

**Phil Gauger, DVM, PHD, DACVP**

## *Staff Spotlight: Phil Gauger*

I did not venture far from the state of Iowa. I grew up on a small, traditional family farm with grain, pigs and cattle and participated in typical farm kid activities, such as 4-H and FFA. At a young age, I knew I wanted to be a practicing veterinarian. I was more interested in livestock versus grain farming and what seemed to be a constant need to fix a grain auger, tractor, or combine. I graduated from high school in West Liberty, IA and although located in Hawkeye country, I always had plans to go to Iowa State University.

I obtained a BS in Animal Science in 1990 and headed to vet school graduating with my DVM in 1994, both from ISU. West Liberty is home to West Liberty Foods turkey processing plant that was known as Louis Rich back in the 1980's. Although I was more interested in swine and cattle, I was a student employee in quality assurance at Louis Rich for two summers while in vet school (1990 and 1991).

The opportunity to practice large animal veterinary medicine was in Northwest Iowa. I headed to the small town of Marcus and the Marcus-Remsen Veterinary Clinic in the summer of 1994, which still does not seem so long ago. There were 5 veterinarians and lots of work that included both large and small animals, on-call schedules and working many Saturdays and some Sundays when weekend on-call was part of the job. I enjoyed the work, the wonderful community and the many clients of the vet clinic. I was involved in many of the small town activities and still have many friends that were clients during my time in veterinary practice and several fond memories.

I decided to pursue a Master's degree in Veterinary Microbiology in 2006 and headed back to Ames and Iowa State, even though leaving veterinary practice was difficult. I was employed for two years at the USDA National Animal Disease Center, received my MS degree in 2008, and had a great opportunity to train as a diagnostician at the Iowa State University Veterinary Diagnostic Laboratory while pursuing a PhD in Microbiology. I was clinical faculty until 2012, when I completed my PhD and started a tenure track position in the diagnostic lab that came to fruition in 2016. I was also given the opportunity to become section leader of molecular diagnostics in 2012, which is a position I still hold and take pride in the PCR and sequencing services the ISU VDL provides veterinarians and clients throughout the US.

Life in the diagnostic laboratory has been, and continues to be, very interesting, fast-paced, and busy with few dull moments. After becoming section leader in 2012, the US swine industry experienced the PEDV outbreak in 2013 and PDCoV discovery in 2014. This was followed by the first highly pathogenic avian influenza virus outbreak in 2015 and subsequent discovery of new pathogens that challenge our production livestock industry on a daily basis. Companion animals have also had their share of challenges with emerging pathogens.

I enjoy conducting research on porcine pathogens such as influenza A virus, PEDV, PRRSV and other emerging pathogens that included porcine parainfluenza virus type 1 that was isolated in 2017. Although never expected, the ISU VDL also conducted PCR testing during the COVID 19 pandemic in 2020 – 2021 that allowed us to use our expertise in high-volume testing to provided services to the

students of ISU as well as the ISU athletic teams and local health providers. This experience had its own set of challenges that involved CLIA certification and coordinating cases submitted from human patients.

I enjoy attending ISU sporting events such as football, basketball, and wrestling. I have attended some games on the road for both football and basketball including a yearly tradition of attending the Big 12 basketball tournament that is typically in Kansas City. Time is also spent attending scientific meetings for work, visiting family, or accomplishing some upkeep around my home.

I look forward to the future challenges of the ISU VDL and the many opportunities that are provided through my involvement with such a great organization. I am fortunate to be at the forefront of detecting and diagnosing diseases affecting production animals in the US and staying prepared for the next emerging pathogen. The diagnostic laboratory provides the additional opportunity of helping veterinarians and producers with their diagnostic questions and animal health concerns associated with their diagnostic submissions. The ISU VDL also provides a great opportunity to stay connected with the production livestock industry and some of the aspects of my life as a practicing veterinarian.

