

# Diagnostic Laboratory Services

## QUALITY ASSURANCE STATEMENT Clinical Bacteriology & Mycology Laboratory

January 22, 2020

The Clinical Bacteriology and Mycology Laboratory at the University of Tennessee's College of Veterinary Medicine maintains an active quality assurance program. Our laboratory annually subscribes to two commercial inter-laboratory comparison 'proficiency-testing' programs. We have also, at various times, provided input for program development, unknown cultures and critical reviews for each of these programs. One program is sponsored by the Veterinary Laboratory Association (VLA) and is administered by the College of Veterinary Medicine at Prince Edward Island, Canada. The other is sponsored by the American Association of Veterinary Laboratory Diagnosticians (AAVLD) and is administered by the National Veterinary Services Laboratory, a government organization. These survey programs respectively provide semi-annual (4 organisms & 2 serum antibody tests per year) and annual (4-5 organisms per year) unknowns that are analyzed in the laboratory. Our laboratory's results are sent back to the program administrators where they are compiled and critiqued. A summary report is sent to directors of participating laboratories for internal lab evaluation and comparison of results with those of benchmark and other participating laboratories.

The Clinical Bacteriology and Mycology Laboratory uses procedural guidelines published by the AAVLD, the American Society for Microbiology (ASM), and the Clinical and Laboratory Standards Institute (CLSI), particularly the CLSI's Vet01 (5th ed), Vet 06, and Vet08 documents for antimicrobial susceptibility testing for bacteria isolated from animals. The laboratory utilizes written standard operating procedures, maintains a readily available 'in-lab' library and has immediate internet access to additional resources. The laboratory routinely conducts and maintains written records of quality control checks on equipment, reagents, tests, culture media, and organisms used in the laboratory. A collection of reference organisms is maintained for quality control purposes. Commercial test kits are used and interpreted in accordance with the manufacturers' specifications and quality control guidelines. Preventive maintenance and calibration of some equipment, e.g. Vitek automated system and biological safety cabinet certifications, are provided on a regular basis by contract with professional vendors.

A chemical hygiene plan, MSDS sheets, appropriate safety equipment and records of personnel safety training are available in the laboratory. Laboratory safety training and inspections are conducted regularly by the University's Biosafety Officer and Institute of Agriculture's Safety Officer

Our personnel, Robert Donnell, DVM, Ph.D., Director of Diagnostic Services, Rebekah Duckett Jones, B.S., Laboratory Section Chief; Brian Johnson, B.S., Sr. Laboratory Technologist; and Porsha Reed, B.S., Laboratory Technologist, have many years of combined experience in diagnostic veterinary microbiology. Laboratory personnel maintain membership in several professional organizations such as ASM, AAVLD, and Association of Veterinary Microbiologists (AVM) and regularly participate in professional development activities through meetings, workshops, seminars and review of scientific journals. Senior laboratory personnel have received training in good laboratory practices and are familiar with many of the relevant operational procedures advocated by national and international organizations.

The Clinical Bacteriology and Mycology laboratory's quality assurance efforts are part of the College of Veterinary Medicine's overall commitment to excellence in total quality management.

Our goal is to ensure the quality and accuracy of diagnostic assays so that they may be used to provide efficient service to veterinarians.

Robert L. Donnell, DVM, PhD, DAVCP  
Director of Diagnostic Services