

MSc. Defence

Pre- and Post-Weaning Nutritional Strategies to Improve Growth Performance, Gut
Development, and Immune Response of Pigs

Brenda Christensen

Date: September 7nd, 2021 at 1:00pm

The MSc Defence for Brenda Christensen has been scheduled for Tuesday September 7th 2021 at 1:00pm. The defence will be held online via Teams: https://teams.microsoft.com/l/meetup-join/19%3ameeting_MmMwNDYxMDctYjVINc00M2ZILWIwNjAtNGExMzI3ZjU4MDQ1%40thread.v2/0?context=%7b%22id%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. Dominique Bureau

Advisor: Dr. Lee-Anne Huber

Adv. Committee Member: Dr. Ming Fan

Additional Member: Dr. Mike Steele

Abstract:

Sows' milk as a sole source of nutrients limits growth of piglets and fails to habituate piglets to pelleted, plant-based post-weaning diets. The aim of this thesis was to evaluate pre- and post-weaning nutritional strategies on piglet growth performance, gut development, and immune response. First, with respect to creep feed composition and form, piglets provided liquid milk replacer had the greatest body weight at weaning. Between weaning and one-week post-weaning, pigs provided commercial creep feed had the greatest reduction in specific activity of maltase. When pigs were provided a high-complexity nursery diet, they had improved growth performance, feed efficiency and gut morphology, regardless of creep feed treatment. Neither creep feed nor nursery treatments had a significant impact on immune system activation. Therefore, provision of creep feed provides no additional benefit when pigs are provided a high-complexity diet after weaning.