Head at the University of Nevada at Reno. As Dean, Dr. Thawley had a strong commitment to outreach at the College and saw the Leman Conference as a great opportunity to help the swine industry. He encouraged faculty in their efforts to build a quality program each year and provided the staff to support a conference of this size. He will be remembered for his commitment to the growth and success of the Allen D. Leman Swine Conference.

Regardless of all the efforts previously mentioned, you, the individuals who attend the Leman Conference, are the most important reason for success. Without your presence, there would be no need for this meeting. Your commitment to your education brings you here. You have challenged yourself and others to be better. We want to meet that challenge.

Thank you for attending the 1998 Allen D. Leman Swine Conference. Please feel free to suggest ideas to improve future conferences.

— Charles H. Casey, DVM

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Serological testing by swine practitioners has increased substantially in the last several years. A major factor that has contributed to the widespread use of serology has been the introduction of fast, cost-effective, and accurate tests. As practitioners, we tend to view the serological testing as being accurate, forgetting that a certain test may have certain ranges in sensitivity and specificity, some tests are dependent upon the skills of the technician, or known cross-reactions with the test just to name a few.

In order to keep their customers informed concerning the breeding stock they are receiving, veterinarians for breeding stock companies are constantly looking for an accurate way to measure the health of the animals and/or semen that are for sale. Most of us are familiar with many of the serological tests that are available, and many of them have become so familiar that we trust the results as a gold standard on which to make decisions. After having used many of these tests in repeated settings, it is apparent that rather than a gold standard, these tests may be at best a tool.

This paper will focus on three situations involving swine pathogens where the serological test resulted in information that could have resulted in wrong decisions being made. These case studies should encourage veterinarians to raise their skepticism over serological results—especially in cases where the clinical signs would not support the serological diagnosis.

Case #1 - TGE vs. PRCV differential

Serological results shown here will explain how unpredictable this test can be on different groups of animals, on the same animals over time, and even on the same serum sample from one blood draw.

Case #2 - Mycoplasma hyopneumonia

Sequential bleedings of pigs show some pigs to be positive one week and negative the next two consecutive weeks. If you only bleed the first week, are you making decisions based on incorrect analysis?

Case #3 - Vesicular Stomatitis

Using a laboratory for testing that is not common for that lab can be a traumatic experience. Making sure that the lab is capable isn’t enough—you need to also have assurance of reliability.