

## CHAIR'S MESSAGE

**Dear Alumni and Friends,**

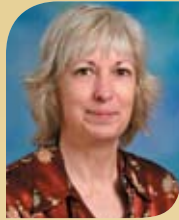
This past year has been interesting and challenging. We are grappling with budget cuts and furloughs and things will be different. They always are. The department is heavily engaged in strategic planning, including three faculty retreats and input from staff, students, alumni, friends/stakeholders, and college administrators. We have generated specific working objectives for the next 5-7 years. Key areas include increasing internal and external communication, developing financial resources, integrating academic planning, revising undergraduate majors, and developing an integrated plan for our animal facilities.

We have celebrated numerous awards highlighting our wealth in human resources. The quality of our faculty, staff and students just gets better and better! Their dedication, excellence and many contributions are being recognized both within and beyond UC Davis.

We are very proud of the award of the 2009 UCD Prize for Undergraduate Teaching and Research to Professor Ed DePeters. Everyone knows about Dr. D.'s dedication to undergraduates! And, in the UC Davis centennial year, what fun to see the Holstein cow motif at Dr. D.'s gala dinner, with hundreds of people wearing "I ♥ milk" buttons. In an exciting act of philanthropy, Professor DePeters and his wife Sue donated the prize money in its entirety to the Department of Animal Science, establishing an endowment named the "Ed DePeters Family Fund." This fund is intended to provide awards for undergraduates studying dairy science and to support undergraduate field trips to gain experience with California agriculture. The DePeters family gift recognizes the inspiration Dr. D. has gained from his colleagues and students, both graduate and undergraduate, who have contributed to his fulfilling career as an educator and researcher. The DePeters family hopes others will be inspired to contribute to this fund. Please consider being a part of this spirit to support our students and their education (a donation envelope is conveniently inserted for you!). We need your support, in all its varied forms, more than any other time in the history of our department, and we thank you for it.

I hope you enjoy our news! Please keep in touch – let us know what and how you are doing. We are gearing up for the coming academic year, furlough days and all – we'll be here doing our best to educate, conduct research and provide outreach in the principles and applications of animal science. Come visit us at one of the many events held throughout the year. Have a happy, healthy fall and all the best to you in 2010.

**Mary Delany**



## Ed DePeters awarded the 2009 UC Davis Prize for Undergraduate Teaching and Scholarly Achievement



A late winter 2009 session of the "Animal Feeds and Nutrition" class taught by Professor Ed DePeters was interrupted when Chancellor Larry Vanderhoef entered the classroom with a cake, dignitaries, and a television crew. The students were surprised, happy,

and in one case, teary. DePeters was beaming! The \$40,000 prize, believed to be the largest undergraduate teaching prize in the nation, is funded by the UC Davis Foundation, which believes that students and their professors are at the heart of the UC Davis mission. A "wonderful alchemy" occurs when excellence in undergraduate teaching is combined with outstanding scholarly achievement, explained Meg Stallard on their behalf. Known for his energy, intensity, and personal concern for students, DePeters also teaches dairy production and livestock production. He photographs the students in his classes to learn all their names. Dean Neal Van Alfen said, "All parents sending their children off to college hope that their students will encounter an Ed DePeters at least once during their academic careers."

DePeters says he tries to teach why things work, not just how. This approach carries into his research, which focuses on modifying the fatty acid composition of milk by changes in the cow's diet. He has also investigated the use of agricultural byproducts such as almond hulls and cottonseed as parts of nutritious feeds. His research was recognized in 2007 with an award from the American Feed Industry Association.

Ed's response to all of this? "When I go, I just want to be remembered as a teacher – as someone who tried to inspire students to be imaginative and to think creatively." Congratulations, Ed DePeters, on this exceptional honor!

### A message from Dr. D.

Receiving the UC Davis Prize was a fantastic experience - I cannot express how emotional it was. The decision my family and I made to donate the prize money to the Department of Animal Science to start a fund to support student field trips and a scholarship was easy. Now the fund needs your financial support to ensure that future majors get the experience of riding in buses and vans to visit dairy, beef, sheep and swine operations. Field trips link the biological concepts learned in class to applications on the farm, and they are expensive. Financial times at UC Davis are changing. I do not want field trips to disappear when teaching budgets are reduced. Please remember your own field trips and consider helping future students - no amount of money is too little.

Thank you to all of my former students. All of you contributed to why I received the award. I wish you the best. - Ed

In the fall, pictures from my classes will begin to appear at the photo album link on <http://animalscience.ucdavis.edu/faculty/depeters/>



## Francine Bradley honored with Common Threads Award.

**Francine Bradley**, Extension Poultry Specialist, was honored with a **Common Threads Award** at a luncheon in March 2009, along with five other Northern California women in agricul-

ture. As well as having distinguished careers, the recipients have made exemplary and extraordinary contributions of time, energy and resources to enhance their communities. The awards are jointly sponsored by the California Agricultural Leadership Foundation and the UC Davis College of Agricultural and Environmental Sciences.

This award recognizes Bradley's commitment and contributions through her career-long education of youth about poultry, her work on disease prevention in birds ranging from family backyard flocks to industry stocks, and her efforts to improve access and diversity through education. Bradley is the statewide 4-H poultry program leader. She organizes the annual Avian Sciences Day to educate youth and their parents as well as preparing "Avian Sciences Notes" that is distributed to 4-H youth and leaders, and to avian fanciers. She spearheaded the development of Avian Bowl, a youth competition about knowledge of all things avian. A 4-H mom described it as an unsurpassed teaching opportunity for the underlying science. It is now a feature of the annual National 4-H Poultry and Egg Conference.

Bradley responded quickly to the 2002-03 outbreak of exotic Newcastle disease by developing multifaceted, multilingual educational outreach programs for game fowl owners, bird fanciers, youth programs and fair/show poultry exhibitors. California State Veterinarian Dr. Richard Breitmeyer said, "During the many months that poultry were banned from exhibition throughout California, Dr. Bradley designed and implemented programs to turn a very negative situation into a valuable learning opportunity." More recently, Bradley disseminated information about avian H5N1 influenza.

This caring, involved, intelligent woman has enhanced the lives of many people.



Francine Bradley with some of her Avian Bowl team members (l to r): Rebekah Jones, Gina Lee, Bradley, and Elise Rodriguez.



## Dan Sehnert receives College Award of Distinction as Outstanding Staff

In October 2008, **Dan Sehnert**, Animal Facilities Coordinator for the Animal Sciences Department, was honored with a **College of Agricultural and Environmental Sciences Award of Distinction** in the "Outstanding Staff" category. Sehnert's record of hard work on behalf of the department and college began 27 years ago, when he became manager of the department's large animal physiology unit, surgical unit, and meat science laboratory. In 1993, he assumed responsibility for all departmental animal facilities and currently oversees 21 staff employees and many students who run 40 facilities. These include the dairy, beef, goat, swine, sheep and horse barns, the avian facilities, plus the surgical rooms and the meat lab. Sehnert also manages beef herds at the UC Davis Research and Extension Centers near Yuba City and in the Imperial Valley, and the herds at Folsom and Vacaville prisons.

Frequently at the drop of a hat (not his, which is nearly always firmly sitting on his head), Sehnert is asked to escort campus visitors on tours of UC Davis animal facilities. He's a major organizer and workhorse for the department's extensive Picnic Day activities as well as events like Ag and Environmental Sciences Field Day. He judges livestock at state and county fairs, and attends conventions for beef cattle and thoroughbred associations.

Amazingly, with all these responsibilities and activities, Sehnert is always smiling! Jonathon Beckett, a professor at Cal Poly San Luis Obispo and former grad student in the department, said, "You will not find a more dedicated, committed, genuine and capable person than Dan Sehnert." We are fortunate indeed to have Sehnert in our department, and we heartily congratulate him on this well-deserved honor!



Dan Sehnert with department Chair Mary Delany and Dean Neal Van Alfen at the awards ceremony.

## Alison Van Eenennaam's research and extension work honored



**Alison Van Eenennaam**, Extension Specialist in Animal Biotechnology and Genomics, received the **UC Davis Academic Federation 2009 Excellence in Research Award**. The award recognizes the vital role Federation members play in the research mission of UC Davis. She also received the **2009 Outstanding New Professional Award** from the Academic Assembly Council of the University of California Division of Agricultural and Natural Resources to honor her robust research and extension program. One of five annual Distinguished Service Awards, it recognizes service and excellence in UC Cooperative Extension over a significant time.

Van Eenennaam's research, only one part of her nationally unique Extension appointment, spans several areas: modification of milk lipids to benefit human health, establishment of biocontainment methods for transgenic fish, and application of DNA-based technologies to livestock production for such purposes as determining paternity or finding the best ways to estimate the genetic merit of bulls on commercial beef ranches. Her publications appear in basic and applied scientific journals. She is especially attentive to integrating her group's research findings into many different types of educational materials for outreach, a core mission of Cooperative Extension.

To make science-based information on biotechnology available to the general public, Van Eenennaam has developed a parallel career in film-making! In 2005, she produced "Genetic Engineering in California Agriculture," outlining the scientific background and issues in this area. In 2007, Van Eenennaam and Peggy Lemaux (UC Berkeley) produced "Cornucopia's Challenge," highlighting the variety of methods used by farmers to meet the challenges of growing, segregating, and marketing crops to meet differing market requirements and consumer preferences. Each of these videos won a **Communicator Award of Distinction** from a leading international awards program that honors creative excellence for communications professionals.



Van Eenennaam's most recent video, co-authored with graduate student William Pohlmeier and released in 2009, is entitled "Animal Biotechnology." It begins with a brief historical description of the development of various animal biotechnologies and places the most controversial, cloning and genetic engineering, within that framework. All these videos can be seen on YouTube or from Van Eenennaam's website, <http://animalscience.ucdavis.edu/animalbiotech>

## Dairy and environmental awards to Deanne Meyer

**Deanne Meyer**, Extension Specialist in Livestock Waste Management, was named the **2009 Outstanding Dairy Industry Educator / Researcher** by the publication **Western DairyBusiness**. She received the award at the February 2009 World Ag Expo in Tulare, California. State and federal regulations are constantly changing how livestock operations must function. Meyer serves as a resource to help operators comply with new regulations. She was instrumental in developing and delivering compliance education that enabled 98% of affected dairy operators to prepare and submit reports of waste discharge in response to a 2005 Central Valley Regional Water Quality Control Board requirement.



*Trish Price, Denise Mullinax, Eliana Meyer, Deanne Meyer, and Joel Hastings, president and publisher of DairyBusiness Communications.*

To accomplish such large-scale challenges, Meyer works with her partners in the California Dairy Quality Assurance Program (CDQAP). "California's dairy industry is the most heavily regulated in the country," said CDQAP Director Dr. Michael Payne, UC Davis. "Nowhere else are monitoring and reporting requirements for water quality more comprehensive than in the Central Valley. California dairies also face the strictest regulations in the nation for control of dust and air emissions."

Meyer and other CDQAP members accepted California's highest and most prestigious environmental honor, the **Governor's Environmental and Economic Leadership Award** in a Nov. 2007 ceremony in Sacramento. The award in "Environmental and Economic Partnerships" was for demonstrating exceptional leadership in building public-private collaborations that help to conserve California's resources and protect and enhance the environment. Gov. Schwarzenegger praised the recipients for their "sustained commitment, innovative solutions and strategic investment to protect our environment and boost our economy." The CDQAP includes 17 regulatory agencies, dairy organizations, environmental advocacy groups and the University of California. The partnership offers classroom and on-farm assistance in meeting regional, state and federal environmental regulations.



*Twenty-one compliance workshops were held during a 2 month period in fall 2007.*



Professor **Joy Mench** received the UC Davis Academic Senate's **2007 Distinguished Scholarly Public Service Award** to honor her service in the assessment and improvement of animal welfare. The award recognizes unpaid dissemination of information to the public and nonprofit sector. Part of Mench's research focuses on

improving the housing, handling, and management of poultry. She has helped develop voluntary standards for agricultural animals used in food production. Mench has also served on the Council on Accreditation for the Association for Assessment and Accreditation of Laboratory Animal Care. She directs the UC Davis Center for Animal Welfare.

Prof. Mench was also named the **2008 Fred Present Memorial Lecturer** at the University of Guelph, Canada. The lecture series enables students, local scientists and members of the food animal industries to engage in discussion with world leaders in farm animal welfare. Her public talk was entitled "Laying Hen Welfare: Scientific, Consumer, and Industry Perspectives."

**Frank Mitloehner**, Air Quality Extension Specialist, was honored with a U.S. Environmental Protection Agency's **2007 Environmental Award for the Pacific Southwest** for his work in protecting public health and the environment. His research is centered on air quality in relation to livestock production as well as environmental physiology, focusing on the effects of air emissions on animal health and welfare. Mitloehner and Ruihong Zhang, also from UC Davis, were the only scientists to receive this honor. Other awardees were industry or environmental groups or entire communities.

Mitloehner also received the **2009 Outstanding Research Award** from the Academic Assembly Council of the University of California Division of Agricultural and Natural Resources, honoring his very visible, high-impact program in Cooperative Extension.



Deputy Regional Administrator  
Laura Yoshii,  
Frank Mitloehner,  
and Regional Administrator  
Wayne Nastri.

**James Oltjen**, Cooperative Extension specialist in animal management systems, began duties as **President of the American Society of Animal Science** in July, 2009. This professional organization helps members provide effective leadership for the rapidly changing livestock and meat industries. Oltjen works on natural resource and beef cattle modeling, and on livestock quality assurance programs.



**Dan Drake**, Cooperative Extension Livestock Farm Advisor, Siskiyou County, and Associate Member of the Department, received the **2007 Western Section American Society of Animal Science Extension Award** at the June 2008 meeting in Moscow, Idaho. Dan is the first livestock advisor or county agent to receive the award. Previous recipients

have been state specialists.

Professor **Kirk Klasing** presented the **Gordon Memorial Lecture** in Stockport England in March 2007. The Robert Fraser Gordon Memorial Trust, in conjunction with the World Poultry Science Association, presented a medal to honor Klasing's distinguished contributions to poultry science. He is the fifth person from the United States to be so honored.



Ed DePeters and  
Mary Delany at the  
2007 American Dairy  
Society Meeting in  
San Antonio, Texas.

Professor **Ed DePeters** received the **2007 American Feed Industry Association Award** at the annual meeting of the American Dairy Society. The award recognized the best original published work on dairy cattle nutrition during the prior 10 years. Ed's research has provided essential data for development of mechanistic models to describe nutrient digestion, nutrient flow, and milk-component synthesis. He is recognized as a leader in the use of nutritional manipulation to alter milk composition.

**Cassandra Tucker** joined the department as an assistant professor in January 2007. Her research focuses on assessing and improving animal welfare. While an undergraduate major in Animal Science and Management at UC Davis, Cassandra was a peer advisor in the Animal Science advising office. She went on to earn her Ph.D. in Animal Science at the University of British Columbia in Vancouver in 2003. She then moved to the north island of New Zealand, to be a research scientist at the Ruakura campus of

AgResearch, near Hamilton. After 3 years there, she happily returned to California to join the Animal Science Department.

Cassandra studies behavior in dairy cattle and is particularly interested in how it changes in response to procedures such as tail

docking and horn disbudding; management decisions like stocking density; housing features like type and quantity of free-stall bedding; and, measures taken to mitigate effects of inclement weather. During summer 2008, she and her research team investigated how cows can use showers



to cool off during hot weather. After training them to step on a platform to activate the shower, the researchers measured the cows' body temperature and respiration. Video cameras tracked which animals used the showers and for how long. Some cows spent 8 hours a day under the water! The behavioral and physiological responses to heat stress help understand how and when to cool cows efficiently, benefiting both the cows and the dairyman. This project, which was widely covered by the press, was supported by a donation from the Animal Compassion Foundation, an affiliate of Whole Foods.

Cassandra teaches popular undergraduate lecture and lab courses on domestic animal behavior. In the lab, students work in small groups to come up with their own research question and then conduct an experiment over the quarter to get an answer. They study animals at the department's dairy, hog, laboratory, sheep, avian, horse and goat facilities. This lab course gives students the opportunity to actively engage in research, interact with animals and explore their own interests. It also provides undergraduates with plenty of contact with a faculty member. Cassandra "thoroughly enjoys the one-on-one interaction with students."

Cassandra is helping to plan the future of the department by serving on committees to recruit a new faculty member in sustainable agriculture and to revise the curriculum offered by the department.

She and her partner, Heiko Wittmer, enjoy hiking, gardening, cooking (and eating) in their spare time.

**Russ Hovey** joined the department as an associate professor in December 2007. Russ is a mammary gland biologist whose research focuses on the molecular and endocrine regulation of mammary gland growth and function. A native of Australia, he earned his bachelor's degree at the University of Queensland and then pursued his Ph.D. at Massey University in New Zealand, where his doctoral research was conducted at the Ruakura Research Center. Russ then did postdoctoral research at the US National Institutes of Health in Bethesda, Maryland. Before moving to Davis, he was an assistant professor of Animal Science at the University of Vermont.

Russ is interested in how mammary glands function during normal development and lactation as well as in abnormal states such as breast cancer. His research subjects - currently cows and pigs - have included human tissues, sheep, mice and wallabies! His group is currently investigating how dietary fats affect the mammary gland, the way that prolactin and the sex hormones act on cells within the mammary gland, and the genes that control development of different structures in the breast. His research is supported by the USDA, Dairy Management Inc., and the Department of Defense Breast Cancer Research Program.

Russ teaches the required undergraduate lecture-lab course on lactation. During Winter 2009, he introduced a new hands-on, boots-on component. To follow udder growth and lactation, the class of 145 students treated cows with hormones mimicking pregnancy. An enthusiastic group maintained their "herd" of 5 cows, doing all the necessary chores as well as making research measurements. "This type of project is exactly what makes learning fun for the students and for me," says Russ.

Russ serves on several committees whose work is shaping the department's future: Strategic Planning, recruiting a new faculty member in reproductive biology, and revising the curriculum offered by the department.

In their spare time, Russ and his partner Josie Trott care for their horses Donatelli and Red who moved with them from Vermont.



# Retirements



**Gary B. Anderson**, an Animal Science professor for nearly 34 years, retired in 2007. His career was honored at a gala dinner at which colleagues, friends, and former students, some from as far away as Illinois, Utah, and Virginia, gathered to celebrate his mentoring, teaching and research with a slide show and anecdotes. Gary's penchant for pithy emails, complex multiple choice questions on exams, and detailed editing of his students' writing was noted. His students presented him with a "distinctive retirement collection" of wine bearing specially designed labels.

Gary, who chaired Animal Science from 1998-2005, was a fierce advocate for the department. His research on reproductive biology focused on embryo transfer, transgenics, cloning, and embryonic stem cells. He received two Distinguished Teaching Awards from the Academic Senate, one for Undergraduate teaching and the other for graduate student teaching. In 1997, he received the UC Davis Prize in Undergraduate Teaching and Research. He also received a 2006 College Award of Distinction, as noted in the Winter 2007 Highlights. Gary and his wife Dianne (above, left) took their Jacob sheep along to Sparta, Michigan, where they now live.



*Mary Ellen Baldwin and Elizabeth Bradford (left) view a quilt made by Dianne to chronicle Gary's career at UC Davis.*



Photos courtesy of Dianne Anderson

**Douglas E. Conklin** retired in September 2007 after 14 years as a professor in the Animal Science Department following 15 years on the research faculty of the Bodega Marine Laboratory aquaculture program. Colleagues, friends, former students and family celebrated at a Hawaiian-themed barbecue. A slide show provided a light-hearted review of highlights of Doug's research career, which focused on nutritional and environmental conditions needed to raise shellfish (Maine lobster and shrimp), as well as fish such as halibut and medaka.

Doug served as a graduate advisor for large numbers of students in the Animal Science Graduate Program and the Animal Biology Graduate Group. One of his much-praised skills was being able to squeeze the many students in these and other department-related programs into limited numbers of desks and cubbies in the grad room. Doug and his wife Ann (above, right) are putting Doug's spatial organizing skills to good use by having him pack their RV, Harvey, for their travels.



## Department strategic planning

**Animal Science department faculty** attended day-long retreats in June 2008, December 2008 and June 2009 to work on strategic planning. The goal is to develop a visionary framework to shape the department's teaching, research, and outreach in the 21st century. Among many challenges are providing a sound education for burgeoning student numbers, planning for replacement of faculty who will retire in the next 5-10 years, and funding research and the department's extensive animal facilities in the face of a difficult economy. An ad hoc committee has already crafted a proposal to revise the curriculum offered by the department. New working groups will be formed to expand the proposal and develop an implementation plan. Another committee is generating an integrated plan for animal facilities. Members of the department are continuing to work together to refine and shape the ideas emerging from the retreats and these committees.



Participants in the June 2008 strategic planning retreat.

## Another Retirement!



**Y.B. Lee** retired in September 2008 after 27 years as an Animal Science professor. Y.B. worked on muscle growth and meat quality, and taught a meat science course with a lab as well as a meat processing and marketing course. His sons and their families joined departmental faculty and staff at a lunch in his honor on the Meyer Hall lawn. Y.B. (above) with emeritus faculty member Ed Price, a previous chair of the department, and (below) with his family.



## Eric Bradford Conference Room Dedicated

*Eric Bradford being congratulated by his friend and colleague Burrows Hamilton from Rio Vista at the reception held after the dedication ceremony.*

On May 23, 2007, the Department of Animal Science dedicated a conference room to honor **Professor Emeritus Eric Bradford** for his many contributions to the department. Eric joined the UC Davis faculty in 1957. His research focused on the genetics of reproduction and growth in livestock and laboratory animals, sheep breeding, animal genetic resources conservation, and international agriculture. He served as major professor for 11 Ph.D. and 14 M.S. students.

Eric was the recipient of numerous awards and honors and accepted responsibility for a number of administrative posts, including associate dean of the college and chair of the department. After retiring in 1993, he remained active in the department and on campus.

Nearly 70 people attended the dedication and the reception afterward. The event was a warm highlight for both the Bradford family and the department, and became especially memorable because Eric died suddenly later that summer.



*Eric and family in the Bradford Conference Room, in front of a painting given to Eric in honor of his services as chair.*



## **Eric Bradford** **1929-2007**

**Eric Bradford**, Professor Emeritus of Animal Science, died on July 29, 2007. Born in 1929, he grew up on a small farm in Quebec, Canada. He received his bachelor's degree in agriculture from Macdonald College of McGill University, then earned his

M.S. (1952) and Ph.D. (1956) in genetics and animal husbandry from the University of Wisconsin. He briefly joined the faculty at McGill University before taking a faculty position in Animal Science at the UC Davis in 1957 to start a sheep breeding program. He served two terms as chair of Animal Science. After his retirement in 1993, he stayed very active in academic pursuits.

Eric taught undergraduate courses in animal breeding and genetics and was the major professor for more than two dozen graduate students from 12 different countries. He and his wife Elizabeth hosted many of them in their home and on camping trips. He served on the board and twice was president of International House in Davis.

Eric's research was on growth and reproduction of livestock and laboratory mice, sheep breeding, conservation of animal genetic resources, and international agriculture. He discovered a major gene mutation conferring increased growth and body size in mice with little change in body composition. This enabled discovery of the gene responsible for the high growth effect and a better understanding of the genetic and metabolic interactions controlling growth in animals.

Eric was the principal investigator of the Small Ruminant Collaborative Research Support Program that had projects in Indonesia, Kenya, and Morocco. Pursuing his interests in increasing the global food supply and sustainability of animal agriculture, he chaired an international task force on Animal Agriculture and the Global Food Supply. He also chaired campus committees whose work led to the founding of the UC Davis Agricultural Sustainability Institute in 2005.

Eric is survived by Elizabeth, his wife of 53 years, his daughters Anne Harris, Margaret Aumann, and Ellen Javete, his son Ken, and their families.



## **Lee Baldwin** **1935-2007**

### **Ransom Leland** **"Lee" Baldwin,**

Professor Emeritus of Animal Science, died on November 30, 2007. Born in 1935 in Connecticut, he grew up on his family's dairy farm. He earned a

bachelor's degree in animal industries from the University of Connecticut, and then an M.S. in dairy nutrition and a Ph.D. in Biochemistry (1963), both at Michigan State University. He joined the faculty in Animal Science at UC Davis in 1963. From 1992 to 2000, he served as Sesnon Professor of Animal Science. Lee retired in 2001.

Lee taught undergraduate courses in lactation and was the major professor for more than three dozen graduate students. He was known for fostering a family environment among his students, postdoctoral fellows, and visiting scientists. He challenged his students to integrate knowledge from different disciplines.

Lee's research areas included the hormonal and metabolic regulation of mammary gland metabolism, animal energetics, and tissue and whole animal adaptation to lactation. He saw that experimental data could be integrated and used to understand energy metabolism in farm animals, and went on to develop mathematical systems models to do this. His achievements were recognized by his election as Fellow of the American Association for the Advancement of Science, the American Dairy Science Association, and the American Society of Nutritional Sciences. His career accomplishments were honored by his election to the National Academy of Sciences in 1993.

Lee and his wife of 50 years, Mary Ellen, took their children to a number of places on sabbatical, including Australia, New Zealand, and England. In addition to Mary Ellen, Lee is survived by their children Cheryl Choate, Randy Baldwin, and Robert Baldwin, foster daughter Angel Starr, and their families.

The UC Davis Department of Animal Science Memorial Fund was established to honor individuals associated with the department. To make a donation in memory of Eric Bradford or Lee Baldwin, please send checks payable to the UC Regents to the Animal Science Department, UC Davis, One Shields Ave., Davis CA 95616.





Graduate degree recipients who conducted their research in the department gathered with faculty after a pre-graduation reception in the Weir Room in Meyer Hall, June 2008.

## Graduate Student Scholarships and Awards

At the California Animal Nutrition Conference in May 2007, **David Ledgerwood** (M.S. with Ed DePeters) received an Animal Nutrition Scholarship and gave an oral presentation to the group. At the May 2008 meeting, **Kimberly Livingston** (Ph.D. with Kirk Klasing) won the abstract competition, presented a 10 minute talk, and was awarded a \$1000 scholarship. **Gustavo Cruz** (Ph.D. student with Roberto Sainz) was awarded third place in the poster competition.

At the 2007 American Dairy Science Association meetings in San Antonio, **Jason Weinstein** (M.S. with Ed DePeters) received 3rd place in the graduate student oral presentation contest.

The California Chapter of the American Registry of Professional Animal Scientists at its Oct 2007 meeting awarded the Memorial Scholarship to **Kimberly Livingston** and the Kutches Dairy Scholarship to **Scott Hamilton** (M.S. with Frank Mitloehner). At the Oct 2008 meeting, **Tom O'Hare** (Ph.D. student with Mary Delany) received the Memorial Scholarship, and **Jolene Berg** (M.S. with Deanne Meyer) received the Kutches Dairy Scholarship.

**Krista Cooprider** (M.S. student with Alison Van Eenennaam) was awarded a 2008-09 scholarship by the California Beef Cattle Improvement Association. The application included an interview with beef industry representatives from this organization and the California Cattlemen's Association (CCA), CCA Feeder Council, Allflex USA, CCA Allied Industry Council, Cornerpost Publications /California Cattlemen Magazine, the Livestock Memorial Research Fund, and the Gordon Van Vleck family.

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*Graduate Student News continued on page 11*

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## Graduate Student Awards

As of June 08, the Animal Science Department housed 110 graduate students belonging to 13 graduate groups.

**Kimberly Stackhouse** (Ph.D. student with Frank Mitloehner) received one of 12 UC Davis Outstanding Graduate Student Teaching Awards presented during Spring 2009. The awards recognize the important contributions of graduate students to undergraduate teaching and learning. Approximately 1500

teaching assistants are employed on campus during each academic year. Kim was nominated for her work in Introductory Animal Science. She has also been a TA for lactation, companion animals, domestic animal production lab, and beef and sheep production classes.



**Ingrid Edwards** (Ph.D. with Kirk Klasing) received the grad student presentation award in the cellular and molecular biology section of the American Association for the Advancement of Science at their May 2008 meeting in Maui. Her talk was entitled "Inflammation decreases lipid processing by macrophages during egg yolk peritonitis in the chicken."

**Jennifer Brennan** (M.S. student with Jim Millam) was awarded 2nd place for a student platform presentation at the October 2008 meeting of the Society for Environmental Toxicology and Chemistry. Her talk was entitled "Uncovering a novel source of phytoestrogens: detection and identification of estrogenic compounds in *Polygonum dumetorum*."

**Devashri Patwardhan** (M.S. with Annie King) earned first place for an outstanding poster presentation and also received a student merit award at the March 2009 Pacific Egg and Poultry Association convention in Hawaii.



Research Poster Session at the May 2007 California Animal Nutrition Conference in Fresno CA. (l to r) Gustavo Cruz, Jason Weinstein, Matthew Singer, Kimberly Livingston, and Nadia Swanepoel.



## We're bulging at the seams!

As of Fall 08, our departmental advising center was serving a total of 831 undergraduates in four majors: Animal Science (ANS-733), Animal Science and Management (ASM-68), Avian Sciences (AVS-19), and Agricultural and Environmental Education (AEE-11).

Professor **Ed DePeters** assumed the duties of Master Advisor for Animal Sciences in Fall 2007. He sometimes walks cows across campus to relax.

**Carl French** (ANM 08) and **Kirsten Thorburn** (ANM 09) of the Beef Show Team exhibited two UC Davis Angus cattle at the March 2007 great Western Livestock Show in Tulare, and then in

April 2007 at the Grand National Livestock Show at the Cow Palace in San Francisco. The bull was the Reserve Champion Angus Bull, and the heifer won the senior Heifer Calf division championship. The show team is advised by Jerry Johnson, Senior Beef Operations Manager in the department.



**Katherine Sanui** (AVS 06) received the prestigious Charles Hess Community Service Award in June 2007 at commencement. Shown here at the reception held after the ceremony are Chair Mary Delany, Patty Sanui, Katie, Kay Ogasawara, and Avian Sciences Master Advisor Francine Bradley. Katie is the granddaughter of Kay Ogasawara and the late Professor Emeritus Frank Ogasawara. She entered vet school at UC Davis in Fall 08.

**Kristianne Rebottaro** (ANM 08) was the student speaker at the June 2008 commencement ceremony of the College of Agricultural and Environmental Sciences.

**Katie Almand** (ANS 09) received a "Got Milk?" scholarship that paid her Winter 2008 fees. She received a \$3000 scholarship after being selected as the A&ES undergraduate who wrote the best 500 word essay about her passion for the dairy sciences.

At the California Animal Nutrition Conference in 2008, **Katie Cassinerio** (ANS 09) was awarded second place for her poster presentation of her research with Ed DePeters. At the October 2008 meeting of the California Chapter of the American Registry of Professional Animal Scientists, Katie received the Undergraduate Award.

The **Avian Sciences Club**, in an effort chaired by **Johanna Griffin** (junior, AVS), tied for first place in the Club Scrapbook Competition at the 2009 Pacific Egg and Poultry Association convention in Hawaii. **Cassie Markley** (freshman, AEE), received a scholarship.



**Animal Science Department UC Bar Awards** were conferred at the 2007 and 2008 spring barbecues to recognize outstanding service of students to their majors. As well as being good scholars, the recipients contributed significant interest and activity in the department, and show promise of continuing service and leadership in the field of animal science. Shown left to right are 2007: Chair Mary Delany, Andrew Wirz, Shelley Parker, Anne Robinson, Jessica Wuoltee, and Robin Camping. 2008: Amanda Plunkett, Carl French, and Chair Mary Delany.

**Congratulations to all of our graduates!**  
**Stay in touch!**



## Undergraduate news *continued*

The annual **Little International Stock Show** held on November 22, 2008 was coordinated by Alicia Bosenko (ANM senior) and Kirsten Thorburn (ANM 09), president of the UC Davis chapter of the Young Cattlemen's Association. The event enabled 60 undergraduates to learn to work with horses, goats, sheep, cattle, dairy heifers, or hogs and then show the animals at a novice livestock competition. More than 3 dozen undergraduate volunteers, several alumni, and a number of facility staff members taught handling and showmanship, procured prizes and T-shirts, helped with registration, served as ring stewards and judges, and fixed the barbecue lunch. Congratulations to all on this fine cooperative effort, accomplished in true agricultural community style!

## Faculty and staff awards *continued*

Teaching coordinator **Lisa Nash-Holmes** received a **Citation for Excellence Award from the Staff Assembly** during Spring 2008. One of 15 in this category, the award specifically honored her work supporting Animal Science Department teaching as well as running the advising center.

Professor **Chris Calvert** received the first **faculty advisor award** at the spring 2008 barbecue. He was nominated and selected by undergraduates in the departmental majors.

Adjunct Professor **Bernie May** received the student-initiated **Most Valuable Professor Award** from graduate students in Ecology in May 2007. An outpouring of nominations was accompanied by enthusiastic mini-essays.

## Graduate student news *continued*

**Kathryn Jackson** (M.S. with Elizabeth Maga) participated during August 2007 in "Debating Science," a graduate education program designed to teach skills of ethical discourse and practice their application to issues in science and technology. The NSF-funded program was sponsored by the Univ. of Montana-Missoula.

While she earned her Ph.D. in Ecology with Bernie May, **Rachel Schwartz** was extensively involved in environmental education. She worked with 5th graders in Vacaville on water, pollution, and fish and educated elementary school students in Sacramento about local animals in the "Watch it, don't squash it" program. With the Center for Land Based Learning's Student and Landowner Education and Watershed Stewardship program, she helped high school students restore habitat and develop an understanding of local ecosystems. In a National Science Foundation-funded project, she worked with science teachers to develop active-learning exercises that would enhance critical thinking skills.

## Events

The Department of Animal Science hosted the 50th anniversary celebration of the **California Beef Cattle Improvement Association** on May 3, 2008, featuring a tour of the Hank Stone family's Yolo Land and Cattle Company in Woodland, as well as industry seminars and a review of the history of the organization. American Angus Association chief executive officer John Crouch was the keynote speaker. The department's campus Angus beef herd has been registered with the Association since 1913!

## Look who visited the campus!

The Budweiser Clydesdales spent several nights at the department's Cole Facility before parading to the dedication of the Mondavi Food and Wine Institute building in October 2008.



The Animal Science Department hosts up to 50 outreach events every year, including visits from community colleges, visits and meetings of commodity groups, species days, and Picnic Day offerings. See an up-to-date schedule at the link on: <http://animalscience.ucdavis.edu/>



**Agricultural and Environmental Sciences Field Day** is sponsored each year by the College of Agricultural and Environmental Sciences for 4-H and FFA high school students to participate in agricultural judging contests. The Animal Science department hosts events for light horses, livestock, poultry, dairy cattle, meats, and specialty animals. Each contest is planned by an undergraduate coordinator, who recruits volunteers to help. Facility managers and faculty also participate.



Speakers for **Avian Sciences Day 2008** (right) included (l to r) Dr. Jeanne Marie Smith, AVS alumna and owner of Avian Health Services, Placerville, who spoke about interpreting diagnostic reports; the Thode family from Sonoma County, who spoke about heritage turkeys; Dr. Fred Leung, Univ. of Hong Kong, whose topic was "Is H5N1 a human or an animal virus?"; and Dr. Francine Bradley, organizer and host.



Sixty people attended the **2009 Aggie Prospect Pig Sale**, where 32 animals were purchased by local 4-H and FFA groups. The event was the effort of 11 past and present Animal Science students, together with 4 departmental staff. Swine facility manager Kent Parker (above left) emceed a silent auction. New buyers liked the low key format with ample time to make up their minds and bid. The three FFA advisors allowed their students to bid on individual pigs, which was not possible in previous fast-paced, oral auctions. Twelve of 20 registered buyers purchased one or more lots. Next year, more pigs will be offered, again in a silent auction format.



The **2009 Aggie Prospect Lamb Sale** was held in January at the Sheep Unit, where 32 lambs were sold to 4-H and FFA members from California and Nevada. The sale is one of the major outreach and student recruitment activities for the sheep program each year and was planned and implemented by 6 student shepherds and members of the introductory sheep management classes from fall 2008 and winter 2009. The 80 people attending the event included parents, leaders, instructors, Aggie volunteers and alumni, departmental staff and faculty. Alpha Gamma Rho Fraternity hosted a barbecue. Sheep facility manager Dana Van Liew (above left) kept things moving.

## More events...

UC Davis News Service photo



**Temple Grandin**, a professor of animal science at Colorado State University who has expertise on humane animal handling, visited the Department of Animal Science during February 2007. She met with several groups of graduate students and faculty, provided a standing-room-only seminar, held a lecture/discussion with undergraduates at the Swine Center, and visited the animal facilities (shown above, with Jerry Johnson, Beef Herd Manager). She also gave two seminars on her experiences with autism for the UC Davis M.I.N.D. Institute. Her seminar, "Reducing Stress During Animal Handling," can be viewed on video at the Animal Science Web site <http://animalscience.ucdavis.edu> .

At the February 2008 Hilmar Cheese Company's annual Producer/Supplier luncheon, the department's **UC Davis dairy** received the "**Cream of the Crop**" 1st place award for milk quality among 300 competing dairies! This was the third year in a row that we placed in the top three. The hundreds of attending dairymen, state agencies and other stakeholders consider this a noteworthy achievement for a university dairy.

At the **2007 American Dairy Goat Association National Goat Show** in Wyoming, one of our Animal Science does, California Oscar's Beaujolais, was the 2007 National Champion Recorded Grade. UC Davis had multiple class winners including group classes in the recorded grade division. The 4 year old Toggenburg, California Landmark Cachet, won 3rd place in a highly competitive class.

Each year, the Animal Science department hosts 75 students and staff from the **Culinary Institute of America** located in Hyde Park, NY, during one stop on a month-long field trip for students completing the two-year Professional Chefs Program. Presentations focus on a different aspect of agriculture and food each time. In 2006, the topic was the dramatic increase in interest in dairy and meat products from goats. In 2007, beef took center stage, with presentations on natural vs. organic beef; the of beef in nutrition; "branded" beef; beef and food safety; and how state beef councils mutually benefit the beef and the food service industries. In 2008, dairy and dairy products were highlighted.

A **World of Ideas Café** took place during the **UC Davis Focus the Nation** week in January 2008. Students, faculty, UC and UC Davis administrators and politicians attended the event, where they voted on ideas presented by 17 teams. They were wowed by the "**Waste to Energy**" proposal presented by the Animal Science team (below) of Frank Mitloehner, Kim Stackhouse, Michele Calvo, Rona Silva, Veronica Artega (Center for Health & Environment), and led by Paul Martin (Western United Dairymen). The idea to use campus waste streams (manure, green waste, paper, food) to generate energy to supply the new campus West Village development won the most votes among small, medium and large-scale climate solutions! It was truly impressive to watch the hum of excitement and energy generated at the table and poster presenting this vision, which made the department's animals part of the solution rather than the problem.



Frank Mitloehner helped organize a June 2008 **Agricultural Air Quality Conference** entitled "*Green Acres, Blue Skies*" that was designed specifically for stakeholders. One day was devoted to dairy and livestock issues, a second to row and field crops, and a third to orchards and vineyards. Presentations by keynote speakers and specialists spanned all aspects of air quality issues facing California agriculture.



The Animal Science Department sponsors a **Horse Day Symposium** (watch for early October 2010). Events include lectures on topics such as nutrition, shoeing, EHV-1, equine ophthalmology, regulatory issues, trail riding, and horse camping. In 2007, the UC Davis intercollegiate polo team presented a polo demonstration at the Animal Science Horse Barn Arena and a farrier workshop was held on the second day.

# Picnic Day

## We want to see you – we're always here!

Picnic Day is truly a team effort and highlights the very best of the Animal Science Department. Over 200 graduate and undergraduate students, staff and faculty helped during the 2008 and 2009 events.



Docile chickens are crowd-friendly!

Horse "painted" by Josie Trott to show superficial muscles with bony landmarks.

2009 T-shirt - Reflections: 100 Years of Aggie Legacy



Ah, that stream of milk.

Dan Myers and Dan Sehnert presenting the Sierra Foothills Research and Extension Center.



Fish guys: Kenji Murata and Silas Hung.



Lab animal enthusiasts.



Ed DePeters is always there, rain or shine!

Alison van Eenennaam (Picnic Day Chair 2007-08), Steve Berry (Picnic Day Chair 2009-10) and Mary Delany (Animal Science Department Chair)



# UC DAVIS

## ANIMAL SCIENCE

### Alumni & Friends Update

*Take a moment to update your information and drop us a note!*

<http://animalscience.ucdavis.edu/alumni/index.htm>

- Which of the following pertains to you ?     Alumni     Friend  
■ Updating contact information?     Yes     No  
■ May we use your name & news (not contact information) in our Department Newsletter?     Yes     No

Date \_\_\_\_\_

Name \_\_\_\_\_

HOME Address \_\_\_\_\_

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

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Year Graduated from UCD \_\_\_\_\_ Degree \_\_\_\_\_ Major \_\_\_\_\_

Occupation \_\_\_\_\_ Employer \_\_\_\_\_

BUSINESS Address \_\_\_\_\_

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

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

News \_\_\_\_\_

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**Alumni Update is online at** <http://animalscience.ucdavis.edu/alumni/update/form.htm>

*Avian Science alumna Anne Robinson (F06) serves breakfast to Francine Bradley at the Good Egg Conference in Modesto, CA. Ann works for Nucal Foods in Ripon.*



*How far can an Animal Science hat travel? Gina Gonella, a UC Davis veterinary student who works at the Animal Science Goat Facility and her family sported UC Davis and Animal Science logos on the Great Wall in China.*



# Upcoming Events

[http://animalscience.ucdavis.edu/n\\_events/index.htm](http://animalscience.ucdavis.edu/n_events/index.htm)

EVENT	DATE	LOCATION	CONTACT
<b>Little I Livestock Show</b>	November 2009	Cole Facility	Alicia Bosenko ambosenko@ucdavis.edu
<b>Aggie Classic Prospect Show Lamb Sale, Aggie Classic Prospect Show Pig Sale</b>	January 2010	Sheep Facility, Cole Facility	Dana Van Liew dbvanliew@ucdavis.edu Kent Parker kparker@ucdavis.edu
<b>Goat Day</b>	January 16, 2010	Freeborn Hall	Jan Carlson jcarlson@ucdavis.edu
<b>Picnic Day</b>	April 17, 2010	Cole Facility, Meyer Hall, Horse Barn	Steven Berry slberry@ucdavis.edu

**HIGHLIGHTS is on the web!** <http://animalscience.ucdavis.edu/alumni/highlights.htm>

## HIGHLIGHTS

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