



Teaching, Research and Extension Faculty

Trish Berger - Professor, tberger@ucdavis.edu, (530) 752-1267

Research: Fertilization and fertility; gamete membrane interaction at the molecular level, including species comparisons and species variation; effect of environmental stresses; Sertoli cell proliferation and testicular development.

Graduate Groups: Animal Biology

Richard A. Blatchford - Assistant Extension Specialist: Poultry, rablatchford@ucdavis.edu, (530) 752-8763

Research: Husbandry, behavior, and welfare of small to large scale poultry operations; effects of housing design and management techniques on laying hens and broilers; development of on-farm assessment tools.

David Bunn - Assistant Adjunct Professor, dabunn@ucdavis.edu, (530) 752-3122

Research: Livelihoods and food security of the rural poor through intervention strategies for improving animal health and production in developing countries and improving small-scale poultry production systems. Research includes reducing wildlife-livestock conflicts, and wildlife conservation. Research and extension projects on village poultry health and production in Tanzania, Kenya, Uganda, Ghana and Nepal; Investigations of intervention strategies that include training women farmers, extension agents, village leaders, and primary school children.

Graduate Groups: International Agricultural Development

Christopher C. Calvert - Professor, Associate Dean – Graduate Studies, cccaltvert@ucdavis.edu, (530) 304-1413

Research: Protein and energy metabolism in mammalian and avian species; protein synthesis and turnover – measurement and controls, nutritional control of reproduction in ruminants; systems analysis of animal metabolism and function.

Graduate Groups: Molecular, Cellular and Integrative Physiology; Nutritional Biology; Animal Biology; Avian Sciences

Fred S. Conte - Extension Specialist: Aquaculture; Lecturer, fsconte@ucdavis.edu, (530) 752-7689

Research: Shellfish sanitation, computer sanitation modeling and computer simulation software; finfish and shellfish production systems, finfish slaughter technology for aquatic animal welfare, fish stress associated with aquatic animal welfare considerations.

Extension Programs: Marine and freshwater aquaculture systems management and production technology; aquaculture regulatory and public policy; computer decision support software for shellfish sanitation; aquatic animal welfare.

Mary E. Delany - Professor, Executive Associate Dean in CA&ES; Fiddymont Endowed Chair medelany@ucdavis.edu, (530) 754-9343

Research: Avian genetics and genome organization including projects in molecular cytogenetics, developmental genetics, vertebrate telomere biology. Main lab projects include: role of the telomere/telomerase pathway and virus-host genome interactions in oncogenic disease; genomic and developmental analysis of sequences and genes causing inherited limb and craniofacial malformations. Main organisms of study are chicken, turkey and Japanese quail.

Graduate Groups: Animal Biology; Avian Sciences; Integrative Genetics and Genomics

Edward J. DePeters - Professor, eidepeters@ucdavis.edu, (530) 752-1263

Research: Ruminant nutrition of dairy cattle; mammary gland synthesis of milk protein and fat; nutrient digestion, absorption, and metabolism; evaluation of by-product feedstuffs and forage quality.

Graduate Groups: Animal Biology; Nutritional Biology

John M. Eadie - Professor, jmeadie@ucdavis.edu, (530) 754-0145

Research: Waterfowl; avian behavior and ecology; population genetics; wetland and riparian ecology; molecular ecology.

Graduate Groups: Avian Sciences; Animal Behavior; Ecology; Population Biology

James G. Fadel - Professor, jgfadel@ucdavis.edu, (530) 752-1259

Research: Mathematical and statistical applications mainly in nutrition, environment, sustainability, and management systems. Research incorporates information from modeling, in vitro, and in vivo experiments and datasets.

Graduate Groups: Animal Biology; International Agricultural Development; Nutritional Biology

Thomas R. Famula - Professor, trfamula@ucdavis.edu, (530) 752-7018

Research: Quantitative genetic theory and statistics; genetic control of animal growth and lactation; inheritance of disease in the dog.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics; Biostatistics

Matthias Hess - Assistant Professor, Wiley Research Fellow, mhess@ucdavis.edu, (530) 752-8809

Research: Application of cultivation-independent as well as cultivation-based techniques approaches to obtain a multi-scale (from molecule to cell to population to ecosystem) understanding of microbial systems. The Hess Laboratory is particularly interested in a) how microbial systems respond to environmental changes and how they affect their habitats and b) the identification of microbes and microbial proteins of industrial relevance. Biological systems studied in the Hess Lab include amongst others: ruminants, photosynthetic consortia and microbial communities associated with natural hydrocarbons.

Graduate Groups: Microbiology

Russ Hovey - Professor, rchovey@ucdavis.edu, (530) 752-1682

Research: Hormonal regulation of mammary gland growth, lactation, and breast cancer with interests in ovarian and pituitary hormone functions; role of the stromal environment in cell function; and across-species differences in mammary gland biology and hormone function.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics; International Agricultural Development

Josh Hull - Assistant Adjunct Professor, jmhull@ucdavis.edu, (916) 414-6742

Research: Conservation ecology; population genetics; phylogeography; threatened and endangered species; migration ecology; raptor biology.

Graduate Groups: Avian Sciences, Ecology

Silas S.O. Hung - Professor, sshung@ucdavis.edu, (530) 752-3580

Research: Fish nutrition, toxicology, biochemistry, physiology, and ecology.

Graduate Groups: Animal Biology; Pharmacology and Toxicology

Peng Ji - Assistant Adjunct Professor, penji@ucdavis.edu, (530) 979-4248.

Research: Nutrition, physiology and regulation of metabolism in dairy cattle; early-life adverse events (infection or malnutrition) on brain development in piglet model.

Ermas Kebreab - Professor, Sesnon Endowed Chair, ekebreab@ucdavis.edu, (530) 752-5907

Research: Sustainable animal agriculture; energy and nutrient requirement/utilization of farm animals; environmental impact of animal agriculture including modeling greenhouse gas emissions from livestock; tropical animal agriculture.

Graduate Groups: Animal Biology; Ecology; International Agriculture and Development

Annie J. King - Professor, ajking@ucdavis.edu, (530) 752-3530

Research: prevention of lipid oxidation in poultry muscle, eggs and their products; effects of environmental systems on lipid oxidation; reduction and determination of cholesterol oxides in poultry meat, eggs and their products; use of horticultural by-products and their antioxidants as nutrient sources, especially to retard lipid oxidation in poultry meat; and safe and economical reclamation and use of horticultural by-products as feed ingredients.

Graduate Groups: Agricultural and Food Chemistry; Avian Sciences; Food Science

Kirk C. Klasing - Professor, kcklasing@ucdavis.edu, (530) 752-1901

Research: Impact of nutrition on immunobiology and disease resistance; immunologic basis of stress; nutrition and metabolic adaptation required by carnivorous, granivorous, and nectivorous birds.

Graduate Groups: Animal Biology; Avian Sciences; Nutritional Biology; Immunology

Dietmar Kueltz - Professor, dkueltz@ucdavis.edu, (530) 752-2991

Research: Animal Systems Biology with emphasis on fish and marine invertebrates and functional systems conferring environmental stress tolerance; effects of environmental/ climate change on the proteomes of three-spined sticklebacks and mountain-colored tilapia species complexes; mechanisms of physiological plasticity and genetic adaptation that confer high environmental stress tolerance to aquatic organisms; identification/ characterization of biochemical networks that control environmental stress responses based on very large proteome datasets; mechanisms of osmosensing and osmoregulation in euryhaline sticklebacks and tilapia.

Graduate Groups: Animal Biology; Genetics; Ecology; Molecular, Cellular and Integrative Physiology

Yanhong Liu - Assistant Professor, yahliu@ucdavis.edu, (530) 752-4275

Research: Feed ingredient evaluation for pigs and/or poultry; Dietary strategies on prevention and control of pig diseases; Swine nutrition on gut health and immunology; Alternatives to in-feed antibiotics.

Elizabeth A. Maga – Adjunct Professor, eamaga@ucdavis.edu, (530) 752-5930

Research: Applied genetic engineering; development and use of animal models of disease, translation of the use of genetically engineered ruminant milk to improve animal and human health, health and well-being of transgenic animals, role of intestinal microbiota on health and resistance to infection; relationship between casein genotypes and milk quality.

Graduate Groups: Animal Biology; Food Science

Maja M. Makagon – Assistant Professor, mmakagon@ucdavis.edu, (530) 752-9419

Research: Animal behavior, animal welfare assessment, optimization of housing systems for poultry

Graduate Groups: Animal Biology; Animal Behavior

Bernie May - Research Professor; Emeritus Adjunct Professor; CFO, Genomic Variation Laboratory; bpmay@ucdavis.edu

Research: Conservation biology; population genetics of natural populations, threatened and endangered species; genetic mapping of quantitative trait loci; effect of environmental stressors on natural gene pools.

Graduate Groups: Ecology; Integrative Genetics and Genomics

Juan F. Medrano - Professor, jfmedrano@ucdavis.edu, (530) 752-6786

Research: Applications of next generation sequencing and systems biology approaches to study genetic variation of complex traits. Development of a new cow genome reference assembly - Optical Mapping and long-read de-novo assembly. Genetics of milk composition – study of health and nutritional properties of cow and human milk, and application of genetic markers to improve manufacturing properties of milk. Molecular phylogeny and SNP variation of wild populations of bears, wolves and coyotes. Coffee Genomics -Developments of a Coffea arabica genome reference assembly and annotation and examination of gene expression differences between coffees grown at different altitudes.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics

Joy A. Mench – Professor and Vice Chair, jamench@ucdavis.edu, (530) 752-7125

Research: Poultry management, behavior and welfare; abnormal behavior; environmental enrichment for managed and captive animals

Graduate Groups: Animal Biology; Animal Behavior; Avian Sciences

Deanne Meyer - Extension Specialist: Livestock Waste Management; Lecturer, dmeyer@ucdavis.edu, (530) 752-9391

Research: Analyses of production, collection, storage, transportation, and utilization of manure management waste stream(s) on dairies. Research has focused on nutrient flows through dairy operations including: content of manure solids and liquids, milk parlor water use, efficiency of mechanical and gravity flow separator devices, analyses of other treatment technologies, nutrient distribution during land applications, and ammonia volatilization.

Graduate Groups: Animal Biology

Extension Programs: Environmental Stewardship Module Coordinator for the California Dairy Quality Assurance Program; develop and disseminate technical information on nutrient flows into and through dairy facilities; provide input to environmental regulatory policy developed for livestock and poultry operations.

Michael J. Mienaltowski - Assistant Professor, mjmienaltowski@ucdavis.edu, (530) 207-3226

Research: Physiology; musculoskeletal biology; development, maturation, and repair; extracellular matrix/niche organization; tissue engineering; functional genomics; mouse model; equine; poultry; livestock.

Graduate Groups: Animal Biology, Integrative Genetics and Genomics, Integrative Pathobiology

Michael R. Miller - Assistant Professor, micmiller@ucdavis.edu, (530) 304-4719

Research: Animal genetics and genomics; conservation and ecological genetics and genomics; genomics and bioinformatics technology development; salmonid fishes.

Graduate Groups: Animal Biology; Ecology; Integrative Genetics and Genomics

Frank M. Mitloehner - Professor & Air Quality Extension Specialist, fmmitloehner@ucdavis.edu, (530) 752-3936

Research: Air quality research related to livestock production, especially quantification and mitigation of air pollutants on dairies, beef feedlots, and poultry operations; environmental physiology research, focusing on effects of air emissions on animal- and human health and welfare.

Graduate Groups: Animal Biology; Animal Behavior; Ecology, Agricultural Chemistry

James D. Murray - Professor, jdmurray@ucdavis.edu, (530) 752-3179

Research: Genetic engineering of animals for use in agriculture, improving the technologies associated with cloning and the production of transgenic animals, modification of anti-microbial, functional and lipid characteristics of milk, equine genomics.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics

Anita M. Oberbauer - Professor and Chair, amoberbauer@ucdavis.edu, (530) 752-1252

Research: Cell and molecular control of animal growth, particularly bone and the impact on animal function; investigation of the genetic causes of canine traits, especially disease.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics; Molecular, Cellular and Integrative Physiology

James W. Oltjen - Extension Specialist: Animal Management Systems; Lecturer, jwoltjen@ucdavis.edu, (530) 752-5650

Research: Animal management systems; resource use in animal agriculture; beef cattle growth.

Graduate Groups: Animal Biology; Nutritional Biology

Extension Programs: Computer decision support software; beef quality assurance; standardized performance analysis for cattle and sheep ranches.

L. Allen Pettey - Lecturer (PSOE), Director of Animal Science Curriculum Development/Assessment, lapetty@ucdavis.edu, (530) 752-8924

Research: Effectiveness of teaching methodologies and technologies as they apply to animal science courses; pedagogically sound approaches to curriculum and course development for traditional and non-traditional animal science students; applied livestock nutrition focusing on use of alternative feed ingredients.

Peter H. Robinson - Extension Specialist: Dairy Nutrition and Management, phrobinson@ucdavis.edu, (530) 754-7565

Research: On-farm animal management systems; on-farm implementation of strategies to reduce the environmental impact of cows.

Graduate Groups: Animal Biology

Pablo J. Ross - Associate Professor, pross@ucdavis.edu, (530) 771-7225

Research: Epigenetic mechanisms controlling early embryonic development and pluripotency. Functional genomics of preimplantation development using next generation sequencing. Application of assisted reproductive technologies in animal production systems.

Embryo genetic engineering and blastocyst complementation. Embryonic stem cell biology and induction of pluripotency by defined factors (iPSC).

Graduate Groups: Animal Biology; Integrative Genetics and Genomics

Roberto D. Sainz - Professor, ldsainz@ucdavis.edu, (530) 752-6293

Research: Beef cattle nutrition, growth, body composition; genetic and nutritional determinants of energy metabolism; international (tropical) animal agriculture; mathematical modeling of animal function and production systems; ecological footprint

Graduate Groups: Animal Biology; International Agricultural Development; Nutritional Biology

Andrea Schreier - Assistant Adjunct Professor, Director, Genomic Variation Laboratory, amdrauch@ucdavis.edu, (530) 752-0664
Research: Applying genetic and genomic techniques to answer ecological or evolutionary questions about wild populations, conservation of threatened and endangered species, genetic management of conservation and commercial aquaculture, animal polyploidy.

Graduate Groups: Ecology, Integrative Genetics and Genomics

Anne E. Todgham - Assistant Professor, todgham@ucdavis.edu, (530) 752-1897

Research: Ecological Physiology; Integrative Stress Biology; Environmental Genomics; Climate Change Biology. Molecular, biochemical and physiological mechanisms that underlie an animal's capacity to cope with multiple environmental stressors.

Graduate Groups: Animal Biology; Ecology

Cassandra B. Tucker - Associate Professor, cbtucker@ucdavis.edu, (530) 754-5750

Research: Animal welfare, animal behavior, effects of housing design and environmental conditions on dairy and beef cattle

Graduate Groups: Animal Biology; Animal Behavior

Alison Van Eenennaam - Extension Specialist: Animal Biotechnology and Genomics, alvaneennaam@ucdavis.edu, (530) 752-7942

Research: Use of biotechnologies in animal agriculture, marker-assisted selection in cattle, cloned and transgenic or genetically engineered animals, bovine respiratory disease complex coordinated agricultural project.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics

Dana Van Liew - Lecturer, Coach-Livestock Judging Team, dbvanliew@ucdavis.edu, (530) 752-9703

Research: Livestock judging; management; outreach.

Jason V. Watters - Associate Adjunct Professor, jasonw@sfzoo.org, (415) 213-8128

Research: Animal behavior, animal welfare, conservation behavior; behavioral assays of animal welfare, environmental enrichment for zoo and aquarium animals; zoo animal behavior and its impact on zoo-goers.

Graduate Groups: Animal Biology

Huaijun Zhou - Associate Professor, Chancellor's Fellow, poultry genetics and genomics, host-pathogen interaction, bioinformatics. hzhou@ucdavis.edu, (530) 752-1034

Research: Investigation of molecular and cellular mechanisms of host-pathogen interaction using genetic, genomic and bioinformatic approaches in poultry. Functional annotation of animal genomes.

Graduate Groups: Animal Biology; Integrative Genetics and Genomics; Immunology; Microbiology; Avian Sciences

Richard A. Zinn - Professor (Desert Research and Extension Center), razinn@ucdavis.edu, (760) 756-3068

Research: Nutrition, health, and management of feedlot cattle.

Graduate Groups: Animal Biology