

Leoni Ferreira Martins

College of Agricultural Sciences
Department of Animal Sciences
333 Agricultural Sciences Building
University Park, PA 16802 US
(929) 331-0238
leonimartins@psu.edu

117 Lingwood Ct
Bellefonte, PA 16823
(929) 331-0238
leoniferreiramv@gmail.com

ABOUT ME

I am a PhD student in the Department of Animal Sciences at The Pennsylvania State University. My focus is on sustainable dairy nutrition for efficient milk production. More specifically, I am investigating how fuels from the diet can affect rumen metabolism and how to better formulate diets to reduce waste of nutrients while maintaining milk production and composition. Additionally, my research is trying to elucidate important missing pieces of ruminant nutrition and will greatly contribute with the understanding of feeding management of dairy cows in automated feeding systems (i.e., precision feeding and AMS systems).

PROFESSIONAL GOALS

My long-term plans are to become a professor of dairy nutrition and to contribute with the advance of dairy science. My career goals are to improve education and research when training the next generation of professionals, and to become a reference in dairy science.

QUALIFICATIONS

- I have a strong background in dairy cattle nutrition and production (diet formulation, forage production, metabolic diseases, ruminal fermentation, pasture management, and calf rearing).
- I am skilled in data mining and statistical analyses.

EDUCATION

- 2021-Present: **PhD Student**, The Pennsylvania State University, PA, USA
 - Project: Precision feeding and nutritional strategies to mitigate enteric gas emissions. Partnership with Dr. Alexander N. Hristov.
- 2018-19: **M.Sc. in Veterinary Sciences**, Federal University of Uberlandia, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Thesis: Characterization of rearing and evaluation of the impacts of management on dairy calves' passive immunity transfer and health.
- 2012-17: **Bachelor's in Veterinary Medicine**, Federal University of Uberlandia, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Undergraduate thesis: Metabolic and productive parameters of periparturient dairy cows.

Leoni Ferreira Martins

Resume

RESEARCH AND WORK EXPERIENCE

- 2021-Present: **Graduate Research Assistant**, The Pennsylvania State University, College of Agriculture, Department of Animal Sciences, PA, USA
 - Projects: Effect of precision feeding frequency on dairy cow performance, N excretion, and enteric methane emission; Effects of an essential oil-based product on enteric methane emission, rumen fermentation, nutrient digestibility, and lactational performance of dairy cows; Effects of calcium carbonate on rumen fermentation, lactational performance, metabolism, and enteric gas emissions of dairy cows.
- 2020-21: **Research assistant**, Purdue University, College of Veterinary Medicine, Veterinary Clinical Sciences Department, IN, USA
 - Projects: Investigation of feed additives to decrease the risk of hypocalcemia in postpartum dairy cows; Revisiting milk fever.
- 2018-19: **Research assistant**, Federal University of Uberlandia, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Projects: Survey of dairy calves' rearing practices in Brazil (Funded by Alta Genetics); Alternative strategies to feed dairy cows: carbohydrates sources and conservation methods (Funded by Cargill), Effects of corn silage hybrid on intake and performance of dairy cows (Funded by Dow Agrosiences).
- 2015-18: **Farm Consultant**, Baixona Farm, Monte Alegre de Minas, MG, Brazil
 - Responsibilities: Forage production and management, diet formulation, economic and financial planning, training of staff, and implementation of SOP.