

**Youth & Small Holder
Sheep, Goats & Swine Health & Food Safety Specialist**

Position Description:

A veterinarian (1.0 FTE CE Specialist), with expertise in maintaining the health of sheep, goats and swine in youth programs such as 4-H and small herd/flock units. The position will focus on preventing infectious diseases and microbial and chemical contamination of breeding and market animals thereby impacting the safety of the meat and milk originating from these animals. DVM or equivalent degree is required; Advanced degree(s) contributing to the candidate's expertise to optimize the health of these animals and the safety of foods originating from them is/are preferred. Demonstrated ability to effectively educate youth, volunteer leaders, County and State Fair personnel and others similar audiences is required. Skills in developing curricula around promoting animal health and food safety are required.

It has been many years since we've had expertise to address these serious issues in ANR and this position is long overdue. This position will provide statewide leadership for 4-H projects and small herds/flocks, as well as animals in educational settings (such as petting zoos, fairs, classrooms, etc.) in the area of preventing infectious and zoonotic diseases (those shared by animals and people) of sheep, goats and swine. The Specialist will develop and promote surveillance programs for early detection of potential foreign animal, epizootic and zoonotic diseases in these species. They will lead a change of the youth livestock project culture associated with the use of drugs that can impact the health of the animals, the emergence of antibiotic resistant microorganisms and potentially pandemic viruses, and the health of the environment. As part of this change in culture, the Specialist will work with producer groups to identify new opportunities and the necessary curricula for sheep, goat and swine projects addressing specialty products, local marketing, sustainable agricultural practices and other emerging farm trends. This position will contribute to curricula needed for raising healthy sheep, goats and swine and related 4-H veterinary science material. Also included is the safety of the food originating from these animals and the ethics and standards surrounding animal stewardship.

Justification:

The health of animals being raised by youth in programs including 4-H, and the safety of the food originating from these animals, are major ethical, human health and environmental health issues with associated public perception and fiscal liability impacts. These animals move regularly to fairs throughout California and between various states and have been linked to spreading diseases such as Malignant Catarrhal Fever, Q-Fever and others that threaten both animal and human health. Threats include those of creating reservoirs in infected wildlife that become persistent sources of future infections. Climate change and the impact on vector range may change disease distributions.

The promotion of antimicrobial resistance from misusing drugs, the attitudes that may place winning above the interests of the animal or humans and ecosystems that interface with these animals are all major issues in California. Youth project members and leaders often have minimal understanding of the impact of these biological risks;

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unethical decision-making in the competitive environment fairs has far reaching impacts. Directly addressing these issues as well as identifying new project activities which reflect the emerging trends toward specialty products and sustainable practices will both enhance the knowledge and skills needed to understand production of wholesome foods of animal origin and provide additional goals (and activities to demonstrate achievement) for youth with sheep, goat and swine projects.

Swine represent the most common 4-H project animal, sheep are another major project and goats are a growing species. In California sheep flocks and goat herds, and many of the swine operations, tend to be smaller “specialty” farms with greater needs for information than larger commercial operations.

Extension:

All 4-H animal projects and the associated youth, volunteer leaders, 4-H YDA, 4-H PR’s, County Directors and the Youth, Families and Communities Statewide Program are considered the primary clientele for this position. In addition, the Specialist is expected to coordinate with the County and State Fairs where these animals are exhibited and sold, and with the California Department of Food and Agriculture (CDFA) as the overseer of fairs and livestock health.

Additional clientele include veterinarians who provide services to these animals. In many communities the veterinarian providing the needed service and products may be specializing in small animal medicine and not aware of significant restrictions associated with using medications in food animal production and food safety requirements. Local volunteer leaders are often ignorant or apathetic about rules associated with using medications and may lack awareness of the zoonotic potential of diseases that are common in these species. A statewide authority standardizes rules and removes the awkwardness of local CD’s or others trying to get volunteers to comply with the rules. This position would provide the leadership needed to effect change at the local level.

We anticipate to contribute meaningfully toward a culture change and to accomplish this goal the successful candidate will need to engage other youth programs that include sheep, goats and swine projects, such as FFA. 4-H youth start animal projects earlier than they can become members of FFA, however by high school many will have projects in one, the other or both programs. It is essential to explore synergistic partnerships across these programs to promote consistent messages about animal stewardship, preventive medicine and food safety.

Research:

Evidence of, or the potential to create, a robust research program in areas around the health of sheep, goats and swine and all foods/fiber originating from these animals, and the ability to compete successfully for grants to support research and outreach activities, are required.

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ANR Continuum:

The School of Veterinary Medicine has a large faculty including flexible AES assignments. This means we can recruit people to the AES mission as needed from the general I & R faculty. Expertise exists in the three identified animal species as well as in ecosystem health and the use of drugs in food animals (Food Animal Residue Avoidance Databank [FARAD] program and NRSP-7 Minor Use Animal Drug program). We have Specialists in Beef, Poultry (under recruitment), Dairy and Animal Welfare to provide additional support to the successful candidate and to those species groups. There are frequent collaborations between SVM faculty with those at UCD CAES, UCR and UCB, as well as other UC campuses.

A component of the US's FARAD program operates within the School and provides information on the safe use of medications in food animals including the minor species identified in this proposal. In addition, the Vet Genetics Lab (DNA testing market animals), CAHFS Equine Analytical Chemistry Lab (drug residue testing is done at UCD in this lab) and CAHFS food safety labs provide robust opportunities for collaboration and research.

Support:

Veterinary Medicine Extension, located within the Department of Population Health and Reproduction at UC Davis, will provide administrative support, office space, and computing and telephone support and laboratory space for research.

Other support:

The SVM has a Center for Food Animal Health that provides two calls for research proposals annually and recognizes proposals with Extension components for bonus points. Many of the livestock industries have small amounts of money available for activities addressing their needs. CDFA often contracts with Specialists for research and outreach programs. The California Animal Health and Food Safety Laboratory (CAHFS) headquartered at UC Davis with branch diagnostic laboratories in Turlock, Tulare, and San Bernardino make available diagnostic cultures and serology samples in need of further research that could be addressed by the Specialist.

Location:

Housed on the UC Davis campus in VM Population Health and Reproduction. Davis is the best location for access to the Youth, Families and Communities Statewide Program (4-H), CDFA, CAHFS, and the Veterinary Medical Teaching Hospital, commodity organizations in sheep, goats and swine, and veterinary students as assistants on projects.