

MSc Defence

The effect of tyndallized *Lactobacillus helveticus* supplementation on calf performance and gut health during the pre-weaning and post-weaning period.

Florencia Olmeda

Date: September 8th 2023 at 8:30am

The MSc Defence for Florencia Olmeda has been scheduled for September 8th, 2023 at 8:30am. The defence will be held online via Teams and in room 141: https://teams.microsoft.com/l/meetup-join/19%3ameeting_YTQ1MjVkNWYtMGIZi00YWQxLTg1NzItNDZkNjQyZGNkNDIx%40thread.v2/0?context=%7b%22Tid%22%3a%22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d

The exam committee will consist of:

Examining Chair: Dr. Marcio Duarte

Advisor: Dr. Mike Steele

Advisory Committee Member: Dr. Katie Wood

Additional Committee Member: Dr. Giselle LaPointe

Abstract:

Ensuring optimal development of dairy calves is vital to ensure the future of the lactating herd. Thus, preserving their health becomes essential, as it plays a key role in enhancing their immune system and maximizing nutrient utilization. Therefore, the objectives of this research were to 1) evaluate the impact of tyndallized *Lactobacillus helveticus* (TLH) supplementation to Holstein calves on growth and health metrics during the pre-and post-weaning period, and 2) to evaluate if supplementing TLH can ameliorate the adverse effects of an abrupt weaning model on the gut barrier function and inflammation. Data from Chapter 2 demonstrates that TLH supplementation improves feed intake in the post-weaning period and tends to improve growth, whereas Chapter 3 suggests that TLH leads to a reduction in inflammatory-related markers. Based on these data, the use of TLH could enhance the recovery of calves exposed to abrupt weaning practices, promoting their health and performance.