

Journeyman's Guide George Vulfs in memory

This tribute to George Vulfs is also a reminder why we do this work and his contribution to our research. We all have that once-in-a-lifetime horse.

The tribute is more than a chronological reflection of the laboratory aspects of our work that takes us from creating a disease model for Bayer and running SAG 1 ELISA testing to understanding PNE. It is our path of discovery and each horses and an explanation of why we need the blood and a completed submission form.

By 2011 we were serotyping sarcocystosis infections using SAG 1, 5, and 6. We tested 1000 horses by 2012 and recognized early disease, first seen in our Bayer studies in 2002 and perplexed the examining neurologists. We wanted horse owners and veterinarians to recognize early signs of disease as well. The laboratory experiments and the field data we collected were key aspects in our understanding of PNE.

Our front row seat let us examine vaccine reactions (observed in 3% of horses). Field veterinarians can only identify what they have experience with and 1 or 2 cases aren't enough to recognize a pattern. It took us 2668 cases to understand what was going on with vaccines and that's when we could distill the information to a statistical relevance. I doubt that a referral clinic will make the association with vaccine and chronic relapsing disease, it was a key factor in Blue Eyed Playboy's signs and fortunately he escaped euthanasia when we figured it out. The clue was in his history, but no one related what the poor fella was experiencing despite several referrals to Universities.

By the time we tested George we had over seven thousand cases for comparison and we compared his case to similar presentations. George fit the bill for a horse with PNE and he was a test case for our serological survey to see when we would detect anti-myelin protein antibodies, polyneuritis equi. We could even predict which horses would become ill. Because George was on our radar he was diagnosed with a demyelinating polyneuropathy six years after we met him. George's owner Marja helped us until the day he died. She provided valuable observations along with the blood samples she submitted. Work on PNE is his legacy.

To date we have tested and consulted on 41,037 horses across the US, Canada, and even a couple in France. The database is subject to new algorithms. If a veterinarian calls or asks how many horses (with or without sarcocystosis/PNE) have (whatever they are suspicious of) we can tell them in a few minutes. We can narrow the analysis to a region of the country, time of year, or age/breed/sex. The notes a veterinarian submits on the submission form are logged into the database and we have refined the useful information down to 17 signs. Our staff will reach out for information that is missing, we request clarification on a daily basis.

So when you want a consultation without first submitting a sample you need to realize what is lost is the opportunity to help your horse, your veterinarian, and may other horses.