



*The Yorkshire Terrier Club of America and The Yorkshire Terrier Club of America Foundation*

.....Together Support....

## A Research Opportunity for Yorkie Health

*What if someday we could genetically screen our Yorkie puppies for Protein Losing Enteropathy and then eventually rid our breed of this devastating syndrome?*

A genetic research project specifically for Yorkshire Terriers is underway that could lead to this reality! We need your help to fund this project and keep this research going.

Research is currently being conducted in the laboratory of Dr. Kenneth Simpson at Cornell University to identify the genetic factors which would enable the development of a genetic marker-based risk test for Yorkshire Terriers. This would allow breeders to make informed decisions with the intent of eliminating PLE in Yorkies. This will also help clinicians develop more effective treatments for affected individuals. Initial funding was provided by the AKC through an ACORN grant. To continue this research and eventually reap the benefits, we need to step up and make our contribution. We need a total of \$49,737. The YTCA Board and the YTCA Foundation jointly support this project and will make the initial payment of \$13,320. We need \$36,417 to cover the remaining payments.

♥ *Never before have Yorkie lovers everywhere had such a timely opportunity to do so much for so little to help the breed thrive in the future. Please give from your heart today.* ♥

YOU can help by sending a tax-deductible donation to:

1. The YTCA Foundation

-----send check to     YTCA Foundation, Inc.  
  Gloria Lyon, Treasurer  
  526 N West Avenue PMB 46  
  Arlington, WA 98223

Make your check payable to: YTCA Foundation  
\*\*\*indicate for the YT-PLE MOU

-----Or by Pay Pal through the "donation" button on the YTCAF.org website.

2. The YTCA AKC/CHF Donor Advised Fund

----- send check to     YTCA Donor Advised Fund  
  c/o AKC Canine Health Foundation  
  PO Box 900061  
  Raleigh, NC 27675

Make your check payable to: YTCA Donor Advised Fund  
\*\*\*indicate for the YT-PLE MOU

## Background

Protein-losing enteropathy (PLE) is a severe, life threatening condition in dogs. It is most often a consequence of one or more intestinal diseases including inflammatory bowel disease, lymphoma and lymphangiectasia (dilation of intestinal lymphatics). Yorkshire Terriers are predisposed to development of PLE. Yorkies have up to *10 times* the risk for developing PLE as other breeds. Although PLE affects other breeds, it appears that the condition in Yorkshire Terriers may be unique. Intestinal lymphangiectasia has been identified as a cause of PLE in Yorkies in addition to abnormal structures in the intestinal mucosa referred to as crypt cysts. Given the breed-specific familial nature of chronic intestinal diseases and PLE in dogs in general, it is very likely there is a genetic component to PLE in Yorkies (YT-PLE).

Affected Yorkies can suffer from weight loss, diarrhea, vomiting and build-up of fluid in the abdomen, often resulting in abdominal distension. Effectiveness of treatment varies widely, and is not successful in many cases. PLE seems to be a “middle age” disease. It is likely that by the time an individual develops symptoms and is diagnosed, he/she, if included in a breeding program, has already produced offspring. These offspring may or may not develop the disease.

PLE is clinically diagnosed by the loss of albumin into the intestines. In YT-PLE, crypt cysts are detected by histology of small intestinal biopsies. Dilated lymphatics can be detected by sonography and endoscopy of the small intestines.

Identifying the genetic factors associated with YT-PLE would enable the development of a genetic marker-based risk test, allowing breeders to make informed decisions about breeding to eventually eliminate YT-PLE. Determining how candidate genes cause PLE would greatly facilitate the development of more effective treatments.

Background information provided by:

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