What are we doing to find a cure for laminitis?

We are using state-of-the-art techniques to study how the small laminar blood vessels respond to substances that cause laminitis.

Using these same techniques, we are testing the effectiveness of new drugs designed to prevent these responses.

Because the horse’s own white blood cells may play a critical role in causing laminitis, we are comparing the activity of white cells of healthy horses with those of horses that have laminitis.

Why are we studying the activity of genes in colic and laminitis?

We believe some horses may have a genetic predisposition to develop laminitis and other complications of colic. We are therefore comparing the activities of specific genes in healthy horses with those of horses that have those conditions.

We believe this research will improve the accuracy of diagnoses by determining the activities of a wide variety of genes in a horse’s white blood cells.

Using sophisticated techniques, we are making huge strides in uncovering the horse’s gene structure and developing methods to compare the activities of more than 3,000 genes simultaneously.

We believe this genomic research will form the cornerstone of our future studies on colic and laminitis, and will help us determine the effectiveness of new treatments.
Laminitis
Laminitis is a painful, sometimes crippling disease of the tissues that bond the hoof wall to the pedal bone. These tissues are the laminae. Laminitis can lead to tearing or separation of the laminae, progressing to tissue death and subsequent rotation of the pedal bone. Laminitis is more common in the front feet and can affect more than one foot.

Is your horse at risk for laminitis?
• The basic cause of laminitis is dysfunction of small blood vessels in the soft tissue in the foot. We do not yet know the immediate cause.
• Although over-eating grain is known to cause laminitis, it also occurs in horses with severe colic and other diseases.

What are the early symptoms of laminitis?
As with colic, successful treatment of laminitis depends on rapid diagnosis and treatment. Be aware of these early symptoms:
• Loss of appetite and depressed attitude
• Constant shifting of weight from one forefoot to the other
• Reluctance to turn in a tight circle or lift a forefoot
• Strong pulses felt at the pastern region
• Shifting of weight from the forelimbs to the hind limbs

Colic
Colic in horses is defined as abdominal pain, but it is a clinical sign or a symptom rather than a diagnosis. The term colic can encompass all forms of gastrointestinal conditions that cause pain, as well as other causes of abdominal pain not involving the gastrointestinal tract.

Is your horse at risk for colic?
• Colic is the most common emergency in most equine practices and clinics.
• Colic can strike any horse, regardless of age, breed, or sex.
• Colic can be accompanied by life-threatening complications, such as laminitis and intestinal adhesions.

What are the symptoms of colic?
Early diagnosis may be the most important factor in successful treatment of colic. For that reason, you should be aware of these early signs and symptoms:
• Constant pawing with a forefoot
• Looking at or kicking the abdomen
• Stretching out, arching the neck, and curling the upper lip
• Loss of appetite
• Lying down or rolling

How far have we advanced toward preventing colic?
Research
• We are discovering how the toxins that enter your horse’s bloodstream during colic cause problems.
• We are testing promising new ways to block the effects of toxins in the blood.
• We host an Equine Colic Research Symposium to share information about colic with scientists worldwide.

Education
• The more we all understand about your horse’s gastrointestinal tract and how colic occurs, the closer we’ll be to prevention and cure.
• We developed The Glass Horse CD to help veterinary students, veterinarians, and horse owners like you to understand colic better.

Will you join us in the fight against colic and laminitis?
Your support can make a difference in the lives of horses and their devoted owners. All gifts are tax deductible.

Yes, I’d like to help.
I’m enclosing a check for $________
Make checks payable to the Arch Foundation.

Please use this gift for:
✓ The Colic Research Fund for equine colic research and treatment
✓ The Laminitis Research Fund for new work on laminitis

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Your gift is appreciated and will be used wisely on behalf of companion animals.