



# MMI 291 Seminar Series

Winter Quarter 2023 – **CRN 33700**

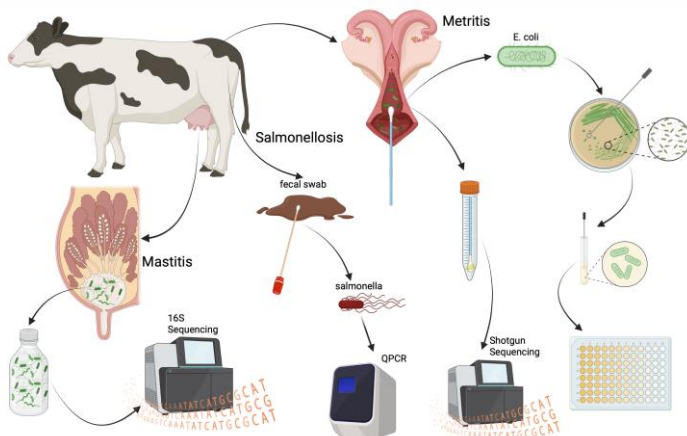
**Exit Seminar – 12:10-1 p.m. (Hybrid)**

Genome & Biomedical Sciences Facility, auditorium & Zoom

## *“Antimicrobial Resistance in California Dairy Cattle Populations: Impacts on Microbiota and Pathogenic Bacteria”*

### Abstract

The challenge of new legislation and growing consumer interest in the prudent use of antimicrobials in the production of dairy has spurred research into the state of antimicrobial resistance (AMR) in cattle within the State of California. In addition, the rapid adoption of next generation sequencing has allowed new perspectives into the causes and potential treatments of common diseases of cattle that often require antimicrobial treatment. The data presented in this dissertation focus on three common ailments of cattle: salmonellosis, mastitis, and metritis. The results presented here highlight the need for better clinical testing data used for interpretation of phenotypic antimicrobial susceptibility testing within large animal veterinary medicine and showcase the potential of 16s and shotgun sequencing to analyze the endogenous and pathogenic bacteria present within the bovine mammary and uterine microbiomes.



March  
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Carl Basbas, Ph.D. Candidate  
Richard Pereira Lab  
Microbiology Graduate Group  
School of Veterinary Medicine  
UC Davis

**March 3, 2023**  
**12:10 – 1 p.m.**  
**Hybrid**

In-Person/ZOOM Meeting

Medical Microbiology  
& Immunology  
School of Medicine

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We hope to see you there!