# CASES OUTLOCK

A publication for alumni and friends of the College of Agricultural and Environmental Sciences • UC Davis 25all 2004

# LAMNING FOR THE FUTURE

# CASES OUTLOOK

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#### Message from the Dean

#### By Neal K. Van Alfen

Change is always difficult, particularly when you are currently successful. Yet, change is inevitable and necessary.

Few successful businesses are organized and function today much as they did 40 years ago. Our college's departments completed their final split from UC Berkeley and UCLA about 40 years ago and, in the process, created most of our existing programs and departments.

The severe budget cuts we experienced over the past few years created a situation where change must occur if our college is to retain its international preeminence.

While we have not given up hope that the cuts to the Agricultural Experiment Station and Cooperative Extension will be restored as the state's economy improves, we must respond to the cuts we received. Making difficult changes now will create a foundation for future growth and continued success.

Throughout the past two years, we have been planning -- not only for how we were going to absorb the budget cuts in the short run -- but how to narrow the scope of our programs, operate them more efficiently, and narrow redundancies.

Faculty have been engaged in planning processes that examined our plant sciences, pest sciences, agricultural and natural resource sustainability programs, environmental biology, regional and spatial planning, and the role of the Agricultural Experiment Station. The goal of our planning process has been to identify priority areas for the college to support for the future and to assure that these programs have strong interconnections.

We all recognize that in our new budgetary climate we cannot do all things well, and so we must avoid small, stand-alone programs. This planning for our future is not complete, but major changes are already in progress because of the recommendations of these planning groups. Two significant departmental changes are underway.

#### Design

The Design Program, a component of our Department of Environmental Design, will transfer to the College of Letters and Science. This is an excellent, primarily undergraduate program that has strong affinities to other L&S visual arts programs.

The Design Program is in need of significant new investments in the near future. Because of the unique nature of the program and our inability to invest in its future, we decided that the program and its people would be better served in L&S than in our college.

#### **Plant Sciences**

Our plant sciences departments are among the great strengths of our college. We are considered by many to have the best plant sciences programs in the world. The structure of these programs can be traced back to the beginning of the past century.

The college has five departments in the plant sciences: Agronomy and Range Science, Environmental Horticulture, Pomology, Vegetable Crops, and Viticulture and Enology.

Changes in research over the past 50 years have created a need for specialized facilities often duplicated in these five departments. During our planning sessions, we realized that it was time to eliminate redundancy in our plant sciences facilities and programs while increasing our ability to serve our traditional stakeholders and students.

Our goal is to provide cuttingedge applied and basic research and outreach programs and strong relevant undergraduate teaching programs. Our plan is to combine four of these departments into a newly organized Department of Plant Sciences. You'll read more about this in our feature article beginning on Page 4.

Plant scientists in the Department of Viticulture and Enology will work closely with their other plant sciences colleagues while retaining their departmental affiliation with the enologists. The Department of

Viticulture and Enology is one of the founding departments of the Robert Mondavi Institute for Wine and Food Science (RMI).

One of the strengths of UC Davis relative to other universities has been a culture that effectively removes barriers that can result from administrative structures. I personally think that this success has occurred, in large part, because of the culture that the campus inherited from our college. For almost half of its 100-year history, the campus was the college.

A mechanism we are using to assure that this heritage of collaboration across administrative structures continues into the future is the support or formation of cross-college and university institutes and centers.

The RMI, the John Muir Institute of the Environment and the Genomics Center are some of these; and, we are in the process of forming others to address issues of agricultural and environmental sustainability, regional change, and foods for health.

The College of Agricultural and Environmental Sciences is committed to its role as one of the premier colleges of its type in the world and to providing the research and outreach activities necessary for the continuing health and prosperity of California's citizens. We are changing to assure that we can meet these goals.



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

### **Planning for the Future**

By Ann King Filmer

#### **Planning for the Future**

Planning for the future in the College of Agricultural and Environmental Sciences involves two critical areas -- programs and facilities.

With the diversity of research and education needs across the college, strategic planning efforts must account for growth in the college, technology and facility needs, evolving research and educational issues, and a commitment to extension of information to alumni and external stakeholders. At the same time, planning must accommodate the substantial budget cuts to the university in the past three years while allowing for growth.

The interdisciplinary nature of research and education in the college has led to dynamic changes on campus in the past few years. New centers have been developed, changes in department structure and location have occurred, and upgraded facilities have been added -- all planned as an investment in higher education and a way to strengthen the continuum of research, education and information outreach.

These changes place the college in a strong position to attract the best students and to remain a world leader in agricultural, environmental and human sciences. Some of the recent and planned changes in the college are highlighted below.

#### **Department of Plant Sciences**

The new Department of Plant Sciences at UC Davis will be operational in spring 2005, pending final administrative approvals. The faculty in four existing plant science departments -- Agronomy and Range Science, Environmental Horticulture, Pomology, and Vegetable Crops -- voted this summer to unite as one new department -- Plant Sciences.

This merger provides exciting opportunities in undergraduate and graduate education, research and

external dissemination of information. Two-thirds of California's agricultural production has a link to the plant sciences, and many of the environmental and social issues in agriculture are related to plant sciences. The merger will allow UC Davis to remain a world leader in plant sciences and will help provide new technologies that support California agriculture and enhance the environment.

The decision to unite the four departments was driven by a desire for ongoing excellent teaching curricula, improving research across the college, and enhancing information extension to stakeholders in California and beyond.

The college and the four departments took into consideration the impact on students, faculty, staff, alumni and external stakeholders. All in all, the new department will benefit everyone.

"This new department will help UC Davis remain at the forefront of plant science research, education and outreach," according to **Chris van Kessel**, professor and current chair of the Department of Agronomy and Range Science. Van Kessel will chair the new Department of Plant Sciences. [See sidebar Page 7.]

The three academic sections in the new department -- Agricultural Plant Biology, Crop and Ecosystem Sciences, and Horticulture -- will each have a section chair. Two other critical vice-chair positions are Teaching and Curriculum Development (responsible for undergraduate majors) and Outreach and Extension (to address clientele and stakeholder needs).

Given the large department size (85 faculty, 26 researchers, 119 support staff), faculty will be housed in several buildings, including Asmundson Hall, the Environmental Horticulture complex, the Mann Laboratory, Hunt Hall, the Plant and Environmental Sciences building, the Plant Reproductive Biology building, Robbins Hall and Wickson Hall.

**Teaching** The Department of Plant Sciences has a strong commitment to student instruction and maintaining its core programs. Existing majors



Professor John Yoder, chair of the Department of Vegetable Crops, works with graduate student Tizita Horning. Yoder will be chair of the Agricultural Plant Biology section of the new Department of Plant Sciences.

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that will be part of the department include:

Crop Science and Management (CSM) Agricultural Management and Rangeland Resources (AMR) Environmental Horticulture and Urban Forestry (EHUF) Biotechnology (BIT)

Biotechnology (BIT) Plant Biology (PLB)

Proposed new majors are being considered, including sustainable agriculture, restoration ecology and natural resource management, applied plant science, and bioinformatics. Cross-discipline majors will fit well in the new department and will allow students to work on different commodities and environmental systems.

Heiner Lieth, chair of the Department of Environmental Horticulture, stressed that "important new majors can be created more easily under a unified department, while existing core majors will continue to receive full departmental support." Lieth sees a potential for tremendous growth by creating new relevant majors that fit into the plant sciences.

Clustering of majors in the new department will produce students who understand the big picture when they enter the work force, and students who are better trained in advanced technologies.

Part of the teaching mission of the department is to provide fundamental, interdisciplinary understanding of agricultural and environmental plant science at all levels of organization -- from cellular and molecular through plant-production systems, postharvest handling and managed ecosystems. This includes genetics and plant improvement, plant biotechnology, plant physiology, plant ecology, botany, interactions with natural and urban environments, and connections with society and societal changes.

**Research** The land-grant university mission of fundamental discovery, integration, and application will remain a core mission of the new department. Research results will be



used to maintain California's world-leading agricultural economy, assure safe and healthy foods, and foster environmental sustainability.

An important advantage of a unified department is the ability to consolidate facilities (labs, greenhouses, growth chambers) and cluster faculty and students.

**Michael Reid**, professor in the Department of Environmental Horticulture, noted that "the UC Davis postharvest biology program's importance to the industry and its international recognition is a good example of the value of clustering research units."

#### **Outreach and Extension**

Disseminating information to California's agricultural and plant science industries, environmental groups, policymakers and consumer organizations will remain a fundamental mission of the Department of Plant Sciences. Commitment to the Agricultural Experiment Station, UC Cooperative Extension, and external stakeholders also is tantamount in the new department.

Beth Mitcham, postharvest specialist in the Department of Pomology, stressed that "appropriate faculty have a strong commitment to agricultural commodities, and will continue to strengthen their ties to stakeholders. The seven existing plant science Research and Information Centers (RICs), and potential

new RICs will be visible and useful focal points not only in agriculture, but in environmental sciences and public education as well."

**Alumni** CA&ES encourages alumni from the four merging departments to follow the development of their "new" department at UC Davis. The fundamental mission remains the same, as do many of the majors of past years. Visit the department's Web site at http://plantsciences. ucdavis.edu.

# Research and Information Centers

During the last decade, the College of Agricultural and Environmental Sciences and the statewide Division of Agriculture and Natural Resources (ANR) developed a number of statewide research and information centers (RICs), based at UC Davis, to promote extension and outreach of research-based information.

These centers are focal points for researchers, specialists, CE advisors, and external stakeholders and clientele in agricultural, environmental and consumer sciences. Each center has its own mission that includes support for extension and outreach, continuing education, information development and distribution, research, and fostering interdisciplinary collaboration.

Primary users of the centers include UC scientists, industry, govern-

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mental and private agencies, alumni and the general public. RICs have strong links to California agricultural and environmental organizations. Many activities focus on crop commodity groups and strengthening the link in providing UC research and education to California's agricultural producers.

New alliances with external clientele have developed through the centers, some of which provide funding to the university. Many campus departments use RICs as a primary method to maintain stakeholder contacts and increase UC's external visibility.

The research and information centers disseminate up-to-date research and link the research that is being conducted on campus, in county Cooperative Extension offices, and with industry and agency collaborators. Newsletters and publications, research reports, events and workshops, calendars, and home gardening and consumer information are available through RICs. Much of the information is Web-based and easily accessible.

One role of research universities is to address emerging issues and technologies. The centers are used to release timely information on new, cutting-edge and critical issues. Additional information can be released as soon as it develops, allowing users to have rapid access to new information.

Recent examples of information

from the centers include reports and links on sudden oak death, glassywinged sharpshooter, biotechnology and yellow starthistle.

For external clientele, the centers are good places to learn about current research and educational programs, access publications, locate campus-based personnel with specific research interests and link to related resources.

Many of the plant science RICs will be administered under the new Department of Plant Sciences, allowing for uniform and improved coordination and support. New research and information centers addressing emerging issues are being developed throughout the college. Learn more about RICs at http://rics.ucdavis.edu.

#### **Other Research Centers**

In addition to RICs, many other well-established, new and developing research centers exist in the college. Most allow for collaboration of faculty knowledge, cross-disciplinary research, consolidation of costly research equipment and coordinated dissemination of information.

Central state-of-the-art research facilities reduce the cost and duplication of expensive equipment and technology. Faculty work together to compete for larger extramural funds, allowing UC Davis scientists to remain at the cutting edge of research—leading to an increase in successful projects and publications.

Many of the research centers focus on interdisciplinary program planning, allowing scientists with similar interests, and from different departments, to address issues together. Research then can address broader agricultural, environmental and social issues not covered by traditional commodity-based research.

The college's five priority research initiatives -- Genomics, Water/Watersheds, Foods for Health, Informatics, and Environmental Policy -- are being addressed by several campusbased research centers, in ways that cannot easily be accomplished in traditional departments.

Considerable progress is being made in research and outreach on critical issues such as sustainable agriculture, balanced ecosystems, and safe and healthy foods.

CA&ES research centers: http://caes.ucdavis.edu/AcadProg/Centers/Default.htm.

# RMI: A Model for Research and Education

The Robert Mondavi Institute for Wine and Food Science (RMI) is one example of how UC Davis is planning its future in a new manner. The institute will house two campus departments and several centers. It will foster collaborative research, education and outreach throughout the college and with external agencies and stakeholders.

Scientists at the institute will address research issues that impact a broad sector of agriculture and consumer sciences in California, including nutrition, safe and healthy foods and food quality. With the strong industry link, new opportunities for research will develop that impact all Californians.

Through the generous contribution of winemaker Robert Mondavi and other donors, two strong campus departments -- Viticulture and Enology, and Food Science and Technology -- will be housed together in a new state-of-the-art teaching and research institute on the south side of campus. This comes at a time when both departments are in need of upgraded

#### **Current RICs**

Agronomy Research and Information Center
California Rangelands Research and Information Center
Center for Consumer Research
Dairy Research and Information Center
Fruit & Nut Research and Information Center
Ornamental Horticulture Research and Information Center
Postharvest Technology Research and Information Center
Seed Biotechnology Center
Vegetable Research and Information Center
Weed Research and Information Center

facilities and equipment.

The combined vision of UC Davis faculty and industry, along with the external support, enabled the development of this interdepartmental institute. The RMI will allow research and education to address issues beyond the scope of traditional single departments, and will house centers that transfer information to students and to the public sector.

The RMI complex will include classrooms, laboratories, offices, meeting rooms, a brewing and food science laboratory (supported by the Anheuser-Busch Foundation), and a teaching and research winery. Faculty and students will work together to create new knowledge in many traditional and emerging food and wine disciplines.

"The Robert Mondavi Institute is poised to become the global innovator in university-based wine and food sciences through its unique focus on addressing quality-of-life issues," according to **Clare Hasler**, executive director. Hasler, an expert in nutrition and health, is overseeing programming, fund-raising and other activities at the institute.

For researchers, the institute will provide international opportunities to develop new partners and will keep UC Davis at the worldwide forefront of wine and food sciences. External stakeholders, including industry and policymakers, will rely upon the institute for new research findings related to wine and food science. Research at the institute will link the traditional sciences with important topics that benefit all Californians, such as nutrition, safe and healthy foods, and food quality.

Academic programs in the two traditional departments include vine-yard practices, fermentation science, brewing science, food chemistry, and industrial microbiology. Educational opportunities at the RMI will include these programs, and will provide unique programs that link wine and food science to artistic, culinary, cultural and historical practices.

Groundbreaking for the Robert Mondavi Institute for Wine and Food Science complex will take place in 2005, but some programs are in place already. The institute just sponsored its inaugural lecture in September on the UC Davis campus, as part of its distinguished lectureship series. Stay abreast of the lectureship series and other institute activities: http://robertmondayiinsitute.ucdavis.edu.

#### Design Program Moves to Letters and Science

The Design Program, Department of Environmental Design, is moving from CA&ES to the College of Letters and Science (L&S) where it will be housed in the Division of Humanities, Arts, and Cultural Studies.

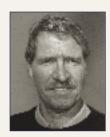
The popular and prestigious program needs additional faculty and upgraded facilities to remain at the forefront of design. An intercollegiate decision to move the program allows it to expand and upgrade, and allows it to develop fruitful collaborations with L&S programs.

According to Neal Van Alfen, dean, "The Design Program was established in our college in 1982 and has provided a broad scope of innovative and creative programming for thousands of our students. We will miss the colorful ideas and outside-the-box thinking that design faculty, staff and students have brought to our college family. We celebrate with them this opportunity for reinvestment and growth."

#### Summary

Strategic planning for change in the college is driven by the desire for ongoing success in our fundamental mission of excellence in teaching, research and outreach. New and changing departments, centers and institutes help strengthen UC Davis' position as a global leader in the agricultural, environmental and human sciences.

# Chris van Kessel Leads New Department of Plant Sciences



Professor Chris van Kessel, current chair of the college's Department of Agronomy and Range Science, will chair the new Depart-

ment of Plant Sciences. According to van Kessel, having served as department chair since 2002, he is ready for this new challenge.

Van Kessel received his undergraduate and graduate degrees in biology at the University of Nijmegen in his native Netherlands. Prior to coming to UC Davis in 1996, he was at the University of Saskatchewan for 10 years and at the University of Hawaii for three years.

When asked what excites him most about the new Department of Plant Sciences, van Kessel said, "The teaching opportunities! We have the potential to strengthen and revamp our current curricula and generate important new majors."

Van Kessel also is excited about coordinating the plant science Research and Information Centers, hoping to develop a more useful outreach and extension program that will increase UC Davis' impact and visibility.

Van Kessel has been working closely with a plant sciences executive council -- Joseph DiTomaso and John Yoder from vegetable crops, James Hill from agronomy and range science, Heiner Lieth from environmental horticulture, Beth Mitcham, Vito Polito and Ken Shackel from pomology, and new department manager Larry Hansen -- to coordinate a smooth transition.

In the rare moments when this busy man is not working, van Kessel takes a few minutes off to read history and political science books.

#### **Around the College**



**Diane Ullman**Chair
Department of
Entomology

Diane Ullman (Ph.D., '85, Entomology) says that as chair of the Department of Entomology, she will work to pursue new opportunities, hire young, vibrant new faculty and continue to build on the strengths of the existing graduate program.

"My vision is one in which we develop and move forward in initiatives determined and supported by the faculty," Ullman said. "I want us to maintain the balance and excellence we currently enjoy in our academic, research and outreach programs."

Ullman's research is in the area of insect transmission of plant viruses and pathogens that cause losses in agricultural and ornamental crops. The work is important, she explains, because insect-transmitted pathogens limit crop productivity, threaten the quality and cost of food and reduce the economic health of agricultural and ornamental industries. Ullman also is busy speaking, writing, serving on technical advisory committees and teaching.

One of her courses, "Art, Science and the World of Insects," is a fusion of art and science that teaches insect biology using lectures (to teach biological concepts) and studios in graphics, surface design and ceramics (to express those concepts).

Ullman team-teaches a course on the natural history of insects and a course on plant-virus-insect interactions, which receives top marks from participants. Active in the department's graduate programs, she has trained students in both the Department of Entomology and the Department of Plant Pathology.

"Our students are the heart and soul of the university," Ullman said. "My hope is to bring the exciting possibilities associated with a degree in entomology to freshmen and sophomores, while fostering their ability to think in new ways."



Terrence
Nathan
Vice Chair
Department of
Land, Air and
Water Resources,
Atmospheric
Science

One of three vice chairs in the Department of Land, Air and Water Resources, Professor Terrence Nathan leads the efforts and activities of the Atmospheric Science program. One of his primary goals is to build on existing program strengths during this time of shrinking resources.

"It is imperative that we support and expand our existing efforts, given the broad range of research in our program," Nathan said. "We serve California in a number of ways, from the instruction and training of undergraduate and graduate students to research ranging from air quality to climate variability."

According to Nathan, Atmospheric Science hopes to flourish and grow by establishing an endowed chair. Efforts already are underway, and Nathan wants to be sure that campaign goals are realized.

Nathan finds his work challenging and exciting. "Just like Mark Twain so aptly stated: 'One of the brightest gems in the ... weather is the dazzling uncertainty of it.'," he said.

Nathan is a member of the Atmospheric Science Graduate Group and the Graduate Group in Applied Mathematics. His research focuses on understanding the life cycles of weather systems that often spawn in the western Pacific during winter, providing California's agricultural and recreational industries with its lifeblood -- precipitation.

Nathan uses mathematical models to understand the processes that control the birth, migration and eventual death of weather systems. The goal of his research is to produce better long-range weather forecasts so that the state and its citizens can be better prepared for droughts, floods and other unpredictable changes in the weather.



Ted Bradshaw Interim Chair Department of Human and Community Development

Associate professor Ted Bradshaw is serving as interim chair of the Department of Human and Community Development, as well as chair of the Community Development Graduate Group. He joined the department in 1995 after nearly 20 years at UC Berkeley's Institute of Governmental Studies and Institute of Urban and Regional Development.

As interim chair, Bradshaw is continuing the planning and preparation that has been underway to offer a Ph.D. program in community development, one of the first in the nation. Planning also is in the works with the Landscape Architecture Program to establish a Center for the Study of Regional Change.

"In a period of budget cuts, our program expansion is challenging," Bradshaw said. "But, as the UC Davis campus grows in size and relevance, we need to continue innovating with new programs that link the campus to the region."

Bradshaw currently is researching the impact of the California energy crisis on the state economy, new local economic strategies and community development organizations. He has studied base closure, workforce development, and the application of geographic information systems (GIS) computer mapping programs to the conversion of farmland in the California Central Valley and on new housing and energy conservation technologies.

Bradshaw just completed the manuscript for a book on the California energy crisis, explaining the situation leading to the crisis, options for resolving the problems created by deregulation, and avoiding future crises. He co-authored the Third Edition of *Planning Local Economic Development*, the leading text for college economic development courses.

#### **2004 Spring Commencement**



Martin Yan

At Commencement 2004, Dean **Neal Van Alfen** (Ph.D., '72, Plant Pathology) reflected on the accomplishments of our graduates and this memorable time of new beginnings and future achievements.

Martin Yan (B.S., '73; M.S., '77, Food Science), host of the acclaimed "Yan Can Cook" show seen in 70 countries and in more than 240 markets throughout the United States, was keynote speaker. A certified master chef and restaurant consultant, Yan has hosted more than 1,500 cooking shows and authored 14 cookbooks.

**Ellen Cheng**, 2004 candidate majoring in human development and family studies, was commencement speaker. In addition to her coursework this past year, she served as an intern in the Yolo County Health Department.

# **2004 Award Recipients** COLLEGE MEDAL

**Nicholas Brian Coley** Genetics

# **CHARLES HESS COMMUNITY SERVICE AWARD (Female)**

#### Lauren Roth

Community and Regional Development Minor: Contemporary Leadership



Ellen Cheng

# CHARLES HESS COMMUNITY SERVICE AWARD (Male)

#### Raj Kullar

Neurobiology, Physiology and Behavior

## MARY JEANNE GILHOOLY AWARD

#### **Donielle Jenise Robinson**

Community and Regional Development Minor: African American and A frican Studies

#### **MARY REGAN MEYER PRIZE**

#### **George Andrew Bruque**

Biological Sciences Emphasis: Molecular and Cell Biology

#### **Julia Anne Correia**

Individual: Genetics and Child Development

#### Cynthia Irene Rail

Clinical Nutrition Minor: Human Development

#### **Fall Commencement**

The winter commencement ceremony will be held at 2 p.m. on Sunday, December 19, at UC Davis Recreation Hall. For complete details, contact Claudette Oriol, (530) 752-2120 or cgoriol@ucdavis.edu, or access details on the Web at www.aes.ucdavis.edu/Events/Commencement/Default.htm

#### Walker Award 2004



Adviser **Tracy Grissom**, Department of Environmental Toxicology, was presented the 2004 Walker Award at a ceremony in Mrak Hall. Named for lecturer emeritus **Harry Walker**, left, of the Department of Land, Air and Water Resources, the award recognizes the college's outstanding academic staff adviser.

Grissom is responsible for comprehensive undergraduate advising for the department -- coordinating advising functions and programs, evaluating and approving transfer credit specific to major requirements, and providing analyses and making recommendations to the Dean's Office on matters related to admission and readmission. In addition, she maintains the department's Web site and oversees department advising and teaching publications.

"I feel deeply honored to receive this award," Grissom said. "Dr. Walker's dedication and support of advisers on this campus is inspiring. What touches me most is the message my students conveyed through their comments. They know I care, and that I am happy to be a part of their academic journey."

CA&ES offers an extensive network of advising for undergraduate students, working to assist them in getting the most out of their academic experiences. Students receive general and comprehensive advising along their paths to graduation provided by faculty, staff and peer advisers. Check out our advising services on the Web at http://www.aes.ucdavis.edu/StudInfo/Advising/Default.htm.



# Philanthropy Will Grow with College

By Christine Schmidt

Our understanding of the world has evolved since the University of California, Davis, was founded nearly 100 years ago. We are asking new questions, about the interactions between population growth and our communities, local agriculture and international trade, and consumer choices and our nation's health.

The College of Agricultural and Environmental Sciences has identified new directions for growth and future investment that will build on our strengths and tackle these important questions.

Our new initiatives will reach their full potential only through the support of UC Davis graduates, parents and friends.

#### **Foods for Health**

The college's Foods for Health initiative organizes expertise (including production agriculture, environmental toxicology, agricultural economics, nutrition and sustainability) around questions of health, food production and distribution.

The initiative aims to identify and better understand the nutrients in our diet that impact health -- either by preventing or reducing risk for chronic diseases or by contributing to the development and progression of certain diseases. The important role of consumer choice will be key to this initiative.

This initiative will work to develop new agricultural and foodprocessing principles and technologies that optimize the quality of our foods while helping to ensure the long-term viability of California's agricultural economy.

Existing campus programs will play prominent roles in this initiative, including the Robert Mondavi Institute for Wine and Food Science, the (Florence) Ragle Human Nutrition Research Center, and USDA's Western Human Nutrition Research Center.

# Center for the Study of Regional Change

The Center for the Study of Regional Change will bring together college resources that address social, economic and environmental opportunities and challenges associated with the dynamics of regional change. These forces include shifting demographics, population pressures and automobile-oriented development.

The center will organize faculty and students who address a variety of related issues, including affordable housing, population dynamics, migration, economic development and community design.

They will collaborate with each other and also with practitioners who work directly with community leaders, design community spaces and create public policies. It will link problem analysts with the people who implement innovative solutions.

# Agricultural Sustainability Institute

The proposed Institute for Sustainability will bring together two of UC Davis' most highly regarded disciplines: agriculture and environmental science. This initiative will support and encourage efforts that help us better understand agricultural and natural resource systems -- systems that serve societal needs in the short and long term, and that are economically viable, environmentally sound and promote healthy communities.

Research, teaching and outreach activities will complement the activities of statewide programs such as the Sustainable Agriculture Research and Education Program, the Small Farm Center, and the Integrated Pest Management Program.

#### The Role of Philanthropy

To fully realize the potential of these initiatives, the generosity of UC Davis graduates, parents and friends will be needed to meet the standard of excellence held for our programs.

Donors can create, sustain or revitalize a relationship with the university by providing support for a distinguished faculty position, an endowment to support one of these initiatives or financial support for a student studying in one of these areas. Come grow with the college. Call today.

#### Endowment Highlight



Robert M. Hagan

Recognizing the critical need for objective, science-based decision making to resolve California's water problems, the late emeritus faculty member Bob Hagan proposed a new faculty position at UC Davis to provide leadership in the state's water management and policy arena. To make this valuable position a reality, he put forward his own money, and the water industry matched it to create the Robert M. Hagan Endowed Specialist in Cooperative Extension in Water Management and Policy.

#### **Contact Information**

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#### CA&ES Develops Leaders for a Changing World

By Susan Webster and Mary Kimball

Every year, the California Agricultural Leadership Foundation sponsors 24 to 30 individuals from production agriculture and related industries to participate in a two-year fellowship that prepares them to work more effectively in their families, professions, communities, state and nation. Participants attend 14 three-day seminars, travel to Washington D.C. and other states on a two-week national trip, and experience a three-week international journey.

Program graduates go on to become leaders in farming organizations, civic groups and government -- prepared to deal effectively with the complicated issues that influence agriculture and our society.

Participants attend monthly seminars at four participating California universities: the University of California, Davis; California State University, Fresno; California State Polytechnic University, Pomona; and California Polytechnic State University, San Luis Obispo. The focus of each seminar depends on the leadership of the host university.

The College of Agricultural and Environmental Sciences (CA&ES) develops and implements multi-disciplinary curricula for the program, bringing together experts from all areas of the college and from other campus entities. Campus partners have included the Graduate School of Management, the School of Law, and the Department of Exercise Biology, to name a few. This program, now in its 35th year, challenges fellows to develop leadership skills, appreciate diversity, experience culture, practice balance and think critically.

As California agriculture and the environment face new challenges, CA&ES encourages and welcomes assistance from Agricultural



**Mary Kimball**, director, Center for Land-Based Learning, Class XXXII, and **Annie King**, CA&ES associate dean of Undergraduate Academic Programs, Class XXX, pose in front of the capitol on a California Agricultural Leadership Program trip to Washington, D.C.

Leadership fellows in supporting the college's vision and in partnering with California citizens and communities to meet contemporary societal needs. In our evolving society, the college and the foundation must continually adapt and change to maintain and build a relevant, innovative, high-quality program.

California agriculture and the environment benefit daily from the more than 1,000 leaders that the program has graduated. For more information on the California Agricultural Leadership Program, contact the foundation at info@agleaders.org.

Susan Webster, program representative for the UC Davis Seed Biotechnology Center, is a graduate of California Agricultural Leadership Program Class XXXII. Mary Kimball, a graduate of class XXXII, is a 2004 CA&ES Award of Distinction recipient.

# **Contact Information Richard Engel**

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#### **STUDENTS**



Brent Sewall, Department of Wildlife, Fish and Conservation Biology and member of the Graduate Group in Ecology, is the inaugural winner

of the American Society of Mammalogists' William T. Hornaday Award, which was presented at the group's annual meeting in June.

Sewall was recognized as a student "who is making significant contributions to the conservation of mammals and their habitats." Competition for the award was worldwide.

Sewall received the award for his master's thesis work on the conservation of rare fruit bats in the Comoros islands. For his dissertation research, he is studying lemurs and fruit bats in Madagascar.



Landscape architecture students created "The knowledge of man is as the waters" for the Cornerstone Festival of Gardens near Sonoma, Calif. Billed as the first gallery-style garden with walk-through installations by international artists, Cornerstone opened to the public in July.

The student installation was inspired by a quotation from Sir Francis Bacon concerning the search for knowledge, explained student team leader **Diana Walker-Smith**. The entire Bacon quote floats in a pond that is lined by red bamboo and pathways of black and white aggregate.

"My fellow students and I worked very hard to create a garden that would be visually stimulating in its



Members of the Cal Aggie Judging Team, along with students enrolled in other department courses and members of departmental clubs, administer and assist a number of workshops and outreach programs each year. The success of these events relies heavily on the efforts and talents of the Department of Animal Science's judging team.

For 21 years, animal science students hosted Community College Judging Field Day each fall. They participate in Fall Classic events held in Oregon and California, events preceding the Cow Palace Invitational Livestock Workshop in San Francisco, and at Agricultural Sciences Field Day on the UC Davis campus.

Students organized and hosted the 2004 Aggie Spring Classic Jackpot Show, which brought high school students from California, Oregon, Washington, Nevada and Arizona to the Yolo County Fairgrounds to compete with their beef, sheep, swine and meat goats. This outreach effort into the state's agricultural communities brought 444 entries, up from 300 entries in 2003. The event is entirely student-run, with advice from animal resources manager and animal science lecturer Dana Van Liew.

simplicity and endowed with symbolism and meaning -- to be more than just a pretty garden -- more like a three-dimensional, interactive work of art," Walker-Smith said.

Heidi Weiskel, member of the Graduate Group in Ecology, received one of only two Emerging Public Policy Leadership Awards from the American Institute of Biological Sciences (AIBS), recognizing demonstrated leadership potential beyond the scope of dissertation research. She was selected based on diversity of experiences and interests that typify policy experts. As a recipient, she attended AIBS Congressional Visits Day in Washington, D.C.

"I think it is extremely valuable for scientists at every stage of their careers to be aware of the multiple contexts in which they are working," Weiskel said. "Opportunities like [this] encourage the kinds of interactions I believe are critical to fostering both the best science and the best policies in this country."

**Rebecca Fox**, animal behavior graduate student working with Professor James Millam on the Psittacine Research Project, Department of Animal Science, was awarded a Phi Beta Kappa Graduate Fellowship for her research on novelty and fear in parrots.

In one study, Fox presented a series of items to young orange-winged Amazons, apparently increasing the courage of the baby parrots, except for presentations of a few "odd items," such as a stuffed elephant that was too frightening.

Fox also compared tameness of baby parrots hand-raised by humans with those raised by their parents but handled by humans for 20 minutes a day after becoming cognitive at several weeks old. She found both groups similar, defying claims that these birds must be hand-fed to be tame.

**Emily Meharg**, first-year graduate student working with professors Patricia Oteiza and Takayuki Shibamoto in the Department of



Environmental Toxicology, is the recipient of a 2004 CEHS Fellowship, awarded by the Center for Environmental Health and Safety.

Meharg said

that she likes the interdisciplinary aspect of UC Davis graduate groups, since many groups collaborate among multiple departments. The funding she received from the CEHS Fellowship was an important factor in her decision to attend UC Davis, she said.

Meharg spent five weeks in each lab and hopes to study natural pharmaceuticals. She believes that the lack of interest in traditional medicine is because herbal remedies cannot be patented.



Denise Kastrinakis, second-year master's student in the Division of Textiles and Clothing, won first place at the annual National Textile Center

forum student presentation contest. Her thesis topic was "Jeans: Brand, Comfort and Value." Presenters were judged on research quality and presentation skills.

Kastrinakis' research takes a qualitative approach to understanding the meaning of blue jeans for female undergraduates, melding physical and social comfort with brand and value. She distributed an open-ended questionnaire to female students at UC Davis and University of Delaware, where she received her B.A. in apparel design. Respondents described their personal style of jeans, what they consider comfortable when wearing jeans, and what brands they wear or do not wear.

Kastrinakis developed three themes that she felt captured the intersection of price, style, brand and fit when young women purchase jeans. The themes were:

- 1. Jeans: A Corset in Disguise?
- 2. Jeans: The New Uniform
- 3. Jeans: Importance of Branding

The data she generated can be used by retailers, manufacturers and designers to better address the needs of this important consumer market.



According to Ronald Tjeerdema (Ph.D., '87, Pharmacology and Toxicology), professor and department chair in the Department of Environmental Toxicology, undergraduates can expect to learn the latest methods in chemical analysis, thanks to the purchase of a high-pressure liquid chromatograph/mass spectrometer. The equipment will be used by both undergraduates and graduates to identify the chemicals in tissues, soil and other media.

Tjeerdema believes that one of the unique aspects of the UC Davis program is that students graduate with a strong background both in toxicology and in environmental chemistry.

"Along with a strong background in analytical techniques, an understanding of how chemicals are influenced by environmental processes gives our graduates a unique advantage when seeking employment or applying to graduate programs," says Tjeerdema.



Renate Robinson, left, and Amy Hanna worked with animal science Professor Ed DePeters on an experiment to evaluate if total mixed ration (TMR) contents are interspersed evenly when delivered into the feed bunk. The project provided students with applied research experience.

Does the mixer wagon provide a uniform mix of dietary ingredients across the feed manger?

"This is a practical question that many nutritionists face when working on commercial dairies," DePeters explained. "In order to complete this project, students had to draw upon all previous courses taken at UC Davis."

Whole corn kernels were added to the regular ration and mixed in the mixing wagon. Samples were collected as the wagon distributed the feed into the manger. Samples were weighed and then separated using a shaker box. Whole corn kernels were counted to determine kernels per pound of feed.

The "# kernels/lb. feed" did not vary much from different sample locations. Students determined that the mixer wagon does a good job.

The project enabled undergraduate students majoring in dairy/live-stock animal science to think about how they would use what they learned in undergraduate courses to answer an applied question.

"Students designed the study, worked as a group, worked with me and the TA, took and analyzed samples, attempted stats, summarized data and -- based on reading previous papers -- came to some conclusion," DePeters explained.

In another project, cows were studied to see if they had a location preference when eating. Data was collected in the spring during afternoon feedings. Hanna and Robinson think the cows are pretty smart -- choosing locations with shade over those in the sun.

Landscape architecture students participated in a four-unit "Farmscape Architecture" studio taught by Paul Robins, executive director of the Yolo County Resource Conservation District. Fifteen farmers, 15 landscape architecture students and 15 conservation professionals from Yolo and Solano Counties met in triads to develop individual conservation plans for the respective farms.

The conservationists -- representing local RCDs, the USDA Natural Resources Conservation Service, Audubon California, the Center for Land-Based Learning, and UC Cooperative Extension -- provid-

ed technical direction. Students developed graphic and narrative plans for each landowner. "The workshops exceeded our expectations," said Robins. "We're looking forward to doing it again next year."

The Department of Vegetable Crops recognized four students at a special awards ceremony and picnic.

**Carl M. Jones** received the William Deardorff Research Award and the Charles M. Rick Award.

Oscar R. Ortega and Fernando Perez de Vida received the Greta Kramer & James Hilary Balderston Award.

**Carla Ticconi** received the Thomas W. & Mary S. Whitaker Award.

Three students pursuing human and community development majors received awards at the 2004 Outstanding Woman award ceremony in Freeborn Hall.

**Adriel Luis**, community and regional development major, received

the Margarita Robinson Student Leadership Award, which is presented to juniors.

**Heather Ricks**, international agricultural development major, received the Human Corps Community
Service Award, which is presented to a graduate student.

**Donielle Robinson**, community and regional development major, received the Mary Jeanne Gilhooly Award, which honors the "graduating woman [considered] to be the most outstanding in the areas of leadership, scholarship, integrity and service [to] the campus community."

Graduate students **Patricia**Jennings and Claire Vallotton of
the Department of Human and
Community Development and
Chris Weible, Department of
Environmental Science and Policy,
are among 15 recipients of the 2004
Outstanding Graduate Student
Teaching Award. The selection
committee reviewed nominations
from faculty and students.



Three students were recognized at a reception held in the Department of Land, Air and Water Resources in June. They are pictured here with department chair and professor Michael Singer.

**Brent Laabs**, left, a senior majoring in atmospheric science, and **Meagan Arnold**, second from left, a sophomore majoring in environmental and resource sciences, received the LAWR Opportunity Fund Undergraduate Award, which recognizes leadership activities, club participation, working with professionals, attendance at professional meetings, international experiences, and working with LAWR faculty in research or field activities.

**Ariel Rivers**, right, a senior majoring in soil and water sciences, received the 2003-04 LAWR Williams Fund Undergraduate Award.



Thirty fifth-graders from Fremont School in Dixon visited Design 124 where they made wire portraits of one another. They were coached by design professor Gyongy Laky, pictured above with a participating student, and design students **Janice Lee** and **Kim Ocampo**. Laky and Fremont teacher Moira Burke ('94, Individual) agree that both elementary-level and university-level students gained from the experience.

"We're still making little creatures out of leftover wire," Burke said. "They are everywhere in my classroom!"





Joan Ogden, associate professor in the Department of Environmental Science and Policy, was named to a 15-person advisory panel of high-level experts

charged with delivering a "hydrogen blueprint" to Governor Arnold Schwarzenegger by January 2005. The panel was appointed following the governor's visit to campus. He drove a hydrogen fuel cell car to the UC Davis hydrogen refueling station and announced his vision for building hydrogen stations along California's major highways.

"California is in a unique position to demonstrate and evaluate hydrogen and fuel cell technologies," Ogden said. "I look forward to working with the panel to develop a plan for moving toward the governor's vision."



Food safety specialist **Linda Harris**, Department of Food Science and Technology, received the International Association for

Food Protection (IAFP) 2004 Educator Award, recognizing outstanding service to the public, the organization and food safety. The award was presented at the group's annual meeting in August.

Harris is a scientific communicator for the Institute of Food Technologists (IFT) and is actively involved with IAFP. She was a member of IFT/FDA Task Force 3, charged with producing a series of documents related to the microbial safety of fresh fruits and vegetables. She served on a National Academy of Science Committee responsible for reviewing the use of scientific criteria in ensuring safe food.

Harris maintains an active research program that includes microbial safety and spoilage issues related to fresh and processed fruits, vegetables and nut meats. Her educational programs relate to all aspects of the food chain -- from producer to processor to food service to consumer.



Professor James Wilen, Department of Agricultural and Resource Economics, was one of two UC Davis faculty members receiving the Aca-

demic Senate's 2004 Distinguished Graduate Mentoring Award. Recipients were selected based on criteria ranging from how they encourage intellectual growth, offer accessibility to students and demonstrate quality scholarship.

Wilen specializes in natural resource and environmental economics. USDA economist Marcia Weinberg, former doctoral student, said that Wilen "is arguably the national leader in training resource economists." In 1998, he received the Distinguished Graduate Teaching Award.

Wilen has supervised 30 Ph.D. students and served on an additional 21 doctoral committees.

James Oltjen (Ph.D., '83, Nutrition), specialist in Cooperative Extension, Department of Animal Science, received the American Society of Animal Science Extension Award for 2003.

Oltjen is a leader in applying mathematical models and computer techniques on farms and ranches. His focus is on animal enterprise management, natural resource monitoring and modeling, and livestock quality assurance programs, with simultaneous computer decision aid development.

Professor **Deanne Meyer**, Department of Animal Science, and Professor **Michael Payne**, Department of Environmental Toxicology, have been honored for their work to create and maintain the California Dairy Quality Assurance Program. The Environmental Protection Agency presented awards to 36 organizations and individuals in recognition of efforts to protect and preserve the environment during 2003.

Meyer and Payne worked on a program that brings together a diverse group of 16 government, university, industry and environmental interests. The program assists California dairy producers in meeting all requirements relating to manure and nutrient management.

The researchers work directly with dairies to create environmental stewardship farm management plans; independent, third-party, on-site evaluation; and certification of compliance with environmental requirements. Dairies now have a "one-stop shop" where they can find out what they need to do and assistance in how to do it.



Joseph DiTomaso (B.S., '78, Wildlife and Fisheries Biology; Ph.D., '87, Botany), extension specialist, Department of Vegetable Crops,

was named Outstanding Weed Scientist - Public Sector at the Western Society of Weed Science annual meeting in Colorado Springs. The award recognizes his contributions to weed science, weed management practices and service to the organization, as well as the impact he has made.

DiTomaso's primary research focus is on the biology, ecology and control of weeds in non-crop environments, with emphasis on California.



Professor Anita Oberbauer, Department of Animal Science, is recipient of the 2004 Corbin Companion Animal Biology Award given by

the American Society of Animal Science. The national award is presented annually to one researcher in recognition of contributions to companion animal biology. Her research focuses on genetic disorders in dogs.

According to department chair **Gary Anderson**, "Oberbauer stepped up and volunteered to develop new courses when the department added

companion animals to its curriculum. The curriculum she developed is now the model used by other universities."

Oberbauer received the UC Davis Distinguished Teaching Award in 2002.

The American Phytopathological Society recognized two Department of Plant Pathology faculty members. Cooperative Extension specialist **Krishna Subbarao** received the APS Syngenta Award for "outstanding recent contribution to teaching, research or extension in plant pathology." The award was presented at the group's annual meeting in August.

Professor **Bryce Falk** was named an APS Fellow, an honor recognizing distinguished contributions to plant pathology or to the organization.



Alan Bennett, professor of vegetable crops and executive director of research, administration and technology transfer at the UC Office of

the President, assumed leadership for the Public Intellectual Property Resource for Agriculture (PIPRA) program, which moved to the UC Davis campus in July. The consortium of 20 universities and philanthropic groups united to overcome the legal barriers that slow development of biotech crops that can benefit developing countries.

In addition, Bennett assumed the position of associate vice chancellor for research at UC Davis. He oversees the Office of Technology Industry Alliances.

The ASUCD Academic Affairs Commission recognized outstanding UC Davis teachers in an awards ceremony hosted in Freeborn Hall. Video clips highlighting the teachers "in action" accompanied each presentation.

Faculty were honored for uniquely impacting the lives of UC Davis students and for exceptional contributions to academics on the UC Davis campus through teaching. Over 300 student nominations were submitted.

Lecturer **John Constantine**, Department of Agricultural and Resource Economics, was presented the 2004 ASUCD Educator of the Year Award.

Professor **Liz Applegate**, Department of Nutrition, received one of six Excellence in Education Awards.

Mikal Saltveit, professor in the Department of Vegetable Crops and director of the Mann Laboratory, was awarded the U.S. Department of Agriculture's 2003 Technology Transfer Award for his work on updating the handbook *The Commercial Storage of Fruits, Vegetables, and Florist and Nursery Crops.* He is the first non-USDA scientist to serve as an editor of the handbook, the primary repository of information about the storage of horticultural crops since 1968.

Professor **Joy Mench**, Department of Animal Science, was presented the 2004 Poultry Welfare Research Award by the Poultry Science Association. The award was presented at the group's national meeting in July. Mench is a member of the Council for Assessment and Accreditation of Laboratory Animal Care, the national oversight group for animals used in teaching, research and outreach.

**Lynn Kimsey**, professor in the Department of Entomology and director of the Bohart Museum of Entomology, was featured in a *National Geographic* magazine article and in a National Geographic Channel TV special about insects.

"If we didn't have insects," she said, "we'd be up to our hips in dead stuff and wood debris. Insects are the single most important recyclers in the environment." Kimsey explained that humans have no reason to be afraid of insects but, rather, should learn to appreciate them, for insects make the Earth a habitable planet.



Judith Stern, distinguished professor in the Department of Nutrition, received a 2004 Secretary's Honor Award, the most prestigious award presented

by the U.S. Department of Agriculture.

The award recognizes outstanding contributions to agriculture and to the consumers of agricultural products. Her award category was "Inspiring the Nation's Nutrition and Health." A presentation ceremony was held in Washington, D.C.

Stern is recognized internationally for her research and outreach in the area of obesity. She is recognized as a leader in the communication of information to the public regarding the evolution of complementary and alternative medicine and how it intersects with nutrition.

Alex McCalla, professor emeritus of agricultural and resource economics, received the Distinguished Alumni Award from the University of Alberta, Canada. An authority on agricultural policy and international trade, he also was named 2004 Distinguished Scholar of the Western Agricultural Economics Association, the organization's highest honor.

Recently the American Agricultural Economics Association established the Alex McCalla Appreciation Club, which was fully funded in its first year.

McCalla was dean of the College of Agricultural and Environmental Sciences and associate director of the Agricultural Experiment Station, as well as founding director of UC Davis' new Graduate School of Administration (now named Graduate School of Management).

William Liebhardt, specialist emeritus in Cooperative Extension, Department of Agronomy and Range Science, received the 2003 Seventh Generation Award from the Center for Rural Affairs and the Consortium for Sustainable Agriculture Research and Education. The national award recognizes innovative family farmers, research scientists, educators or others who have conducted research to further sustainable food and farming systems that are practical, productive and environmentally sound.

Liebhardt retired in 2001 as director of the Sustainable Agriculture Research and Education Program. His work considers economic, environmental and social activities in agriculture so the entire system can be evaluated.



David Campbell, specialist in Cooperative Extension, received the annual Editors' Prize for the best scholarly paper in the journal

Nonprofit Management and Leadership for his article, "Outcomes Assessment and the Paradox of Nonprofit Accountability."

A political scientist, Campbell is a faculty member in the Department of Human and Community Development and director of the California Communities Program. He studies the intersection between public policy and community development processes at the local level, focusing on governance, civic engagement, citizenship and economic development. Campbell teaches CRD 158 - Small Community Governance.

**Howard Schutz**, food science and technology professor emeritus, is one of three recipients of the 2004 Distinguished Public Service Award presented by the UC Davis Academic Senate. The award recognizes public service contributions to the world, nation, state and community.

Schutz worked on product development methods, consumer behavior, food irradiation attitudes, and food and nutrition attitudes. He focused on taste and odor research, preference measurement and methodology, and food acceptance factors. He is founder of the distance-learning certificate in sensory evaluation and consumer testing for UC Davis Extension.



Professor **Adel Kader**, Department of Pomology, received the 2003 Distinguished Graduate Mentoring Award.

An internationally known

pomologist specializing in the postharvest biology of fruits, Kader has been the major professor to 24 Ph.D. students in his 26 years at UC Davis.

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 internationally for work that led to the rapid

adoption of newer, higher-yielding rice varieties and innovative weed control practices in California. He developed farming practices that prevent herbicide runoff in rice field tailwater, which has allowed rice growers to reduce pollution by 98 percent.



The California Small Farm Conference presented an Individual Achievement Award to consumer specialist **Desmond Jolly**, Department of

Agricultural and Resource Economics, and director of the Small Farm Program, for local, state and national leadership on behalf of small-scale farmers.

Jolly served on planning and steering committees for three national small-farm conferences and served as vice-chair of the National Commission on Small Farms. He serves as co-chair of the Roots of Change Council, a group of California agricultural and food-system leaders who advise the ROC Fund, a collaboration of private California foundations.

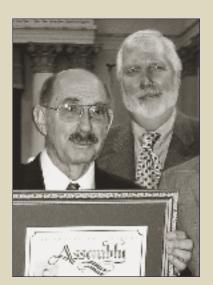
The Small Farm Center, headquartered on the UC Davis campus, is planning a 25th year conference/celebration in November. For more details, contact Jolly at dajolly@ucdavis.edu.

Adjunct professor **David McCarron**, Department of Nutrition, was named recipient of the 2004 International Award in Modern Nutrition. The prize, which recognized his work in mineral metabolism and high blood pressure, was presented at a ceremony in Zurich.

McCarron works with Professor **Judith Stern** in the area of obesity.

Warren Johnston, professor emeritus, Department of Agricultural and Resource Economics, received the Western Agricultural Economics Association's Distinguished Scholar Award, recognizing an "enduring contribution to agricultural, resource and/or environmental economics in the western states" as well as to the organization.

#### **Goldman Receives Lifetime Achievement Award**



Professor **Charles Goldman**, left, Department of Environmental Science and Policy and director

of the Tahoe Research Group, received the Alfred C. Redfield Lifetime Achievement Award from the American Society of Limnology and Oceanography. The award recognizes long-term achievements in the fields of limnology and oceanography, including research, education and service to the community and society.

The citation presented to Goldman reads, "...for his enduring efforts to understand and protect Lake Tahoe, his inspiring mentorship of numerous students who have made lasting scientific contributions, and for his tireless advocacy for limnological research, training and stewardship worldwide."

Dean **Neal Van Alfen** is pictured in the background.

Johnston's work focuses on California's agricultural sector, emphasizing commercial agriculture, natural resource use and related policy issues. He recently co-authored a comprehensive study on the future of California agriculture with Professor emeritus Alex McCalla.

The Mother Lode Chapter of the Sierra Club presented its Environmental Book Award to professor emeritus **Robert Thayer**, Landscape Architecture Program, for his 2003 book LifePlace: Bioregional Thought and Practice.

A strong advocate for sustainable planning, Thayer also was named the New Zealand Institute of Landscape Architects' first Education Foundation Scholar. He spoke in nine New Zealand cities during June and July.

Robert Zasoski (B.S., '67, Soil and Water Science; M.S., '70, Soil Fertility; Ph.D., '74, Soil Chemistry), professor in the Department of Land, Air and Water Resources, was elected a fellow in the Soil Science Society of America. Fellows, the organization's highest honor, are active members with a minimum of 10 years membership who have demonstrated superior achievement.

Zasoski teaches global environmental interactions, aquatic geochemistry, and advanced topics in soil chemistry. His research focuses on areas including rhizosphere processes, environmental chemistry, soil chemistry and fertility, plant nutrition, nutrition of forest species, acid soils, micronutrient and trace metal chemistry.



Professor Chris Calvert, fourth from left, is the sixth member of the Department of Animal Science to receive the prestigious UC Davis Distinguished Teaching Award in the last 11 years. Calvert celebrated with previous animal science award recipients, from left, professors Edward DePeters (1998), Thomas Adams (2000), Gary Anderson (1992), Thomas Famula (1999)

"In addition to his classroom teaching, Professor Calvert is an active undergraduate and graduate adviser," said department chair

and Anita Oberbauer (2002).

Gary Anderson. "He advises 35 to 40 undergraduates in the animal science major each year, which is above the mean for faculty in our department. I know good teaching when I see it, and Professor Calvert is an exceptionally good teacher."

The Distinguished Teaching Award, established in 1979, is presented by the Academic Senate and recognizes UC Davis colleagues for outstanding teaching abilities. The awards are given annually to as many as four faculty members.

#### CA&FS

#### In Memoriam

#### Wade C. Rollins

(Ph.D., '48, Genetics) Instructor, Animal Husbandry, 1949 Department of Animal Science November 1, 2002

#### Dale Lott

Professor Emeritus Department of Wildlife, Fish and Conservation Biology January 26, 2004

#### **Glenn Rogers Hawkes**

Professor Emeritus
Department of Human and
Community Development
CA&ES Associate Dean for
Division of Social Sciences
and Humanities
March 8, 2004

#### **James Steichel**

Senior Agricultural Technician Department of Pomology Student Farm April 8, 2004

#### Melvin D. Androus

2001 Award of Distinction Recipient CA&ES Dean's Advisory Council April 28, 2004

#### **Pran Nath Vohra**

(Ph.D., '58, Nutrition)
Professor
Department of Animal Science
May 5, 2004

#### **Charles Mohun Quarre**

(B.S., '50, Animal Husbandry) June 12, 2004

#### Frank G. Parsons

Namesake, Parsons Seed Certification Center 1994 Award of Distinction Recipient June 22, 2004

#### Donald L. Brown

(B.S., '49; M.Ed., '53, Agricultural Education) June 29, 2004

#### **Howard Needles**

Professor Emeritus Division of Textiles and Clothing July 30, 2004



#### **Tracking West Nile Virus**

The Center for Vector-Borne Diseases, headed by entomology professor **Iohn Edman**, is central to California's efforts to track movement of West Nile virus. The center's reputation for accurate, quick analysis is a primary reason it was given such a critical role. Edman confirms or denies the presence of West Nile virus in tissue samples from wild birds and mosquitoes, and in blood samples from horses. The center's work keeps the state apprised of the potentially fatal disease's progression, which infected nearly 10,000 Americans last year.

The center also addresses vectorborne diseases that occur in developing countries and tropical areas, in order to develop global strategies for protecting human health, animal agriculture and foreign trade. The center is a joint venture among the College of Agricultural and Environmental Sciences and the schools of Medicine and Veterinary Medicine.

#### **Big Ideas for Small Farmers**

Professor **Patrick Brown**, Department of Pomology, and director, Office of International Programs, is involved in a horticulture project in Egypt to increase rural incomes and create jobs for small- and mediumsized growers. Participatory approaches will be used to build the farmers' organizational capacity, business skills, technical skills and marketing intelligence.

Traditionally, these farmers have grown vegetables for family consumption. This project will introduce the concept and practices of growing high-volume horticultural crops for sale in domestic markets and export.

Brown also leads a UC Davis team partnering with Roots of Peace and other groups to replace land mines with grapevines in Afghanistan. UC Davis' role involves training farmers, implementing an agricultural extension service, establishing a vineyard nursery system and developing post-harvest collection and marketing centers.

#### **Mastering Nutrition**

The UC Davis Master of Advanced Studies Degree in Maternal and Child Nutrition Program, in collaboration with the Department of Nutrition and the Graduate Group in Nutrition, announces a new master program that will prepare working adults to meet the growing need for nutrition professionals in public health and maternal child health. The new, part-time program allows students to complete their degrees while they work.

The program was developed in response to an increasing need for

nutrition specialists in public health and maternal and child health programs, and in recognition that low birth weight, diabetes, and child-hood overweight and obesity are important national health concerns. There is also an increasing demand for lactation consultants.

The new program provides a strong scientific foundation in these topics and trains professionals to design, implement and evaluate nutrition intervention programs for mothers and children from various cultural, ethnic and social backgrounds.

#### **Greenhouses Reorganized**



In July 2004, 150,000 square feet of research and teaching greenhouses widely spread throughout campus and previously managed by multiple departments, became one central operation.

Greenhouse staff from the departments of Agronomy and Range Science, Environmental Horticulture, Pomology, Entomology, Nematology, Plant Pathology, Vegetable Crops, and Viticulture and Enology are now one coordinated unit. Activities are administered under the newly formed Department of Plant Sciences.

**Garry Pearson**, left, lead greenhouse manager, explains the implications of the reorganization: "The primary focus is to streamline day-to-day operations, reduce travel time between facilities and develop a centralized customer-based operation." He oversees budget and personnel and serves on the Greenhouse Oversight Committee.

Greenhouse space is critical to the college's teaching and research in basic and applied plant science. Last year, the college dedicated the newly built Core Greenhouse Complex, a state-of-the-art facility capable of accommodating a broad range of plant species and providing cost-effective, quality control over environmental conditions. Research encompasses a broad range of projects from traditional agricultural crops to plant reproductive biology and biotechnology.

#### **Growing Healthier Plants**

Professor **Arnold Bloom**, Department of Vegetable Crops, and colleagues discovered that photorespiration -- a biological process in plants long thought to be useless and even wasteful -- is necessary for healthy plant growth. The study demonstrated that when plants are exposed to elevated levels of atmospheric carbon dioxide or low levels of oxygen, both conditions that inhibit photorespiration, nitrate assimilation in the plants' shoots slows down, eventually curtailing the plants' growth.

Bloom says that as we anticipate a doubling of atmospheric carbon dioxide associated with global climate change by the end of this century, the study results suggest that it would not be wise to decrease photorespiration in crop plants. Findings were published in the *Proceedings of the National Academy of Sciences*.

#### What's the Catch?

The California halibut, a popular fish sought by both commercial and sport fisheries along the Pacific coast of the U.S. and Mexico, has steadily declined in numbers since 1920, despite a variety of efforts in recent years to restore commercial catches

to historical levels. The high cost of energy and stringent environmental regulations present unique challenges to developing a halibut culture in California.

To meet these challenges, **Douglas Conklin**, associate professor, Department of Animal Science, and **Raul Piedrahita**, professor, Department of Biological and Agricultural Engineering, and their colleagues, are developing a culture system built around recirculation technology that allows an energy-efficient, industrial-like approach to the culture of California halibut while minimizing environmental impacts. Prototype systems will be built at the Bodega Marine Laboratory.

#### **How Does Your City Grow?**

Want to know how your city and county will grow? The Information Center for the Environment has released the first-ever seamless General Plan Map of California. All county general plans and many city general plans are integrated into one statewide Geographic Information System (GIS) dataset. The data was standardized to 13 consistent land-use classifications for natural resource and infrastructure planning. Two GIS datasets have been released.

James Quinn, professor, and Michael McCoy, academic administrator, Department of Environmental Science and Policy, directed the mapping project. View data at the California Digital Conservation Atlas, http://legacy.ca.gov.

# Agricultural Water Computer Models

Richard Snyder, biometeorology specialist, Department of Land, Air and Water Resources, and Morteza Orang, scientist with the California Department of Water Resources, created two computer models that could revolutionize the way farmers and water planners estimate crop irrigation needs. The models have value in other areas, too, such as frost protection.

Researchers respond to inquiries from companies, geologists, engineers, universities, and from United Nations units in Italy, Turkey, Egypt and India.

Snyder's research focuses on evapotranspiration, the process by which water is transpired by plant leaves and evaporated from the surrounding soil. While still a postgraduate researcher at UC Davis, Orang worked with Snyder on new methods for estimating evapotranspiration.

#### Focus:

#### **International Nutrition**

Professor **Kenneth Brown**, Department of Nutrition, is principal investigator of a Freedom-to-Discover grant that will advance the application of innovative genetic technologies to help solve dilemmas facing international nutrition. Ten grants for unrestricted biomedical research were presented to 10 leading research institutions throughout the world in six research fields: cancer, neuroscience, cardiovascular, infectious and metabolic diseases and nutrition.

Brown is also director of the Program in International Nutrition, which focuses on the effects of nutritional status on health outcomes and the design, implementation and evaluation of interventions to improve human nutrition and health in resource-poor communities.



#### **Award-Winning Textile Research**

A group of 22 faculty and graduate students from the Division of Textiles and Clothing traveled to South Carolina for the National Textile Center's (NTC) annual conference. NTC is a research consortium of eight universities that shares human resources, equipment and facilities.

UC Davis received three of four Director's Awards for faculty research, as well as ribbons for two research posters. Faculty research awards were based on a review by four industry committees. Denise Kastrinakis won first place in the graduate student competition among member institutions. (See story on page 12)

Professor **You-Lo Hsieh**, left above, is shown with Corine Cecile and Lifeng Zhang of the Agricultural and Environmental Chemistry Graduate Group.





Arthur S. Greathead (B.S., '49, Plant Science; M.S., '60, Plant Pathology) of Salinas retired in 1988 after serving as a farm advisor for UC

Cooperative Extension. He currently serves as a consultant to the vegetable industry and greenhouse transplant industry in California's coastal counties.



Roy T. Ott (B.S., '52; M.Ed., '52, Agricultural Education) and UC Davis graduate Dolores M. Ott of Grass Valley, Calif., retired from teaching in

1979 and moved to the farm where they grow fruit and Christmas trees. Roy taught agriculture, environmental science and math and was a counselor in the Yuba City and Vacaville school districts. Dolores taught music and was a choral director at the elementary level. The Otts have three sons.

**Joshua A. Lee** (Ph.D., '58, Genetics) of Sylvania, Georgia, retired from USDA-ARS at North Carolina State University. He is breeding a long-stapled cotton that contains a gene that prevents crossing with other cotton cultivars.

William Looney (M.Ed., '66, Agricultural Education) of Silverdale, Wash., is faculty emeritus of Big Bend Community College in Moses Lake, Wash. Retired after 32 years teaching farm management to farm families, he writes, trains and works with Kitsap Food & Farm Alliance

Looney's wife, **Teri** (Teresa Sauer, '64, Home Economics), retired from promoting art throughout Central Washington and set up shop where she creates ceramics and sculpture.

**Stephen Rae** (B.S., '68; M.S., '70, Botany), who is working toward his Ph.D. in plant biology with Professor Michael Barbour, completed the instructional program for the UC Cooperative Extension Master Gardener Program in Napa County and started the intern phase of training. The program supports better understanding of home horticulture.



**Daniel J. Desmond** (B.S., '69, Animal Science; M.Ed., '74, Agricultural Education), UC Cooperative Extension 4-H youth develop-

ment advisor, is the recipient of a Food and Society Policy Fellowship. The fellowship program, administered by the Thomas Jefferson Institute in partnership with the Institute for Agriculture and Trade Policy, allows food and agriculture experts to improve communications about food, diet and health issues pertaining to youth.

Eight fellows were chosen from 150 applicants. Each will work on issues such as youth obesity and diet, school nutrition, and the overall connection between the way food is produced and the health and diet of America's youth.

Barbara Schneeman ('70, Food Science) of Washington, D.C., was appointed director of the Food and Drug Administration CFSAN Office of Nutritional Products, Labeling and Dietary Supplements. She oversees the development of policy and regulations for dietary supplements, nutrition labeling and food standards, infant formula and medical foods.

During her 27-year career with UC Davis, Schneeman held professional appointments in the departments of Nutrition and Food Science and Technology and served as dean of the college. She also held an appointment in the Department of Internal Medicine in the UC Davis School of Medicine. During the last three years, she served as associate vice provost for university outreach.

**Julie Underhill Elam** ('71, Child Development) and her husband, UC Davis graduate Jon Elam, are proud Aggies. And it runs in her family.

Elam's father, John (Jack) P. Underhill of Stockton, studied vegetable crops at UC Davis until 1941. He worked with the San Joaquin County agricultural extension office for 34 years, retiring in 1975 as county director. In 2004, he served as alternate board member of the California Asparagus Commission and chair of the San Joaquin County Agriculture Professional Retiree Group. He received membership in the San Joaquin County Agricultural Hall of Fame in 1986.



David Carle ('72, Wildlife and Fisheries Biology) of Lee Vining, Calif., is a writer and retired ranger. In April 2004, University of California

Press published his most recent book, *Introduction to Water in California*, as part of the California Natural History Guide series. In 2003, his book *Water and the California Dream* was released by Sierra Club Books.

When Carle selected his major at UC Davis, he thought he might work either as a wildlife biologist or continue an academic career. As it turned out, he became a park ranger, working in California state parks for 27 years, including at Hearst Castle, Auburn State Recreation Area, and the State Indian Museum in Sacramento. At the Mono Lake Tufa State Reserve, he shared the unit ranger position with his wife, **Janet** ('75, Environmental Planning and Management).

Carle currently is working on another book for the California Natural History Guide series, An Introduction to Air in California.

**Karl Victor Berquist** ('73, Biological Sciences) of Kerman, Calif., is manager of technical services for Los Gato Tomato Products in Huron.

**Sam Brown** ('77, Zoology) of Paonia, Colo., is a ceramic artist. Following graduation, Brown

attended Humboldt State University for one year and worked for the National Park Service for five years in Colorado and Alaska.

Brown has been traveling to Peru since 1986, promoting solar technology, solar electric and solar cooking on Taquile Island in Lake Titicaca. As a result, Taquile Island is a solar village with 80 percent of houses using solar electric.

Brown and his wife solar cook and have a net metered photovoltaic system on their house in Western Colorado.

Helen Wylie [Thompson] Poindexter ('78, Wildlife and Fisheries Biology) of Redmond, Oregon, is a family nurse practi-tioner in Bend, a city of 62,900 at the foothills of central Oregon's Cascade Mountains. Poindexter attended nursing school and established her private practice after working for years as a firefighter and biologist. She lives with her husband, Stratton.



**Dean Vayder** ('79, Agricultural and Managerial Economics) of Pleasanton, Calif., is a consultant with Applied Analytix, a professional services firm specializing in budgeting, forecasting and analysis solutions. The company creates systems that put information at the fingertips of employees and analysts, giving them more time to analyze business profit potential.

Vayder is pictured with his 13-year-old son, Michael.

John C. D'Arrigo ('80, Agricultural Economics and Business Management) of Monterey is president of D'Arrigo Bros. Co. of California, a fruit and vegetable grower based in Salinas. He is past chair of the Grower-Shipper Association of Central California and former chair of Western Growers, a 3,000-mem-

ber association that works to protect the fruit and vegetable industry in California and Arizona.



Michelle Maynard Nichols ('80, Agricultural and Managerial Economics) of Katy, Texas, is a professional speaker and sales columnist

for BusinessWeek Online. Her column, Savvy Selling, is distributed to 200,000 subscribers worldwide. Married and the mother of three children, Nichols consults with a wide variety of industries.



Paul Jorgensen ('82, Biochemistry) of Walnut Creek, Calif., is director of AcroMetrix, the biotech company that he started five years ago

with two colleagues.

Jennifer Bauer Kelly ('86, Zoology) of Middletown, Calif., teaches eighth grade physical science and seventh grade animal science for the Middletown Unified School District. She and husband Ron have three sons. "Seven-year-old Tanner already says he wants to go to UC Davis!" she writes.



Jon Klingborg ('87, Zoology) of Atwater, Calif., is a small-animal veterinarian with Valley Animal Hospital in Merced. He is president of

the California Veterinary Medical Association, the largest state veterinary organization in the nation. Klingborg and his wife Kim have two children, Patrick and Aaron.

Melissa St. John-Harder ('89, Animal Science) of Paso Robles, Calif., is a compliance manager for Waste Management, Inc. in Livermore, where she has worked as an environmental health specialist since 1992. St. John-Harder received an M.A. in organizational management online from University of Phoenix in 2003. She currently is president-elect for the California Environmental Health Association.



Genevieve Cottraux ('89, Design; M.S., '93, Textiles) of Napa is assistant museum registrar in the art exhibitions department of COPIA: The

American Center for Wine, Food and the Arts. COPIA investigates and celebrates the culture of the collective table through wine, food and the arts.

**Leah Peri Siegel Taylor** ('90, Design) of San Diego is an occupational therapist at Children's Hospital in San Diego. She lives with her husband, Steve, and daughter, Sophie. She has worked at the hospital for six years.

Edwin Pattison ('92, Environmental Policy Analysis and Planning) of Modesto is an environmental science and engineering consultant with MFG Science & Engineering Consultants, a Tetra Tech, Inc. company. Pattison received his masters in public administration from California State University, Stanislaus, in 2004.

**Sue Murphy Mote** ('93, Community Development) of Richmond, Calif., is a freelance writer. In April, her book *Hmong and American: Stories of Transition to a Strange Land* was published by McFarland & Co. The book tells the stories of 12 Hmong immigrants who adapted to American life and culture while preserving the values of their own ancient culture.

Mote previously worked as a feature writer and editor for newspapers in northern California.

**Sunil Dutta** (Ph.D., '94, Plant Biology) of Agoura, Calif., is a Sergeant II assigned to the Internal Affairs Division of the Los Angeles Police Department. Asked if his major at UC Davis helped to prepare



him for his current career, Dutta said that the strongest connection for him has been "scientific method."

"In police work, one cannot

bring preconceived notions or hypothetical or personal bias," Dutta said.

Dutta is working on a memoir titled *Hard Wall of Reality*.

Larkspur Morton (M.S., '95; Ph.D., '00, Animal Behavior) of Old Town, Maine, teaches at Audubon Expedition Institute, Lesley University, in Cambridge, Mass. He previously taught at Colby College. Morton writes that life with his partner -- and cats Matilda and Purvis -- suits him incredibly well.



Timothy Leung ('97, Design) of New York City is a technical designer for Polo Jeans Company where he designs for men's knits and sweaters. He

also designs his own line of clothing, plays guitar and bass, designs musical instruments and pursues interests in the culinary arts.

Shawnee Shahroody ('97, Environmental Biology and Management) of Davis recently traveled to Iran to visit relatives. Her father left Iran in the 1960s for graduate study at UC Davis, where he fell in love with and married her mother. Her parents stayed here to work and raise a family. Shahroody is the first person in her family to visit Iran in more than 25 years.

Shahroody is doing some writing and penned a story about her travels. Her career is focused on practicing environmental law.

Liesel Fenner ('98, Landscape Architecture) of Boston, Mass., is program manager for the New England Foundation for the Arts. The artist-in-residence program addresses local and regional conservation concerns through site-specific public art projects that include



temporary art installations, exhibitions, interpretive media and festivals.

Fenner received the National Park Service Conserva-

tion Hero Award for her role in developing and coordinating the Art and Community Landscapes program.



Barney Caton ('98, Ecology) of Hillsborough, N.C., is an ecologist and pest risk analyst for the Center for Plant Health Science and Technology,

USDA-APHIS Plant Protection and Quarantine program. He works on invasive plants issues, including Internet surveillance and assessment of voluntary efforts by nursery associations to reduce trade in invasive plants.

Caton's wife, **Julie Reynolds** (M.S., '94, Ecology), is a Mellon Fellow at Duke University. She is an instructor in the Writing in the Disciplines Program in the Biology Department. They have two sons.

Tamara Hussain Acord ('01, Clinical Nutrition) of Rocklin, Calif., is a sales representative with Reliant Pharmaceuticals, promoting and selling cardiovascular drugs for hypercholesterolemia and hypertension. She married UC Davis graduate John Acord in 2001. She attended McGeorge School of Law for one year.



John Mitchel ('01, Agricultural and Managerial Economics) of Colorado Springs is working on a Masters of Science in Management with

a concentration in leadership and organizational efficiency at Troy University. He is executive officer for B Company, 64th Forward Support Battalion, 4th Infantry Division, Fort Carson, Colo. Mitchel feels that his studies at UC Davis in managerial

economics gave him the critical and technical skills in resource forecasting and leadership that allowed him to provide the proper proactive logistical support to his customers.

**Nicole Rayl** ('02, Environmental Biology and Management) of Menlo Park, Calif., is a biology education manager with the National Aeronautics and Space Administration.



Christina Lee Tom ('02, Human Development) of Honolulu graduated from Johns Hopkins University School of Nursing in Baltimore,

receiving a B.S. degree. She works at Maryland General, a community teaching hospital serving the Baltimore metropolitan area, assigned to a medical-surgical unit that specializes in orthopedic surgeries and neurological disorders.

**Sarah Kaylor** ('03, Environmental Biology and Management) of West Sacramento is a biological sciences technician at United States Geological Survey. A week after graduation, she married fellow Aggie **Jeff Mills** ('01, Biotechnology).



Jason Rasgon (Ph.D., '03, Entomology) of Raleigh, N.C., is assistant professor at Bloomberg School of Public Health, Johns Hopkins

Univer-sity. He is a member of the Depart-ment of Molecular Microbiology and Immunology, focusing on the development, evaluation and application of effective mechanisms to disperse introduced transgenic traits into natural insect populations.

Rasgon wrote, "UC Davis was a wonderful place to begin my development as a scientist, due to the people and resources in the Department of Entomology and the Center for Population Biology."

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