

COLIC

Grayson-Jockey Club Research Archives

Equine colic is an unfortunately common condition that affects horses of all ages, breeds, and disciplines. This condition refers to any sort of abdominal pain in horses, and while in some cases it may be so mild that you don't even notice, a severe case could be deadly. In fact, it's one of the leading causes of equine death, after old age.



Grayson is proud to have funded the following projects to find better treatment for this dangerous malady.

Effect of NSAIDs on Anion Transport in the Equine Colon

University of Florida, *Principal Investigator: David Freeman*

CO-PIs: Anje Bauck, Sadavisian Vidyasagar, Guy D. Lester, Ruethaiwan Vinijkumthorn, Jami Claire

This proposal was designed to improve management of horses with right dorsal colitis, an insidious life-threatening form of colic for which all horses on phenylbutazone are at risk.

Year: 2020 TOTAL - \$25,149

Non-Invasive Evaluation of Host-Microbiota Interactions

Texas A&M University, *Principal Investigator: Canaan Whitfield-Cargile*

CO-PIs: Michelle Coleman, Noah Cohen, Ivan Ivanov, Ana Chamoun Emanuelli, Robert Chapkin

The aim of this study was to develop a non-invasive platform to serve as a diagnostic test for gastrointestinal inflammation prior to severe disease and to reveal how bacteria in the gut influence horse health.

Years: 2019-2020 TOTAL - \$92,570

Ethyl Pyruvate Improves Survival In Large Colon Volvulus

Michigan State University, *Principal Investigator: Susan J. Holcombe*

Co-PIs: Lorraine Sordillo; Eric Schroeder (OH State); Peter Morreseey (Rood & Riddle);

Callie A. Fogle (NC State); Carrie Jacobs & Louise Southwood Parente (U of PA)

This study proposed to demonstrate the effectiveness of ethyl pyruvate to decrease intestinal damage and improve survival in horses with large colon volvulus.

Year: 2017 TOTAL - \$66,184

Flunixin or Firocoxib in Postoperative Colic Patients

North Carolina State University

Principal Investigator: Anthony Blikslager

Co-PIs: Jennifer Davis; Callie Fogle; Leandi Kruger; Ashwini Poopal; Vanessa Cook (MI State UN);

Louise Southwood (UN of PA); Bettina Wagner (Cornell)

The purpose of this project was to provide an evidence-based approach to the optimal treatment of horses with small intestinal strangulating obstruction in order to reduce endotoxemia and increase survival.

Years: 2015-2016 TOTAL - \$122,601

Colonic Pathophysiology in Horses Administered Phenylbutazone

Louisiana State University

Principal Investigator: Rebecca S. McConnico

Co-PI: Rustin Moore

Years: 2002-2003 TOTAL - \$68,261

The Role of Volatile Fatty Acids and Calcium in Gastric Ulcer Disease

University of Tennessee

Principal Investigator: Frank M. Andrews

Co-PIs: Jennifer Nadeau; Steve Patton

Years: 2001-2002 TOTAL - \$68,825

Excitatory & Inhibitory Neuromuscular Transmission in the Horse Cecum

Washington State University

Principal Investigator: David A. Schneider

Co-PI: Gilbert Burnes

Years: 2001-2002 TOTAL - \$52,203

Effect of Diet and Fluid Administration on Colonic Ingesta

Marion duPont Scott Equine Medical Center Virginia-Tech

Principal Investigator: Nathaniel A White II

Co-PIs: Marco Lopes; Mark Crisman

Year: 2000 TOTAL - \$35,037

Pathogenesis of Acid Injury in the Non-Glandular Region of the Equine Stomach

University of Tennessee

Principal Investigator: Frank M. Andrews

Co-PI: Steve Patton

Years: 1999-2000 TOTAL - \$37,110