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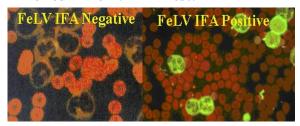
# Our 50<sup>th</sup> Year Anniversary

June 1<sup>st</sup>, 2022 was The National Veterinary Laboratory's 50<sup>th</sup> anniversary! Yes, 50 years, one-half century ago, we started the lab in Dr. Hardy's garage in New Jersey. To our knowledge, we are the oldest private veterinary diagnostic laboratory in the United States. We are a specialty lab testing for only "the 3 common cat pathogens."

### Diagnostic Tests for "The 3 Common Cat Pathogens"

1972: FeLeuk® Test- The Feline Leukemia Virus (FeLV) IFA Test: FeLV is the least frequent of the 3 common cat pathogens - found in 1.1% of healthy cats, but is very pathogenic.

#### FeLeuk® FeLV IFA Test:

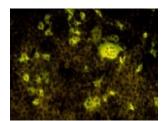


In 1969, we published results of detection of FeLV, by immunodiffusion, in cats with lymphosarcoma and also in healthy cats. We then developed a more practical method, immunofluorescent detection of FeLV antigens in peripheral blood leukocytes and platelets (IFA). This allowed us to discover that FeLV is transmitted contagiously among pet cats. Dr. Hardy then established the National Veterinary Laboratory which enabled veterinarians to test for this contagious virus and helped to elucidate, with many veterinarians, the FeLV disease spectrum.

On June 1, 1972, our first FeLV IFA test was negative, but the second test was positive- both cats were from New York City. Since then, we performed 1,348,380 FeLeuk® FeLV IFA tests.

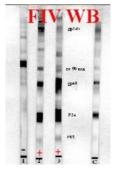
1991: Feline Immunodeficiency Virus (FIV) Test: FIV is the 2<sup>nd</sup> most frequent of the 3 common cat pathogens-found in 2.2% of healthy cats, but causes little disease.

IFA test on a mixture of FIV infected and uninfected cells.



We initially developed an IFA test for detection of FIV antibody but found it was too variable to use.

FIV Confirmatory WB test



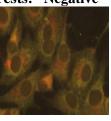
Thus, we developed a specific and sensitive confirmatory FIV WB and offered it as an economical screening and confirmatory test for FIV infection.

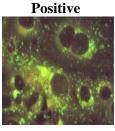
We began FIV testing, using the Idexx FIV ELISA under patent protection, but on January 2, 2002, then switched to use our FIV WB after the Idexx FIV patent expired.

1999: FeBart® Bartonella Test: Bartonella spp. are the most frequent of the 3 common cat pathogens-found in 35% of healthy cats and cause many inflammatory conditions.

ELISA and IFA Bartonella Tests: Negative

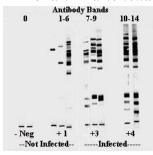






We initially developed ELISA and IFA tests for detection of *Bartonella spp*. antibodies but found them too variable to use.

FeBart® Bartonella WB test- Test for infection



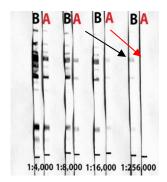
Thus, we developed a very sensitive and specific western immunoblot (WB) screening test for detection of a profile of at least 7 antibodies against the more than 14 *Bartonella* proteins. This screening test ensures specificity for *Bartonella* and indicates infection.

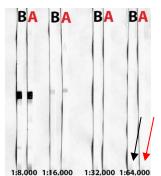
On November 5, 1999, we were the first private laboratory to make *Bartonella* tests available to veterinarians. We have performed  $442,051 \text{ Fe}Bart^{\otimes}$  WB tests.

#### 1999: Bartonella Therapy (WB) Titration Test:

We developed this test for evaluation of the effectiveness of therapy.

Therapy Titration tests: We have performed 32,935 Bartonella Therapy Titration Tests.





A reduction in titer of 4 fold or greater indicates elimination of infection.

Successful Therapy: Bartonella-infected cat treated with azithromycin- 10 mg/kg once daily for 21 days. There is a 16-fold decrease in titer which indicates effective Bartonella therapy. B. Pre-therapy titer is 1:256,000 (black arrow) whereas the A. post-therapy titer is 1:16,000 (red arrow).

Therapy Failure: Bartonella-infected cat treated with azithromycin- 10 mg/kg once daily for 21 days, failed to decrease the titer. B. Pre-therapy titer is 1:64,000 (black arrow) and the A. post-therapy titer is 1:64,000 (red arrow).

5,169 clients have used our laboratory. We thank all of our clients for their patronage and for cooperating with us as we continue to learn and gather data on the 3 common cat pathogens, FeLV, FIV and *Bartonella spp*.

We refer you, and your clients, to our website which has information about the "3 common cat pathogens" *Bartonella spp.*, FeLV, FIV and the SARS-CoV-2 virus, which can infect animals and people. Now, a cat has been found to have infected a veterinarian with SARS-CoV-2 (spillback).

**National Veterinary Laboratory Web Site:** 

www.natvetlab.com