## CASES OUTLOOK

A publication for alumni and friends of the College of Agricultural and Environmental Sciences • UC Davis • Spring 2001



UNSHED SCHOOLE DISTRICT

OUTREACH

How do we connect with the community?

# CASES OUTLOOK

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#### **CA&ES Outlook**

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#### The Land-grant Heritage is Alive and Well...

#### By Neal Van Alfen

UC Davis is a land-grant institution. When President Abraham Lincoln signed the Morrill Act into law in 1862, he made possible the support of higher education by the federal government. This was a departure by the federal government from its normal practice of providing financial support only for national defense and a few similar activities.

The Morrill Act provided grants of land to states willing to establish institutions of higher education that would cater to the practical educational needs of citizens. Land-grant institutions were specifically mandated to train students in practical enterprises such as agriculture and the mechanical arts.

Later, federal laws established agricultural experiment stations and cooperative extension services in each land-grant institution. Thus, land-grant institutions represented innovative centers for gaining practical knowledge through research. Knowledge was disseminated to students through classroom teaching and to the general public through various outreach programs.

This investment in higher education was intended to assure that our new nation had knowledgeable and trained citizens. Today, students flock to our universities from throughout the world, and we lead the world in research because of the quality of our universities.

We are charged with teaching the public - not just the students enrolled in our classes. The process by which we reach the public takes many forms, as you will learn by reading about our outreach activities.

Our most important outreach activities are through our Cooperative Extension faculty. Public education is the primary responsibility of the college's 80 CE faculty members. They provide a direct link between the University of California and CE educational programs in every California county by

educating the public on issues related to agriculture, environmental sciences, nutrition and child development. The 4-H Program is one of Cooperative Extension's betterknown activities. It is designed to provide young adults with the skills necessary to become successful, productive adults.

Although Cooperative Extension is our most broadly organized outreach effort, every faculty member holding an appointment with the Agricultural Experiment Station also is charged with outreach responsibilities. Those CA&ES faculty members who do not have Cooperative Extension appointments do have Agricultural Experiment Station (AES) appointments; thus, every faculty member of the college has formal outreach responsibility.

The AES research mission mirrors the educational programs of our college; thus, our faculty are involved in mission-oriented research related to agricultural, environmental and human science issues and are expected to seek ways to transfer the knowledge they gain to the general public.

This issue of *CA&ES Outlook* focuses on that part of the land-grant institution vision that is perhaps most innovative.

You will read that even our most basic research science programs have outreach responsibilities, such as the biotechnology outreach programs of the Center for Engineering Plants for Resistance Against Pathogens. This program seeks to help high schools educate students about modern biotechnology -both by laboratory instruction and computer-based virtual training programs.

You will discover that CA&ES public education and outreach programs take many forms and are directed to diverse audiences.

Certainly, our longest association has been with California farmers. Our state's agricultural wealth is unequaled anywhere in the country. The value of our agriculture is twice that of our nearest competitive state; yet, the overhead costs of California's agriculture production are greater than anywhere else in the world.

The outreach and CE programs of our college have been very important to the success of California agriculture, and we are committed to supporting California's agricultural industry. It is a top priority for the college.

Our fastest growing research programs are directed toward environmental quality issues, and these programs are the most important sources of information available to our state's policymakers. Good water policy must be based on good information. It is our role to provide that information and to broadly educate the public about issues regarding water quality and availability. Our environmental science efforts and outreach activities will continue to grow in importance.

Today, UC Davis and other landgrant institutions can be characterized as more than "agricultural and mechanical arts universities." However, our heritage must not be lost as we strive for institutional excellence.

We have a responsibility to the citizens of California to educate broadly, not limiting efforts to students in our classrooms. As you read about our outreach and Cooperative Extension activities, I believe you will agree that the landgrant heritage is alive and well at UC Davis.



Neal K. Van Alfen (Ph.D., '72, Plant Pathology) Dean, College of Agricultural and Environmental Sciences

## Outreach: How the College Connects with the Community

By Karen Finney

Research. Teaching. Public service. All three missions of UC Davis are as vital today as when the university was established nearly a century ago. While each is equally important, public-service initiatives can provide faculty and students with the most gratification. It gives them chances to interact in direct and meaningful ways with people in the communities the university serves.

Community outreach in the College of Agricultural and Environmental Sciences encompasses the full range of issues related to our food supply, our land and our environment. It addresses social issues such as poverty, education, childcare and conservation. And it involves communities throughout the state, country and world.

You still can find our graduate students and faculty in labs and campus classrooms. But you are just as likely to find them developing nutrition information for low-income families, showing high-school teachers how to incorporate water-quality experiments in their classes, creating science projects for elementary school after-care programs and providing guidance to farmers interested in environmentally sound agricultural practices.

CA&ES departments are actively involved in hundreds of outreach projects, and all of them honor and enrich the college. Here is some information we think you'll enjoy reading about several of our programs in K-12 education, agriculture, community planning, and consumer safety and health.

## Bridging Environmental Education

The Aquatic Toxicology Outreach Program offers internships to UC Davis students interested in science education, trains them in a water-quality experiment and connects them with middle- and high-school educators who teach environmental sciences. Participating schoolteachers receive necessary training and test equipment.

The experiment - based on similar ones used by the California EPA - involves students gathering samples from nearby bodies of water, usually the creek that runs through their community, then exposing water fleas to the sample. The organisms' survivability rates determine quality levels and whether or not toxins or pollutants may be present. Test results then can be provided to regional water boards for ongoing monitoring and follow up.

"We have developed a network that helps state agencies obtain data



on smaller urban water bodies that they don't always have the opportunity to monitor," says program director **Chris Pincetich**.

Katie Palatinus, a science teacher at Adelante Continuation High School in Roseville, California, has been involved with the program for four years, partly because she values learning experiences for her students with real-world applicability. She also appreciates the college interns' visits to her classes - giving her students chances to benefit from great role models and giving those role models chances to demonstrate to an often-challenging audience.

When colleges and high schools interact, it's a boost for education," Palatinus says. "It definitely helped my students - and interns, too."

## Using Agriculture as the Window to Science

What **Randy Southard** remembers most about his field days as a mentor with the FARMS Leadership



Program is the looks on the kids' faces - "it's a surprised reaction to things they've never thought about before," says the associate

dean of the Division of the Environment.

Standing in a four-foot trench with a group of high schoolers, Southard leads them through the process of thinking about soil as more than mud. He talks about the connection between agriculture and soil - what it tells us about fertilization, irrigation and pest-management practices. He shows them how to use soil color and texture to determine its age - as far back as when mammoths walked on land we now farm. More importantly, he teaches them why they should care.

"Environmental concepts that students may have heard about but truly don't understand can be brought to life by looking at soil," Southard says.

FARMS is a statewide program dedicated to directly involving high-school students in agriculture and conservation. Kids from several schools are grouped together throughout the academic year for research projects and field days led by a variety of mentors.

The program was started by Craig McNamara ('76, Individual Major), who hosts the Yolo-Sacra-mento program on his Winters, California, farm. McNamara says the chance to encourage kids' understanding of and respect for the land and our natural resources is "the most important thing I've ever done."

FARMS is also a catalyst for inspiring interest in science. "Agriculture involves chemistry, physics and biology," Southard says. "The agricultural context is ideal for teaching science."

## Encouraging Up-and-comers in Agriculture

CA&ES actively is promoting higher education in the agricultural and environmental sciences. College-student 'ambassadors' visit California high schools year-round to showcase UC Davis opportunities. The campus also hosts one of California's most important student recruitment and leadership events.

Each March, an estimated 3,000 people - mostly members of 4-H and Future Farmers of America, their teachers and their parents - convene at UC Davis for Agricultural and Environmentals Sciences Field Day. The event gives high-school students opportunities to test their skills in competitive events, learn more about jobs in agricultural and environmental fields and preview UC Davis degree programs.



Rich Engel, director of student recruitment and outreach, notes that Field Day is an outcome of the college's commit-

ment to agricultural and environmental sciences and youth education. It spotlights a valuable aspect of the CA&ES heritage by "promoting agriculture and its interrelationships with the environment as the basis for our society and how it supports the way we live."

## Supporting Quality After-school Care

Most of us think snails are just pests. A group of elementary-school children in Esparto, California, are finding that snails are much more, and they are learning the process of scientific discovery at the same time.



Richard
Ponzio, director
of the 4-H Center
for Youth
Development,
works with UC
Davis undergraduate students on

activities that focus on snails as

learning tools. Activities include how to build a snail playground, how to create a smorgasbord for snails and how to host a snail dance. College students then show teams of high-school students how to teach the activities - written both in English and Spanish - to five- to eight-year olds in their community's elementary school after-care program.

"It's pretty amazing how kids learn by doing," says Ponzio. "The goal is to make familiar, everyday occurrences *unfamiliar* so that the students become interested in learning more about them. It's userfriendly and user-driven science."

The children begin by identifying what they want to know about snails: What do they eat? How fast do they crawl? What do they most like to do? They find answers to the questions by designing and conducting their own investigations.

Eventually their new knowledge can be applied creatively to more complicated questions: What would I plant in a garden if I didn't want snails to visit? What materials would I use to build a snail jail? What would a snail sanctuary look like?

According to Ponzio, the guiding message for everyone involved is that "learning science can be interesting and fun."

#### Bringing Biotechnology to High School

Young people hear the word 'biotechnology' a lot these days. What it actually means, however, is not always well understood. The Center for Engineering Plants for Resistance Against Pathogens (CEPRAP) helps improve young scientists' understanding of biotechnology through firsthand experience.



Barbara
Soots, CEPRAP's education coordinator, explains that the program provides highschool science teachers the

chance to borrow free-of-charge the expensive equipment necessary to conduct DNA experiments in their classrooms. Two software programs are provided for students - "Virtual DNA Fingerprinting Lab," which involves them in solving a crime by using molecular biology techniques,





Many hands reach out to discover how Chlorogalum pomeridianum - commonly known as soap plant - can be used for washing. Each spring, college students participating in the UC Davis Children's Garden Program guide hundreds of children through activities such as this one in Ecological Garden at the Plant Science and Teaching Center and Student Farm.

and "Germ Wars," through which students explore the world of microbes.

CEPRAP offers year-round workshops and institutes to help teachers stay current in a constantly changing field. Students have the chance to meet and talk with a biotechnology 'star' or expert.

CEPRAP's efforts have a growing reputation in California and as far away as Japan. Soots says that the program's popularity is appreciated, but the opportunities it provides are far more important. "It's great to be able to give teachers and students access to the technology and information. Otherwise they couldn't have this experience."

## Showing Kids Where Salsa Comes From

Wander through the Ecological Garden at the Plant Science Teaching Center and Student Farm and you're likely to see elementaryschool children picking the ingredients for salsa or salad.

Carol Hillhouse, director of the



UC Davis Children's Garden Program, explains that there are three goals for all young visitors to the garden. "Everyone eats

something they have harvested, everyone takes something home with them and everyone has fun."

UC Davis student tour guides lead as many as 50 school groups through the garden each year, providing K-3 students with better knowledge of how plants grow and how humans use them. Activities might involve learning about compost, nutrition, herbs, vegetable crops, fruit trees - whatever best complements in-class lessons.

"Eating what they've harvested themselves is a unique experience for most kids," Hillhouse says, but it's the interaction between college students and children in a garden setting that she finds most inspiring. "It's magical. They all get a lot out of this experience."

#### Advancing Sustainable Agriculture

Inspiration for the Student Farm began in the late 1970s with students' growing interests in alternative agricultural practices. Today, the Student Farm has 22 acres dedicated to teaching and research in sustainable agriculture, focusing on ecologically sound and economically viable farming methods.

The farm is an important campus and community resource. Students get the chance to practice what they learn in class - from seed to harvest - using biological processes to improve the soil and manage pests. Some crops are sold on campus to help support the program, and excess crops are distributed to charitable organizations.



Mark Van Horn, associate director of the Plant Science Teaching Center and Student Farm, says they also have worked

on collaborative initiatives to share the practical knowledge they've gained over the years with the farming and gardening communities.

Van Horn and others from the program have worked with farmers, students, and private- and public-sector advisers on workshops covering various aspects of sustainable agriculture. They also have participated in bringing farmers together to talk about what they tried and how it worked.

"It's a little different approach to educational outreach because peoples' experiences can be the basis for learning," Van Horn says. He adds that farmers today are more interested in exploring sustainable agriculture, since consumers are becoming more interested in purchasing food grown using biological methods.

## Fostering Interaction about Research

The Vegetable Research and Information Center fosters appropriate research and collects and dissemi-

nates information relevant to consumers, growers and processors in the California vegetable industry.



According to center director **Don Nevins**, the intent is to "make sure research is effective. We learn how research is being used, and

we learn what kind of research we should be doing."

University-industry interaction is supported primarily by the center's Web site. Communication also is facilitated through e-mail and meetings that bring together industry representatives and university specialists.

An important outcome of the ongoing feedback is development of several smaller research projects on issues that otherwise may not receive much attention, including a study on a garlic disease. "Garlic isn't a huge industry, but the problem had the potential to be devastating to growers. We were able to be proactive in providing start-up funding, which led to matching industry funds for the research," Nevins says.

#### **Assuring Disease-free Plants**



When California winemakers want to start growing grapes from another country, they see **Deborah Golino**.

Golino oversees more than 100 acres of an elite collection of roses, strawberries, pistachios, sweet potatoes and more on the site of the Foundation Plant Materials Service. Commercial nurseries rely on FPMS for ongoing supplies of clean and healthy plants. It is also the nation's only import-quarantine facility dedicated to grapevines - a valuable service as agriculture becomes more global.

"We make it possible to bring clones into the country," Golino says. Using the wine industry as an example, she explains that "if a winemaker wants to introduce a variety from France, Australia or Israel, we can find out if it is carrying exotic viruses or pests."

The tests FPMS uses are state-ofthe-art. The same technology used in genomics research is applied to the task of detecting tiny organisms that can destroy entire crops.

"We save growers from a lot of trouble and expense down the road," Golino says.

#### Singing about Food Safety



What do music and science have in common? Carl Winter.

Winter, Extension food toxicologist and director of the UC Davis

FoodSafe Program, makes sure everyone receives answers to questions about food safety. He responds to dozens of inquiries every week from consumers, the media, government officials and industry representatives about pesticides, genetically modified foods, food poisoning and even how best to cook the Thanksgiving turkey.

Anyone with a concern about food or health is welcome to call or log on to the FoodSafe Program Web site - a one-stop resource for current information and expert contacts. But the program doesn't end there. Winter also sings about food safety.

Winter performs popular music on two CDs with the lyrics adapted to food and health messages. His version of the Beatle's classic tune "I Want to Hold Your Hand," for instance, is "You Better Wash Your Hands."

"My goal is to make sure that food safety messages are delivered in ways that are easy to understand," Winter says. "This is a new and fun way to get the information out."

The songs are hits with everyone who hears them - 7,000 CDs have been distributed so far. They are especially popular in elementary-school classrooms and as training

tools for food-service workers. The secretary of the USDA is even a fan!

## Getting Information to Those Who Need It Most

The Expanded Food and Nutrition Education Program (EFNEP) is one of the most successful and lasting efforts to arise from the 1960s anti-poverty movement. The program develops research-based curricula on nutrition, health, budgets and other life skills for populations facing economic difficulty.



"Not everyone in California is enjoying prosperity," says program director **Barbara Sutherland**. "We are able to give important infor-

mation to those having trouble making ends meet."

EFNEP is a unique educational program because it involves recruiting and training community members who, in turn, provide information and practical guidance toward positive behavior change to groups within their communities. Participants usually are reached through programs such as Head Start and Welfare-to-Work. The curriculum is adjusted as necessary.

For instance, a lesson on increasing calcium intake for a Hmong group would focus on non-dairy calcium sources, since dairy foods are not common in their traditional diet. The lesson would be delivered in Hmong. "It truly is culturally appropriate, community-based education," says Sutherland.

## Promoting Good Food-preparation Practices



Fruits and vegetables are some of the healthiest foods you can eat, but are they safe?

**Christine Bruhn**, director

of the Center for Consumer Research, recently conducted a study on how fruits and vegetables are prepared for meals. She learned that people don't always wash lettuce, melons, strawberries and other foods that are rich in nutrients but still can pose bacteria-related health risks. She also discovered that many people wash their fruits and vegetables with harsh soaps or cut them on the same surfaces as meats or poultry without thoroughly washing in between. Both of these practices are health concerns.

Based on focus group and survey research, Bruhn learns where the food safety information gaps are in consumer knowledge. She then makes sure that reliable information is made available. "We don't want to scare anyone. We just want them to be safe," says Bruhn.

Solutions may involve industry as well - like training supermarket baggers not to put tomatoes next to chicken. "It's important to look at every avenue for making sure our food is healthy," says Bruhn.

## Increasing the Quality of Community Life



A key concern for **Randall Fleming**, director of Community Design and Planning Services, is to create neighborhoods that are

livable, preserve open space and maintain a degree of natural-system function in urbanizing regions. Fleming, the Urban Village Initiative principal investigator, believes that these goals are possible with good design and planning practices.

Randall analyzes factors such as how residents value land-efficient neighborhoods, how development can relate to streams and sensitive habitats with minimal effects and how amenity-rich, denser neighborhoods affect quality-of-life.

The goals are to maximize livability and personal choice while reducing pressure on natural

resources and ecosystems. Another objective is to develop a database of design principles and details that can be applied across communities.

"If we know what works in one neighborhood, we can apply the findings to other neighborhoods with similar conditions. This is especially helpful for new developments or in cases of urban infill," says Fleming, whose techniques have been used in the Sacramento region and in Northern New Mexico. "By combining good planning and design data with good scientific information, we can promote economic well-being and a good quality-of-life."

#### Find Out More...

Contact the programs featured in this article at the Web sites and e-mail address listed below:

Aquatic Toxicology Outreach Program

http://www.envtox.ucdavis.edu/cehs/outreach/aquatic.htm

FARMS Leadership Program http://www.farmsleaders.org

Agricultural and Environmental Sciences Field Day

http://www.aes.ucdavis.edu/events/default.htm

4-H Center for Youth
Development
http://www.aes.ucdavis.edu/researc
h/centers.htm

Center for Engineering Plants for Resistance Against Pathogens http://ceprap.ucdavis.edu

Children's Garden Program http://childrensgarden.ucdavis.edu

Student Farm http://studentfarm.ucdavis.edu

Vegetable Research and Information Center http://vric.ucdavis.edu

Foundation Plant Materials Service http://fpms.ucdavis.edu

FoodSafe Program http://foodsafe.ucdavis.edu Expanded Food and Nutrition Education Program http://efnep.ucdavis.edu

Center for Consumer Research http://ccr.ucdavis.edu

Urban Village Initiative E-mail: rcfleming@ucdavis.edu

College of Agricultural and Environmental Sciences http://www.aes.ucdavis.edu

UC Davis http://www.ucdavis.edu

CA&ES extends special thanks to its many sponsors and community partners who make outreach efforts possible.



Professor **Randal Southard**, Department of Land, Air and Water Resources, was named associate dean of the college's Division of the Environment effective October 2000.

"I am very pleased that Dr.
Southard agreed to serve as associate dean for environmental sciences," said Dean Neal Van Alfen. "During this past year, while serving in an interim capacity, he has been a very effective and articulate spokesperson for environmental sciences. With his leadership, we anticipate significant mo-mentum in advancing our environmental sciences programs."

Southard served as vice chair of the LAWR Soils and Biogeochemistry Program and was a member of the college's Steering Committee for Academic and Strategic Planning.

"I look forward to the challenges of working with our excellent faculty to foster exciting new research and teaching opportunities in the environmental sciences," Southard said.

A professor of soils, Southard's research in soil genesis, morphology and classification; soil-geomorphic relations; and soil mineralogy. His research centers on mineralogy of dust from agricultural cultivation practices and mineralogy of dust particles in human and horse lungs.

"We're trying to understand the extent to which soil minerals in dust generated by ag practices affect air quality and to determine the effects of those air borne soil minerals on human health," he explained.



Professor **Susan Kaiser**, who has had an appointment in the Division of Textiles and Clothing since 1980, has been named chair. She previously served as associate dean for curricular and student affairs, associate dean for human health and development and director of Science and Society, a program she assisted in developing. Kaiser is past president and a fellow of the International Textile and Apparel Association.

Kaiser's primary goal as chair is to highlight and expand the division's role in making interdisciplinary connections that enhance undergraduate and graduate curricula, research and outreach to consumers and industries.

"These are very interesting times, as the very nature of what constitutes a 'textile' is under scrutiny," said Kaiser. "Innovative, high-performance fabrics and garments are emerging, along with new ways of visualizing and imaging fiber, fabric and garment properties. California is the largest apparel-producing state in the nation and the second largest cotton-producing state, and we are well-positioned to explore new frontiers of textiles -technically and socially."

Kaiser's research focuses on social meanings related to textiles, clothes and appearances, with specific interest in gender and race issues. She has an appointment in Women and Gender Studies and assisted in developing the cross-college, interdisciplinary Ph.D. program in Cultural Studies.



Professor **Michael Singer** was named chair of the Department of Land, Air and Water Resources effective February 1, 2001.

"This is an exciting time to be chair of a big department like LAWR," Singer said. "After 40 years in Hoagland Hall, the soils and biogeochemistry program will move to a new building during the next academic year, and the atmospheric science program will move into a renovated Hunt Hall shortly thereafter. Parts of the hydrologic science program will move into Hunt Hall from other parts of campus. We'll be physically closer as a faculty."

Singer explained that new faculty and Cooperative Extension specialists are being recruited in areas left vacant by retirements and resignations. "The great challenge," he said, "is addressing research and teaching issues that cross the department's three disciplinary partners. Our atmospheric scientists, hydrologists, plant nutritionists and soil scientists are working on global climate change, California water quality and supply, and meeting food production challenges brought about by the collision between growing demand and environmental concerns. I plan to address this challenge."

Singer received his B.S. in agronomy from Cornell University and M.S. and Ph.D. in soil science from the University of Minnesota. His research focuses on soil management and soil genesis.

#### Bee Biology Facility Named for Harry Laidlaw



Robert Page, center, chair of the Department of Entomology, congratulates Harry and Ruth Laidlaw at the campus reception in Laidlaw's honor.

Professor emeritus Harry Laidlaw, Department of Entomology, was honored at a dedication ceremony held at the University Club when the Bee Biology Facility was renamed the Harry H. Laidlaw, Jr. Honey Bee Research Facility. Robert Page, professor and entomology chair, proposed the name change.

"Harry Laidlaw is considered worldwide the 'dean of apiculture,'" Page told a large audience at the dedication reception. "He is the father of honey bee genetics and has had a long-term commitment to apicultural research here in California."

Born and raised in Texas, Laidlaw's first experience with bees was working on a hive at age five. He inseminated his first queen bee at age 13. At 30, he developed the first insemination instrument, a "complicated advancement," according to Page. Laidlaw was in his late 80s when he published his final paper on insemination instruments.

A resident of Davis, Laidlaw celebrated his 93rd birthday this year. He joined the UC Davis faculty in 1947 and began the campus's bee program. He found funding for the bee research laboratory and for bee researchers. In that research lab, he developed technology that made it possible to artifically inseminate queen bees.

"Renaming the bee facility for Harry Laidlaw truly memoralizes his work and his contribution." said Page.

#### Scholarship Reception Will Recognize Recipients, Thank Donors

Dean Neal Van Alfen will welcome CA&ES scholarship donors and 2000-01 scholarship recipients and their families at a scholarship reception and ice cream social on Sunday, May 6, 2001, at Freeborn Hall. The reception is an opportunity for the college to recognize and congratulate scholarship recipients, thank donors and give donors the opportunity to meet the students they support. Everyone is treated to a make-your-own-ice cream-sundae feast!

A 16-page program distributed at the reception lists recipients and scholarships, "a testament to the caliber of our students and the spirit of our donors," said assistant director of college relations Sharon Lynch, who is coordinating the event.

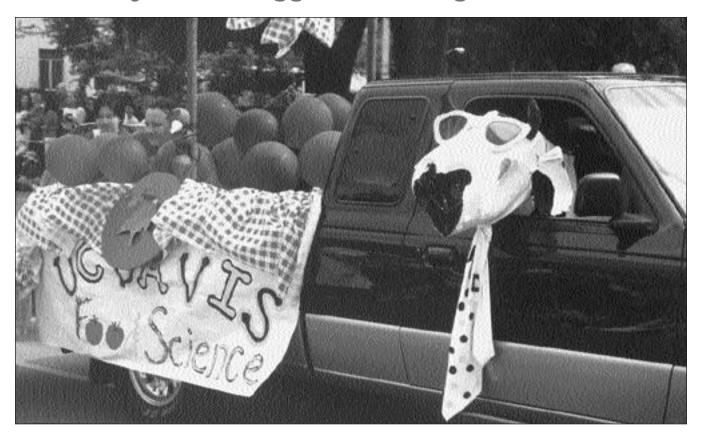
The UC Davis Undergraduate Scholarship Office administers over 200 scholarships that are provided



through the generosity of alumni and friends; corporations, businesses and professional associations; and the university. More than 80 of the scholarships are restricted to majors in the College of Agricultural and Environmental Sciences.

For additional information, contact Lynch at 530/752-1602 or selynch@ucdavis.edu.

### Picnic Day 2001: "Aggies Shine Together"



Plans for Picnic Day 2001 have been underway for nearly a year. It's the largest student-run event in the country, and it's rumored that this will be the biggest and best Picnic Day celebration ever. Don't miss it!

What does Picnic Day have in store this year? Educational, informational, experiential, fun-filled, exciting and eclectic activities; an imaginative, colorful parade with dazzling bands and floats; food, food and more food; and a hospitality booth manned by Dean Neal Van Alfen and members of the Dean's Office of the College of Agricultural and Environmental Sciences.

Stop by the college's hospitality canopy at the corner of North Quad and West Quad, just west of Freeborn Hall. Pick up information on Picnic Day departmental displays and open house activities. Our staff and students are there to say hello and answer any questions you may have about the college, its programs or majors. It's the perfect opportunity to reconnect with faculty, friends and

alumni of the college.

And don't forget...bring along the "Jacket Basket" Entry Form for a chance to win a FREE UC Davis Aggie sports jacket. You do not have to be present at the time of the drawing to win. (See the Picnic Day 2000 student winner on page 16.)

It's as simple as 1-2-3.

- 1. Complete the entry form below.
- 2. Visit the CA&ES hospitality canopy on Picnic Day, Saturday, April 21.
- 3. Drop your entry form into the "Jacket Basket."

**Good luck!** 

#### "Jacket Basket" Entry Form

College of Agricultural and Environmental Sciences Picnic Day • Saturday, April 21, 2001

Yes! I'd like to win the FREE UC Davis Aggie sports jacket. I understand that I do not have to be present at the time of the drawing to win. In fact, the only thing that I have to do for a chance to win is drop this Entry Form into the "Jacket Basket" at the CA&ES college canopy, corner of North Quad and West Quad. Wish me luck!

Name		
Address		
City / State / Zip		
Phone: W()	H(	)
AlumniStudentStaff		Friend of the college



# Tucker Gift Benefits Arboretum and Herbarium

By Rick Swantz Director of Development

Let's see...

if walking is the number one choice of exercisers, and if gardening is the number one choice of hobbyists, and if the public's interest in plants and making environmentally appropriate choices is stronger than ever, then we all owe professor emeritus John M. Tucker a huge thank you for making our campus a much better place for employees and visitors.

Tucker, who is 85 years old, walks in the UC Davis Arboretum nearly every day and spends part of each work day in the UC Davis Herbarium. He pledged \$500,000 in support - split between the two programs.

"Both of them, at least in the early years, had tough going financially." Dr. Tucker said. "Things have changed for the better in recent years. I just wanted to help things along."

The arboretum and the herbarium play significant roles in the college's outreach efforts.

#### The Herbarium

Private consultants, members of the public, visiting university researchers, and, of course, UC Davis faculty, staff and students use the herbarium to identify plant specimens. They use the herbarium library to study specimens and identify the plants they bring along. As a public service, the staff identifies weeds for farm advisors throughout the state. Poisonous plants are identified for medical diagnoses.



Above, left to right, Kathleen Socolofsky, director of the UC Davis Arboretum, John M. Tucker and Ellen Dean, director and curator of the UC Davis Herbarium, walk through the Oak Grove in the UC Davis Arboretum.

#### The Arboretum

The arboretum provides numerous opportunities for UC Davis and the City of Davis to become more accessible to a larger, regional audience. It provides an inviting space for learning, recreation and study.

As Dr. Tucker walks the arboretum, he lingers in the Peter J. Shields Oak Grove. It contains more than 80 kinds of oaks, many grown from acorns he collected during his career as a UC Davis faculty member.

John Tucker's generosity is a great boost to both of these programs. His gift is a result of sound investment strategies that enabled him to perpetuate his own values.

Many of our strongest supporters have done the same. Campus programs are strengthened by donors who invest in areas in which they strongly believe. Thanks to them all, the UC Davis campus is a better place.

For more information about making a gift to UC Davis or making UC Davis a beneficiary of your estate plan, contact Rick Swantz, director of development, 530/752-7961; raswantz@ucdavis.edu.

## What's New in Development?

-The George W. Ushijima Memorial Foundation recently made a gift of \$5,000 "to be used to help recruit outstanding students to the College of Agricultural and Environmental Sciences."

This gift is a tremendous boost to the college student recruitment effort and may be used to supplement award and scholarship packages to encourage the very best students to come to UC Davis.

George Ushijimi, a greatly respected leader in the produce marketing industry, died in 1986. He was president of Growers Produce, which he started in Oakland in 1948.



David Hills, chair of the Department of Biological and Agricultural Engineering, and a volunteer inspect the newly installed cabinets in the Olsen teaching wing.

-In the fall 2000 issue of *CA&ES Outlook*, I had some fun chronicling Mel Olsen's gift to the Joe A. Heidrick, Sr. Western Center for Agricultural Equipment. I compared Mel's gift to a football-scoring drive that won the game and completed the fundraising campaign.

Well, Mel did it again!
In December 2000, Mel contributed another \$100,000 that put the icing on the cake for this campaign. The southern wing of the Western Center will bear the name "Melvin J. Olsen Family Trust



Senior Mike Viola, left, talks with director of development Rick Swantz about the possibilities for involving students in college development cultivation and stewardship efforts. Mike is a student peer adviser in the college's undergraduate academic program office and volunteers as a Web intern in the communication's unit of the Dean's Office.

Teaching Wing" and will include a multi-media lecture room, teaching laboratory, restrooms, administrative office and kitchen.

Thank you Mel!

-In the spring 1998 issue of *CA&ES Outlook*, we reported that Drs. Donis and Erwin Eichhorn were gifting The Family House to the Center for Child and Family Studies, Department of Human and Community Development. The gift value of the house was expected to be \$200,000.

Since then, with many changes in plans, personnel and project scope, the Eichhorn Family House has grown to a \$420,000 project. The Eichhorns very generously increased their gift to \$288,000, and the campus and college contributed the remainder.

The Eichhorn Family House will support research, teaching and service programs in the domain of family influences on early childhood development.

Thanks for bearing with us, Donis and Ike!

-Professor Kent Bradford, director of the Seed Biotechnology Center, is grateful to industry leaders who have stepped forward to support the center's building campaign. As fundraising efforts near completion, construction plans get underway to build the center on the west side of campus near the new Bowley Plant Science Teaching Center. Gifts and pledges to date total \$1,347,175 towards a campaign goal of \$1,500,000.

"I am very thankful for recent supporters who brought us within grasp of our fundraising goal," Bradford said. "The California Planting Cotton Seed Distributors and Monsanto each contributed \$100,000 to our efforts. Every dollar makes a difference!"

Other contributors include BASF Plant Science L.L.C., De Wit Seed Company, De Pue Warehouse and Canastrinos.

The center's first annual report was published in January, outlining educational events, publication development and building campaign highlights. The report introduced the center's advisory council, which was formed to provide guidance and assist in program development.

To learn more about the Seed Biotechnology Center or ways that you can support efforts to construct the center, contact Susan Webster,



## It's Decision Time!

By Richard Engel Director of Student Recruitment and Outreach

Do you remember what you were doing at midnight on November 30, 2000? You may not remember, but many of the record 33,496 high school seniors and junior college transfer students who applied to UC Davis - and who were working feverishly to finish their admissions applications - sure do.

This year, UC Davis received a record number of applications – an increase of 10 percent from 1999. Of these, 6,502 applied for admissions to majors with the College of Agricultural and Environmental Sciences.

"The UC Davis increases are higher than the UC average gains and reflect the involvement of our faculty, staff, alumni and students in contributing to a comprehensive outreach and recruitment plan," said Gary Tudor, UC Davis director of admissions.

TAV OF FAME

-Dean Neal Van Alfen, left, joined over 800 farmers, ranchers and agribusiness leaders from California and Nevada to discuss issues affecting the agricultural industry and implement policies developed at the county and state The programmatic variety and academic reputation of UC Davis, combined with campus outreach and recruitment efforts, played a major role in this year's recruitment pool.

The passing of the admissions deadline, however, signifies only half of the work to be done to ensure that the highest caliber students comprise the incoming class.

In early March, approximately 3,400 high school seniors and junior college transfers were notified that they had been accepted for admission to UC Davis in majors within the college. During March and April, they evaluated their offers and submitted letters of intent.

Surveys show that one of the leading factors resulting in the selection of a college is a visit to the campus. Many students and parents visited prior to submitting admissions applications. However, a personalized tour and meetings with departmental advisers and peers help all students - first time on campus or returning - with detailed information necessary to make their decisions.

There is a lot more to UC Davis than the Quad, the Eggheads and an impressive array of buildings. In the past months, Aggie Ambassadors led hundreds of prospective students and parents on personalized tours of the campus. Visitors listened to

levels. He is pictured here with Linda Boehm ('68, Home Economics), director of development, California Foundation for Agriculture in the Classroom, and Bill Pauli, president, California Farm Bureau Federation. The California/Nevada Farm Bureau annual meeting was held in Sparks, Nevada.

Van Alfen and UC Division of Agricultural and Natural Resources (DANR) vice president Reg Gomes met with leaders from both states to share projects that DANR and CA&ES are undertaking in support of the agricultural industry and environmental fields. student and alumni panels and toured research and production facilities.

The Aggie Ambassadors provide high school seniors and transfers a 'student perspective' on campus life, opportunities to sit in a UC Davis classroom, visits to the dorms and assistance setting up departmental adviser visits.

Faculty, staff, students, parents and alumni help students choose the college they want. *You* can help the College of Agricultural and Environmental Sciences. Call me to find out how

 -Twenty-four CA&ES Aggie Ambassadors joined student leaders from 34 college campuses at Cal Poly San Luis Obispo on January 18-20, 2001, for the sixth annual National Agricultural Ambassador Conference.

A total of 350 student leaders, advisers, presenters and special guests participated in a program designed to assist colleges of agriculture and natural resources in their recruitment and outreach efforts.

UC Davis had one of the largest delegations in attendance and conducted two workshops during the conference.

Aggie Ambassador president Michelle Leinfelder said: "The Agricultural Ambassador Conference provided our newer members a wealth of ideas for recruitment and outreach projects and enabled our officers to share some of our ideas with other colleges. We thought we were doing a lot of activities here at UC Davis; but, we came away from the conference with 26 new projects we will try to implement in the next year."



Richard Engel 530/754-6249; rrengel@ucdavis.edu

#### Veneman Named to Cabinet

Ann Veneman, who served on the college's Dean's Advisory Council from 1996 through 2000, is the first woman in history



to serve as U.S. secretary of agriculture. She rotated off the council when she was named to President George W. Bush's cabinet.

In her new position, Veneman is responsible for 107,000 workers and an \$81 billion annual budget.

In 1999, Veneman joined the law offices of Nosswaman, Guthner, Knox & Elliot in San Francisco, working on food safety issues, environmental issues concerning water in the Central Valley and transporta-

tion issues. She served as secretary of the California Department of Food and Agriculture from 1995 to 1999. She was the first woman appointed to the position, directing the state agency that regulates the largest agricultural economy in the nation. With a background in international trade, she made it a priority to expand trade opportunities for California agriculture.

From 1991 to 1993, Veneman served as deputy secretary of the U.S. Department of Agriculture. She directed and oversaw the activities and policies of the USDA and its 42 agencies.

Veneman was raised on a peach farm in Modesto. She attended UC Davis, UC Berkeley and Hastings College of Law.

#### Van Alfen Appointed to Wine/Food/Arts Center Board

Neal Van Alfen, dean of the College of Agricultural and Environmental Sciences, was appointed to serve as UC Davis representative to the board of trustees of the American Center for Wine, Food and the Arts. The appointment was made by Chancellor Larry Vanderhoef.

The center, scheduled to open in the fall, will explore American culture, highlighting innovations and investigating distinctive approaches to food and drink. The complex will include an auditorium, concert terraces, a demonstration kitchen, classrooms, a restaurant and gift shop, exhibition galleries, a resource center and gardens.

#### Nominations Being Accepted for Award of Distinction

In October 2000, eleven individuals and one family were honored as Award of Distinction recipients at the college's annual College Celebration awards ceremony.

The Award of Distinction is the highest individual recognition presented by the college. Recipients are honored for contributions and achievements that enrich the image and reputation of the college and enhance the college's ability to provide public service.

Pictured, left to right: Richard Engel, Eric Bradford, Christine Wente, Dan Dooley, John Diener, Eric Wente, Charlette Strutzel (accepting for Landon Heffner), Arel Wente, Bob Clarke (accepting for Lloyd Swift), Walter Howard, Marylee Hardie, Adel Kader, Joe Aparicio, Robert Webster.

Award of Distinction nomination forms are available from Sharon Lynch, selynch@ucdavis.edu; 530/752-1602 or check the Web at www.aes.ucdavis.edu/events/celebration/main.htm.

College Celebration 2001 will be held Friday, October 19, in Freeborn Hall.





Brenda O'Flaherty Franklin ('72, Home Economics) of LaCrescenta, California, is the alumni winner of the college's Jacket Basket drawing at last year's Picnic Day celebration. "This is a fantastic jacket! It's great," she said. "I'll wear this with pride."



Joel Green of Davis dropped his entry into the Jacket Basket drawing at the CA&ES hospitality canopy on Picnic Day last

year. It was the winning entry in the student category. Green is a senior studying viticulture and enology. Congratulations!



**Veronica Lopez** of San Jose and **Susan Wu** of Davis received research grants from the Sigma Xi Committee on Grants-in-Aid of Research.

Lopez, a Ph.D. candidate studying developmental nutrition, will focus her research on cell biology and biochemistry. Her study is titled "Potential role of zinc in osteoblast differentiation and matrix mineralization." Lopez received her B.S. in molecular, cellular and developmental biology from UC Santa Cruz in 1996.

Wu's research project is titled "Effects of zinc deficiency on protein kinase C and iron status." She

received her undergraduate degree in 1997 from UC Davis, majoring in nutrition and Spanish. She currently is working on her Ph.D. in nutrition with a minor in biotechnology.



Elizabeth Koutos, Ph.D. candidate in the Nutrition Graduate Group, was presented the Best Graduate Student Research Presentation

Award in the immunology section at the Poultry Science Association meeting in Montreal. Her presentation was based on her dissertation, "The effect of intra-abdominal injections of lipopolysaccharide or muramyl dipeptide on the acute phase response in Japanese quail."

Marcelo Bertolini, Ph.D. candidate in the Physiology Graduate Group and student of animal science department chair Gary Anderson, received the Best Graduate Student Paper Award at the 72nd annual meeting of the Western Section of the American Society of Animal Science. The paper was titled "Appearance of giant cotyledons in the Large Offspring Syndrome."

Bertolini earned Doctor of Veterinary Medicine and Master of Science degrees in Brazil prior to coming to Davis in 1995 to begin doctoral work.

Victoria Erikson was honored with the first UC Davis Foundation Graduate Fellowship for her Master of Science thesis project titled "Evaluating the effectiveness of vegetative buffers for attenuating sediment, nutrients and pathogens in runoff from irrigated foothill pastures." Erikson's project focuses on evaluation of different-sized buffer strips, compared to up-slope areas.

Results will provide needed data to assist ranchers in developing management practices to protect surface waters. Her mentor is animal waste management Extension specialist Deanne Meyer. Jennifer Williams, animal science master's student, is the first recipient of the department-administered Jessup Graduate Fellowship. Her thesis research concerns the relationship between the sexual libido and performance of Hereford and Angus beef bulls and the frequency of mating with individual cows housed in groups during estrus.

Williams is working with Professor Ed Price of the Department of Animal Science.



Monna Hess, Ph.D. candidate in the Physiology Graduate Group, was awarded a Chancellor's Teaching Fellowship for the 2000-01 academic year. She is working with her mentor, Professor Jan Roser, to revise the content of Animal Science 15, Introductory Horse Husbandry, and develop a course Web site. Hess also delivered lectures during the winter quarter. The award was presented by Chancellor Larry Vanderhoef.

**Brigid McCrea** is a winner of the Carpenter Youth Program Essay Contest, sponsored by the U.S. branch of the World Poultry Science Association. Her essay was titled "Reciprocal relationship of poultry science departments and the poultry industry."

McCrea, who is working on a Master of Science degree in avian science, also was selected to participate in a tour of Ontario and Quebec poultry facilities. She is conducting a study on pre-harvest food safety issues related to niche marketing of poultry products.



The Student

Margareta Lelea completed her undergraduate work in international agricultural development in three years. Her family and mentors encouraged

her to come to UC Davis. "I've always been interested in humanitarian work," she explained. "That's how I chose my major. I want my work to benefit others." Lelea, whose family lives in San Diego, was accepted at UC Davis, UCLA, UC Berkeley and UC Santa Cruz. She said, "I felt I would get the best undergraduate education at Davis, and that has happened."

"I have been privileged to work with Dr. Janet Momsen," Lelea said. "I traveled to Romania as part of a National Science Foundation (NSF) geography grant. I was particularly inspired to work in rural, agricultural areas because my grandmother lives in Yugoslavia. This work took me back to my roots."

Lelea stayed in Romania for two months, always with families. She rode her bicycle among six villages and did interviews with farmers and rural residents. Villages were without hotels, paved roads or running water.

"I had to stay within 50 kilometers of the border because of bomb-

ing in Yugoslovia," Lelea said. "I was interested in what effect the border - or political boundaries - had on women's entrepreneurship. The area was in transition politically and economically."

Asked to describe the most difficult part of her trip, Lelea replied: "Being on my own. I always was asking myself: 'What do I do next?'

"I became involved in the communities, did my interviews, compiled them into surveys and entered the information onto spreadsheets," Lelea explained. Later, she presented the work at an undergraduate research conference at the International House in Davis and was flown to Pittsburgh by NSF to present before the Association of American Geographers.

"I feel really thankful that I've been able to be at such a wonderful university with such dedicated professors and exciting opportunities." Lelea said. "I've had a lot of individual attention. We did a lot of interesting research on woman and development. It has provided me a unique perspective."

Lelea seems to be drawn to 'village life.' Today, she is living in a cooperative in Davis where residents grow much of their own food in a large organic garden and raise chickens for eggs. She graduated in December and plans to travel before entering graduate school.



Margareta Lelea took this photograph of Romanian women supplementing their pensions by selling milk and melons at the local ag cooperative. The women told Lelea that their pensions are less than \$10 per month.



The Teacher

Professor Janet
Momsen,
Department of
Human and
Community
Development,
traveled to
Hungary for three
years to study

gender and rural entrepreneurship. She is particularly interested in identifying the problems and possibilities of transition-to-capitalism in Hungarian villages. She wants to know how such a transition impacts women.

"I am interested in agriculture, that's why I came to Davis," Momsen said. "The number of female farmers in California almost doubled between 1978 and 1997. And, there is more going on in villages and in farm communities than being a farmer. It's important to me to know what the women are doing."

In 1999, Momsen began working with Margareta Lelea, an IAD undergraduate student who shared Momsen's interest in rural, entreprenuerial women.

"Margareta's ability to speak the language enabled me to extend my research into Romania," said Momsen. "No one else is doing studies on women entrepreneurs in Eastern Europe and what barriers they have in starting and maintaining a business. This was a wonderful opportunity for us.

"The villages in Romania are very, very poor" Momsen continued, "and Margareta found that woman make up 30 to 40 percent of the entrepreneurs. Many are hairdressers, masseuses or cosmeticians. They are very enterprising, very flexible, very open."

"Margareta has made a major contribution to our research, I am grateful she was willing to participate and do the extra work to bring us a new view. Not everyone would be willing to study in rural villages, riding around on a bicycle, talking to old ladies. It's been very rewarding to work with her and extremely satisfying to watch her grow, do research and meet other geographers."

#### The Fusion of Art and Science

#### By Eileen Rendahl

The irridescent sheen of a beetle's hardened outer wings.

The distinctive colors and patterns on a butterfly's wing.

The charming sophistication of the honeybee waggle dance on a hot summer afternoon.

These are all subjects worthy of an artist's attention; but, in the close observation and examination required to produce art, the artist also gains a fascinating glimpse into the world of insects.

To bring this fusion of art and science to UC Davis students, Professor **Diane Ullman** of the Department of Entomology, and artist Donna Billick created a new course, Entomology 1: Art Science and the World of Insects.

The course consists of two one-hour lectures and one three-hour studio session each week. The first offering in the fall of 2000 was funded by the Undergraduate Instructional Improvement Program and provided general education credits in either science and engineering or arts and humanities.

In addition to lectures developed by Ullman, guest lecturers from several sub-disciplines of entomology and the art community contributed their own unique experiences with insect biology and the association of insects with art.

During the studio sessions, students illustrated concepts in insect biology, morphology, physiology and



ecology with drawing, textiles or ceramics. The drawing section was led by teaching assistant **Richard Martinez**; the textiles section was led by teaching assistant **Meghan Lancaster**; and the ceramics section was led by Ullman with a series of guest workshops by Billick.

Artwork created by students revealed the beauty of insects and illustrated insects's roles in society, as well as their unique biology.

Entomology 1 was targeted specifically at incoming freshman. This targeted group comprised 75 percent of course enrollment.

One course goal was to provide students the opportunity to explore a diversity of topics and career paths in order to focus their academic careers. "This class gives students a rare opportunity to be introduced to exciting areas of biological science," said Ullman, "and to discover the unusual and interesting career opportunities available, particularly to people with interdisciplinary skills."

According to students and instructors, Entomology 1 was an overwhelming success. Most students who took the two rigorous written examinations and submitted a final project in the studio sections received a grade of A or B.

"Even more exciting than individual results was the magic produced by Dr. Ullman's unique method of teaching biology through the infusion of art and science," a student commented. "This class filled a gap that only could have been achieved through the development of such a diverse and instructive course."

Other Entomology 1 students were quick to praise the class.

"What a great idea - combining art and science! Art makes me really observe the insect I am studying."

"Although I had not really known what entomology was when I began this course, I am now knowledgeable in the area. This class has sparked my interest in the subject."

"I love art and science put together like this. The class was fun and educational!"





Professor **Richard Zinn**, Department of Animal Science, was presented the 2000 Ruminant Nutrition Research Award by the American Society of Animal Science. The award, sponsored by the American Feed Industry Association, recognizes significant and lasting contributions to ruminant nutrition, technology for feeding cattle and the feed industry.

Zinn maintains an active research program in the areas of health, nutrition and feedlot cattle management at the Desert Research and Exension Center in Imperial Valley. Fluency in Spanish gives him opportunities to speak in Mexico and throughout Latin America.

Extension specialist **James Wolpert**, chair of the Department of Viticulture and Enology, is the first recipient of the new Marvin Sands Endowed Department Chair, created with a \$466,000 donation from members of the wine-grape community. The endowed chair was established in memory of Marvin Sands, the late chair of Constellaton Brands, formerly known as Canandaigua Brands.

"I am honored to be named recipient of the Marvin Sands Endowed Department Chair," Wolpert said. "This is an enormous personal honor, and the endowed chair provides valuable resources to enhance our teaching programs."

Wolpert, a Cooperative Extension viticulture specialist, focuses his research on statewide programs for rootstock and winegrape clonal evaluations and winegrape production in Northern California.

Professor **Heiner Lieth**, Department of Environmental Horticulture, is the recipient of the 2000 Henry E. Heiner Award from the Joseph H. Hill Memorial Foundation, an affiliate of the International Cut Flower Growers Association.

Lieth was recognized for "out-

standing research in support of the fresh-cut rose industry" and for research on modeling of rose productivity, participation in educational programs and work as an adviser to several association committees.

Lieth's research focuses on crop ecology of greenhouse and nursery crops; greenhouse environment control automation; ornamental crop modeling; and automated irrigation.

Professor **Ralph Ernst**, Department of Animal Science, was commended for his work in maintaining UC's Poultry Web Page. According to accolades in a "Poultry Online" column of the industry publication *Poultry Times*, the "information-rich site offers data and links for the expert and novice alike."

Site topics include important avian meeting dates, practical egg production tips, game bird management techniques and avian disease prevention.



Professor **Judy Jernstedt**,
Department of
Agronomy and
Range Science,
was selected to
head the
Botanical Society

of America (BSA), a professional society with over 2,500 members in the U.S. and 50 other countries.

"This is an exciting time to be involved in the society," Jernstedt said, "and in all scientific societies. Electronic communication results in a more active society and a more involved membership. Electronic publication and archiving of scientific journals makes our science more available to more people around the world and is revolutionizing access to the literature of plant biology. This definitely is good for increasing scientific literacy and research collaborations."

Jernstedt was treasurer of BSA from 1992 through 1998. She also is president of the Davis Botanical Society. Her area of interest is plant morphology and evolution.





Professor emerita **Emmy Werner**, Department of Human and Community Development, and lecturer emeritus Harry Walker, Department of Land, Air and Water Resources, were among five retired UC Davis faculty and staff members honored at a ceremony marking the completion of The Colleges at LaRue, the campus's newest student residential complex. The 450-bedroom complex houses more than 600 students in five thematic 'pods.' each named for faculty or staff who have contributed to the undergraduate life of UC Davis students.

Werner, an internationally recognized developmental psychologist, has spent a lifetime studying how children cope when confronted with adversity. She published books on children of the western migration, the Civil War and World War II. Since her retirement in 1994, she continues to teach undergraduates and supervise graduate students.

Walker headed the college's Exploratory Program and was active in the summer advising program that welcomes new students and prepares them for their first year at Davis. He developed numerous courses that alerted students to the relationship between natural resources and well being. Walker retired in 1990.

Stephen Russell, 4-H youth development specialist in the Department of Human and Community Development, was presented the Wayne F. Placek Award by the American Psychological Foundation. The award "encourages scientific research to increase the general public's understanding of homosexuality and alleviate the stress that gay men and lesbians experience."

The award supports a research

project titled "Adolescent sexual orientation, risk and resilience."

Russell's research focuses on adolescent development and sexuality, particularly the long-term effectiveness of sexuality education, risk factors for early parenthood and pregnancy, and adolescent sexual orientation and the health and wellbeing of sexual minority youth.

Three Department of Agricultural and Resource Economics faculty members were ranked among the top 2 percent of world economists based on publications and citations during the review period. They are professor **Michael Caputo**, professor **Catherine Morrison-Paul** and associate professor **Scott Rozelle**.

The study by Tom Coupe of the Universite Libre de Bruxelles places UC Davis among the most productive universities in the world in the field of economics. It ranks 55,000 economists and their departments on the basis of publications and citations for the five years 1994-98. The average ranking placed economics at UC Davis at 21st among all U.S. universities and ninth among U.S. public universities.

Professor **Les Ehler**, Department of Entomology, was elected president of the International Organization for Biological Control (IOBC). He serves four years as president and four additional years as past-president.

"This is a great honor for me and the Davis campus." Ehler said. "I look forward to the challenge of leading IOBC for the next four years."

IOBC is the major professional organization for biological-control workers. It is headquartered in Montpellier, France.

Professor **Julian Alston**, Department of Agricultural and Resource Economics, received the 2000 Outstanding Alumnus Award from the Department of Agricultural and Resource Economics at North Carolina State University. The award is presented to alumni "who have distinguished themselves in their

postgraduate endeavors."

Alston presented the annual Outstanding Alumni Seminar titled "Reassessing Research Returns: Attribution and Related Problems."

In 2000, Alston was named a fellow of the American Agricultural Economics Association. He is president of the Australian Agricultural and Resource Economics Society.

Professor **Susan Williams** is the new director of Bodega Marine Laboratory, a UC Davis organized research unit. She is an expert in understanding the nutrient cycles, plant-animal interactions and restoration genetics biology of near-shore marine communities, particularly seagrasses, seaweeds and coral reefs. She often advises policymakers and resource managers on the preservation and restoration of marine ecosystems.

Williams taught and conducted research at major marine laboratories in Alaska, Hawaii, New England, Texas, Washington, the Caribbean, Japan and California. She previously served as science director of the National Oceanographic and Atmospheric Administration's National Undersea Research Program in the U.S. Virgin Islands. She is a fellow in the Aldo Leopold Fellowship in Environmental Leadership Program.

Regional coordinator **Rick Melnicoe**, Department of Environmental Toxicology, was named director of the UC Davis-based regional Pest Management Center. The center was established by the U.S. Department of Agriculture to strengthen connections between production agriculture, research institutions and Cooperative Extension programs. The unit will serve 13 western states, including Alaska and Hawaii.

Melnicoe, along with statewide pest coordinator **Michael Stimmann**, Department of Environmental Toxicology, and Cooperative Extension specialist **Frank Zalom**, Department of Entomology and director of the Statewide Integrated Pest Management Project, were successful recipients of the USDA grant to form the western center.

"Although this is a UC Davis campus grant," explained Melnicoe, "it is a part of and will benefit the Division of Agriculture and Natural Resources and has excellent CA&ES and DANR support."

The center is designed to better link pest management researchers with farmers and ranchers in the Western United States.

"Our task is particularly challenging in the west," Melnicoe said, "with its varied geography and diverse agricultural operations that run the gamut from cattle and sheep ranching to vegetable and field crops to fruit and nut production. The fact that California is particularly vulnerable to the introduction of exotic pests presents special issues for us."

Professor **James Carey**, Department of Entomology, and professor and chair **Paul Gepts**, Department of Agronomy and Range Science, have been elected fellows in the American Association for the Advancement of Science.

Carey was selected for distinguished contributions to the field of biodemography and invasion biology. His areas of research include invasion biology; Mediterranean fruit fly invasion of California; mortality dynamics of insects; and aging, longevity and life-span limits.

Gepts was honored for research and teaching on the genetic structure, evolution and domestication of plants, especially the common bean. His research focuses on the genetics of food legumes; crop evolution; genetic conservation; genome mapping; and molecular evolution.

Carey and Gepts were among 251 scientists elevated to the rank of fellow for their contributions to the advancement of science or its applications. The American Association for the Advancement of Science is the world's largest federation of scientists with more than 143,000 members and 276 affiliated societies.

Associate professor **Scott Rozelle**, Department of Agricultural and Resource Economics, and professor **Andrew Waterhouse**, Department of Viticulture and Enology, were selected 2000-01 Chancellor's Fellows. The Chancellor's Fellows Program was established to honor the achievements of outstanding faculty members early in their careers. Academic Senate members from all schools and colleges are eligible for the honor.

"Professor Rozelle is the leading western economic expert on China's agricultural development," said Professor Colin Carter, chair of the Department of Agricultural and Resource Economics. "Scott is fluent in Chinese and has established an international reputation as a scholar with broad expertise on Chinese agriculture."

Rozelle organized a U.S.-China trade policy conference last summer and hosted a policy study team from the People's Republic of China. The itinery included stops at UC Davis, the Chicago Board of Trade, a grain trading facility in Iowa and Cargill in Minnesota.

Waterhouse was recognized for excellence in academic pursuits evidenced by the quality and significance of his research and teaching. He is vice chair of the Department of Viticulture and Enology and previously served as chair of the Agricultural Chemistry Graduate Group. His research focuses on the natural product chemistry of grapes and related fruits and nuts.

"Andy is a tremendous scientist, and his work in wine chemistry and wine composition and human health has been groundbreaking," said Professor James Wolpert, department chair. "Andy is one of our program leaders."

#### Professor Kathryn Dewey,

Department of Nutrition, received the March of Dimes Agnes Higgins Award for outstanding achievements in the field of maternal fetal nutrition. The award was presented to Dewey at the American Public Health Association annual meeting in Boston.

Dewey is renowned in the U.S. and in the developing world as an expert on the nutritional needs of breastfeeding women and their infants. Her work has led to a better understanding of various key factors in breastfeeding and has resulted in new standards, recommendations and public policies for the health of mothers and babies.

Dewey is a technical consultant on infant and young child feeding for the World Health Organization and UNICEF and a member of the March of Dimes Task Force for Nutrition and Optimal Human Development.

Extension specialist **James Hill**, Department of Agronomy and Range Science, was elected a fellow of the American Society of Agronomy. The designation is the highest bestowed upon members by the society.

Hill is recognized nationally and internationally for work that led to the rapid adoption of newer, higher-yielding rice varieties and innovative weed control practices in California. He also contributed to the solution of perplexing environmental problems related to rice production and developed farming practices to prevent herbicide runoff in rice field tailwater, allowing rice growers to reduce pollution by 98 percent.

Articles written by **Linda Bisson**, professor and Amerine Chair, Department of Viticulture and Enology, and **Sharon Shoemaker**, California Institute of Food and Agricultural Research director, were published in the millennium edition of *Gastronome*, published by Chaîne des Rôtisseurs.

Bisson highlighted trends in viticulture and enology and explained that scientists at UC Davis and on other campuses are battling major pests - such as Pierce's Disease - that threaten the California grape industry. She described how researchers in the Department of Viticulture and

Enology and across the UC Davis campus have developed an internationally recognized research program in the areas of wine and health.

In writing about trends in food science and technology, Shoemaker said that the return to 'natural' and an emphasis on low-fat diets and healthy foods have prompted new programs to examine the nutritional benefits of foodstuffs. "At UC Davis," she wrote, "prune fiber pectin has been found to lower blood cholesterol levels. Studies suggest that for the control of obesity, dietary fiber prolongs the presence of fat in the small intentine and depresses hunger."



Professor **Bruce Hammock**,
Department of
Entomology, was
named 2001
Faculty Research
Lecturer by the
Academic Senate.

The honor, recognizing exceptional research contributions of a campus faculty member, has been presented 59 times since it was established by the Davis Sigma Chi club in 1941.

Hammock joined the UC Davis faculty in 1980. He was elected to the National Academy of Sciences in 1999, one of the highest honors in the U.S. for scientists. He received the prestigious Alexander von Humboldt Award in 1995 for research contributions to U.S. agriculture and the \$250,000 Burroughs Wellcome Toxicology Scholar Award in 1987 from the Society of Toxicology.

Hammock's research focuses on new biological pest controls and analytical methods for detecting environmental contaminants. He also works on the development of new therapies for hypertension.

Hammock and his colleagues genetically engineered insect-specific viruses so that the viruses would interfere with the growth and development of certain caterpillars that feed on agricultural crops. Dairy foods Cooperative Extension specialist **John Bruhn**, Department of Food Science and Technology, was elected fellow of the International Association for Food Protection (IAFP). He was cited for contributions to the association's educational program and his professional activities in dairy foods.

IAFP previously cited Bruhn for exemplary contributions to outreach education and applied research when they awarded him the Educator's Award and IAFP Haverland Citation.

Bruhn, a fellow of the Institute of Food Technologists, also received the Sanitarian Award from the California Association of Dairy and Milk Sanitarians and the Outstanding Alumnus Award from Michigan State University where he received his B. S. in food science in 1962. He received his Ph.D. in dairy bacteriology and biochemistry from

UC Davis in 1969.

Bruhn is director of the Dairy Research and Information Center. His research focuses on dairy bacteriology, dairy chemistry and processing of dairy foods.

Geneticist **Linda Bisson**, Department of Viticulture and Enology, was presented the Honorary Research Lecturer Award by the American Society for Enology and Viticulture at its annual meeting in Seattle. The award recognizes "valued research for the grape and wine industry." Her lecture title was "The biological resilience of Saccharomyces: Strategies for adaptation to the natural fermentative environment."

Bisson is a member of the Technical Projects Committee and of the Editorial Board and Publications Committee of the American Journal of Enology and Viticulture.

At the same meeting, Professor

Each year, three faculty members from the Department of Land, Air and Water Resources travel to Bari, Italy, to teach one-week segments of a year-long diploma course titled "Land and Water Resource Management: Irrigated Agriculture." The course is held at the International Centre for Advanced Mediterranean Agronomic Studies. Most students travel from North Africa and the

Middle East to attend.

Professor **Roger Shaw** teaches a class on "Weather and Climate."

Biometeorological specialist **Richard Snyder**, pictured above with some of his students, teaches "Crop Water Requirements and Practical Irrigation Scheduling."

Professor **Theodore Hsiao** teaches "Crop Response to Water and Water-use Efficiency."

Jeffrey Granett, Department of Entomology, associate professor Andy Walker, Department of Viticulture and Enology, and collaborators received the Best Viticulture Paper Award for "Grape Phylloxera populations adapted to Vitis berlandieri X V. riparia rootstocks." It was selected as the best publication in viticulture for 1999.

Professor **Bo Lonnerdal**, Department of Nutrition, was awarded an honorary doctorate in medicine by the University of Uppsala, Sweden, his alma mater. He was recognized for "achievements in nutrition research and continued active collaboration with Swedish universities regarding teaching, training and research."

Lonnerdal's research focuses on infant nutrition and the physiological significance of breast milk.

Professor **Deborah Elliott-Fisk**,
Department of Wildlife, Fish and
Conservation Biology, was elected to
the executive committee of the
Section on Fish and Wildlife
Resources of the National
Association of State Universities and
Land-grant Colleges. Her research
interests include biogeography,
ecosystem management, paleoecology and conservation biology, especially in mountain systems and
California.

Professor **Robert Rice**, Department of Environmental Toxicology, was awarded a Fulbright grant to teach environmental science in the Russian Federation by the U.S. Department of State and the J. William Fulbright Foreign Scholarship Board. Recipients are selected on the basis of academic or professional achievement and demonstrated leadership potential in their fields.

Landscape architecure professor

Mark Francis, Department of
Environmental Design, received an
Ahwahnee Award from the American
Institute of Architects, American

Planning Association and the Local Government Commission for his design of Central Park in Davis and the Davis Farmer's Market.

Central Park was selected as one of the best projects built in the last 10 years, exemplifying the creation of more livable, pedestrian-oriented and transit-based communities throughout the Western United States. The award was presented at the Urban Land Institute and Local Government Commission's "Smart Growth Conference" in San Diego.

Francis also received a
Centennial Medallion from the
American Society of Landscape
Architects for his design of Central
Park. The park was recognized as
one of the most important designed
landscapes in the last century.

#### Professor **Peter Richerson**,

Department of Environmental Science and Policy, was appointed to the National Academy of Sciences/ National Research Council Commission on Behavior and Social Science and Education's Committee on the Human Dimensions of Global Change. He serves for three years. The group is comprised of social scientists interested in the implications required for social and economic policy changes to cope with and/or ameliorate global climate change.

Richerson's primary research interest is the theory of cultural evolution. He also conducts research in limnology, the study of inland waters.

Adjunct professor **Edwin Frankel**, Department of Food Science and Technology, was selected secondmost-cited author of the 1990s in agricultural science by the Institute for Scientific Information (ISI). He was cited 586 times, making him the "second-most-cited author of the 1990s in agricultural science." Agricultural science is an umbrella term for the fields of agricultural chemistry, agriculture/agronomy and food science/nutrition.

ISI is an international database company that surveys the published

literature of all journals and compiles 'citation index' and 'citation impact' of journals and authors based on the number of citations given in all publications in journals about each author. This information is regarded as one of the most reliable, unbiased criterion of the scientific impact of published papers.

Geneticist and professor **Carole Meredith**, Department of Viticulture and Enology, was awarded the Ordre du Merite Agricole by the government of France in recognition of her service to agriculture. The medal was created in 1883 to honor Louis Pasteur.

Meredith's research focuses on grapevine genetics, including the study of cultivar origins and relationships, transformation and genomic mapping.

Professor **Dean MacCannell**, chair of the Landscape Architecture Program, Department of Environmental Design, was named to the editorial board of the University of California Press. He will serve for five years.

MacCannell will read and report on manuscript submissions in the areas of cultural studies, especially tourism; performance; architecture/ landscape architecture; and social science. He will discuss editorial decisions in other areas.

Professor **Miguel Marino**, Department of Land, Air and Water Resources, was recognized by the Universities Council on Water Resources for dedicated service and leadership in advancing water resources research, education and public service. He was honored at the council's annual conference in New Orleans.

Marino's research interests include groundwater modeling, contamination and management; water resource planning and management; conjunctive use of surface water and groundwater; hydrologic systems analysis; and irrigation management.

Professor **Joe Cech**, Department of Wildlife, Fish and Conservation Biology, was presented two awards by the American Fisheries Society (AFS) at its annual meeting. Cech received the California-Nevada Chapter's Award of Excellence for "outstanding contributions to fishery conservation and the fishery profession." The society's Equal Opportunities Section also presented Cech with its Mentoring-for-Professional-Diversity Award.

Cech was one of five scientists inducted into the AFS Congressional Legion of Honor at the Physiology Section's International Congress on the Biology of Fish held in Aberdeen, Scotland. He served as co-organizer of the congress symposium on fish migration and passage.

Cech's research interests include physiological adaptations and adjustments of fishes to their environment.

Cooperative Extension specialist **James Thompson**, Department of Biological and Agricultural Engineering, and Professor **Adel Kader**, Department of Pomology, were recognized by the American Society of Agricultural Engineers (ASAE) in the organization's 2000 Educational Aids Competition. Their entry, "Marine Container Transport of Chilled Produce," was judged outstanding and awarded blue ribbon status. Their entry was displayed at ASAE's annual international meeting.

Thompson's research focuses on postharvest operations. Kader's research program focuses on quality of fruits and nuts in relation to postharvest biology and technology.

Sensory scientist/flavor chemist **Ann Noble**, Department of Viticulture and Enology, received the American Wine Society's highest honor, the Award of Merit. It was presented at the organization's national conference in Cleveland.

Noble's research involves the sensory and chemical factors that affect perception of flavor and acceptance, with emphasis on wine. Sensory data for aroma, taste and mouthfeel is

related to consumer preference data, physiological factors and/or wine composition using multivariate statistical methods.

Professor **Judith S. Stern**,
Departments of Nutrition and
Internal Medicine, was elected to the
Bioavailability and Nutrient
Absorption Expert Committee by the
U.S. Pharamacopeia Council of
Experts. She will serve for five years.
The committee sets manufacturing
standards for vitamins, minerals and
herbals.

Stern also was named recipient of the 2001 Charles A. Black Award by the Council for Agricultural Science and Technology. The award recognizes her work in translating science to the media.

Stern is director of the UC Davis Food Intake Laboratory Group and co-director of the Alternative Medicine Center for Research in Asthma, Allergy and Immunology.

Weed science emeritus **W. B. Jim McHenry**, Department of Vegetable
Crops, was presented a Lifetime
Achievement Award by California
and western professional land managers at their forest-management
meeting in Redding. He was recognized for contributions to forest
vegetation management.

McHenry developed many of the weed-management principles used today in forest plantations. Among his publications are papers on poison oak and blackberry control/identification and the earliest work on perennial pepperweed control.



Professor emeritus **Eric Bradford**, Department of Animal Science, was presented the 2000 Fellow Award, At-Large Category, by the

American Society of Animal Science. The society also honored him with the Jean-Claude Bouffault Award for leadership and distinguished service to international animal agriculture.

He joined the organization in 1951.

Bradford held various administrative appointments at UC Davis and taught courses in international agriculture, introductory animal science, animal breeding and genetics, beef cattle and sheep production and animal growth. From 1978 through 1996, he was a principal investigator in the USAID-funded Small Ruminant Collaborative Research Support Program and conducted projects in Kenya, Indonesia and Morocco.

Bradford is an American Association for the Advancement of Science Fellow. He served as UC Davis Genetics Graduate Group chair, Department of Animal Science chair and CA&ES associate dean.

Since retirement in 1993, Bradford continues his programs in international agriculture and has expanded his focus to include issues of global food supply. He chaired the task force that prepared the report "Animal Agriculture and Global Food Supply" published in 1999 by the Council for Agricultural Science and Technology. In 2000, the college honored Bradford as an Award of Distinction recipient.

Associate professor of chemical ecology **Walter Leal**, Department of Entomology, was elected president of the International Society of Chemical Ecology during the organization's annual meeting in Pocos de Caldas, Brazil. He will serve a one-year term as president, one year as past-president and three years as 'councillor.'

Society members are natural-product chemists specializing in insect, plant and marine products; biologists; ecologists; molecular biologists and neurophysiologists. Nine hundred members represent 40 countries.

Leal also was named associate editor of the *Journal of Chemical Ecology*. He handles papers related to all aspects of pheromones.

Professor **Joy Mench**, Department of Animal Science and director of the Center for Animal Welfare, is a member of the scientific advisory committee for the new Free Farmed Certification Program.

The first such certification effort in the United States, the program is designed to establish living standards for poultry, dairy cows and beef cattle raised for food production. It is modeled after England's eight-year-old Freedom Food Program that certifies nearly 25 percent of Britain's animal-based food products.

Mench, an animal welfare expert, and **Carolyn Stull**, UC Cooperative Extension large-animal welfare specialist, helped establish the program to certify and label food products that meet animal welfare standards. The program was launched by the American Humane Association and is administered by Farm Animal Services. The service conducts audits of farms, dairies, processing plants and other businesses. The inspection process is verified by the U.S. Department of Agriculture.

Professor emeritus **Calvin Qualset**, Department of Agronomy and Range Science and director of the Genetic Resources Conservation Program, was appointed to the U.S. national committee for the International Union of Biological Sciences (IUBS) by the National Academy of Sciences Office of International Affairs. The committee is the formal representative of the U.S. biological community to IUBS. He will serve for six years.

Qualset also is principal investigator of a wheat genomics research program involving 13 university laboratories in 10 states.

Professor **Lee Baldwin**, Department of Animal Science, was appointed to a new 15-member overview committee of the National Research Council. The Committee on Opportunities in Agriculture will review, synthesize and write a report with conclusions and recommendations drawn from information reported from three subcommittees addressing specific components of agricultural research, education and extension.

Baldwin's research interests include energy metabolism, systems

analysis and lactation.

William Lacy, UC Davis vice provost, university outreach and international programs, also serves on the committee.



Professor Ning Pan, Division of Textiles and Clothing, was elected president of the Fiber Society. He will serve the 2001-

2002 term.

"This is the first time in the 50-year history of the Fiber Society that a member from California has been elected president." Pan said. "I am grateful to my peers for this recognition of my contributions and the quality of our programs at Davis."

Pan came to UC Davis in 1990 and holds a dual appointment in the Department of Biological and Agricultural Engineering and the Division of Textiles and Clothing.

Professor **You-Lo Hsieh** of the Division of Textiles and Clothing currently serves as the 2000-01 Fiber Society Lecturer. Two lecturers are selected each year, one from academia and one from industry. According to Hsieh, the lectureships acquaint science and engineering students and faculties with challenges and opportunities in the field of fiber science.

Gamma Sigma Delta, the honorary society for agriculture, installed a UC Davis chapter in November 2000 and elected its first officers.

Professor **Richard Bostock**, chair of the Department of Plant Pathology, was named president-elect. Professor **Michael Singer**, chair of the Department of Land, Air and Water Resources, was named secretary. Linda Whent, student affairs officer with School/University Partnerships, was named treasurer. Tom Rost, associate dean of the Division of Biological Sciences, was named president.

Twenty-six new members were initiated, including CA&ES dean **Neal Van Alfen**, executive associate

dean **James MacDonald** and associate deans **Tu Jarvis**, **Michael Parrella** and **Randal Southard**.

Other members from the College of Agricultural and Environmental Sciences are:

**Arnold Bloom**, professor, Department of Vegetable Crops

**Randy Dahlgren**, professor, Department of Land, Air and Water Resources

**Richard Engel**, director of student recruitment and outreach, Dean's Office

**Kevin Gibson**, postgraduate researcher, Department of Agronomy and Range Science

**Mark Grismer**, professor, Department of Land, Air and Water Resources

**William Horwath**, assistant professor, Department of Land, Air and Water Resources

**Annie King**, associate dean of undergraduate academic programs and professor, Department of Animal Science

**Andre Lauchli**, professor, Department of Land, Air and Water Resources, and associate vice chancellor of research, Office of the Vice Chancellor - Research

**Stuart Pettygrove**, soils specialist, Department of Land, Air and Water Resources

**Ken Tanji**, professor emeritus, Department of Land, Air and Water Resources

Although undergraduate and graduate students are eligible for membership, the group decided to concentrate on senior representatives the first year in order to establish a base of people that will continue the organization. In the future, students, alumni and people working in agriculture will be nominated.

"I appreciate the initiative shown by UC Davis faculty interested in agriculture to open a chapter of Gamma Sigma Delta," said Van Alfen. "I am honored to be chosen for membership in this highly respected society."

Established in 1905, the society sponsors seminars and other activities related to agricultural research,

maintains a scholarship program for students at all levels and recognizes excellence in alumni service. Chapters include nearly all U.S. land-grant agriculture colleges.

Research scientist **Gregory McPherson** of the Center for Urban Forest Research was presented the L.C. Chadwick Award for Arboricultural Research from the International Society of Arboriculture. He was recognized for research activities that "fundamentally have altered the perception of the role of trees in cities."

The award acknowledges McPherson's contribution of the Benefit Cost Analysis Model, which demonstrates the environmental value of trees and provides arborists with a needed tool for quantifying the benefits and costs associated with trees. McPherson also has been involved in evaluating the nature of root-pavement conflicts, assessing the success of tree plantings in parking areas and reviewing the success of street tree master plans.



Associate professor and associate analytical chemist **Susan Ebeler**, Department of Viticulture and Enology, was selected the

Agricultural and Food Chemistry Division's "Young Scientist" for 2000 by the American Chemical Society. She was cited for her research program on analysis, flavor and phytochemistry of wine and her determination that wine polyphenols can bind aroma substances and, thus, reduce aroma intensity.

Ebeler's research is focused on interactions of flavors with non-volatile food components; correlation of analytical methods with sensory measures; health effects of wine fractions and individual components and their biochemical mechanisms; and development of analytical methodologies for measurement of volatile components in grapes, musts and wines.

CA&ES

RESEARCH

#### **Changing Filters**



Laurie Lippin, Department of Human and Community Development, is working with groups of students to help

them improve their relationships with one another. She teaches a diversity class with a 25/75 percent ratio of white students to students of color.

Lippin's work is experiential. The students learn through what she calls "interaction exercises."

"There is a rhythm to my class," Lippin explains. "We usually move the seats around and work in small groups. Now that the class is bigger and we've been moved into an auditorium, it's more challenging; but it still works. This is an exciting, potentially life-changing class for my students. I am passionate about the process and the results."

Lippin's students learn how to talk with one another, after they've learned to recognize that everyone views and experiences life through their own 'filter.' They learn to recognize that students come to campus from a place of 'advantage' or 'disadvanage' and to realize the impact it has on each individual's ability to communicate, socialize and succeed.

"My students step beyond the world of traditional education and use methodology that is interpretative and personalized," Lippin said. "We talk about guilt, fear, identity and racism. We talk about campus issues of safety, discrimination and prejudice. The students coming to UC Davis reflect the multi-culturalism of the United States. As a campus and as a college, we have got to do so much better in relating to and responding to these students."

At the end of the term, Lippin's students make a commitment to

change the self-segregation of different ethnic groups on campus. Her hope is that once her students learn to talk with and listen to one another, that skill can be part of the campus experience and then part of the community experience.

"Diversity outreach is important work," Lippin stressed. "This class impacts my students for a lifetime." Lippin shares the Commitment-to-Change Statements from three of her students:

"I would like to break down any misconceptions that I have about other races and erase any stereotypes that I carry. I want to celebrate our country for its diversity."

-- Chinese-American student

"I hope to become more culturally aware and less likely to act on stereotypes."

-- Norwegian-Japanese American student

"I want to show my identity and background to the world. It betters me; thus, it betters the world around me."

> -- Cambodian-Chinese American student



# Odor Free Jock Socks Textile chemist **Gang Sun**, Division of Textiles and Clothing, has invented odorless sports socks and says that the same technology could be used to make everything from odor-free diapers to odor-free hospital gowns that repel bacteria and viruses.

The germ-free socks have been tested by volunteers, including the UC Davis cross-country team. The socks need only a machine wash with household chlorine bleach to recharge the bacteria-killing capacity, he said.

The technology works by attaching chlorine-containing molecules called halamines to textile fibers, using a method patented by Sun. Chlorine - in the form of halamines - has powerful bacteria-killing properties. Unlike chlorine gas, there are no adverse effects, as toxic chlorinated carbon atoms are not generated.

By sticking halamines to the cellulose fibers in cotton, the bacteria-killing effect can be bonded to the material and used again and again. The chlorine eventually is used up and can be regenerated with a chlorine bleach wash.

"The key to this invention was finding a practical way to bind the halamines to the cotton," Sun explained.

Sun began his work at Auburn University in Alabama and came to UC Davis in 1995.

#### Invasive Weeds – Pervasive Problem

A new \$3.8 million grant from the National Science Foundation was awarded to theoretical ecologist **Alan Hastings** and his UC Davis team to look at the ecosystem processes of invasive Spartina alterniflora, an Atlantic cordgrass that traps sediment and, therefore, elevates the marsh in Pacific estuaries. The award expires in 2005.

The grant, "Dynamics of an Invasive Non-Native Species and its Biological, Physical and Human Impacts: Spartina Alterniflora on the Pacific Coast," was awarded to UC Davis and will be directed by a team of five:

Department of Environmental Science and Policy: Ecological mathematician and professor Alan M. Hastings; assistant professor **Davis E. Layton**; assistant Cooperative Extension specialist **Edwin D. Grosholz.** 

Department of Land, Air and Water Resources: associate professor **Susan L. Ustin.** 

Division of Biological Sciences: evolution and ecology professor Donald R. Strong.

Atlantic cordgrasses decrease human commercial, traditional, non-commercial and esthetic values of Pacific estuaries. This study will look at the dynamics of an invasive species, including a core mathematical/conceptual model, physical and biological feedbacks and a careful, justified study of impacts on non-commercial human values. Integrating the valuation with the model will provide one of the first studies of invasive species on the value of ecosystem services.

Information Infrastructure
According to Professor James
Quinn, Department of Environmental Science and Policy, the
Department of the Interior's budget
contains funds for a California/
Southwest Center for the National
Biological Information Infrastructure
(NBII) to be located at UC Davis.

NBII is a federal interagency

#### **Understanding Conservation Easements**

Public policy specialist **Al Sokolow**, professor, Department of Human and Community Development, is researching the use of conservation easements to protect farmland in California. The 18-month project is assessing California's experience with acquisition of agricultural conservation easements (AACE) and its future potential. Results of the research will inform state and local program administrators and Californians about the advantages, risks and practicalities of this approach to farmland protection.

Conservation easements increasingly attract the interest of Californians as a tool for the protection of farmland from urbanization. AACE programs restrict future development potential on farmland, allowing landowners to continue farming while prohibiting more intensive non-agricultural uses. Widely used in certain other states, AACE is a relatively new technique in California.

Easements acquired so far are concentrated mostly in coastal counties; few are located in the Central Valley.

Three interrelated studies are proceeding concurrently.

- 1. Study of AACE participants and farmland owners in Marin and Sonoma Counties, focusing on incentives, disincentives, program experiences, farm characteristics and personal situations.
- 2. Statewide study of land trusts and local governments with AACE programs, exploring program origins and community support, organization and activities, landowner relations, pricing and

locational strategies, funding, and relationships to county and city planning.

3. Study of AACE prospects in the Central Valley, examining levels of knowledge and interest on the part of community leaders, perceived benefits, obstacles and planning relationships.

"We interviewed a large number of Californians - landowners, land trust managers, planners and other local government officials, and leaders in agriculture, development and other areas," said Sokolow.

In referring to the first study of the project, Sokolow noted that "farmland owners usually are motivated by cash and a personal desire to keep their family farms in agricultural production when they agree to sell conservation easements on their properties that prevent them from being developed into homes or businesses."

Results of the first study are available in a report titled "California Farmers and Conservation Easements: Motivations, Experiences and Perceptions in Three Counties," authored by Sokolow and Ellen Rilla, director of Marin County UC Cooperative Extension. The publication is available free on the UC Ag Issues Center Web site, http://aic.ucdavis.edu.

A second study will examine the organization and performance of local easement programs throughout California, and the third will discuss prospects for the technique in the Central Valley.

biological informatics initiative designed to provide access to information on biodiversity, rare species and habitats, invasive species, museum collections and biological resource information. NBII has supported research at Davis on biological information clearinghouses, species in parks and protected areas around the world, and invasive species in the Americas and elsewhere.



Students Studying Science
Howard Hughes Medical Institute
(HHMI) has awarded a grant to
UC Davis to promote innovation
in the teaching of the biological
sciences. Professor Ernest Chang
Department of Animal Science and
Bodega Marine Laboratory (BML),
is a member of the executive committee administering the grant. He
is directly involved in two programs supported by the grant.
Focused Integrative Research

Scholar Training Program (FIRST)
FIRST emphasizes the integrative

ractive nature of modern research. It represents a new model for the undergraduate research experience.

Faculty members grouped according to research field individually mentor junior- and senior-level undergraduates. FIRST students conduct part-time laboratory research and attend seminar courses that expand understanding of respective fields beyond the narrow focus of specific laboratories.

During the summer, students conduct full-time, faculty-super-

vised research in the laboratories of their individual mentors. They also meet weekly in journal clubs and research focus groups.

## Spring Quarter in Residence at Bodega Marine Laboratory

Each spring, BML offers a unique curriculum in marine biology, including formal course work, seminars and student-planned, faculty-supervised research.

Students begin with five weeks of course work featuring extensive laboratory and field work, including field trips to rocky intertidal areas, soft-bottom mudflats, sandy beaches and several terrestrial habitats. Lectures cover various aspects of population and community ecology, and comparative biochemistry and physiology.

At the end of the quarter, students give oral presentations of their work during seminars and prepare written reports. Students also participate in a colloquim, during which they attend seminars presented by world-class researchers.

Lessons for Teachers and Students

Students from the Davis Joint Unified School District are engaged in scientific inquiry during a LTRAS (Long-Term Research on Agricultural Systems) field trip, and their teachers are enthusiastic about the 100-year project underway at the LTRAS field research facility six miles west of campus.

**Dennis Bryant** of LTRAS, a college-administered research

center, spearheads an education outreach project where teachers district-wide are invited to participate in tours that include aspects of both basic and applied research.

"Our students have directly benefited from field trips to LTRAS, guest lectures in our classes and exposure to the breadth of field and laboratory research," commented Joan Kennedy, science department co-chair of Holmes Junior High School. "Contributions from the LTRAS project

have included plants and tissue samples - allowing teachers to design lessons around plant physiology, plant growth and current issues in California agriculture."

Kennedy feels that this experience has helped students understand science as a career possibility.

Dennis Bryant and his colleagues have been working with Holmes Junior High School for the past four years. "Teachers visit our field facility to observe the seasonal changes that are occurring," said Bryant. "They return to school with renewed excitement and enthusiasm. They can't wait to share their experience and enthusiasm with with their students and colleagues."

Mapping the Wheat Genome The National Science Foundation awarded a \$4.4 million grant to two UC Davis scientists and their colleagues to fund the physical mapping of one of the wheat genomes, the largest plant genome to be tackled to date.

This project will lead to a better understanding of the structure and organization of the genomes of all plants. Researchers, in turn, will locate the genes responsible for economically important traits that can be incorporated into improved agricultural crop varieties.

Professor **Jan Dvorak**,
Department of Agronomy and Range
Science, and UC Davis researcher **Ming-Cheng Luo** are collaborating
with scientists at Kansas State and
Texas A&M Universities and with
the U.S. Department of Agriculture's
Agricultural Research Service in
Albany, California.

The grant also provides an infrastructure at UC Davis to pursue other projects in plant genomics.

**Healthy Breakdown** 

According to a study undertaken by soils specialist **Stuart Pettygrove**, Department of Land, Air and Water Resources, and waterfowl biologist **John Eadie**, Department of Wildlife, Fish and Conservation Biology, letting ducks forage on flooded rice

fields breaks down rice straw.

Experimental rice plots were harvested, flooded and either wet-rolled or left untilled. Mallard ducks were allowed to forage on half of the experimental plots. When the experiment was complete, the ducks had increased straw decomposition by 78 percent in the untilled plots and by 18 percent in the wet-rolled plots.

"Birds may bring other benefits to rice farmers, by getting rid of insects and weed seeds and reducing the need for herbicides," suggests graduate student **Jeff Bird** who also worked on the project.

Eadie believes that fields managed in this way provide habitat and attract more waterfowl, in addition to breaking down straw and potentially reducing pests.

The study was published in the *Journal of Applied Ecology*.

Coping Strategies
Professor Carolyn Aldwin,
Department of Human and
Community Development, spoke at
the International Congress of
Psychology in Stockholm, describing
a series of studies she did examining
the long-term effects of childhood
environments on adult well-being.

Current family dynamics often reflect early childhood family dynamics; but having a difficult family in early life has little effect if those family dynamics are not replicated in the current family.

Positive family environments have protective effects, even controlling for current family dynamics, for both depression and alcoholism.

Childhood stress can affect personality development, which, in turn, can set up people for problem drinking.

People who report having supportive early childhood environments cope better with stress in adulthood, whereas individuals who were abused in early chilhood use more negative coping strategies, which, in turn, have adverse effects on their mental health.



Live-insect Petting Zoo
Area school children come to the
Bohart Museum of Entomology on
the UC Davis campus because they
are fascinated by the idea of a liveinsect 'petting zoo.' Once they get
here, half of them are thrilled for
the opportunity to watch a walking
stick crawl up their arms while the
other half stand in the back of the
class with horrified expressions of
disgust or fear on their faces.

This is just another day in the popular science education outreach program located on the first floor of Academic Surge on the UC Davis campus.

Museum director **Lynn Kimsey**, Department of Entomology, welcomes visitors for hands-on programs, lectures and tours. Highly trained staff and students provide educational programs, information and identification services to the public, university associates, government agencies and businesses.

The museum collections were developed in the Department of

Entomology in 1946 for teaching and research. Today, nearly 7 million specimens are housed in the museum.

"The Bohart Museum is one of the largest systematic entomology resources in the country, providing specimens and library materials to scientists and students worldwide through loans and visits," Kimsey explained. "We loan more than 30,000 specimens for research each year."

Informal science education programs about insects - consisting of permanent and traveling exhibits and hands-on programs, lectures and tours - are popular with schools and community groups, especially the live-insect 'petting zoo.'

"We serve roughly 8,000 school-age children, parents and teachers each year," Kimsey said. "Demand for these programs is very high."

## A Giant Leap!



Human and Community Development students at UC Davis are working as interns in an innovative, successful program in Yolo County that is improving elementary school attendance and performance.

Cooperative Extension specialist **James Grieshop**, Department of Human and Community Development (HCD), is overseeing an after-school program called LEAP (learning, enrichment, achievement and pride) at Dingle Elementary School in Woodland.

"This program makes a huge difference for the children at Dingle, and it makes a huge difference for our students who work with them," Grieshop said. "UC Davis has this excellent opportunity to be in partnership with Dingle Elementary."

The program services 50 students from first through sixth grades. LEAP participants are nominated by their daytime classroom teachers who select candidates deemed 'at risk,' either academically, behaviorally and/or socially. Volunteers from UC Davis, Woodland Community College, Woodland High School and Lee Junior High School staff the program. Teachers from Dingle Elementary and community members volunteer to teach enrichment activities and tutor students.

UC Davis began its relationship with Dingle through the UC Links Program. Each academic quarter, university students work with at-risk children in the after-school program. According to Grieshop, human and community development students find the experience relevant to their classes. "Each week, our students discuss their observations of program participants or program activities among themselves and with

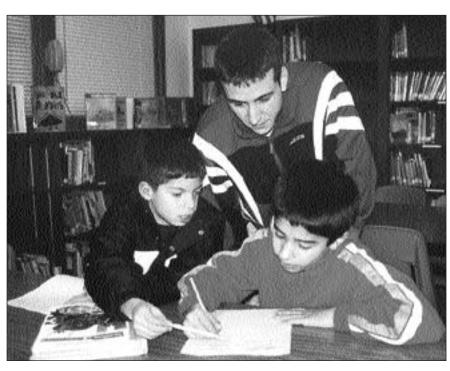
their professors," Grieshop said.
"This year, they are organizing computer-learning activities."

Several HCD students were working with children one afternoon in January. When asked "What is the best part of working with the students?" and "What is the most challenging part?," **Abby Goldstein** replied, "Working with the kids!" It was obvious that she loved her job and that the kids loved her.

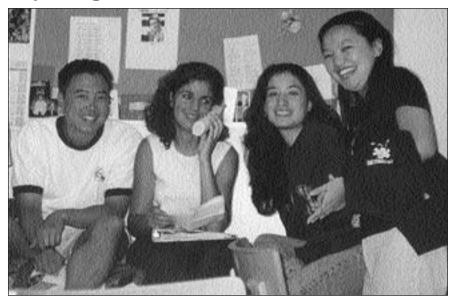
**Amy Austin** was an intern last year and this year is program coordinator. "I like the feeling I get working with the kids. It's so satisfying."

Sitting atop a cafeteria table in the corner was **David Franklin**, who teaches a second/third-grade combination class at Dingle. He was listening intently to an eight-year-old child with big, brown, trusting eyes.

It's Franklin's second year teaching. He is a graduate of the HCD program ('87, Human Development) and serves as a mentor to all the students in the room...the elementary school students who have been identified as 'at-risk' and the university students who are trying to make a difference in the success of a community school.



#### **Exploring Professions in the Sciences**



**Adrian Mei**, **Mounia Chaib**, **Connie Cortez** and **Cindy Chen** are socializing at the dorms at the end of a full day working in the SURPRISE program.

The Summer Undergraduate Research Program in Science and Engineering (SURPRISE) is an eightweek summer internship program designed to provide research experience to students from backgrounds that traditionally have not led to academic careers and to stimulate interest in graduate study in the agricultural, environmental, biological,

resource and physical sciences, math and engineering.

SURPRISE students are assigned to faculty mentors and work directly in their labs, participate in research discussions, attend educational workshops, seminars and field trips, write research reports, and present their research projects to their student peers and invited guests at a formal

banquet at the program's conclusion.

"Exposing students to well designed research projects defines and addresses scientific curiosities," explained **Judy Sauer**, associate director of the program. "These students are trained to think analytically and to use their imaginations to solve complicated research queries. This experience often results in lasting impressions that motivate students to explore professions in the sciences."

According to Sauer and program co-director Robert Flocchini, the combination of a student's willpower to succeed and the mentoring by a prestigious UC Davis faculty member sets the stage for the pursuit of graduate training in the sciences.

The SURPRISE program fosters rewarding and life-long friendships. Students gather in dorm space and the dining commons, attend program-related activities and spend weekends sightseeing, hiking and visiting nearby cities and areas of interest.

"This program's unique blend of nurturing research skills and encouraging social interactions is the catalyst that produces future stars within the science community," said Sauer.

#### **Parrot Outreach**

Professor James Millam, **Department of Animal Science**, wanted to develop a program to educate the public on responsible pet care, avian biology and conservation, while simultaneously providing an opportunity for undergraduates to gain experience in informal science education. He wanted to use live animals as a means of conveying information so that the experience would be memorable. And, he wanted a self-supporting program.

The Parrot Outreach Program, a traveling one-hour presentation to local elementary schools and convalecent homes, features tamed birds from the Psittacine Research Project colonies, including a show-stealing, blue-and-yellow Macaw named "Oscar." Presentations are made by

undergraduate student volunteers.

Undergraduate students get firsthand experience handling and learning about parrots and working with the community, and they gain careerenhancing experience in public speaking. Classroom students are introduced to issues ranging from responsible pet care to basic bird biology and conservation. Classroom teachers and kids benefit from a science curriculum reinforced with live animal-based examples.

Volunteers are recruited and trained and then travel to schools as teams to conduct outreach presentations.

"We are exploring possibilities for Web-based follow-up opportunities for classroom kids who are motivated to learn more about parrots," Millam said. "There is a lot of student and community interest in the program."



Undergraduate student **Christine Hoover** enjoys a special moment with Oscar, the Macaw.

#### **Learning Laboratories**

#### By Loran Hoffmann

One afternoon each week, Michelle, Venus and Chai and other UC Davis undergraduate students arrive at the Birch Lane Child Development Center in Davis to lead hands-on, inquiry-based science activities with children grades K-3.

Venus and Chai are interested in teaching as a career. Michelle is not certain if she wants to teach; but she knows that she wants to work with children.

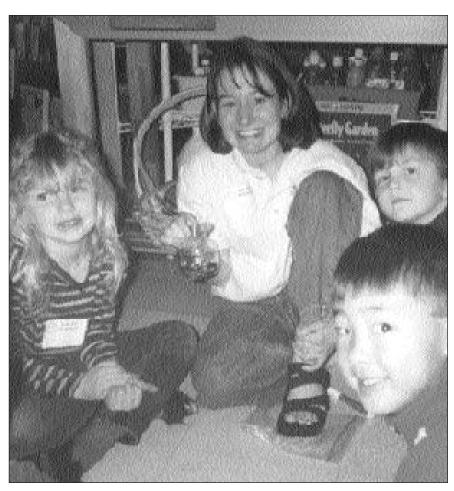
This internship provides UC Davis students an opportunity to explore applications of pedagogy, human development, innovations in teaching science and direct field teaching experience.

This course of study in the Department of Human and Community Development emerged from the Youth Experiences in Science (YES) Program, a research and development project funded in part by the National Science Foundation. The project developed a set of thematically linked science curriculum for children five through eight years of age enrolled in afterschool child-care programs.

According to 4-H specialist **Richard Ponzio**, 4-H Center for Youth Development director and HCD faculty member, the YES curriculum - along with the theoretical course work - provides a powerful science teaching model for undergraduates interested in pursuing a teaching career.

YES project coordinator **Loran Hoffmann** and internship coordinator and placement supervisor **Emily Ohrwall** recruit HCD students interested in working with children, select placement sites for the undergraduates and coordinate student training and supervision.

Child development centers located on school grounds throughout Davis have become 'learning laboratories' for the undergraduates and exciting places for children to explore the world of natural science



through hands-on science activities.

"The course has made a difference in the quality and quantity of children's science experiences offered at child development centers and school enrichment programs," said Ponzio. "The course also has had a significant impact on the undergraduates' attitude towards science."

Thirty-five undergraduates participating in the class completed a preand post-survey designed to measure their baseline interest and attitude toward science.

Ten percent of the respondents on the pre-survey finished the sentence "Science is..." using words with negative connotations toward science, such as "too hard," "frustrating," "not for me!"

At the conclusion of the course, almost all respondents finished the sentence using words reflecting positive attitudes toward science, such as "interesting," "fun," "fascinating" and "can be learned."

A second part of the impact assessment included a draw-a-scientist activity. Undergraduates were given a blank piece of paper and asked to draw a scientist. Seventy-five percent of the undergraduates depicted the scientist as an adult male in a lab coat. Following the course, 84 percent of the undergraduates drew a scientist as an adult of their own gender or as children!

"This type course - which includes theoretical course work with authentic teaching experience - opens up education as a profession and possible career choice for participating undergraduates," said Ponzio. "The YES undergraduate program provides unique, authentic teaching experiences for UC Davis students and enriches the opportunity for young children in childcare settings to learn and enjoy science. It's a win-win!"

#### CA&ES

### Pierce's Disease, Grapes and the Glassywinged Sharpshooter in California: Reviewing Critical Research

Pierce's Disease - vectored by the Glassy-winged Sharpshooter - has enormous potential to dramatically impact a number of important agricultural industries in California, including grapes, citrus, almonds, alfalfa and containerized nursery products. It already has been devastating to grape production in Southern California.

UC Davis researchers believe that a multidisciplinary approach to solving this problem is required. In an effort to mobilize the entire research community and because UC Davis has the breadth and expertise on its faculty to address this problem - primarily in the Departments of Viticulture and Enology, Plant Pathology and Entomology, Dean **Neal Van Alfen** sponsored a symposium on campus in December 2000.

More than 50 scientists doing promising research on bacterial diseases and sharpshooters were invited from California, throughout the United States and around the world. The symposium was titled "Pierce's Disease and the Glassy-winged Sharpshooter in California: Reviewing Critical Research." Scientists from eight countries attended.

Participants were addressed by UC Davis Chancellor Larry Vanderhoef; CA&ES Dean Neal Van Alfen; Bill Lyons, secretary of the California Department of Food and Agriculture; Richard Rominger, former USDA deputy secretary of agriculture; and Ted Batkin, California Commodity Commission.

CA&ES faculty presentations included:

**M. Andrew Walker**, "Overview of Pierce's Disease: Genetic Sources and Applications to Resistance"

**Doug Cook**, "Application of Plant Genomics to Pierce's Disease: EST Profiling and Data Mining"

**David Gilchrist**, "Genetic Engineering: Functional Screening for Resistance and Gene Transfer in Vegetative Tissue of Grape"

**Michael Reid**, "Bacterial and Bacteria Products in Xylem Occulsions"

**Bruce Kirkpatrick**, "Prospects and Challenges of Controlling Xylella fastidiosa with Bactericides"

The symposium was divided into five sessions. Each was summarized at the close of the conference. For a copy of the summaries or additional information, contact Brenda Nakamoto, 530/752-1606; bvnakamoto@ucdavis.edu.



#### IN Memoriam

#### Keith P. Rice

(Teaching Credential, '49, Animal Science) June 10, 1999

#### **Deborah Johnson Clark**

(B.A., '73, Child Development) February 1, 2000

#### Robert G. Prochaska

(B.S., '58, Entomology) June 14, 2000

#### **Charles "Boot" Martin**

(B.S., '76, Economics) August 12, 2000

#### Richard E. Owen

Senior Superintendent of Cultivations
Department of Agronomy
and Range Science
August 28, 2000

#### **Meghan Christian Gumbelevicius**

Exploratory Program Student September 17, 2000

#### W. Landon Hefner

(B.S., '72, Applied Behavioral Science; M.A., '74, Education) October 4, 2000

#### Patricia D. Moore

(M.S., '83, Consumer Science) October 16, 2000

#### J. Herbert Snyder

Professor Emeritus Department of Agricultural and Resource Economics November 18, 2000

#### **Harry Gee**

Post-doctoral Researcher Department of Vegetable Crops November 28, 2000

#### Lloyd W. Swift, Jr.

Donor Department of Wildlife, Fish and Conservation Biology February 17, 2001

#### **Ian Garnett**

Lecturer Department of Animal Science March 4., 2001



Robert D. Burrows ('48, Animal Husbandry) of Sacramento retired after 40 years in the wine and spirit business. He managed Sacramento Valley Wholesale House prior to retirement. Today, Burrows travels and fishes and is an active member in Save the American River Association, the Lower American River Task Force and the American River Parkway Advisory Board.



Roy T. Ott ('52, Agricultural Economics) of Grass Valley, California, raises Christmas trees, peaches, apples, pears, plums and

berries. For almost 30 years, he taught vocational agriculture, biology and mathematics in Yuba City and Vacaville. More recently, he has been involved in Roy's Tree Farm and enjoys music and dancing for fun. He and his wife of 51 years have three sons and six grandchildren.

"When we travel Route 80," Ott writes, "we reflect upon the unforgettable teachers, the good people and the good times at Davis, including square dancing in the Silo..."



W. James Clawson (B.S., '56, Animal Science; M.S., '61, Animal Husbandry) of Dallas, Oregon, is a Cooperative

Extension rangeland management specialist emeritus with ties to the UC Davis Department of Agronomy and Range Science. He is also a small acreage landowner, active in the local soil and water conservation district.

Clawson is a director of the Polk County Livestock Association. He enjoys living in the Northwest, travelling throughout the country and keeping in touch with UC Davisassociated friends. He serves on the college's Mrak Student Loan Selection Committee.

Ehvind "Marc" Faye ('58, Agricultural Economics) was named 2000 Agri-Business Person of the Year at the 33rd annual Farm-City Banquet at the Yolo County Fairgrounds. The event was co-sponsored by the Woodland Chamber of Commerce and the Yolo County Farm Bureau. Faye was recognized for his outstanding achievements and contributions to the county and to agriculture.

A lifelong farmer, Faye and his wife of 40 years, Gerda, operate the family's El Dorado Ranch. He is a California Agricultural Leadership Program - Class III graduate and served as deputy director of the California State Department of Food and Agriculture.

**Luanne Hebner Perez** ('59, Family and Consumer Science) of Fillmore, California, is a teacher in the Fillmore Unified School District.

**Don DeValle** ('60, Food Science) of St. Augustine, Florida, retired after managing plants for Campbell Soup for 33 years. He worked in Fremont, Nevada; Douglas, Georgia; and Fayetteville, Arkansas. DeValle, who is a member of Delta Sigma Phi fraternity, spends his free time playing golf and the stock market!



Charles A.
Francis ('61,
Agronomy) of
Lincoln,
Nebraska, is a
professor of
agronomy at the
University of

Nebraska. In November 2000, he received the first national Seventh Generation Research Award for exemplary research and teaching in areas of sustainable agriculture and systems research. In September 1999, he received an honorary doctor of science degree from Helsinki University for educational work in

ecological agriculture in the Nordic/Baltic Region.

Francis and his wife Barbara have lived in Lincoln since 1977. She is a pre-school Spanish teacher.

**Kerry Mazzoni** ('71, Child Development) of San Rafael, California, was named secretary of education by Governor Gray Davis. She stepped into the cabinet post last December when her legislative term expired. She left the Assembly due to term limits.

"Kerry Mazzoni was a driving force for education while in the Legislature, and now she brings invaluable experience to improve California schools," Davis said.

Before being elected to the Assembly, Mazzoni spent seven years on the Novato Unified School District Board, serving as president in 1990 and 1991.

Mary Dahl Christopherson ('73, Animal Science) of Brentwood, California, is the owner and manager of Harvest Moon Farm in Brentwood where she breeds Arabian horses for competition and companionship. She works as a laboratory technician for the City of Benecia Water Quality Lab.

Christopherson also assists her husband in managing his specialty construction business in Walnut Creek. She enjoys riding and gardening in her free time.



Heather Fargo ('75, Environmental Planning and Management) was elected mayor of Sacramento after serving on

the City Council

for 11 years. She was elected to the council in 1989 and re-elected in 1994 and 1998. She represented Natomas, Gardenland, downtown and Alkali Flat areas.

Fargo met her future husband while attending Davis. **Alan Moll** ('76, Applied Behavioral Science) is a home remodeling contractor and furniture craftsman.

Fargo also is manager of the state parks volunteer program with the Department of Parks and Recreation.

**Rebekah "Bekke" Hess** ('76, Dietetics) of Kailua Kona, Hawaii, is a financial adviser for Morgan Stanley Dean Witter.

"I made a career change several years ago," Hess writes, "never dreaming that I would end up moving to Hawaii. I am enjoying the climate, the ocean and the lifestyle!"

**Gary J. Germone** ('76, Food Science) of San Jose is a production manager for Guittard Chocolate Company in Burlingame, California. He returned to the Bay Area after working as plant superintendent for a major macadamia nut processor in Hawaii for 10 years.

Germone coordinates day-to-day production activities and interfaces with marketing and research and development units on special production runs for test products and new-product introductions.

Germone writes: "Recently, several ex-Struve alumni from the Bay Area got together to catch up on the last 26 years. It's been wonderful to see one another again, share memories and realize that a special bond still exists among us."

[Editor's note: Struve is one of four dorms that comprise the Primero student housing complex.]

Stephen Krebs (B.S., '76, Plant Science; M.S., '77, Horticulture; Ph.D., '95, Ecology) of Napa, California, is program coordinator and professor of viticulture and winery technology at Napa Valley College. In 1999, the program enrolled over 1,000 students.

Krebs is responsible for program curriculum and scheduling, administration and finance, hiring and supervision of part-time instructional staff, and operation and management of the Student Vineyard. He also serves as college liasion to the wine industry.

Previously, Krebs was a viticulturist and manager for Mayacamas

Vineyards in Napa, Matanzas Creek Winery in Santa Rosa and Sunny Slope Ranch in Glen Ellen.

**Ed Blonz** (M.S., '77; Ph.D., '83, Nutrition) is the director of More.com, a Web site that links to a broad range of food and nutrition sites. It also links to commercial operations and translates text into other languages. *The Blonz Guide* is available at www.blonz.com.

Blonz is a winner of the James Beard Foundation Award for writing on diet, nutrition and health.

**Cathy Corison** (M.S., '78, Food Science) of St. Helena is founder/owner of Corison Winery where she produces Cabernet Sauvignon.

Corison and her husband built a new winery between St. Helena and Rutherford last year. It is home and workplace to them and their two daughters. The winery's output is 2,000 to 3,000 cases a year.

Corison studied marine biology at Pomona College and took a noncredit wine appreciation course in her sophomore year. After receiving her B.S. in biology, she attended UC Davis where she earned a master's degree in enology.

John Metzer ('78, Animal Science) of Gonzales, California, is a self-employed hatchery owner. Metzer Farms is a duck and goose hatchery that ships ducklings and goslings throughout the United States and internationally to commercial growers, hobbyists, feed stores and other hatcheries. Metzer also is a representative to North and South America for Nordam International, a Danish duck and goose breeding company.

Louie Valenzuela (M.S., '79, Agricultural Economics) of Santa Maria, California, is the chief financial officer of Valenzuela Engineering, Inc. He recently was appointed trustee of Allan Hancock Community College and is serving as chair of the Santa Maria Valley Chamber of Commerce and Visitor's Convention Bureau.

**Debra Levesque Zatarain** ('79, Agricultural and Managerial Economics) of Tustin, California, is owner/cruise consultant for Cruise Holidays of Anaheim. The firm specializes in cruises for individuals, families and groups. She has worked in cruise sales since graduating from UC Davis.

Marie Chesley ('80, Design) of Corvallis, Oregon, is a theatrical costume designer. In June 2000, she retired from Oregon State University as an associate professor after teaching theatre arts for 14 years.

Roberto Avena Bustillos (M.S., '80, Food Science) was appointed director of the Insituto Technologico de Culiacan in Mexico in November 2000. He oversees the academic efforts of 3,600 students and 450 professors and administrative workers in six engineering majors and graduate programs.

Bustillos received his Ph.D. in engineering from UC Davis in 1992. He worked with Professor John Krochta who has a joint appointment in the Department of Food Science and Technology and the Department of Biological and Agricultural Engineering.

Celia Welch Masyczek ('82, Fermentation Science) and Robert Masyczek (M.S., '82, Food Science) live in Napa, California. Celia is the winemaker for Hartwell Vineyards in Stags Leap and Staglin Family Vineyard in Rutherford. She also makes wine for several small-scale clients. Robert is a winemaker at Beaulieu Vineyard.

Phyllis Gail Hotchkin Weintraub (Ph.D., '84, Entomology) of Neve Dekalim, Israel, is a research entomologist for the Agricultural Research Organization at the Gilat Research Station in Neve Dekalim. She has been working at the southern research station near Be'er Sheva for six years.

**Chuck Holloway** (B.S., '84, Agricultural Science and Management) of Sheridan, Wyoming, is an instructor in the agriculture department at Sheridan College. During the summer months, he guides fly fisherman in Wyoming and Montana on the Big Horn River.

Holloway and his wife have two sons, ages 18 months and four years.

Scott McLeod ('85, Fermentation Science) has been Francis Ford Coppola's winemaker since 1991. McLeod was mentioned in an article last October titled "The Winemaker" by Sacramento Bee food editor Mike Dunne. The story highlighted the life and pursuits of Coppola, who has lived in Napa Valley since 1974.

Joel Van Eenennaam (M.S., '85, International Agricultural Development) and Alison Balson Van Eenennaam (M.S., '90, Animal Science; Ph.D., '97, Genetics) of Davis met at a Super Bowl party in 1989 when Joel was a research associate in the Department of Animal Science and Alison was an undergraduate exchange student from the University of Melbourne. They were married in 1989 and have two sons, Alec and Kyle.

Both Joel and Alison love to travel. Joel spent four years in Thailand, working in small villages to rebuild fish spawning stations and teach fish farmers how to increase spawning. Alison once traveled by bus with a group of Australians through Nepal, Pakistan, Iran, Bulgaria, Romania, Scandinavia and England.

Joel currently is a researcher in the Department of Animal Science, specializing in fish reproduction. Alison is a scientist for Calgene.

**Eric M. Smith** (M.S., '86, Agricultural Economics) of Visalia, California, is an agricultural lender for The MONY Group.

**Annette Laverty** ('87, Animal Science/Nutrition Science) of Oakland is a public health nutritionist at the Alameda County Depart-

ment of Public Health. She received a Master of Public Health from UC Berkeley's School of Public Health in 2000 and passed the registered dietitian examination.

Laverty writes that the classes she took in the Department of Nutrition "channeled her interests" and "motivated" her to pursue an advanced degree. "I want to help disadvantaged people in my community," she said.

**Age A. Nyborg** (M.S., '87, Soil Science) is living in Norway and working at the Norwegian Institute of Land Inventory. He has been with the institute for 12 years, working as a soil mapper, manager of the soil survey department and, currently, as a researcher.

Nyborg's professional activities include classification of Norwegian soils and using the Norwegian soil information system in risk assessments. He started a Ph.D. study on spatial variability of soil hydraulic properties in marine clay soils and is a member of a research team working with pasture quality assessment in the high mountain areas of Northern Pakistan.

Nyborg and his wife Ingrid have two children, Morgan and Kimberly.

Manuel Hernandez (Ph.D., '87, Soil Science) of Canary Islands, Spain, is the director of Canary Islands Water Center, a new institution funded by private and public sectors. It will provide technical support and extension services on water issues to the seven Canary islands.

Following graduation from UC Davis, Hernandez returned to Spain and worked in Madrid as an environmental consultant. He focused on soil and groundwater pollution and treatment, environmental audits for large Spanish corporations and U.S. multinationals. Later he worked on water quality and waste issues for the Central Spanish government.

Hernandez and his wife have three children.

Melissa Thorme (M.S., '88, Ecology) of Davis works in the natural resources department of Downey, Brand, Seymour and Rohwer, a Sacramento law firm. She joined the firm as counsel; her law practice focuses on environmental and administrative law, including water quality, waste water permitting and endangered species issues. Thorme received her law degree from UC Davis in 1990.

John Alban (M.S., '90, Food Science) of Edna Valley, California, started planting grapes for other people in 1985 and bought his own estate vineyard in 1989. Today, Alban Vineyards supplies 90 percent of the grapes used for the 5,000 cases of wine it produces annually.

Alban said that he wanted to be a winemaker when he was a teenager. He apprenticed in the Rhone region of France and, today, all eight wines produced by Alban Vineyards are made in the Rhone style.

Asked which wine he would serve an important dinner guest, he responded: "It would depend on the guest and his/her style and personality. Which of your children would you introduce to a guest to make a good impression? It all depends."

**Alfreda Sebasto** ('90, Applied Behavioral Science) of Fresno and **Peni Wilson** ('91, Design) of San Diego were named to the board of directors of the Cal Aggie Alumni Association. Each will serve a two-year term.

Sebasto is senior account executive at the Fresno public relations firm Stoorza, Ziegaus and Metzger. She served on the Fresno County Farm Bureau board of directors, the California Farm Bureau Young Farmers Committee and in leadership roles with numerous California agricultural organizations.

Wilson is a certified interior designer. She received the CID designation from the California Council for Interior Design. She was named an Award of Distinction recipient by the College of Agricultural and Environmental Sciences in 1998.

**Dany Doueiri** ('91, International Agricultural Development) of Culver City, California, is vice president of IslamiCity in Cyberspace. He previously served as vice president of Human Assistance and Development International.

**Shelly Bianchi-Tomasin** ('92, Environmental Design) of Sonoma develops software and provides customer support for Blend Winery Software in Petaluma. She has two sons, Stephen and Nicholas.

**Kieshia Fykes Nathaniel** ('92, Applied Behavioral Science) of Los Angeles is a development specialist with the Los Angeles County Housing Authority. She received her M.S. in public administration in 1996 from the University of Southern California. She is married to Keith Nathaniel, a 1992 UC Davis sociology graduate.

**Debra Norris** ('94, Design) of Fremont, California, is a certified kitchen designer at the Expo Design Center in Palo Alto. Her work ranges from extensive remodel design to new home space design. She works with clients to recreate spaces, select materials and build new kitchens and bathrooms.

Norris previously worked as a Home Depot kitchen designer. She received her Certified Kitchen Designer designation from the National Kitchen and Bath Association and plans to sit for the Certified Bath Designers examination in September.

Heather Runes ('95, Environmental Toxicology) of Richmond, California, is a research chemist with PTRL West, Inc. She completed her Ph.D. in toxicology at Oregon State University in December 2000. The title of her dissertation was "Atrazine remediation by a constructed wetland."

**Brian Truong** (B.S., '96, Human Development) of Los Angeles is a financial analyst for Robinsons-May in North Hollywood.

Truong remembers Davis as a



small college town with lots of cows and, of course, the cow smell. "I quickly learned that 'Aggies' meant 'agriculture' and

that you can get a speeding ticket for going over 21 mph on Anderson Road," he writes. "And, the bike circles actually work, unless you're a freshman!"

Truong was a member of the UCD Stunts Team his senior year. "I met a bunch of lifetime friends at Davis, and I do miss the community," he said. "Here in LA I enjoy playing tennis, working out, going to the beach and partying. Go Aggies!"

**Isabelle Guerin-Groelz** ('97, Design) of San Francisco is working as a graphic designer for Pentagram Design Inc. She is attending the Academy of Art College of San Francisco and expects to graduate in June with a Masters of Fine Art in graphic design.



Liana Delucca ('98, Agricultural and Managerial Economics; Design) of Pasadena attends Art Center College of Design.

"I am specializing in product design," Delucca writes. "UC Davis definitely provided me a great base of knowledge and prepared me for many new endeavors! I keep in touch with many of the people I met my freshman year at the dorms. I have many reasons to be thankful to UC Davis and never will forget my experience there!"

**Stefanie Bosch** ('98, Wildlife and Fisheries Biology) of Emmett, Idaho, is a fisheries bio-aide with the Idaho Department of Fish and Game.

**Katherine Watt Chan** (Ph.D., '99, Pharmacology and Toxicology) of Quincy, Massachusetts, is an envi-

ronmental consultant with Gradient Corporation. She and her husband relocated to Boston last summer after returning from their honeymoon in Europe. They live with their Labrador retriever, Casey.

Maral Kasparian ('99, Wildlife, Fish and Conservation Biology) of Stillwater, Oklahoma, is a graduate student in the Department of Zoology at Oklahoma State University. She expects to graduate in 2002 with a master's degree in wildlife ecology.

Kasparian is conducting research on raccoon and opossum ecology, determining through a removal experiment if competition for habitat, space and food exists.

Andrea Mongini (M.S., '00, Nutrition) of Turlock is a veterinarian with Lander Veterinary Clinic. She works in a food-animal practice: 95 percent dairy, 5 percent beef and small ruminants. Her work involves herd health examination; sick cow evaluation and surgery; and herd health consultation.

"My master's degree has been a great complement to the DVM," Mongini writes. "I am better able to assist dairies in managing herd health and nutritional problems with the combined degrees. Also, the M.S opens up another field of veterinary medicine - the use of nutrition and management together to prevent disease."

**Gavin Ow** ('00, Biological Sciences) of Yuba City, California, is teaching English at Shandong University of Science and Technology in China's Shandong Province.

"I teach two reading classes and three writing classes," Ow writes, "I also teach a newspaper and magazine reading class and film appreciation class to 54 seniors, and I give a free lecture every two weeks on any topic. Last week I talked about UC Davis."

"I'm having a great time here and enjoying teaching. The people are very friendly and make me feel welcome every day. But, I still miss Davis, and the campus is one of the first places I'll go when I get back to the United States."

**Richard Rominger** ('49, Plant Science) of Winters, California, former deputy U.S. secretary of agriculture, was honored as a longtime public servant when a newly renovated wing of the Agriculture Department Building in Washington, D.C. was named the Richard E. Rominger Wing.

Rominger, a Yolo County farmer and one-time head of the California

Margarita Camarena (B.A., '98, Design; Art Studio) of Davis, is an artist in the Dean's Office of the College of Agricultural and Environmental Sciences. She coordinates production of the college's alumni magazine, CA&ES Outlook, and provides design and production support on a wide variety of print and electronic projects that promote the programs and services of the college.

Camarena continues her artistic endeavors outside the office; she oversees a community art project for the City of Woodland. She began working with the Department of Parks and Recreation last summer through a grant provided by the Woodland Beautification Committee.

Department of Food and Agriculture, went to Washington in 1993 to manage the day-to-day operations of the agriculture department. He was previously a board member of the American Farmland Trust.

Rominger was named 1992 Agriculturalist of the Year at the California State Fair. He was recognized by the college as an Award of Distinction recipient in 1989.

Thomas W. Crawford, Jr. (M.S., '72 Ecology; Ph.D., '80, Soil Science) of Lincoln, Nebraska, is associate program director of the

Local children between the ages of eight and 16 meet with Camarena three days each week. The program involves the children in a project that enhances their community and develops a variety of individual and group skills.

"The children introduce a different perspective to the mural and add their own personal touch," Camarena said. "When we began the project, the children were shy and intimidated, and it is a learning experience for me to watch their personalities evolve. When the project is complete, they show their pride and ownership to their friends and loved ones."

The murals, located at Campbell Park in Woodland, **International Sorghum and Millet** Collaborative Research Support Program at the University of Nebraska.

In 2000, Crawford was part of a 10-member team of scientists in Ethopia that assessed agricultural research needs and capabilities in the food-insecure Amhara National Regional State. For three years, he worked in the International Program of the USGS Earth Resources Observation Systems Data Center in South Dakota

Crawford and his wife Jeanne have three daughters.

measure 30 to 40 feet wide by eight feet high. The theme, designed by Camarena, centers around the Chinese/Tibetan culture.

"The original theme of the park was dedicated to Hannabel Campbell, a Chinese ambassador," Camarena explained. "Existing park equipment and sculptures embody the Chinese influence, so I wanted to enrich the beauty of that culture. This is a great way to teach the children about other cultures."

Boys and girls are starting to sign up for the 2001 summer program that begins in May - when Camarena and her students begin phase two of the community art project.

Margarita Camarena, back row,



## The College of Agricultural and Environmental Sciences College Custom Apparel Program

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Kingston

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#### **Alumni Information Sheet**

This alumni section is a favorite among our 45,000 readers. People like to know where you're living and what you're doing. Take a moment to drop us a note. Return this form to the address below or send us the same information electronically to outlook@agdean.ucdavis.edu. If you send us a photo, we'll scan and return it to you immediately.

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