



GRADUATE RESEARCH OPPORTUNITY

Dr. Bodmer's Meat Science & Muscle Biology Research Program at Mississippi State University is seeking a highly motivated graduate student to join an interdisciplinary research program investigating the biological mechanisms that regulate muscle growth, metabolism, proteolysis, and beef quality.

This is an opportunity to develop your own research expertise while working at the intersection of animal biology, muscle physiology, biochemistry, and meat science.

RESEARCH INTERESTS

My research program seeks to understand the biochemical mechanisms that regulate skeletal muscle growth, metabolism, and the transformation of muscle into meat. We investigate how muscle biology influences animal performance and the development of important meat quality attributes.

Our research particularly focuses on:

- Skeletal muscle growth, development, and efficiency
- Postmortem energy metabolism and pH decline
- Protein degradation and muscle proteolysis
- Calpain activation and function
- Calpain & Calpastatin regulation
- The biological mechanisms underlying beef tenderness
- Factors influencing beef color and other meat quality attributes

By connecting muscle biology, metabolism, and meat science, our goal is to better understand the biological sources of variation in meat quality and identify opportunities to improve both animal efficiency and the consistency of high-quality beef.

Interested in joining the lab?

Please email a brief statement of your research interests, CV/resumé, and unofficial transcripts.



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Mississippi State University



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