Meet the New VMDL Quality Assurance Coordinator

Susan Martin, Quality Assurance Coordinator of the VMDL, didn’t waste any time getting started after joining the MU CVM. Before the completion of her first month on the job she had already attended the Quality Symposium held at the AAVLD meeting in Kansas City.

Martin’s previous seven years of experience as the Assistant Manager of Pathology at the MU Women’s and Children’s Hospital prepared her in the areas of quality improvement and quality assurance, customer service and leadership. During her first six years in that role she was the operational manager in charge of the Clinical Pathology, Microbiology, Anatomic Pathology laboratories; as well as, the Blood Bank. During Martin’s last year, her role was expanded to include administrative oversight for the University’s Clinic laboratories; Cytology, Anatomic Pathology and IR Chemistry at the University Hospital; as well as the Toxicology, Special Chemistry and Molecular sections at the MU Ellis Fischel Cancer Center. Martin stated that the cross-over transition has been easy because the quality principles that govern laboratory medicine also apply to veterinary diagnostic laboratory work. “In healthcare, the patient’s needs, safety, and outcomes are always first. That mantra drives quality work as well since we must always ask ourselves, “How can we maximize the benefits for our clients and their patients,” Martin said.

Martin and her husband are lifelong residents of Missouri and are both MU graduates. Their son Neal is currently a fourth year CVM student and their son Brian is engaged to 2014 CVM graduate Lynn Brockway. The Martin family has deep roots in agriculture. They have a livestock and row-crop farm near Centralia, Missouri where they run an Angus cross cow-calf operation and also produce corn, soybeans, wheat, hay and silage. Their three grown children all have careers within the agricultural industry.

Looking forward to the VMDL’s future Martin states, “The quality system that is in place at the VMDL is an exemplary, multifaceted program which assures the accuracy and quality of results in every step. Quality is the foundation of everything we do.”
Quality Quarterly

For most people quality is associated with the idea of a product or service that is well done, looks good, and does its job well. In medicine, the concept of quality is based on an interaction among relevant actors who agree upon and establish standards (the norms and values) and the components (the possibilities) from which these standards are derived or arise. With respect to the University of Missouri Veterinary Medical Diagnostic Laboratory, quality comes down to this! “Is it correct, unambiguous, and timely?” Just as in your practice, a significant percentage of time of every VMDL workweek is devoted to ensuring that the results reported to every client are accurate, clinically relevant, and reported so as to avoid confusion. The VMDL quality system works every day to ensure that the thousands of individual steps which go into the generation of VMDL diagnostic reports are done correctly by qualified individuals working with the highest quality reagents, supplies, and equipment.

A critical component of VMDL quality is documentation, be it the standard operational procedure used to conduct a microbiological examination of a submitted sample, the daily monitoring of every piece of equipment in any VMDL section, or the log which explicitly states that all VMDL employees have read and understands every job-critical document in the laboratory. Control procedures are in place to ensure that the laboratory documents are readily available where related operations are performed, that these documents are regularly reviewed, that they are replaced by new or revised approved versions of the document when the need arises, and that the old versions are securely archived and/or discarded. Proper daily management of the documentation system allows VMDL to inform you on any given day of a variety of events. These include when and how a sample was submitted, who handled it in receiving and within a testing section, who set up a test or tests, who interpreted the results of those tests, and who reported the results. The quality documentation system also ensures that these individuals have demonstrated initial and continuing competence in those activities, shows which instruments were used for processing, technical assessment of the sample, or for storage of the sample. In addition to all of that, the system can demonstrate the performance history of these instruments for the last several years. Very little is left to chance. In VMDL if you have not documented it, you have not done it! You don’t have to take our word for it, we have the record!

The most important part of the VMDL Quality system is its people. Their education, professional competence, experience and dedication to our mission is integral to ensuring that the product you receive is the best it can be. To ensure that the high standards which we set for ourselves are met and maintained, all VMDL personnel, from the Director to the newest laboratory technician are required to engage in continued education programs as well as participate in internal and external checks on competency. Some laboratory sections are staffed by individuals who have completed nationally accredited certification programs. In order to maintain certification, these individuals participate in several hours of certification every year. In addition, every state licensed veterinarian on staff must participate in MVMA-approved continued education program to maintain their professional license. Non-clinical faculty and technical staff are also required to engage in the numerous continued education opportunities provided by professional organizations within a given discipline. Activities such as these keep us appraised of the latest and greatest, reminds of us of the pitfalls of not doing it by the book, and allows us to meet for the first time or re-
Presented at the 57th National Annual Meeting of the American Association of Veterinary Laboratory Diagnosticians, October 2014, Kansas City, MO

A new bacterium was discovered in the joint of a Holstein calf that presented with lameness and respiratory distress. The lung culture revealed *Corynebacterium*, *Staphylococcus* spp and *Streptococcus* spp. Molecular diagnostics, using PCR, demonstrated the presence of *Mycoplasma* spp, in the lung, but not *Mycoplasma bovis*. The joint fluid was negative, by PCR, for all *Mycoplasma*. However, the joint fluid demonstrated a microorganism from the Eugon Chocolate agar cultured in 95% air-5% CO\(_2\) (microaerophilic conditions) suggestive of *Micrococcus* when *Histophilus somni* was expected. Gene sequencing of the 16s Ribosomal RNA identified the isolate as *Helcococcus ovis*. To the investigators knowledge, this is the first report of this microorganism in a bovine calf joint.

From the Bacteriology/Mycology Section of the VMDL and the Department of Veterinary Pathobiology

Detection of a New Bacterium from the Joint of a Lame Holstein Calf

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