Paulette F. Suchodolski Biography 2013

I received my PhD in Veterinary Microbiology at Texas A&M University. My PhD work focused on experiments involving recombinant Marek's disease viruses, to better understand the role of the viral oncogene meq in vitro and in vivo. I received extensive training in molecular virology and cell biology. During my PhD I also led cell culture experiments in isolating the elusive etiologic agent of proventricular dilatation disease (PDD). Using the same techniques for culturing Marek's disease virus, we isolated Avian Bornavirus, for the first time, from clinical cases of PDD.

PDD is a fatal neurological disease that affects the central and enteric nervous systems. Clinical signs include weight loss, crop stasis, intestinal dilatation, regurgitation, maldigestion, tremors, ataxia, seizures, blindness and eventually starvation and death. ABV is widespread and has been found world-wide and in multiple avian species. Due to the devastating nature of the disease, bird owners, veterinary practitioners and aviary owners need a reliable, sensitive and quick diagnostic test for ABV.

The short-term goals of my current research are to develop rapid, sensitive diagnostics for screening avian bornavirus ABV, and ABV antibody responses. My long-term goal is to utilize these diagnostic tools to advance understating of ABV infection and ABV immune responses in the development PDD. PDD is a complex disease and birds intermittently shed ABV and may be infected for years before developing clinical signs. Therefore, a better understanding of ABV infectious status and immune response are needed to develop a dependable diagnostic protocol for ABV and/or PDD.

I am very excited to be working with ABV/PDD research. I hope to apply my background in molecular virology and cell biology to further advance our understanding of ABV and PDD.