Upcoming research:

HOW YOU CAN CONTRIBUTE
Improving Antibiotic Stewardship in Dairy Goats to Assure Food Safety and Milk Quality

Pat Gorden, Iowa State University, College of Veterinary Medicine
Jennifer Bentley, Larry Tranel, & Fred Hall, Iowa State University, Extension and Outreach
Leo Timms, Iowa State University, Animal Science
Roselle Busch, UC Davis, School of Veterinary Medicine, UC Cooperative Extension (rcbusch@ucdavis.edu)
Paul Plummer, Iowa State University, College of Veterinary Medicine, NIAMRRE
Objectives

• Determine the **antibiotic withdrawal periods** for both meat and milk of dairy goats following intramammary infusion with dry cow therapy.

• Determine the efficacy of dry cow therapy for the **selective treatment of intramammary infections** at dry off in the dairy goat.

• Determine if the use of dry cow therapy result in the development of **antibiotic resistance** in dairy goats.

• Develop a **producer education program** via Cooperative Extension that demonstrates how mastitis prevention strategies coupled with a judicious approach to antibiotic use can minimize antimicrobial resistance, improve milk quality, and preserve food safety.
Seroprevalence and farm-related risk factors of Toxoplasma gondii infection in California goat herds

Meera Heller (mcheller@ucdavis.edu), Karen Shapiro, Roselle Busch, & Joan Dean Rowe,
UC Davis School of Veterinary Medicine
Objectives

What information:
• The first dataset on *T. gondii* seroprevalence in goats in California.
• Evaluate on-farm risk factors and data regarding reproductive outcomes associated with *T. gondii* exposure.

What are the expected outcomes:
• Evaluate if *T. gondii* is associated with abortions or lower birth rates on farms with exposed does.
• Highlight potential management practices that can reduce the risk of infections.
Impact of coccidia species and burden on severity of disease in small ruminants

Roselle Busch (rcbusch@ucdavis.edu), Heather Fritz, Katherine Watson, Alda Pires, & Meera Heller, UC Davis School of Veterinary Medicine
Objectives

What information:

• **Fecal oocyst counts** and **physical condition** of lambs and kids in Northern California.
• Evaluate **on-farm risk factors** including management practices, medications, and environmental and spatial factors) associated with coccidiosis.
• Determine **severity of infection** in the intestine.

What are the expected outcomes:

• Develop a **diagnostic test** that can quickly and accurately identify disease causing coccidia species.
• Examine the **relationships between coccidia species** causing infection, management practices, and environmental variations.

rcbusch@ucdavis.edu
Capacity Building Using Train-the-Trainer Approach to Improve Biosecurity and Reduce Disease Spread in Small-scale and Backyard Livestock and Poultry Premises

Alda Pires, UC Davis SVM & UC ANR (PI, apires@ucdavis.edu)
Richard Pereira, Beatriz Martinez –Lopez & Terry Lehenbauer, UC Davis SVM
Dale Moore, Craig McConnel, Washington State University
Ragan Adams, Colorado State University
Objectives

- **The overall goal** is to develop and improve biosecurity among livestock producers at various scales, including alternative agricultural systems such as small-scale, backyard and 4H/FFA livestock operations.

- **Multi-state outreach program (CA, WA & CO)** focused on targeted training, communication and outreach activities:
  - Compile and summarize training information available on biosecurity.
  - Develop capacity building by creating train-the-trainer tools/resources on biosecurity and disease transmission for stakeholders, veterinarians, extension agents and educators.
  - Develop and pilot customized farm biosecurity plans (farm visits).

- More info soon [http://ucanr.edu/sites/Small_Farms_/](http://ucanr.edu/sites/Small_Farms_/)

- Funding: NADPRP, USDA-APHIS; timeline 2021-2023