

## **Assistant Professor of Cooperative Extension in Food Animal Welfare**

### **Position Title: Food Animal Welfare**

Full-time Assistant Professor of Cooperative Extension (CE) focused on advancing the welfare and well-being of agricultural animals, with an emphasis on dairy and beef cattle but covering other species as needed by clientele, to improve sustainability of animal production systems by addressing societal and consumer expectations for animals being raised for food production.

### **Position Description:**

The focus of this statewide position is to provide leadership, outreach education, research, and innovation for achieving gains in animal welfare that will build trust by consumers and the public in our food animal production systems. This position will be responsible for identifying critical gaps and needs in animal welfare in contemporary animal production systems, conducting applied research for discovering ways to improve animal welfare, and effectively sharing that information through collaborative, multidimensional outreach education programs and products that target diverse audiences which include producers, veterinarians, policy makers, regulators, consumers, and other concerned members of society. Success in this position will require ongoing effort to optimally blend ethics, values, and science to advance animal welfare and build public trust in our food animal production systems. This CE Professor will be expected to build upon existing networks and collaborations within UC ANR Program Teams comprised of Advisors, CE Professors, Agricultural Experiment Station (AES) and other faculty members in the UC Davis School of Veterinary Medicine and the UC Davis Department of Animal Science who have expertise and interests in animal behavior and animal welfare related to food-producing animals. A PhD degree in a relevant discipline such as animal welfare or ethology/animal behavior or a DVM (or equivalent) degree with advanced training (e.g., MS or PhD) or an equivalent combination of education and relevant experience related to the welfare and health of food animals is required.

### **Justification:**

California is a leading state for animal agriculture that ranks #1 in the U.S. for dairy cows and milk production and #4 with the most cattle. Milk and cattle sales generated combined cash receipts in 2020 of more than \$10.2 billion, representing more than 20% of all agricultural commodity value for the state. Additionally, California ranks #2 in sheep and goat farming and #10 for both poultry and egg production. For California to continue its leadership in animal agriculture for feeding our families, friends, and neighbors in our state, across the country, and around the world, our food animal production systems must be sustainable. Definitions of sustainability typically include these three spheres, economic, environment, and social, and so far, greater emphasis by scientists, educators, and producers has been placed on economics and productivity with a lesser focus on environmental concerns while the social pillar has received the least amount of attention. However, this present situation conflicts with views being expressed by today's consumers of food products of animal origin. Nationwide consumer surveys released in July 2021 show that sustainability influences purchase decisions for 54% of meat items and that 34% of U.S. meat consumers say that they have become more concerned with sustainability of those meat products compared to the previous year. These surveys have revealed, rather surprisingly perhaps, that consumer definitions of sustainability for foods of animal origin are not environment-centric, but instead, today's consumers say that 'sustainably-raised' meat addresses animal welfare concerns. Better animal welfare outranked other sustainability items including carbon footprint, grass-fed, raised without antibiotics & hormones, and better land & water usage. More specifically, 44% of consumers said that 'sustainably-raised' meat would address animal welfare and the humane raising of livestock, and a commitment to animal welfare and care standards was ranked as most important (29%) more frequently than assessing the overall environmental footprint of meat production as being most important (24%). Similarly, more than 62% of California voters supported ballot initiatives in both 2008 and 2012 to restrict confinement and establish minimum space requirements for specific classes of food animals. From an industry perspective, a needs assessment for cooperative extension dairy programs in California published in the Journal of Dairy Science in 2019 showed that dairy producers ranked consumer demands and animal well-being above herd health concerns and that other higher ranked concerns were directly related to economic factors of milk production such as milk pricing, labor availability, and feed costs. Priority issues for dairy cattle include pain mitigation for painful procedures, including disbudding/dehorning and castration, separation of the calf from the dam at birth, addressing expression of natural behavior related to housing needs for young calves, and lameness. Issues of concern for beef cattle also include pain mitigation for castration, dehorning, and branding, proper shelter and shade related to environmental stress for feedlot cattle, and achieving improved outcomes for cattle handling and transportation. Given this increased awareness by producers and growing concerns by consumers, a critically important opportunity exists to make a difference for improving food animal welfare and sustainability of food production from animal sources by committing resources for a new Assistant Professor of CE in Food Animal Welfare.

### **Extension:**

This position will provide statewide extension and outreach within the ANR network (Advisors, CE Professors, AES faculty) and across the state in support of awareness, knowledge gain, and advancement of food animal welfare using both conventional and technology-based delivery methods. The new Assistant Professor of CE will engage with individual producers and veterinarians and will work with organizations that have important priorities related to animal care and welfare, such as the California Cattle Council, Dairy Cares, California Cattlemen's Association, California Wool Growers Association, California Poultry Federation, Pacific Egg and Poultry Association, California Pork Producers Association, and the California Veterinary Medical Association. This CE Professor will work to

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inform consumers and other stakeholders, including public and non-profit groups, regarding food animal welfare improvements and existing needs and opportunities for advancing food animal welfare and will endeavor to translate scientific discoveries into action so that knowledge for improving food animal welfare can be put into practice.

### **Research:**

This specialist will develop a scholarly applied research program to identify and address challenging questions and needs that impact the welfare of food-producing animals in California and beyond. Although a good state of animal welfare is supported by good health, disease prevention, and proper nutrition, this position is expected to focus on research areas that combine physical health and biological functioning with natural living behaviors and affective states. Also, the discovery and enhanced understanding of consumer expectations and preferences for food animal production as it is related to animal welfare is an additional area of critical importance for investigation. Collaboration with UCCE Advisors and Professors (Specialists) involved with food animals and with AES and other scientists and faculty members in the School of Veterinary Medicine and UC Davis Department of Animal Science will strengthen the breadth, depth, and impact of the applied research programs for this position.

### **ANR Network:**

This CE Professor in Food Animal Welfare is a critical missing link in overall perspective of existing ANR research and outreach programs related to food animals. Significant numbers of positions currently exist within ANR that are dedicated to improving production efficiency, health, and economics of food animals and related areas of environmental stewardship. Additionally, a considerable number of professionals, private businesses, and for-profit entities exist that provide services, expertise, and consultation in animal health, animal nutrition, financial & economic advising, and other areas, but, by comparison, relatively few professionals and other resources currently exist that are dedicated to the societal concerns of well-being and welfare of food animals. This situation creates a serious gap for ensuring the future sustainability of food animal production and food security in our state and country. ANR is in a unique position to make an important difference for addressing consumers' expectations and advancing the welfare of food-producing animals by identifying this Assistant Professor of CE position as a high priority need.

### **Networks External to ANR:**

The individual hired in this position will collaborate with various external networks including, but not limited to, California Beef Quality Assurance Program, California Dairy Quality Assurance Program, California Farm Bureau Federation, California Dairy Research Foundation, Dairy Cares, National Dairy FARM Program, California Cattle Council, California Cattlemen's Association, California Wool Growers Association, California Poultry Federation, Pacific Egg and Poultry Association, California Pork Producers Association, California Veterinary Medical Association, Certified Humane, and Validus.

### **Support:**

This position will be located at the Veterinary Medicine Teaching and Research Center (VMTRC) in Tulare. This location can provide full access to information technologies (IT) for electronic research and outreach collaborations throughout the state and beyond, as well as other infrastructure support resources and services. The School of Veterinary Medicine, the Department of Population Health and Reproduction, and the VMTRC will provide administrative and research support.

### **Other support:**

The livestock industries, allied industries, and USDA have competitive grant programs which can support research and outreach programs in food animal welfare. As an Assistant Professor of CE in the School of Veterinary Medicine (SVM), this individual would be expected to serve as both a principal investigator and a collaborator for USDA grant funds (Animal Health Formula Funds; Hatch Funds; Multi-State Research Funds) administered by the School's Center for Food Animal Health. Some endowment funds exist at UC Davis, such as the Russell L. Rustici Rangeland and Cattle Research Endowment, the Lillian Young Bovine Research Fund, and the Edward E. Hills Fund for Educational Outreach for the Humane Treatment of Food Animals, which are also available to support projects on a competitive basis.

### **Headquarters and Coverage Area:**

This position will be strategically located at VMTRC, near the geographic center of the state, and would join a critical mass of other current CE professors located there in Dairy Cattle Herd Health and Food Safety, Dairy Cattle Production Health Management, and Antimicrobial Stewardship. Office space, laboratory facilities, information technology, and other infrastructure resources are available at the VMTRC to support this Assistant Specialist of CE.

### **Developed and proposed by:**

Veterinary Medicine Extension and the SVM Dean's Office. Stakeholder input on needs and priorities for food animal sustainability related to this position has been provided through the External Stakeholders' Advisory Committee of the SVM Center for Food Animal Health. We have asked the Dairy Production & Food Safety and the Meat Production & Food Safety program teams to review this proposal and provide critical input and revision.