

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

EDUCATION

- 2021-Present: **PhD Student**, The Pennsylvania State University, PA, USA
 - Project: Effect of precision feeding frequency on dairy cow performance, nitrogen excretion, and enteric methane emission.
 - Project: Effect of rumen-protected botanical products on dairy cow productivity, nutrient digestibility, and blood metabolites.
 - Project: Effects of a calcium carbonate product on rumen fermentation, enteric gases emissions, nutrient digestibility, metabolism, and lactational performance of dairy cow.
 - Project: In vitro evaluation of enteric methane mitigation strategies: A meta-analysis.
 - Partnership with Dr. Alexander N. Hristov.
- 2021: **Research Assistant**, The Pennsylvania State University, PA, USA
 - Project: Sustainable dairy production.
 - Partnership with Dr. Alexander N. Hristov.
- 2020-21: **Visiting Scholar**, Purdue University, IN, USA
 - Project: Revisiting milk fever.
 - Partnership with Dr. Rafael Neves.
- 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.

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AWARDS

- 2022: **Graduate Student Research Contest**, Northeast Chapter, American Registry of Professional Animal Scientists – ARPAS
- 2022: **Scholarship**, Donald V. Josephson and Stuart Patton Award in Dairy and Food Science, The Pennsylvania State University
- 2021: **Scholarship**, College of Agricultural Sciences, The Pennsylvania State University
- 2020: **Scholarship**, Ross Assistantship, Purdue University, College of Veterinary Medicine
- 2018-19: **Scholarship**, CAPES - Coordination for the Improvement of Higher Education Personnel. 1st place Veterinary Sciences/Animal Production Masters' Students
- 2015-17: **Scholarship**, CNPq - National Council for Scientific and Technological Development. Undergraduate Young Researcher

RESEARCH AND WORK EXPERIENCE

- 2021-24: **Graduate Research Assistant**, The Pennsylvania State University, College of Agriculture, Department of Animal Sciences, PA, USA
 - Responsibilities:
 - Planning, helping, and/or executing the projects:
 - Effect of precision feeding frequency on dairy cow performance, nitrogen 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
 - Development and application of research protocols at PSU dairy unit, and coordination of farm staff and laboratory employees.
 - Formulation of experimental diets.
 - Laboratory work: blood, fecal, urine, milk, and feed analyses.
 - Field work: feeding management and general care of dairy cattle.
 - Processing, analyzes, and interpretation of data. Writing reports, abstracts, and scientific articles.

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- 2020-21: **Research assistant**, Purdue University, College of Veterinary Medicine, Veterinary Clinical Sciences Department, IN, USA
 - Responsibilities:
 - Planning and/or executing the projects:
 - Investigation of two feed additives to decrease the risk of hypocalcemia in postpartum dairy cows.
 - Revisiting milk fever.
 - Development and application of research protocols at PU dairy unit, and coordination of farm staff and laboratory employees.
 - Formulation of experimental diets.
 - Jugular vein catheterization and post-operative animal care.
 - Laboratory work: blood, fecal, urine, milk, and feed analyses.
 - Field work: feeding management and general care of dairy cattle.
 - Processing, analyzes, and interpretation of data. Writing reports, abstracts, and scientific articles.
- 2018-19: **Research assistant**, Federal University of Uberlandia, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Responsibilities:
 - Planning, helping, and/or executing the 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)
 - Development and application of research protocols at PU dairy unit, and coordination of farm staff and laboratory employees.
 - Formulation of experimental diets.
 - Laboratory work: blood, fecal, urine, milk, and feed analyses.
 - Field work: feeding management, pasture management, and general care of dairy cattle.
 - Training of new hires and undergraduates to execute field work (feeding, milking, and managing dairy cattle).

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- Processing, analyzes, and interpretation of data. Writing reports, abstracts, and scientific articles.
- 2015-18: **Farm Consultant**, Baixona Farm, Monte Alegre de Minas, MG, Brazil
 - Responsibilities:
 - Forage management and production (silage making process; pasture management).
 - Diet formulation.
 - Economic and financial planning.
 - Training of staff and implementation of SOP.
- 2014-17: **Young Researcher** PIBIC/CNPq, Federal University of Uberlandia, MG, Brazil
 - Responsibilities:
 - Executing the projects:
 - Factors affecting colostrum quality and its impact on passive immunity transfer, health and performance of crossbred dairy calves (Funded by CNPq).
 - Performance of dairy cows fed diets supplemented with fibrolytic enzymes (Funded by AB vista).
 - Effects of the concentration of crude protein in milk replacers on performance and health of dairy calves (Funded by AB vista).
 - Metabolic and productive parameters of periparturient dairy cows.
 - Performance, physiologic parameters, and feeding behavior of grazing dairy cows supplemented with Omnigen-AF® (Funded by Phibro Animal Health).
 - Data analyzes and writing reports.
 - Presenting abstracts and posters in scientific meetings.
- 2014-17: **Trainee consultant, project coordinator and CEO**, CONAVET Veterinary Consulting and Assistance, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Responsibilities:
 - Consultant in beef and dairy farms.
 - Organization of events, symposiums and workshops to the overall community, farmers, and/or students.
 - Training students to work in the field.

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- Coordinating extension projects to help improving the efficiency of milk production in the regions of Triângulo Mineiro and Alto Paranaíba, MG, Brazil.
 - Coordinating financial and economic plans to farms.
 - Leadership and representation of the junior company nationally.
- 2014: **Intern**, ACPs's Farms, Carmo do Rio Claro, MG, Brazil
 - Responsibilities:
 - Management, nutrition, reproduction, health, and clinics of dairy cattle.
- 2012-13: **Intern**. Veterinary Hospital, Federal University of Uberlandia, School of Veterinary Medicine, Uberlandia, MG, Brazil
 - Responsibilities:
 - General care and post operatory care of farm animals.

TEACHING EXPERIENCE

- 2022-23: **Teaching Assistant**. Penn State University, Department of Animal Sciences. Course: ANSC 410 - Advanced Dairy Herd Management
- 2021-22: **Teaching Assistant**. Penn State University, Department of Animal Sciences. Course: ANSC 420 - Animal Nutrition and Feed Technology
- 2021-21: **Teaching Assistant**. Penn State University, Department of Animal Sciences. Course: ANSC 410 - Advanced Dairy Herd Management
- 2017-17: **Teaching Assistant**. Federal University of Uberlandia, School of Veterinary Medicine. Course: Feeds and Diet Formulation for Cattle.
- 2016-17: **Teaching Assistant**. Federal University of Uberlandia, School of Veterinary Medicine. Course: Dairy Cattle Production.
- 2015-16: **Teaching Assistant**. Federal University of Uberlandia, School of Veterinary Medicine. Course: Agrostology.

MENTORING EXPERIENCE

- 2019: Co-supervision of student Francieny Aquino Rezende dos Santos (B.Sc. in Veterinary Medicine at Federal University of Uberlandia). Characterization of calves' rearing in dairy farms in Brazil.
 - Responsibilities:

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- Helping with experimental design, statistical analyses, and writing the dissertation.

PROFESSIONAL ASSOCIATIONS - MEMBERSHIP

- 2022-Present: **Dairy Cattle Reproduction Council**, DCRC, Member
- 2017-Present: **American Dairy Sciences Association**, ADSA, Member
- 2021-Present: **American Registry of Professional Animal Scientists**, ARPAS, Member
- 2021-Present: **American Society of Animal Science**, ASAS, Member

PROFESSIONAL ASSOCIATIONS - ACTIVITY

- 2021-2023: **Northeastern Graduate Director**, American Society of Animal Science Northeast Section/American Dairy Science Association Northeast Branch

PUBLICATIONS

PEER REVIEWED ARTICLES

- Silvestre, T., **L. F. Martins**, S. F. Cueva, D. E. Wasson, N. Stepanchenko, S. E. Räisänen, S. Somai, M. L. Hile, and A. N. Hristov. 2023. Lactational performance, rumen fermentation, nutrient use efficiency, enteric methane emissions and manure greenhouse gas emitting potential in dairy cows fed a blend of essential oils. *J. Dairy Sci.* TBD. Accepted on May 9, 2023.
- **Martins, L. F.**, J. Oh, A. Melgar, M. Harper, E. W. Wall, and A. N. Hristov. 2023. Effects of phytonutrients and yeast culture supplementation on lactational performance and nutrient use efficiency in dairy cows. *J. Dairy Sci.* 106:1746–1756. <https://doi.org/10.3168/jds.2022-22482>.
- Silvestre, T., S. E. Räisänen, S. F. Cueva, D. E. Wasson, C. F. A. Lage, **L. F. Martins**, E. Wall, and A. N. Hristov. 2022. Effects of a combination of Capsicum oleoresin and clove essential oil on metabolic status, lactational performance, and enteric methane emissions in dairy cows. *J. Dairy Sci.* 105:9610-9622. <https://doi.org/10.3168/jds.2022-22203>.
- **Martins, L. F.**, D. E. Wasson, A. N. Hristov. 2022. Feeding dairy cows for improved metabolism and health. *Anim. Front.* 12(5):29-36. <https://doi.org/10.1093/af/vfac059>.
- **Martins, L. F.**, J. Oh, M. Harper, A. Melgar, S. E. Räisänen, X. Chen, K. Nedelkov, T. P. Karnezos, and A. N. Hristov. 2022. Effects of an exogenous enzyme preparation

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extracted from a mixed culture of *Aspergillus* spp. on lactational performance, metabolism, and digestibility in primiparous and multiparous cows. *J. Dairy Sci.* 105:7344-7353. <https://doi.org/10.3168/jds.2022-21990>.

- Silvestre, T., M. Fetter, S. E. Räisänen, C. F. A. Lage, H. Stefenoni, A. Melgar, S. F. Cueva, D. E. Wasson, **L. F. Martins**, T. P., Karnezos, and A. N. Hristov. 2022. Performance of dairy cows fed normal- or reduced-starch diets supplemented with an exogenous enzyme preparation. *J. Dairy Sci.* 105:2288–2300. <https://doi.org/10.3168/jds.2021-21264>.
- Malacco, V. M. R., **L. F. Martins**, I. C. F. Maciel, C. F. A. Lage, R. R. B. Coelho, A. L. B. S. A. Costa; A. M. Moura, H. M. Saturnino, S. G. Coelho, and R. B. Reis. 2021. Effects of partial replacement of solvent-extracted soybean meal by amino resin-treated soybean meal in the concentrate supplement of high producing grazing dairy cows. *Livestock Science.*, v.254. 104762. <https://doi.org/10.1016/j.livsci.2021.104762>.
- **Martins, L. F.**, P. R. Menta, L. Fernandes, V. S. Machado, and R. C. Neves. 2021. Prolonged, low-grade inflammation in the first week of lactation: associations with mineral, protein, and energy balance markers, and milk yield in a clinically healthy Jersey cow cohort. *J. Dairy Sci.* 104:6113–6123. <https://doi.org/10.3168/jds.2020-19538>.
- **Martins, L. F.**, D. M. B. Prado, G. R. Gomes, A. M. Teixeira, L. N. Oliveira, L. C. Gonçalves, and F. S Oliveira. 2020. Nutritional value of elephant grass harvested at different regrowth ages. *Arquivo Brasileiro de Medicina Veterinária e Zootecnia.*, 72:1881–1890. <http://dx.doi.org/10.1590/1678-4162-11329>.
- **Martins, L. F.**; D. O. C. Sousa, L. O. Lopes, and A. M. C. Lima. 2014. Profile of dairy farms in the total bacterial count in the cities of Patos de Minas and Lagoa Grande in the state of Minas Gerais. *Revista Brasileira de Higiene e Sanidade Animal.*, v.8, p. 66-73 <http://dx.doi.org/10.5935/1981-2965.20140043>.
- Sousa, D. O. C., **L. F. Martins**, L. O. Lopes, and A. M. C. Lima. 2014. Profile of somatic cell count on dairy farms in the municipalities of Patos de Minas and Lagoa Grande in the state of Minas Gerais. *Revista Brasileira de Higiene e Sanidade Animal.*, v.8, p. 59-65. <http://dx.doi.org/10.5935/1981-2965.20140042>.

PUBLISHED BOOKS

- Azevedo, R. A., A. M. Teixeira, C. M. M. Bittar, G. F. Caixeta, J. A. Zambrano, J. E. P. Santos, J. H. C. Costa, **L. F. Martins**, L. C. M. Silva, M. M. Campos, P. M. Tiveron, P.

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P. Rotta, R. M. Meneses, R. O. S. Silva, S. G. Coelho, V. J. Chiogna, and V. Gomes. 2021. Alta CRIA 2021. 1. ed., 2021. <http://dx.doi.org/10.26626/978-85-5953-056-8.2019B0001>.

- Azevedo, R. A., A. M. Teixeira, C. M. M. Bittar, **L. F. Martins**, L. C. M. Silva, J. A. Zambrano, J. E. P. Santos, P. M. Tiveron, P. P. Rotta, R. O. S. Silva, S. G. Coelho, V. Gomes, R. M. Meneses. 2020. Alta CRIA 2020. 1. ed., 2020. <http://dx.doi.org/10.26626/978-85-5953-056-8.2019B0001>
- Azevedo, R. A.; **L. F. Martins**, P. M. Tiveron, A. M. Teixeira, C. M. M. Bittar, G. Lopes Júnior, L. C. M. Silva, J. E. P. Santos, P. P. Rotta, R. M. Meneses, and S. G. Coelho. 2019. Alta Cria 2019 – benchmarking for dairy calves and heifers. 1. ed., 2019, v.1. p.112. <http://dx.doi.org/10.26626/978-85-5953-056-8.2019B0001>
- Azevedo, R. A.; **L. F. Martins**, P. M. Tiveron, A. M. Teixeira, C. M. M. Bittar, L. C. M. Silva, J. E. P. Santos, P. P. Rotta, R. M. Meneses, and S. G. Coelho. 2019. Alta Cria 2019. 1. ed., 2019, v.1. p.124. <http://dx.doi.org/10.26626/978-85-5953-055-1.2019B0001>
- Azevedo, R. A.; **L. F. Martins**, P. M. Tiveron, A. M. Teixeira, C. M. M. Bittar, L. C. M. Silva, J. E. P. Santos, P. P. Rotta, R. M. Meneses, and S. G. Coelho. 2018. Alta Cria 2018. Uberaba: Alta Genetics, 2018, v.1. p.96.

BOOK CHAPTERS

- Gonçalves, L. C.; M. A. Ramirez, A. M. Teixeira, D. Santos, F. P. A. A. Pires, R. A. Menezes, **L. F. Martins**, B. O. Silva. 2016. Challenges of knowledge transference in an effort to minimize social discrepancies In: Extensão rural e conexões. 1ed. Belo Horizonte: FEPMVZ, 2016, v.1, p. 25-36.

AUTHORSHIP OF ABSTRACTS AT SCIENTIFIC MEETINGS

- **Martins, L. F.**, S. F. Cueva, N. Stepanchenko, D. E. Wasson, and A. N. Hristov. 2023. Developing an algorithm to predict intake of concentrates in dairy cows fed a partial mixed ration. J. Dairy Sci. Vol. 106, Suppl. 1. P. TBD.
- **Martins, L. F.**, K. C. Welter, S. F. Cueva, N. Stepanchenko, D. E. Wasson, and A. N. Hristov. 2023. Aragonite as a rumen buffer and calcium source for lactating dairy cows. J. Dairy Sci. Vol. 106, Suppl. 1. P. TBD.
- **Martins, L. F.**, S. E. Crater, S. F. Cueva, T. Silvestre, N. Stepanchenko, D. E. Wasson, and A. N. Hristov. 2022. Effects of feeding method and frequency on lactational

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performance and enteric methane emission in dairy cows. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 69:70.

- **Martins, L. F.,** S. E. Crater, S. F. Cueva, T. Silvestre, N. Stepanchenko, D. E. Wasson, E. Wall, and A. N. Hristov. 2022. Effects of botanical preparations on lactational performance and enteric methane emission in dairy cows. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 121.
- **Martins, L. F.,** G. F. S. Congio, S. F. Cueva, C. F. A. Lage, M. Ramin, T. Silvestre, J. Tricarico, and A. N. Hristov. 2022. In vitro evaluation of enteric methane mitigation strategies: A meta-analysis. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 310.
- **Martins, L. F.;** Räisänen, S. E.; Lage, C. F. A.; Zhou, C.; Melgar, A.; Silvestre, T.; Wasson, D. E.; Cueva, S. F.; Takagi, T.; Hristov, A. N. Performance of dairy cows fed two levels of digestible histidine and metabolizable protein. Penn State Dairy Cattle Nutrition Workshop, 2021, Hershey, PA.
- **MARTINS, L. F.;** NETTO, A. P. D. A.; SILVA, B. O.; OLIVEIRA, L. N.; MARINHO, M. N.; OLIVEIRA, F. S.; GOMES, G. R.; TEIXEIRA, A. M. Live weight monitoring from transition dairy cows. Proceedings of VIII Symposium of Dairy Nutrition of Minas Gerais, III National Symposium of Dairy Production and Nutrition, 2017, Uberlandia.
- **MARTINS, L. F.;** NETTO, A. P. D. A.; SILVA, B. O.; OLIVEIRA, L. N.; OLIVEIRA, F. S.; GOMES, G. R.; PRADO, D. M. B.; TEIXEIRA, A. M. Live weight variation from cows with ketosis in prepartum. Proceedings of VIII Symposium of Dairy Nutrition of Minas Gerais, III National Symposium of Dairy Production and Nutrition, 2017, Uberlandia.
- **MARTINS, L. F.;** NETTO, A. P. D. A. ; Silva, B. O. ; Prado, D. M. B. ; Mundim, G. G.; TEIXEIRA, A. M. ; MAGALHAES, F. A. The influence of the colostrum quality into the albumin globulin ratio, globulins and total proteins concentrations of crossbred calves. Proceedings of the III Brazilian Symposium of ruminant production in the Cerrado, 2015, Uberlandia.
- **MARTINS, L. F.;** NETTO, A. P. D. A.; Silva, B. O.; Prado, D. M. B.; Sá, J. P. O.; TEIXEIRA, A. M.; MAGALHAES, F. A. Subclinical mastitis prevalence of crossbred dairy cows according to the parity. Proceedings of the III Brazilian Symposium of ruminant production in the cerrado, 2015, Uberlandia.
- **MARTINS, L. F.;** NETTO, A. P. D. A.; Silva, B. O.; Prado, D. M. B.; Sá, J. P. O.; TEIXEIRA, A. M.; MAGALHAES, F. A. Subclinical mastitis prevalence of

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crossbred dairy cows according to the lactation stage. Proceedings of the III Brazilian Symposium of ruminant production in the cerrado, 2015, Uberlandia.

- **MARTINS, L. F.**; ROSA, P. L. R. B.; TEIXEIRA, A. M.; MAGALHAES, F. A.; PIRTOUSCHEG, A.; NETTO, A. P. D. A. Strategies for feeding minerals to dairy herds in Uberlandia. Proceedings of I Brazilian Symposium of Dairy Ruminants, 2014, Uberlandia.
- **MARTINS, L. F.**; ROSA, P. L. R. B.; TEIXEIRA, A. M.; MAGALHAES, F. A.; PIRTOUSCHEG, A.; NETTO, A. P. D. A. Predominant fertilizing strategies and grazing methods adopted by dairy farms in Uberlandia. Proceedings of I Brazilian Symposium of Dairy Ruminants, 2014, Uberlandia.
- **MARTINS, L. F.**; ROSA, P. L. R. B.; TEIXEIRA, A. M.; MAGALHAES, F. A.; PIRTOUSCHEG, A.; NETTO, A. P. D. A. Characterization of the pastures systems of dairy farms in Uberlandia. Proceedings of I Brazilian Symposium of Dairy Ruminants, 2014, Uberlandia.
- **MARTINS, L. F.**; ROSA, P. L. R. B.; TEIXEIRA, A. M.; MAGALHAES, F. A.; PIRTOUSCHEG, A.; NETTO, A. P. D. A. General profile of dairy farmers in Uberlandia. Proceedings of I Brazilian Symposium of Dairy Ruminants, 2014, Uberlandia.

CO-AUTHORSHIP OF ABSTRACTS AT SCIENTIFIC MEETINGS

- Stepanchencko, N., D. E. Wasson, S. Welchez, **L. F. Martins**, D. W. Pitta, and A. N. Hristov. 2023. Lactational performance and enteric methane emissions of phenotypically high and low methane emitting dairy cows fed bromoform. J. Dairy Sci. Vol. 106, Suppl. 1. P. TBD.
- Stepanchencko, N., D. E. Wasson, S. Welchez, **L. F. Martins**, R. A. Brennan, and A. N. Hristov. 2023. Effects of replacing alfalfa haylage with high-protein duckweed on ruminal fermentation in vitro. J. Dairy Sci. Vol. 106, Suppl. 1. P. TBD.
- Stepanchencko, N., D. E. Wasson, S. Welchez, T. Silvestre, **L. Martins**, C. D. Dechow, and A. N. Hristov. 2023. Production performance, enteric gas emissions, and their associations with genomic predicted transmitting abilities of Holstein cattle. J. Dairy Sci. Vol. 106, Suppl. 1. P. TBD.

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- Wasson, D. E., **L. F. Martins**, E. H. Wall, and A. N. Hristov. 2023. Effect of capsaicin supplementation on performance and health of dairy cows: A meta-analysis. *J. Dairy Sci.* Vol. 106, Suppl. 1. P. TBD.
- Wasson, D. E., S. F. Cueva, **L. F. Martins**, N. Stepanchenko, K. Welter, and A. N. Hristov. 2023. Effects of long-term supplementation with *Asparagopsis taxiformis* on enteric methane emission and lactational performance of dairy cattle. *J. Dairy Sci.* Vol. 106, Suppl. 1. P. TBD.
- Cueva S. F., **L. F. Martins**, N. Stepanchenko, D. E. Wasson, D. M. Kniffen, R. A. Fabin, and A. N. Hristov. 2023. Effects of replacing canola meal with extruded soybean meals on lactational performance and enteric gas emissions in dairy cows. *J. Dairy Sci.* Vol. 106, Suppl. 1. P. TBD.
- Cueva S. F., **L. F. Martins**, N. Stepanchenko, D. E. Wasson, and A. N. Hristov. 2023. Lactational performance of dairy cows fed diets based on corn silage with varying organic matter digestibility. *J. Dairy Sci.* Vol. 106, Suppl. 1. P. TBD.
- Cueva S. F., S. Sommai, **L. F. Martins**, N. Stepanchenko, D. E. Wasson, J. D. Lambert and A. N. Hristov. 2023. Effects of polyphenolic compounds on enteric methane production and rumen fermentation in vitro. *J. Dairy Sci.* Vol. 106, Suppl. 1. P. TBD.
- Stepanchenko, N., D. E. Wasson, S. Welchez, **L. Martins**, T. Silvestre, D. W. Pitta, and A. N. Hristov. 2022. Effect of methane inhibitors on in vitro fermentation and CH₄ production using rumen inoculum from cows with high and low methane yield phenotype. *J. Dairy. Sci.* Vol. 105, Suppl. 1. p. 316.
- Stepanchenko, N., D. E. Wasson, S. Welchez, **L. Martins**, R. A. Brennan, and A. N. Hristov. 2022. In vitro evaluation of the effects of high-protein duckweed on ruminal fermentation. *J. Dairy. Sci.* Vol. 105, Suppl. 1. p. 368.
- Wasson, D. E., **L. F. Martins**, N. Stepenchenko, S. F. Cueva, C. F. García, R. Radulovich, and C. Yarish. 2022. Screening of tropical macroalgae for enteric methane mitigation effect in vitro. *J. Dairy. Sci.* Vol. 105, Suppl. 1. p. 310.
- Cueva, S. F., D. E. Wasson, S. E. Räisänen, **L. F. Martins**, T. Silvestre, and A. N. Hristov. 2022. Lactational performance and enteric gas emission in dairy cows fed an amylase-enabled corn silage. *J. Dairy. Sci.* Vol. 105, Suppl. 1. p. 57.
- Cueva, S. F., D. E. Wasson, **L. F. Martins**, N. Stepanchenko, D. Chatterjee, T. Lesko, C. Surinder, and A. N. Hristov. 2022. Effects of corn hybrids differing in flavonoid content

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on rumen fermentation and enteric methane emission in vitro. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 308.

- Wasson, D. E., S. F. Cueva, **L. Martins**, S. Räisänen, N. Stepenchenko, Y. Chen, L. W. Rottman, and A. N. Hristov. Effect of supplementation with *Bacillus subtilis* on rumen fermentation and enteric methane production in vitro. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 309.
- Malacco, V. M. R., M. R. Savage, L. Beckett, S. Hilger, **L. F. Martins**, R. C. Neves, B. Funnell, and S. S. Donkin. 2022. Effect of glucose infusion dose and stage of lactation on urinary glucose excretion in dairy cows. J. Dairy. Sci. Vol. 105, Suppl. 1. p. 306.
- PRADO, D. M. B.; NETTO, A. P. D. A.; SILVA, B. O.; **MARTINS, L. F.**; SANTOS NETO, A. R.; OLIVEIRA, L. N.; OLIVEIRA, F. S.; TEIXEIRA, A. M. Intake behavior of dairy cows supplemented with fibrolytic enzyme in diets with different forage levels. Proceedings of I International Symposium of Dairy Nutrition and Production, IV National Symposium of Dairy Nutrition and Production and IX Symposium of Dairy Nutrition and Production of Minas Gerais. Belo Horizonte: FEPMVZ, 2019. v. 1. p. 177-179.
- OLIVEIRA, L. N.; SILVA, B. O.; NETTO, A. P. D. A.; PRADO, D. M. B.; OLIVEIRA, F. S.; OLIVEIRA, A.; **MARTINS, L. F.**; TEIXEIRA, A. M. Performance of calves on a step-down feeding program receiving milk replacers with different protein levels. Proceedings of I International Symposium of Dairy Nutrition and Production, IV National Symposium of Dairy Nutrition and Production and IX Symposium of Dairy Nutrition and Production of Minas Gerais. Belo Horizonte: FEPMVZ, 2019. v. 1. p. 201-203.
- OLIVEIRA, F. S.; SILVA, B. O.; NETTO, A. P. D. A.; **MARTINS, L. F.**; GUIMARAES, M. E. S.; STWART, F. S.; GOMES, G. R.; TEIXEIRA, A. M. Starter intake of calves fed with different milk replacers in feeding program step-down. Proceedings of I International Symposium of Dairy Nutrition and Production, IV National Symposium of Dairy Nutrition and Production and IX Symposium of Dairy Nutrition and Production of Minas Gerais. Belo Horizonte: FEPMVZ, 2019. v. 1. p. 228-230.
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INTERVIEWS

- 2022: Adding fungal enzymes to dairy cow rations boosts milk output and quality. <https://www.psu.edu/news/research/story/adding-fungal-enzymes-dairy-cow-rations-boosts-milk-output-and-quality/>

OTHER CERTIFICATIONS AND COURSES

- 2020: Statistics 1: Introduction to ANOVA, Regression, and Logistic Regression, SAS Institute Inc, SAS, USA.

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- 2019: Protein nutrition & metabolism in domestic ruminants – Dr. Glen Broderick. Lavras, MG, Brazil.
- 2019: Evaluation of the dairy cows' metabolic status – Dr. Rodrigo de Almeida. Lavras, MG, Brazil.
- 2019: Advanced Excel. Brasilia University, UnB.
- 2018: Near infrared reflectance spectroscopy. Uberlandia, MG, Brazil.
- 2016: Nutritional consulting on dairy cattle. Lavras, MG, Brazil.
- 2015: Intensive pasture based bovine production. Uberlandia, MG, Brazil.
- 2015: Compost bedded pack barns. Alta Brazil, Uberaba, MG, Brazil.
- 2015: Dairy cattle nutrition and feeding management. Viçosa, Brazil. SENAR.