Background
- Systemic fungal infections such as aspergillosis are rare in animals with a competent immune system; however, certain dog breeds (namely the German shepherd, Rhodesian ridgeback and Hungarian vizsla) are reported to have a higher risk of this uncommon disease. A genetic etiology is suspected to cause this over-representation. We propose to use a technique called genome-wide association analysis to evaluate the differences in the genetic material of affected dogs (dogs infected with Aspergillus spp.).

Participation Requirements
- German Shepherds with systemic Aspergillus spp. infections

Procedures
- Collection and submission of a blood sample for DNA extraction

Owner (or Referring Veterinarian) Responsibilities
- Collecting and submitting a blood sample and medical records.

Benefits
- Results from this study will hopefully lead to the development of DNA tests that would identify dogs at risk for developing systemic aspergillosis. These tests would help simplify the diagnosis of the disease by identifying at risk individuals and allow breeders to avoid producing affected dogs.
- If the genetic traits responsible for this disease in dogs are shared with human patients, precision medicine can be used to help develop targeted therapies to treat this life-threatening disease.