

CURRICULUM VITAE

University of Idaho

NAME: Bruna Calvo Agostinho

POSITION: Post-Doctoral Associate

DEPARTMENT: Animal, Veterinary and Food Sciences

OFFICE LOCATION: Ag Science 210, 83844-2330

EDUCATION:

Post-Doctoral Training, 2020 – in progress Early Stress in Dairy Calves

University of Idaho- Animal, Veterinary and Food Science /Dr. Rezamand (Moscow, ID)

Ph.D., Animal Science (Ruminant Nutrition), 2020, State University of Maringa (Maringa, Brazil)

Ph.D., Visiting Ph.D. Internship (Ruminant Nutrition), 2020, University of Florida (Gainesville, FL)

M.S., Animal Science (Ruminant Nutrition), 2017, State University of Maringa (Maringa, Brazil)

B.S., Animal Science, 2015, State University of Maringa (Maringa, Brazil)

PROFESSIONAL EXPERIENCE

Teaching Assistant, Animal Science Dept., State University of Maringa, Introduction to Animal Science, Fall 2017

Teaching Assistant, Animal Science Dept., State University of Maringa, Applied Animal Nutrition Feedstuffs and Ration Formulation, Fall 2016 and Fall 2017

Intern, Poultry Slaughterhouse Quality Control. JBS Corporation (Seara Foods). Santo Inacio, PR, Brazil, 2015-2015.

Extensionist Assistant, ZooJr Livestock Extension Assistance. State University of Maringa. Maringa, PR, Brazil, 2012-2014

Research Assistant, Ruminant Nutrition Laboratory, Department of Animal Sciences - State University of Maringa. Maringa, PR, Brazil, 2012-2014

RESEARCH EMPHASIS

My research is focuses on ruminant nutrition and stress and inflammation in weaning stress in dairy calves.

SELECTED PEER-REVIEWED PUBLICATIONS

RECENT REFEREED PUBLICATIONS (2015-present)

Agustinho, B. C., Daniel, J. L. P., Zeoula, L. M., Alcalde, C. R., Machado, E., Bragatto, J. M., Schneider, C. R., Santos¹, N. W., Matumoto-Pintro, P. T., Saraiva, B. R., Osorio, J. A. C., Faciola, A. P. 2021. Enzymatic effects of *Pleurotus ostreatus* spent substrate on whole-plant corn silage and performance of lactating goats. *Journal of Dairy Science*. **Accepted for publication.**

Arce-Cordero, J. A., Ravelo, A., Vinyard, J. R., Monteiro, H. F., **Agustinho, B. C.**, Sarmikasoglou, E., Bennet, S. L., Faciola, A. P. 2021. Effects of supplemental source of magnesium and inclusion of buffer on ruminal microbial fermentation in continuous culture. *Journal of Dairy Science*, v. 104, n. 7, p. 7820-7829

Bennett, S. L., Arce-Cordero, J. A., Brandao, V. L. N., Vinyard, J. R., **Agustinho, B. C.**, Monteiro, H. F., Lobo, R. R., Tomaz, L., Faciola, A. P. 2021. Effects of bacterial cultures, enzymes, and yeast-based feed additive combinations on ruminal fermentation in a dual-flow continuous culture system. *Translational Animal Science*, v. 5, n. 2, p. txab026, 2021.

Agustinho B. C., Zeoula, L. M., Santos, N. W., Machado, E., Yoshimura, E. H., Ribas, J. C. R., Bragatto, J. M., Stemposki, M. R., Santos, V. J., A. P. Faciola. 2020. Effects of flaxseed oil and vitamin E supplementation on digestibility and milk fatty composition and antioxidant capacity in water buffaloes. *Animals* 2020, 10(8) 1294.

Machado, E., P. T. Matumoto-Pintro, L. C. V. Ítavo, **B. C. Agustinho**, J. L. P. Daniel, N. W. Santos, J. M. Bragatto, M. G. Ribeiro, and L. M. Zeoula. 2020. Reduction in lignin content and increase in the antioxidant capacity of corn and sugarcane silages treated with an enzymatic complex produced by white rot fungus. *PLoS One* 15:e0229141.

Ribas, J. C. R.; Pintro, P. T. M.; Vital, A. C. P.; Saraiva, B. R.; Anjo, F. A.; Alves, R. L. B.; Santos, N. W.; Machado, E.; **Agustinho, B. C.**; Zeoula, L. M. 2019. Influence of basil (*Ocimum basilicum* Lamiaceae) addition on functional, technological and sensorial characteristics of fresh cheeses made with organic buffalo milk. *Journal of Food Science and Technology*, v. 56, p. 5214-5224.

Saraiva, B.R.; **Agustinho, B. C.**; Vital, A. C. P.; Staub, L.; Pintro, P. T. M. 2019. Effect of brewing waste (malt bagasse) addition on the physicochemical properties of hamburger. *Journal of Food Processing and Preservation*, v. 43, p. e14135.

Yoshimura, E. H.; Santos, N. W.; Machado, E.; **Agustinho, B. C.**; Pereira, L. M.; Aguiar, S. C.; Franzolin, R.; Gasparino, E.; dos Santos, G. T.; Zeoula, L. M. 2018. Effects of dairy cow diets supplied with flaxseed oil and propolis extract, with or without vitamin E, on the ruminal microbiota, biohydrogenation, and digestion. *Animal Feed Science and Technology*, v. 241, p. 163-172.

Yoshimura, E. H.; Santos, N. W.; Machado, E.; **Agustinho, B. C.**; Pereira, L. M.; Aguiar, S. C.; Nalanishi, A. B.; Mareze-Costa, C. E.; Zeoula, L. M. 2018. Functionality of cow milk naturally enriched with polyunsaturated fatty acids and polyphenols in diets for diabetic rats. *Plos One*, v. 13, n. 4.

Santos, N. W.; Yoshimura, E. H.; Mareze-Costa, C. E.; Machado, E.; **Agustinho, B. C.**; Pereira, L. M.; Brito, M. N.; Brito, N. A.; Zeoula, L. M. 2017. Supplementation of cow milk naturally enriched in polyunsaturated fatty acids and polyphenols to growing rats. *Plos One*, v. 12, p. e0172909.

Santos, V. L. F.; Ferreira, M. A.; Santos, G. T.; Damasceno, J. C.; Oliveira, K.; **Agustinho, B. C.**; Olivo, P. M.; Soares, L. F. P.; Silva, J. L. 2015. Cassava peel as a replacement for corn in the diet of lactating cows. *Tropical Animal Health and Production*, v. 47, n. 4, p. 779-781.

Machado, E.; Yoshimura, E. H.; Santos, N. W.; **Agustinho, B. C.**; Pereira, L. M.; Samensari, R. B.; De Aguiar, S. C.; Zeoula, L. M. 2015. Nitrogen metabolism, digestive parameters, and protein requirements for the maintenance of buffalo growth. *Tropical Animal Health and Production*, v. 48, p. 361-366.

ARTICLES SUBMITTED

Agustinho, B. C., Ravelo, A., Vinyard, J. R., Lobo, R. R., Arce-Cordero, J. A., Monteiro, H. F., Sarmikasoglou, E., Bennett, S., Johnson, M. L., Vieira E. R. Q., Stoffel, C., Stocks, S. E., Faciola, A. P. 2021. Effects of replacing magnesium oxide with calcium-magnesium carbonate with or without sodium bicarbonate on ruminal fermentation and nutrient flow in vitro. *Under Review*.

Agustinho, B. C., Ramsey, K. C., Moore, C., Tsai, C. Y., Scholte, C. M., McGuire, M., Rezamand, P. 2021. Interaction among energy status, immune status, retinol-binding protein and retinoids status in periparturient dairy cows: Immune parameters and vitamin metabolism. *Under Review*.

Agustinho, B. C., Daniel, J. L. P., Zeoula, L. M., Ferraretto, L. F., Monteiro, H. F., Pupo, M. R., Ghizzi, L. G., Agarussi, M. C. N., Heinzen Junior, C., Lobo, R. R., Ravelo, A. D., Faciola, A. P. 2021. Effects of lignocellulolytic enzymes on the fermentation profile, chemical composition, and in situ ruminal disappearance of whole-plant corn silage. *Under Review*.

Monteiro, H. F., Januario Lelis, A. L., Fan, P., **Agustinho, B. C.**; Lobo, R., Arce-Cordero, J., Dai, X., Jeong, K. C., Faciola, A. P. 2021. Effects of lactic acid-producing bacteria as direct-fed microbials on the ruminal microbiome. *Under Review*.

Ravelo, A., **Agustinho, B. C.**, Arce-Cordero, J; Monteiro, H. F., Bennett, S., Sarmikasoglou, E., Vinyard, J., Vieira, E., Lobo, R., Ferraretto, L., Vyas, D., Faciola, A. P. Effects of partially replacing dietary corn with molasses, untreated whey permeate, and treated whey permeate

on in vitro ruminal fermentation in a dual-flow continuous culture system. *Under Review.*

GRANTS

Weaning strategies; managing gut inflammation during weaning in young calves and the implications throughout life cycle. 2021. To USDA-NIFA (PI: P. Rezamand, coPI: A. H. Laarman, D. Konetchy, B.C. Agostinho, proposed budget \$649,000)

Wildfire smoke and the dairy industry: discovering impacts on animal performance and health, and the molecular and cellular mechanisms involved. 2021. To USDA-NIFA (PI: A. Skibieli, coPI P. Rezamand, D. Konetchy, B.C. Agostinho, proposed budget \$650,000)

ABSTRACT

Agostinho, B. C., Wolfe, A., Tsai, C. Y., Konetchy, D. E., Laarman, A. H., Rezamand, P. 2021. Effect of weaning pace and age on the gene expression of inflammatory markers in hepatic, rumen, and intestinal tissues of Holstein dairy calves. American Dairy Science Association Annual Meeting, 2021.

Agostinho, B. C., Ravelo, A., Vinyard, J. R., Lobo, R. R., Sarmikasoglou, E., Arce-Cordero, J., Monteiro, H. F., Vieira, E. R. Q., Bennett, S., Stoffel, C., Faciola, A. P. 2021. Effects of magnesium source and buffer inclusion on fermentation profile in a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2021.

Agostinho, B. C., Laarman, A. H. 2021. Low rumen pH in calves: Problem or opportunity? American Dairy Science Association Annual Meeting, 2021.

Wolfe, A., Rezamand, P., **Agostinho, B. C.**, Konetchy, D., Laarman, A. 2021. Effects of weaning strategies on intake, growth, and health in Holstein dairy calves. American Dairy Science Association Annual Meeting, 2021.

Wolfe, A., **Agostinho, B. C.**, Tsai, C. Y., Konetchy, D. E., Laarman, A. H., Rezamand, P. 2021. Effect of weaning pace and age on the blood cells and haptoglobin concentration of Holstein dairy calves. American Dairy Science Association Annual Meeting, 2021.

Ravelo, A. D., **Agostinho, B. C.**, Arce-Cordero, J. A., Monterio, H. F., Bennett, S. L., Sarmikasoglou, E., Vinyard, J. R., Vieira, E. R. Q., Lobo, R. R., Faciola, A. P. 2021. Effects of partially replacing corn with molasses, untreated whey, and treated whey on in vitro ruminal fermentation in a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2021.

Arce-Cordero, J. A., Ravelo, A., Vinyard, J. R., Monteiro, H. F., **Agostinho, B. C.**, Sarmikasoglou, E., Bennett, S. L., Faciola, A. P. 2021. Effects of supplemental source of

magnesium and inclusion of buffer on ruminal fermentation in continuous culture. American Dairy Science Association Annual Meeting, 2021.

Lobo, R. R., Arce-Cordero, J. A., Marinho, M., So, S., Ravelo, A., **Agustinho, B. C.**, Vinyard, J., Johnson, M. L., Sarmikasoglou, E., Monteiro, H., Faciola, A. P. 2021. Effects of Mg sources and buffer inclusion on high producing dairy cows` performance. American Dairy Science Association Annual Meeting, 2021.

Vinyard, J. R., Ravelo, A., Sarmikasoglou, E., Monteiro, H. F., Arce-Cordero, J. A., Johnson, M. L., **Agustinho, B. C.**, Bahman, A., Lobo, R. R., Gilbertson, L. M., Mills, M. N., Soltis, M. P. L., Ferrarreto, L. F., Faciola, A. P. 2021. The effect of inclusion of exogenous amyolytic or cellulolytic enzymes on in fermentation of lactating dairy cow diets in a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2021.

Agutinho, B. C., Zeoula, L. M., Ferraretto, L. F., Monteiro, H. F., Pupo, M. R., Ghizzi, L. G., Agarussi, M. C. N., Heinzen Junior, C., Vinyard, J. R., Bennett, S., Faciola, A. P. 2020. Evaluation of an enzymatic lignocellulolytic complex on corn silage fermentation profile. American Dairy Science Association Annual Meeting, 2020.

Bennett, S. Arce-Cordeiro, J. A., Brandão, V. L. N., Vinyard, J. R., **Agustinho, B. C.**, Monteiro, H. F., Tomaz, L., Lobo, R. R., Faciola, A. P. 2020. Effect of probiotics, enzymes, and yeast combination on ruminal fermentation in a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2020.

Arce-Cordeiro, J. A., Fan, P., Monteiro, H. F., Dai, X., **Agustinho, B. C.**, Lobo, R. R., Estes, K., Jeong, K. C., Faciola, A. P. 2020. Unprotected choline alters microbial community composition in a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2020.

Monteiro, H. F., Fan, P., Dai, X., Arce-Cordeiro, J. A., **Agustinho, B. C.**, Lobo, R. R., Lelis, A. L. J., Brandão, V. L. N., Faccenda, A., Avila, A. S., Restelatto, R., Silva, L. G., Jeong, K. C., Faciola, A. P. 2020. Effects of Lactobacillus plantarum as direct-fed microbials on the ruminal microbial community composition using a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2020.

Amaro, F. X., Pupo, M., **Agustinho, B. C.**, Bennett, S., Vinyard, J., Tomaz, L., Lobo, R. R., Arce-Cordeiro, J. A., Jiang, Y., Arriola, K. C., Faciola, A. P., Adesogan, A. T., Vyas, D. 2020. Effect of different levels of aflatoxin B1 on ruminal digestibility, fermentation profile, and N efficiency of a lactating dairy cow diet using a dual-flow continuous culture system. American Dairy Science Association Annual Meeting, 2020.

Agustinho, B. C., Machado, E., Bragatto, J. M., Alcalde, C. R., Pintro, P., T. M., Schneider, C. R., Saraiva, B. R., Zeoula, L. M. Corn silage treated with spent substrate from white rot mushroom culture to lactating goats. American Dairy Science Association Annual Meeting, 2019.