

Contributors

CONSULTING EDITOR

ROBERT A. SMITH, DVM, MS

Diplomate, American Board of Veterinary Practitioners, Veterinary Research and Consulting Services, LLC, Greeley, Colorado; Veterinary Research and Consulting Services, LLC, Stillwater, Oklahoma, USA

EDITORS

JOHN DUSTIN LOY, DVM, PhD

Diplomate, American College of Veterinary Microbiologists, Professor and Veterinary Microbiologist, Nebraska Veterinary Diagnostic Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

JESSIE D. MONDAY, DVM, MS

Diplomate, American College of Veterinary Preventive Medicine, Bovine Veterinary Diagnostician, Texas A&M Veterinary Medical Diagnostic Laboratory, Canyon, Canyon, Texas, USA

DAVID R. SMITH, DVM, PhD

Diplomate, American College of Veterinary Preventive Medicine, Diplomate, Epidemiology Specialty, Professor and Associate Dean of Research and Graduate Studies, College of Veterinary Medicine, Mississippi State University, Mississippi State, Mississippi, USA

AUTHORS

PAMELA R.F. ADKINS, DVM, PhD

Diplomate, American College of Veterinary Internal Medicine (Large Animal Internal Medicine), Assistant Professor, Department of Veterinary Medicine and Surgery, College of Veterinary Medicine, University of Missouri, Columbia, Missouri, USA

JUAN CARLOS ARANGO-SABOGAL, DMV, PhD

Département de Pathologie et Microbiologie, Faculté de Médecine Vétérinaire, Université de Montréal, St-Hyacinthe, Québec, Canada

BRUCE W. BRODERSEN, DVM, PhD

Professor and Director, Nebraska Veterinary Diagnostic Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

SÉBASTIEN BUCZINSKI, DR VÉT, MSC

Département des Sciences Cliniques, Faculté de Médecine Vétérinaire, Université de Montréal, St-Hyacinthe, Québec, Canada

MICHAEL L. CLAWSON, PhD

Research Molecular Biologist, USDA, Agriculture Research Service, US Meat Animal Research Center, Clay Center, Nebraska, USA

SIMON DUFOUR, DMV, PhD

Département de Pathologie et Microbiologie, Faculté de Médecine Vétérinaire, Université de Montréal, St-Hyacinthe, Québec, Canada

VIRGINIA R. FAJT, DVM, PhD

Diplomate, American College of Veterinary Clinical Pharmacology; Clinical Professor, Veterinary Physiology and Pharmacology, Texas A&M University, College Station, Texas, USA

MATTHEW M. HILLE, DVM, PhD

Assistant Professor and Diagnostic Pathologist, Nebraska Veterinary Diagnostic Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

JOHN DUSTIN LOY, DVM, PhD

Diplomate, American College of Veterinary Microbiologists, Professor and Veterinary Microbiologist, Nebraska Veterinary Diagnostic Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

BRIAN V. LUBBERS, DVM, PhD

Diplomate, American College of Veterinary Clinical Pharmacology; Associate Professor, Food Animal Therapeutics-Outreach, Kansas State University, Manhattan, Kansas, USA

JOHN R. MIDDLETON, DVM, PhD

Diplomate, American College of Veterinary Internal Medicine (Large Animal Internal Medicine), Professor, Department of Veterinary Medicine and Surgery, College of Veterinary Medicine, University of Missouri, Columbia, Missouri, USA

JESSIE D. MONDAY, DVM, MS

Diplomate, American College of Veterinary Preventive Medicine, Bovine Veterinary Diagnostician, Texas A&M Veterinary Medical Diagnostic Laboratory-Canyon, Canyon, Texas, USA

ELIZABETH PARKER, BVSc, MPH, PhD, DACVPM

Dipl ACVPM, Dipl Epidemiology, Department of Veterinary Preventive Medicine, The Ohio State University, Columbus, Ohio, USA

SARAH J. SILLMAN, DVM, PhD

Diplomate American College of Veterinary Pathologists; Assistant Professor and Diagnostic Pathologist, Nebraska Veterinary Diagnostic Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska, USA

DAVID R. SMITH, DVM, PhD

Diplomate, American College of Veterinary Preventive Medicine, Diplomate of Epidemiology, Professor and Associate Dean for Research and Graduate Studies, College of Veterinary Medicine, Mississippi State University, Mississippi State, Mississippi, USA

ROBERT J. VAN SAUN, DVM, MS, PhD

Diplomate, American College of Theriogenologists, Diplomate, American College of Veterinary Internal Medicine (Nutrition specialty), Professor and Extension Veterinarian,

Department of Veterinary and Biomedical Sciences, College of Agricultural Sciences,
Pennsylvania State University, University Park, Pennsylvania, USA

LEYI WANG, DVM, PhD

Diplomate of the American College of Veterinary Microbiology (DACVM), Clinical Assistant Professor, Department of Veterinary Clinical Medicine, Veterinary Diagnostic Laboratory, College of Veterinary Medicine, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

YVONNE M. WIKANDER, DVM, MS

Diplomate, American College of Veterinary Pathologists, Clinical Assistant Professor of Veterinary Clinical Pathology, Department of Veterinary Pathobiology, VERO Program, Texas A&M, School of Veterinary Medicine, Canyon, Texas, USA

REBECCA P. WILKES, DVM, PhD

Diplomate of the American College of Veterinary Microbiology (DACVM) (Virology and Bacteriology/Mycology), Associate Professor, Department of Comparative Pathobiology and Molecular Section Head, Animal Disease Diagnostic Laboratory, Purdue University College of Veterinary Medicine, West Lafayette, Indiana, USA

CHRISTINA WILSON-FRANK, MS, PhD

Clinical Associate Professor of Toxicology, Indiana Animal Disease Diagnostic Laboratory, Department of Comparative Pathobiology, Clinical Associate Professor of Toxicology and Head, Analytical Chemist, Purdue University College of Veterinary Medicine, West Lafayette, Indiana, USA

AMELIA R. WOOLUMS, DVM, MVSc, PhD

Mikell and Mary Cheek Hall Davis Endowed Professor, Department of Pathobiology and Population Medicine, Mississippi State University, Mississippi State, Mississippi, USA