

Bartonella Cultures Now Referred to Galaxy Diagnostics, Inc.

All Bartonella testing calling for culture in the BAPGM platform developed at NCSU-CVM has been transferred to **Galaxy Diagnostics, Inc.**, a new company located in Research Triangle Park, NC. Galaxy provides optimized serological and molecular testing services to veterinarians. North Carolina State University has provided Galaxy Diagnostics with an exclusive license to BAPGM (*Bartonella* alpha Proteobacteria Growth Medium) which serves as the cornerstone of Bartonella testing platform. The VBDDL Tick Panel will continue to include *Bartonella henselae*, *Bartonella vinsonii* subsp. *berkhoffii* and *B.koehlerae* serology. The VBDDL PCR Panel will continue to include detection of DNA of *Bartonella* with sequence analysis to identify species in blood samples. The Comprehensive Panels, both Canine and Feline, include *Bartonella* serology and PCR. **Effective Sept 15, 2009, the VBDDL no longer be accepts *Bartonella* culture requests.**

BAPGM was envisioned, refined and patented by VBDDL scientists as a result of ongoing efforts to enhance the growth of these highly fastidious (difficult to isolate) bacteria from animal and human patient samples. Over the past two decades, numerous new *Bartonella* species (currently 22 named species and many yet to be named species) were discovered, named and ultimately found to be of human and veterinary medical importance. *Bartonella* species are vector-transmitted and induce long term intravascular infections in domestic and wild animals. During this same time period, it became obvious to diagnosticians and research scientists that, unless the individual was severely immunocompromised (drugs, HIV infection and transplant recipients), microbiological documentation of infection with these bacteria in animal or human patients was difficult to achieve by conventional culture or direct PCR.

VBDDL scientists were able to overcome the low sensitivity of other testing approaches by combining a BAPGM enrichment culture step with PCR amplification of bacterial DNA. As *Bartonella* species have a dividing time of approximately 24 hours, a diagnostic sample that contains one bacterium will contain only 2 after 24 hours, 4 after 48 hours, 8 after 72 hours, etc. On a practical basis, this means that time (at least 7- 10 days) is required to increase the number of bacteria in the patient's BAPGM blood, CSF, joint or effusion culture to a level in which there is enough DNA to be detected by PCR (polymerase chain reaction. **At this point in time, the BAPGM culture/ PCR testing platform is the most sensitive diagnostic modality for the documentation of *Bartonella* spp. infection that exists anywhere in the world.**

For more information on our Bartonella research program (see the publications list) or the *Bartonella* BAPGM platform available at Galaxy Diagnostics, please go to www.galaxydx.com. Information is also posted on the VBDDL website at www.cvm.ncsu.edu/vth/ticklab.html.

Sincerely yours,

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