## Participation in UGA Research Study Does "Leaky Gut" occur in horses during endurance rides?

There is strong evidence in people that strenuous exercise, especially in warm environments, affects gut permeability and results in the movement of harmful bacteria and other toxins from the inside of the bowel into the bloodstream, aka "Leaky Gut." The goal of this research is to document changes in biomarkers of intestinal injury in endurance horses before, during, and after rides of 50 miles or more and compare these changes with other markers of overall health.

Drs. Canaan Whitfield, Jarred Williams, Michelle Coleman, Natalia Rodriguez, and Amy Brandon, Department of Large Animal Medicine and Surgery, College of Veterinary Medicine University of Georgia, Athens, will be enrolling participants at the upcoming ride at Biltmore Challenge, May 5,6. Details of what a participant who enrolls can expect are below. See the May issue of the AERC Endurance News in-print or on-line for more info.

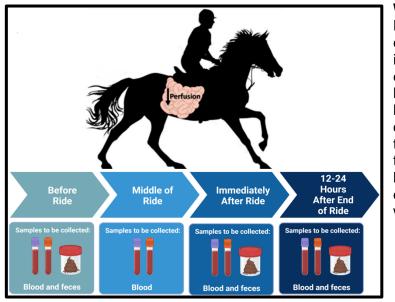
Inclusion Criteria: Any horse signed up for rides of 50 miles or more.

## Samples Collected:

<u>Blood Collection at 4 time-points</u>: Two blood tubes (8mL; approximately 2 teaspoons) will be collected from the jugular vein prior to the race, once during the race (at a mid-race vet check), within 30 minutes after completion of the race (or being pulled), and 12-24 hours after completion of the race.

<u>Fecal Sample Collection at 3 time-points:</u> A freshly voided fecal sample will be collected from within 2 hours prior to the race, after the race, and approximately 12-24 hours after the race.

**Paperwork:** Sign a client consent form and fill out a short survey about your horse including diet, exercise program, and other basic information.



## What You Get:

Participants will receive results of a complete serum biochemistry panel including electrolytes, muscle enzymes, kidney values, and lactate before and after the race. You will be emailed this information within 10 days of the race. You will also get the satisfaction of being a part of this research project that will hopefully have a beneficial impact to endurance horses and to equine welfare and colic overall.