

PROGRESS REPORT



Understanding the Relationship between Intestinal Bacteria and Inflammatory Bowel Disease (IBD)

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Morris Animal Foundation-funded researchers at the University of Melbourne are looking at changes in gut bacteria in dogs with inflammatory bowel disease (IBD). Their goal is to help identify novel ways to diagnose and treat this disease. IBD is a common disease of dogs, causing vomiting, diarrhea and weight loss. Some studies suggest that specific intestinal microbiota can drive or exacerbate intestinal inflammation, but this mechanism has not been well studied in dogs.

The team is assessing and tracking certain bacteria, known to interact directly with the gut immune system, in stool samples of dogs with inflammatory bowel disease. Data is being collected during treatment until the dogs gain remission. So far, the team has completed validation of their collection protocols on a small subset of dogs. Now that all protocols for collection, storage and extraction of DNA are in place, active recruitment of new cases is underway.

Findings from this study will help identify which bacteria are functionally important to the disease process, and how treatment modifies the gut bacteria. This new information will lead to a better understanding of how the gut microbiome can be manipulated in dogs with IBD and may reduce the need to directly biopsy the intestine to establish a definitive diagnosis of this disease.

Thanks to the generous sponsors of this study!