in child care centers, preschools, and other out-of-home programs," Richarz said.

M. Virginia Schafer, former U.S. Ambassador to Papua New Guinea and the Solomon Islands and a WSU alumna, also established a scholarship and a fellowship for WSU food



science and human nutrition majors. And last year, Pullman resident Betty Manning gave a gift of \$25,000 to establish an undergraduate scholarship for the Department of Apparel, Merchandising, and Interior Design.

These donors, along with others who are helping build the scholarship fund, will make it possible for more students to enroll in WSU's home economics departments. If you would like to contribute to the drive for the new Home Economics Scholarship Fund, contact the CAHE Development Office at 509-335-2243, or e-mail: patrick-kramer@GOCougs.WSU.edu.



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. His intent was to develop colleges in each state that would provide practical education for the American public. 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.

Land Grant Day 1998 Saturday, October 10 !

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 1998 commemorates 108 years of progress at WSU.



Land 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 1998* when the Cougars take on the Oregon Ducks in Martin Stadium Saturday, October 10, 1998.

Activities begin at 10:00 a.m. on the rugby field with the debut of the CAHE Extravaganza Fair. Explore the

College of Agriculture and Home Economics through a series of fun activities. Your reward? Prizes, prizes, and more prizes. You will be able to collect stamps from each event involved with the fair. Once you receive the stamps, place them in a passport book. After filling up the book, you may enter a drawing for a Grand Prize. 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 will enjoy a great barbecue beef dinner followed by the annual CAHE Alumni and Friends Associations Benefit Auction. The Alumni and Friends Benefit Auction raises money for student club



awards, *Connections* magazine, faculty advising awards, as well as many other alumni activities sponsored by the CAHE. If you would like to make a tax-deductible contribution to the auction, please contact the CAHE Alumni and Development Office at 509-335-2243.

What better way to end the day than to enjoy and relax to a country western concert and dance.

The cost for the dinner is \$6 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. Or, register early via the web at <http://cougnet.wsu.edu/landgrantday>. You must RSVP no later than October 5.

SCHEDULE OF EVENTS

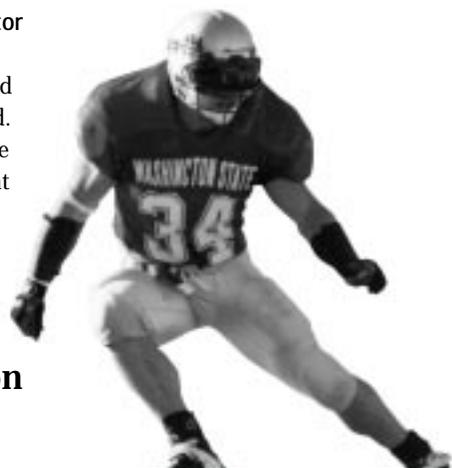
10:00 a.m. - 1:30 p.m. Extravaganza Fair, Rugby Field

Experience the debut of the CAHE Extravaganza Fair! Explore the College of Agriculture and Home Economics through a series of fun activities. Your reward? Prizes, prizes, and more prizes. Collect stamps from each event involved with the fair. Once you receive the stamps, place them in a supplied passport book. After filling up the book, enter 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.

10:00 a.m. - 1:30 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 present a wonderful historical event.

2:00 p.m. WSU vs. University of Oregon Football Game



5:00 p.m. - 6:00 p.m. Social Hour

Commemorate old times with friends, family, and alumni right after the game!

5:30 p.m. Barbecue Beef Dinner.

Consider yourself invited to the best barbecue in town! Great music. Great food. Join Everett Martin and Alpha Zeta for barbecue and many other dishes. Don't miss out!

6:30 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 a weekend stay at the Dean's condo in Schweitzer to a trip on the Washington Dinner Train. We will have great auction items again this year. The Alumni and Friends Benefit Auction raises money for student club awards, *Connections* magazine, faculty advising awards, as well as many other alumni activities sponsored by the 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 and enjoyable auction. Hope to see you there!

9:00 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. Please check with the Alumni and Development office, 509-335-2243, prior to the event for any changes.

A Time of Challenge for Pacific Northwest Wheat Producers

WSU helps arm producers with effective risk management tools

This fall, Pacific Northwest wheat producers face record low prices. A worldwide surplus of wheat, combined with financial turmoil in Southeast Asia, the PNW's largest wheat market, has made this a difficult year for farmers. In addition, this is the first low-price cycle growers have faced without a government safety net. The Farm Bill of 1996 abolished 60 years of farm policy, including deficiency payments that provided the safety net for many farmers in the past.

"This is certainly a time that requires thinking differently," said Jonathan Newkirk, extension economist with WSU Adams County Cooperative Extension in Ritzville. "Under the old federal program, the economic incentives were to concentrate management time on production. Now, financial and marketing management are equally important. Farmers must take responsibility for risk management as well."

To help PNW producers through this transition, WSU, along with the federal government, other state institutions, and various agricultural associations, will be conducting risk management workshops starting this fall. Topics will include financial management, marketing, record keeping, preparing a good business plan, effectively working with ac-



countants and bankers, and other subjects that will help farmers become least-cost producers and learn marketing strategies.

"It's important in a time like this that producers better manage their costs and be able to reduce them," said Newkirk. "They have to pay more attention to book-keeping. The economic environment they're working in today is very different prior to April 1996."

Newkirk's advice to grain producers is to "Tighten your

A series of risk management workshops will be offered this year. Washington State University, in partnership with the University of Idaho, Oregon State University, the Idaho Grain Producers Association, the Oregon Wheat Growers League, Country Hedging, and the Washington Association of Wheat Growers, received a \$236,339 grant to conduct this series. They have scheduled 10 in each of the three states, beginning later this fall.

The workshops will feature marketing topics, financial management, estate planning, cost of production, stress management, and family finance for agricultural producers. There will be other extension opportunities throughout the winter. Contact your county's Cooperative Extension office for more details.

belts and remember that prices aren't going to stay down forever. Once we pass through this transition and discarding the old farm policies, we should do well here in Washington state." He believes that the diversity of Washington's agricultural industry will help in the long run and will be its strength. Arming producers with effective risk management tools should greatly aid them through this transition.





1 Mel Ehlers, professor of dairy husbandry (far right), and students at Ferdinand's first campus location shortly after it opened. 2 N.S. Golding, for whom Cougar Gold is named, checks the vacuum seal on cans of cheese, circa 1954.

FERDINAND'S

One of the Most Successful University Creameries in the Nation

With a growing mail-order business, production line expansion plans, and new dairy product research, WSU's creamery, Ferdinand's, continues to be a phenomenal success. Ferdinand's serves 19 different flavors of ice cream and 10 varieties of cheese to tens of thousands of customers a year. While most other university creameries have long since closed their doors, Ferdinand's continues to thrive—far exceeding anyone's expectations.

In fact, according to Ferdinand's manager, Marc Bates, the WSU creamery is probably the most successful university creamery in the country today. "We have a product with a national reputation produced in the best facilities

around," said Bates. "What separates us from the others is that we operate our facility daily in a business-like manner. That not only makes us financially successful, but it also provides students in many different fields an opportunity to work with us and gain real-world business experience."

After 50 years of fruitful research and success in producing premium dairy products, Ferdinand's Creamery has evolved into one of the University's few totally self-supporting units—funded solely by the revenue generated from its products. It supports 6.5 staff positions, a full-time faculty member in the Department of Food Sciences and Human Nutrition, two research graduate student assistantships, and employment for 50

part-time students. In addition, many other students across campus have the opportunity to learn about and experience firsthand the many stages of Ferdinand's business operations, from processing raw milk into products, to packaging and storage, to retail sales, including an expanding mail-order business.

"Our growth over the years has certainly allowed us to be helpful to more students," said Bates. "In addition to food science and nutrition majors, students from bio-engineering, computer, business, marketing, English, and communications work with us on special projects. We feel this experience will give them an edge when it comes time to

see Ferdinand's on page 12

Ferdinand's
from page 11

look for a job. Many of our students today are working in the Northwest dairy industry. When we work with the dairy industry, we often interact with our own former students."



SPANNING 50 YEARS

From its inception as a land-grant university in 1890, WSU has always had a dairy herd. Starting in the 1920s, milk from the dairy herd was processed by a private contractor at a creamery located in Troy Hall. The milk was sold to University dormitories and at a sales outlet in downtown Pullman.

In the 1930s, WSU started research on hard cheese and attempted to package it in metal cans. This was before the era of plastics. The conventional way to

"The most enjoyable aspect of this job for me is to watch students learn and to be able to take that knowledge and put it to work in the dairy industry."

MARC BATES,
MANAGER OF FERDINAND'S

preserve cheese at the time was to wrap it in wax, which tended to crack and led to contamination. The problem with canning cheese was that the tin eventually bulged due to the formation of carbon dioxide, making it inedible.

The University's research effort in canning cheese was bolstered in the 1940s when the federal government and the American Can Company added funds to the project. The government's interest in this work was spurred by the war years and a need for more canned goods.

N.S. Golding, a professor of dairy husbandry, was a key investigator in WSU's cheese research in the 1930s and 1940s. Golding eventually discovered that a bacteria produced the carbon dioxide that caused cans to expand during storage. By adding an additional



starter bacteria, he was able to eliminate the gas—and in the process created a unique cheese flavor. The cheese was called Cougar Gold, in honor of Professor Golding.

During this same decade, the University took over the creamery from the private contractor and started producing dairy products itself. In 1948, WSU opened a retail outlet in Troy Hall, which they called Ferdinand's. The name origi-

nated from the Walt Disney animated cartoon *Ferdinand the Bull*. A student used that name to sell ice cream to raise money for the Dairy Products Judging Team in 1939. When WSU opened its dairy bar, they chose to call it Ferdinand's Creamery.

Throughout the 1950s, 1960s, and 1970s, teaching and research continued at the creamery. Milk and ice cream products were made to supply the dining

Ferdinand's 50th Anniversary Celebration!

SEPTEMBER 24, 1998

Ferdinand's officially celebrates its 50th year September 24—the day in 1948 Ferdinand's opened its doors.

Events for the day will include:

- ☞ 49-cent ice cream cones, from 1:00 to 4:00 p.m.
- ☞ Cheese samples.
- ☞ On-site broadcasting from a local radio station.

Come and join us!



4

1 Don Danielson, '75, mills the curd, circa 1974. 2 Shannon Herron, '87, presses cheese, circa 1985. 3 President Samuel H. Smith and KOMO-TV television reporter Kathi Goertzen, '80, whip up a holiday recipe using creamery products in the late 1980s. 4 Marci Whitney McAndrew, '88, does some of the cleaning vital to producing quality food products.

halls on campus. During the summer months and holidays, when students were gone, the extra milk went into cheese production. To help sell the excess cheese, Ferdinand's launched its mail-order cheese business in 1953.

By 1979, the campus dining halls found a lower-cost milk supplier and ceased buying milk from the WSU creamery. With the large volume of milk, the creamery went into year-round production of cheese. That was indeed a pivotal year for Ferdinand's.

"The very next year after this happened, we produced 30 percent more cheese," recalled Bates. "Our visibility picked up immediately at that point, especially during the 1980 holiday season. This was a major shift for us."

The University's dairy herd also started growing, increasing from 120 to 160 cows; productivity, the volume of milk per cow, also continued to rise. This meant even more production for the

see Ferdinand's on page 14

From Milk to Curds to... Cougar Gold

The 15,000 pounds of milk that is delivered every morning to Ferdinand's from the WSU dairy eventually becomes 1,500 pounds of Cougar Gold cheese.

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Just about everyone associated with WSU recognizes the yellow, white, and green circular 30-ounce tin with the WSU logo on it as Cougar

Gold—a cherished tradition. This white, sharp cheddar cheese (white because no artificial coloring has been added) is aged a record 12 months, more than most cheddar cheeses on the market. Typically, cheddar cheeses are only aged 60 to 90 days.

This long aging process helps give it its unique flavor.

Crucial in the production process of Cougar Gold is the ratio of butterfat to protein. Too much of either alters its quality and quantity; the wrong ratio will lead to a cheese that can be too hard or too soft. Needless to say, the first task in producing this cheese is the careful monitoring of the two ingredients. Lactic bacteria is added to give flavor and to eliminate the carbon dioxide—the gas that causes canned cheese to bulge.

When the future Cougar Gold is still in a liquid form, an enzyme called rennet is added to the mixture that causes it to thicken to the consistency of jello. The next step is to cut this jellowy form into small curds and eliminate the liquid, the whey. A computer regulates the process so the proper amount of whey can be re-

leased. The whey is then drained off the curds. Once most of the whey is gone, the curds knit together and are then cut into

loaves and turned and stacked. This process, called cheddaring, makes cheddar cheese—a process used as early as the 1500s in England.

The loaves are once again cut into curds in a milling machine. Salt is added to prevent the cheese from softening and liquefying.

The curds are placed on an elevator and an auger carries them into metal hoops that ultimately shape Cougar Gold. Each hoop makes nine cans of cheese; 30 ounces each.

Next, the cheese press squeezes the hoops so that the curds will knit back together. The cheese is taken out of the hoops, wrapped in cheesecloth, and the last of the whey is squeezed out. The cheese is then sliced, put into cans, and vacuum sealed. The cans are stored in a 45-degree cooler for an entire year to enhance the cheese's flavor—a flavor that is unique to Cougar Gold. This cheese has brought WSU a number of prestigious awards. Last year at the U.S. Cheese Championship Contest, sponsored by the Wisconsin Cheese Association, Cougar Gold earned silver medal.



Milk delivery in Pullman, circa 1920s.

Ferdinand's from page 13

creamery. Ferdinand's was quickly outgrowing its location in Troy Hall.

In 1992, Ferdinand's moved to a new, state-of-the-art facility, doubling its capacity. "When we moved, we were able to increase our cheese production from three days a week to four," said Bates. "Since moving from Troy Hall, our production has doubled and so has our revenue."

Today, Ferdinand's annually produces 11,000 gallons of ice cream and 160,000 cans of cheese, 75 percent of which is Cougar Gold. Its products are marketed in Ferdinand's dairy bar on the WSU campus, in retail outlets in the Northwest, and to all 50 states and abroad through its mail-order operation. Cougar Gold is also distributed through a national mail-order catalog, Norm Thompson.

After only six years in their new facility, Bates said they have already exceeded their location's capacity. "Our current facility really doesn't address all of our needs," said Bates. "We need more warehouse space and more room for our growing mail-order business. We are looking at another facility to add to our operations some time in the future. This will be needed, since we plan to move into a five-day production week, increasing our volume of cheese to 195,000 cans a year."

Ferdinand's not only plans to expand its current production line, but is also engaged in new dairy product research to meet changing consumer demand. Some promising product areas include low-fat cheeses and ways to utilize whey, a by-product in the cheese-making process. Whey is growing in popularity as a health product and alternative source of protein. Stephanie Clark, WSU's new food scientist supported by Ferdinand's funds, will be investigating possible products using whey, which the creamery hopes to someday produce.

While WSU's creamery has been an extraordinary success story, largely due to its Cougar Gold, Bates believes their greatest pride is in providing a training ground for students. "The most enjoyable aspect of this job for me is to watch students learn and be able to take that knowledge and put it to work in the dairy industry," Bates said.

WSU's Safe Food Initiative

Helping Agriculture Survive in the 21st Century

Foodborne pathogens cause millions of illnesses and thousands of deaths each year in the United States, according to experts in the field. Food safety is a vital concern along the entire agricultural spectrum—from the beginning stages of production to processing to food preparation. The CAHE has recently proposed an ambitious research and extension plan that will help ensure the safety and quality of food in the coming years, as well as protect air and water quality.

"This initiative is a major investment for agriculture in the state of Washington," said Pete Jacoby, associate dean of the college. "And it is long overdue. Agriculture is facing more issues and challenges today than it has in a long time."

Specifically, WSU's Safe Food Initiative seeks \$7.5 million in state funding for the next biennium, which includes money for three WSU colleges and the Washington State Commission for Pesticide Registration (WSCPR). The CAHE would receive \$4.5 million to focus on high-priority issues identified by Washington's food production industries. In addition, the College of Veterinary Medicine and the College of Sciences would gain \$1.5 and \$.5 million, respectively, for research in emerging diseases and food safety in veterinary medicine, and additional funding for the Center for Reproductive Studies. Currently, WSCPR will seek \$1 million to expand its capacity to fund research on integrated pest management.

This University team effort will help Washington's agricultural industry be better prepared for the next century, when consumers in both domestic and

global markets will insist on a higher quality, safer food supply. Meeting this expectation, under even stricter environmental regulations, will be one of agriculture's great challenges in the years ahead.

The Food Quality Protection Act, the Endangered Species Act, and the Clean Water Act will all soon significantly affect agriculture. It is possible that up to 40 percent of agricultural chemicals

used to grow more than 200 different crops in the state eventually will be banned. New pest management strategies and improved food production practices are desperately needed and are major goals of

WSU's proposed research initiative.

"These issues are coming at us so fast, we can't redirect faculty into them overnight," said Jacoby. "We are in urgent need of new resources. This initiative will help us focus on some of these issues—not only on when the product hits the market, but the whole process of getting it there. Our focus is not just on safe food, but a safe environment and preservation of natural resources. They are all tied together."

For more information, visit the Safe Food Initiative site at <http://ext.wsu.edu/safefood>.

"This initiative is a major investment for agriculture in the state of Washington. And it is long overdue. Agriculture is facing more issues and challenges today than it has in a long time."

**- PETE JACOBY
ASSOCIATE DEAN**



Pete Jacoby

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*.

Mike Dalziel, '92, President, CAHE Alumni and Friends

Agricultural Economics

Brian Edward Adams
Justin Thomas Avenell
Robert Steven Aycock
Amos Isaac Bechtel III
Jason Joseph Champoux
Christopher B. Crider
Giovanni Battista Drei
Kailan Clark Elder
Ryan Matthew Ellis
Luis Arturo Gardeweg
Brian David Gordon
Katie Lynne Gordon
Xiao Mei Guan
Peter Lee Hammarstrom
Richard Jason Hopper
Jodi Lynn Hubbard
Eric L. Jessup
Dennis Lee Jones
Jon Weldon Kincaid
Stacy Alan Kniveton
Mary Ann Elizabeth Kulpaca
Maria Luz Garcia Loureiro
Robert James Mensonides
Katsura Nakai
Jason Christopher Pabisz
Eivis Petrela-Qenani
Kaarin Jarene Reinbold
Eric Ryan Rogers
Traci Schoessler
Justin Lee Shahan
Reid Sean Shahan
Grant Boyd Shumway
Rex E. Taylor
Kami Renee Turner
Jay John Vanderhoek
Shawn Michael Ward
Gerald Hans Wesselius
Lisa Ann Young
Michael Jeffrey Young

Apparel, Merchandising, and Interior Design

Jennifer Dawn Baker
Christina Marie Ballantyne
Traci Ann Baughman
Carrie Patience Bauwens
Stephanie Louise Benine
Jessica Erin Burkland
Kristina Maureen Chalfant
Fang-Ching Vivian Chang
Juo-Lan Chiu
Krista Lee Darby
Sarah Rose Dehal
Noelle Renee Gayral
Charlotte Marie Glen
Annmarie Henning
Melissa Francine Hilmes
Jennifer Lynn Jameson
Amy Lynn Johnson
Heidi Renea Kihlman
Krin Kirijas
Michele Ruth Kott
Elizabeth Ann Kreid

Jin-Woo Lee

Sonya Michelle Lenzi
Gena Ashley Lewis
Tiehong Lin
Kelsi Kathleen McConville
Katrina D. Melnichuk
Kimberly Kristine Omlin
Krista Lynn Peterson
Marcella Christine Pierro
Kelly Nichole Shaffer
Lora Beth Sherod
Tammy Marie Soldwisch
Jennifer M. Tarr
Sheila Ann Trowbridge
Chia-San Tsai
Nikki Lynn Wildfang
Lisa Anne Young
Annette Kay Zins

Animal Sciences

Jessica Dayle Adams
Kristin R. Behm
Cori Arlene Bumbarger
Kenneth Daniel Cain
José Antonio Eliás Calles
Kirsten Leah Capek
Kevin Glen Carnahan
Nani Cha
Melissa Florence Close
Kimberly Nicole Cooper
Jacqueline Diane Courneen
Eva S. Dwonch
Jason Paul Evenhuis
Julie Elizabeth Gerth
Willow Lisa Gooch
Machele Marie Heck
Jenny Lynn Stiles Hudson
Andrew Jason Humphrey
Donald Ward Johnston
Jenaya Jan Kinsman
Stephanie Lynn Kubotsu
Richard Kent Leckie
Cynthia Lee Loveland
Sarah P. Maki
Elizabeth Anne Morton
James Patrick O'Dea
Sandra Elizabeth Proctor
Iliana Pruneda
William Daniel Ratliff
Ronald Jason Reyer
Christopher Lee Robinson
Jennifer Elaine Scott
Danielle Elizabeth Ann Smith
Kathleen Johanna Smith
Abby Colleen Snodgrass
Seth Adam Trachtenberg
Hasan Ulker
Angie Lynn Vereb
Mindy Lou Vetter
Bor-Chun Weng
Kraig Roy Williams
Katherine Elizabeth Yackley
Paula M. Zuanich

Biological Systems Engineering

Daniel Scott Andrews
Derek Paul Appel
Aaron Edward Bagwell
Chaun Dale Birks
Justin John Black
Tina Lou Davault
Eric J. Davis
Melissa Ann Davis
James William Eckhardt
Russell Tyson Finch
Holly Jean Gutzwiller
Richard William Hilliker
Andrew John Hover
Amy Marie Howard
Daniel Lee Knapp
Ryan John Kuster
Brock J. Ledgerwood
Jonathan Malasa Majula
Lori Michelle Meehan
Brad Allen Miller
Christopher Louis Nemnich
Christopher Karl Perry
Scott R. Picker
Darin Arthur Reppe
Christopher Lee Robinson
Robert Francis Roche
Bianca Anne Schlueter
Christopher Duane Scott
Daniel Kenneth Sherley
Jaya Delynn Smith
Hans J. Weber
Quintz B. Whitaker
Erica Rae Willson

Crop and Soil Sciences

Brent Arthur Barrett
Marco Bittelli
Paul Neil Blanus
William Aaron Burkey
Xiwen Cai
Joseph Abram Cazier
Duncan B. Cox
Scott Bryan Dobbins
Chad Douglas Goldsmith
Jennifer Leann Reisenauer
Sean Thomas Watts
Kristine Faye Wingen

Entomology

Todd Bryon Adams
David L. Epstein
Christopher Nedd Looney
Peter Scott McGhee
Christopher Andrew Nobbs
John Albert Rumph
Natalia Katrina Schuyler
Jennifer Anne Shlichta
Evan Thanner Vaughn

Food Science And Human Nutrition

Julie Kae Aldrich

Nicole Marie Ananias
Holly Kohles Angelo
Matthew Gus Asplund
Dusty Lynn Bachman
Sara Lynn Council
Jacqueline Ruth Helen Baker
Woo Suk Bang
Misty Nicole Bridges
Paula Lynn Curry
Julie Kristine Daw
Mohamed Diarra
Michele Leah Dinelt
Amy Nichole Gibson
Joy L. Gibson
Keri Jo Haigh
Kristin Marie Hirano
Linda Sakura Hironaga
Claudia Denise Hume
Esther Jacobson
Jeffrey Carl Janssen
Adrienne Frantonio Jefferson
Amy Jean Johnson
Christy Kadharmestan
Karin Adele Keller
Amanda Elizabeth Kogle
Hee-Young Koh
Yoko Kondo
Li Liang
Melanie Marie Longmeier
Kimberly Sue Marriott
Anhtrinh Thi Nguyen
Linhda Thi Nguyen
Katherine J. O'Dea
Jeansoon Park
Yongsoon Park
Melissa Ann Pickett
Karen Jo Preston
Keri Lynn Shugarts
Michelle L. Skidmore
Robert Skrivanek
Alison Michele Smith
Cheryl Denise Stroschein
Elizabeth Sarah Switzky
Charlotte Jay Thornley
Shannon Elizabeth Turner
Cuong Quoc Vu
Tara Denise Williams
Godfrey Chi-Ho Wong

Genetics and Cell Biology Sciences Option

Kaile Anne Adney
Sheri Lynn Babb
James Leroy Coffield

Horticulture and Landscape Architecture

Timothy Richard Ackerman
Aaron Joseph Alt
Jason Micheal Anderson
Andrea M. Barnes
Theo Kang Chargualaf
Michael Dennis Endsley
Colin Clare James Hammett

Debra Alene Heather
Jason C. Helm
Brian Michael Johnson
Robert Larry Parton
Kim Marie Thomas
Brooke Leeann Wamsley
Matthew Carl Whinery
Anthony David Williamson
Young Kwon Ahn
Jennifer Lynn Bair
Tracy Denise Calvert
Swee Teck Chong
Craig Michael Cleveringa
Eric Reed-Owl Eulenbergh
Nichole Deanne Gish
Jacob Leo Gutzwiller
Jennifer Lynne Halliday
Ty M. Hedges
Kyle Jack Kirby
Karen Ann Kitzmiller
Nelson Loyola-Lopez
Todd Melton
Jessica Anne Munnell
Nathan Alan Oberg
Sean Wayne Sahli
Darren Clifford Sandeno
Erin Marie Silva
Stephen Tyler Skylstad
James Eric Vonderahe
Daniel Richard Wesselius
Tyler Frank Widner
Andrew Brian Wigen
David K. Wood

Human Development

Nicole M. Abrahamsen
Jenica Marie Acevedo
Melinda Jean Alexander
Crystal Jo Allen
Manuel Ascencio
Tammy Marie Berg
Michelle Kimberly Berry
Melissa Lea Bloor
Kristian Lee Bly
Erin Elizabeth Brunell
Tracy Lynn Bumgarner
Carrie Olivia Butterfield
Michael David John Buttice
Nancy Elizabeth Capener
Taryn Renee Capps
Michele Yvette Casteel
Tina Ellen Clark
Shannon Lee Curfew
Jacqueline Lee Davis
Andrea Christine Dollahite
Shelley Marie Downing
Abbie Johanna Durham
Kara Anne Ekstran
Shelley L. Ewing
Kristen Jean Fitting
Tami Louise Goodlake
Crystal J. Gray
Angela Lee Guinn

see **Graduates** on page 16

ALUMNI NOTES

Richard Ballou ('83 Wildlife Biology, '93 Mechanical Engineering) has begun a position as a machine design engineer for Ovalstrapping in Hoquiam, Washington. His wife, **Lisa Ballou** ('83 History), is a free-lance editor. They have a son, Dana, who is four.

Jeffrey D. Grossman ('94 Landscape Architecture) recently accepted a job as Assistant Golf Course Architect with Case Golf Company in Lake Worth, Florida.

Ericka (Melin) Suhrbier ('93 Apparel, Merchandising, and Textiles) and her husband, Ben, welcomed a daughter, Mia Irene, on May 21, 1998.

Tiffany Lara (Lasee) Sanders ('96 Food Science and Human Nutrition) is currently a registered dietitian for Snohomish County Pregnancy AID/WIC. She and **Chris Sanders** ('96 Civil Engineering) were married May 31, 1997, and live in Mukilteo, Washington.

Monte Russell ('89 Landscape Architecture) and his wife, **Shelly (Simmons) Russell** ('91 Communications), recently gave birth to their first child. Megan Nicole was born on April 29, 1998, in Kirkland, Washington.

Richard Gilbert ('96 Crop Science) is currently a field representative for Rainier Seeds, Inc. in Eltopia, Washington. He married Charlette Baker September 27, 1997.

Jennifer Cline ('97 Agricultural Education) has started teaching agriculture at Wenatchee High School in Wenatchee, Washington.

Jessica (Hill) Mahan ('94 Child, Consumer and Family Studies) married Scott Mahan October 11, 1997. She is now a computer teacher for Learning Street USA.

Tiehong Lin ('97 Apparel, Merchandising, and Textiles, M.A.) married **Lijian He** ('97 Business Administration, Ph.D.) in Pullman, Washington, February 28, 1998. They now live in Olympia, Washington, where Lijian works for Washington State DSHS/RDA and Tiehong is a graphic designer at Picturit Co.

Stephen W. Blomgren ('63 Agricultural Engineering, P.E.) retired from the USDA Natural Resources Conservation Service January 4, 1996. Currently, Stephen is operating a small beef raising operation near Tyler, Washington. He has also maintained his state license in Washington and does consulting work in engineering.

Graduates from page 15

Julie Ann Harris	Melissa Dawn Calvert
Douglas Eugene Haugen	Brian Matthew Campbell
Stacey Elizabeth Hawley	Laura Elizabeth Cooke
Deedra Lynne Hayden	Brian Marshall Cramer
Heidi Lynn Hoeckelberg-Waldo	Jennifer Maye Croft
Joann Horal-Walters	Darius Joseph Damonte
Jill Marie Hove	Adam Joshua Daniel
Amanda Mara Ibach	Scott Douglas Fielding
Jodi Lavaughn Jackson	Erich Glenn Gaedeke
Gabrielle Serena Jacobson	Karleen May George
Lisa Ann Kearney	Juanita Maria Gonzalez
Heather Marie Keller	Juley L. Hanks
Wendi Anne Kepner	Scott Christopher Hanna
Travis Tyler Kipp	Hansel Hayden
Connie Lynne Klein	Kendrick Ames Lee Heston
Meaghan Marie Kombol	Daniel Steven Howard
Kimberly Lechell LaVigne	David Lee Howe
Katherine Ann Lum	Peter Jon Douglas Hughes
Jennifer Katherine Maxwell	Shannon Michelle Hurn
Paula Ann McKenzie	Stacy Gweneth Jenkins
Jessica Kathleen McNulty	Michael William Jewell
Tami Lynn Nordquist	Albert Arthur Kassel
Carolyn Kate Olberding	Jason A. Kirchner
Heather Paige Patrick	Eric Peter Krausz
Angela Marie Piercey	Wendy Michelle Lammers
Jana Louise Pursley	David Albert Leguis
Rachelle Marie Quarders	Sandra Rae Lembcke
Stacey Lyn Ringstad	Randy James Lewis
Monica Ann Roeser	Shawn Paul McCully
Debra Gale Rubin	Laura Susannah McKay
Susanna Sakuragi	Mark Justin McKinney
Rika Sakurai	Robert John McQuary
Melissa Kay Sampson	Paul Middleton
Lynne Marie Schauble	Jeff Richard Olmstead
Stacey Renee Scroggins	Megan Nicole Penney
Erin Lynn Shultz	Dan J. Rieger
Teresa Margaruite St George	Leonard A. Rieman
Trina Lin Stangland	Aaron Charles Rinker
Gretchen Ann Steigert	Gway Ruth Rogers
Heidi Elizabeth Stolz	Brian D. Ruetten
Alyson L. Strappazon	Anna Noelle Schmidt
Krista Jo Swanson	Emily Rebecca Smelser
Kathryn Marie Walter	Adam Stan Smolinski
Teresa Ann Warfield	Deanna Kim Sundstrom
Bethanie Janelle Weber	Samantha Nan Tilanus
Kjersti Anne Werre	Gerald L. Tom
Dionne Adrienne Williams	Cynthia Louise Tonasket
Eleanora Jane Wilson	Craig John Tranmer
	Dana Elizabeth Trethewey
	William Alphonse Warren
	Jason M. Watters
	Jeremy Michael Webb
	Heather Quinn White
	William Lee Wight
	Donald Wayne Woolery
	Plant Pathology
	Greg W. Douhan
	Bradley Dale Geary
	Steven J. Klosterman
	Jeffery S. Miller
	Brenda Kay Schroeder
	Yunling Shi
	Rural Sociology
	Heidi Elizabeth Stolz

YOUR NAME IS NEWS!

What have you done recently? New Job? Married? Addition to your family? Honors? Your news may be old to you, but new to your classmates. Share your news with them 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. Please fill out every blank, include year of graduation and major for your spouse if he or she went to WSU. We'll print as many items as we can. **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) _____

DEAN'S MESSAGE

Creating the Next Generation of Alumni

We look forward to an exciting year for the College of Agriculture and Home Economics. We have greatly expanded our ability to provide continuing education to you and to create new alumni through distance education technology. Our commitment is to connect as many people as possible to WSU. When we're done, 95 percent of Washingtonians will be able to simply make a local phone call and access our courses and programs.

Our growing Extended Degree Program and community Learning Centers make it possible for us to reach far more people than ever before. We are now taking higher education to all corners of the state and the nation, serving a much wider audience, from single mothers and working adults, to people living in minority communities and remote rural areas. In the past, many of these new students would not have had the opportunity to earn a college degree.

Some of our recent highlights in distance education include adding four new majors. A natural resource science degree can soon be obtained from our WSU Vancouver campus. This is an important field for many western Washington residents and we're pleased to be able to offer it.

The second major is in human development. There are now eleven courses in this major leading to a bachelor's degree in human development through distance learning. A third degree option will be in applied biology; for it, we will partner with WSU's College of Sciences.

A fourth new distance education degree is now available through a unique collaborative effort with Oregon and Idaho. Educational institutions in the three Northwest states will make it possible for students to obtain a bachelor's degree in general agriculture. This will be especially advantageous to students who have started at the freshman and sophomore level at community colleges and want to continue on and get a general agriculture degree from WSU.

Cooperative Extension's Learning Centers are also vitally important to our outreach success. We now have eight centers in various regions of the state and three more are being proposed: one in Walla Walla, another in the Grays Harbor area, and a third in Skagit County. The purpose of the Learning Centers is again to help people continue their education wherever they live. Since establishing these centers two years ago, over 440 students have been able



James J. Zuiches, Dean

to take college courses. The very positive results from a recent survey indicate that we are on the right track in serving place-bound students.

As we celebrate the 100th anniversary of WSU's Alumni Association this year, we are reminded of our multi-generational commitment to higher education. And to me, that is one of the beautiful aspects of a land grant university. Last spring, we gave degrees to students whose parents, grandparents and even great grandparents, one hundred years ago, also graduated from WSU.

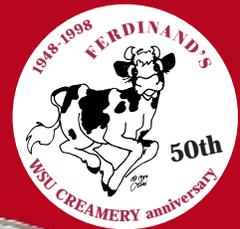
This coming year we will continue to open the doors to more students everywhere—to your sons and daughters, nieces, and nephews, wherever they live.

Dean James J. Zuiches

Editor's note: If you would like more information on WSU's Extended Degree Program (EDP), call 509-335-3557 or 1-800-222-4978; or, e-mail: edp@wsu.edu.

Crack into a Can of Cougar Cheese

FROM WASHINGTON STATE UNIVERSITY



Cougar Gold • Viking • Reduced Fat Viking • American Cheddar • Smoky Cheddar • Dill Garlic • Italian • Sweet Basil • Cracked Pepper and Chive • Hot Pepper

Phone 1-800-457-5442

M-F, 8:30 a.m. - 4:30 p.m. Pacific Time
Have your VISA or MasterCard ready

or Fax 1-800-572-3289



Washington State University

College of Agriculture and Home Economics
Alumni and Development Office
Washington State University
PO Box 646228
Pullman, WA 99164-6228

Nonprofit Organization
U.S. Postage
PAID
Pullman, WA
Permit No. 1