Your involvement is essential for the success of the study! Thank you for participating!

Using improved, more sensitive vector-borne pathogen diagnostic assays to screen cats with acute onset fever, we intend to gather prospective data on the prevalence of feline vector-borne disease (FVBD) to better understand the clinical signs of diseases caused by flea and tick-borne pathogens. Cats presenting to their veterinarian with a naturally acquired fever and whose veterinarian can provide data from a CBC and biochemistry panel will be used in this study.

**Study objectives:**
1. To determine if cats with acute onset fever will have a higher prevalence of vector-borne disease than a previously reported prevalence study of between 4-8% in cats without specified acute onset fever.
2. To evaluate cats with acute onset fever that are infected or not infected with a vector-borne pathogen and identify any significant clinicopathologic abnormalities that differ between these two groups.

This protocol summarizes the steps to be performed when enrolling patients for this study. Please follow it carefully.

1. Determine if the cat meets the inclusion criteria (outlined below)
2. Have clients fill out the consent form.
3. Submit 1-2 mL whole blood-EDTA sample (purple top) and 2 mL serum sample (red, gold or tiger top) for vector-borne disease diagnostics *(Note: If the cat/kitten is severely anemic, smaller volumes of 0.5 mL can be sent.)*
4. We will provide the veterinarian with results from the Feline Comprehensive Panel within 10 days.
5. The veterinarian is responsible to provide any appropriate treatment for the cat’s clinical signs and for any positive vector-borne diagnostic results (if the veterinarian is highly suspicious of a vector-borne disease before results from the panel are provided, please begin the appropriate treatment).
6. The veterinarian will fill out a questionnaire and submit it, along with results from a CBC and biochemistry panel, with the whole blood and serum samples (see below for shipping instructions).
7. Please schedule the cat for a follow-up blood sample, at ~30 days, to submit for a second Feline Comprehensive Panel (1-2 mL Blood-EDTA sample (purple top), 2 mL Serum sample (red, gold or tiger top)).
8. We will provide the veterinarian with results from the Feline Comprehensive Panel within 10 days.

**Criteria to INCLUDE a cat in the study:**
- Fever (rectal temperature between 103 - 106°F), for which the cause is not obvious from the cat’s history and physical examination (such as traumatic wounds or subcutaneous abscessation).
- The cat must have a CBC and a biochemistry panel blood work performed at the time of presentation (not necessary at the follow-up visit).
- The cat must have outdoor access or have had exposure to fleas and ticks in the past; +/- flea and tick prevention; +/- the presence of fleas or ticks at time of examination.
- The cat’s owners are willing and able to return for follow-up examination and blood draw for FVBD testing at ~ 30 days after the initial evaluation.
- Owners agree to and sign the consent form.

**Criteria EXCLUDING a cat from the study:**
- Treatment with antibiotics or anti-rickettsial drugs during the 4 week period before this evaluation.
- Obvious causes of fever including traumatic wounds or subcutaneous abscessation (tissue necrosis).
- Owners cannot return for follow-up examination at ~ 30 days after the initial evaluation.
• Owners do not agree with or do not sign the consent form.

**Questionnaire:** The veterinarian will be provided with a set of questions to answer about the enrolled cat related to history, physical exam and any potential additional diagnostics performed. Please answer to best of your ability and include the completed form in shipment of samples.

**Costs:** Unfortunately we cannot cover veterinary service costs for initial consultations, CBC or biochemistry and follow-ups. Our goal is to use any available information from each case if the tests were requested for defining clinical decisions made by participating veterinarians. Thus, we would like to ask you to send with the samples any available laboratory test results obtained at each evaluation time point. We count on your collaboration in re-evaluating cats and collecting samples after treatment (no CBC or biochemistry panel is required at the follow-up blood draw).

**We will cover the cost of both Feline Comprehensive Panels which includes:**
Serology Testing for *B. henselae, B. vinsoni, B. koehlerae* (by IFA); a commercially available in-clinic ELISA (SNAP® 4DX® Plus) to detect *Anaplasma* genera, *Ehrlichia* genera, *Dirofilaria immitis* and *Borrelia burgdorferi*
PCR (DNA) testing to detect presence of *Babesia, Bartonella, Cytauxzoon, Anaplasma, Ehrlichia, Rickettsia*, and hemotropic *Mycoplasma* organisms.

Some veterinarians participating in this study may waive clients’ costs of follow-ups if they are intended strictly for sample and data collection for this study. However, this decision is solely based upon your judgment and we appreciate your contribution to obtaining the results that will be generated through this collaborative research study.

**Sample volume for the study, packaging and shipping instructions:**
• Collect at least 1-2 ml of whole blood in EDTA and 2 ml of separated serum from each cat in each evaluation *(Note: If the cat/kitten is severely anemic, smaller volumes of 0.5 mL can be sent.)*
• Pack samples in leak-proof plastic bags, separated from questionnaires and laboratory test results. Include paperwork with samples.

**The shipping address is:**
NCSU - College of Veterinary Medicine,
ATTN: Vector Borne Disease Lab –Dr. Barbara Qurollo
1060 William Moore Drive, Room 462A,
Raleigh, NC 27607.

More information or questions, please contact Dr. Barbara Qurollo, (919) 513-8007, Barbara_Qurollo@ncsu.edu, or Dr. Edward Breitschwerdt, (919) 513-8277, Ed_Breitschwerdt@ncsu.edu.