The Department of Veterinary Large Animal Clinical Sciences (VLCS) has a strong commitment to scholarship and graduate education with an emphasis on research and training relevant to horses and other farm animals. Degrees offered include both the Master of Science (MS) and Doctor of Philosophy (PhD) in Biomedical Sciences. In addition, some faculty members participate in interdisciplinary programs of study such that it is possible to earn MS or PhD degrees in Genetics and Toxicology through VLCS.

The established areas of study in VLCS include equine infectious disease epidemiology, equine reproduction, and equine regenerative medicine. Other areas of research interest and activity are diagnostic imaging, ruminant gastroenterology, ruminant urolithiasis, and small ruminant reproduction. Prospective graduate students must first identify a VLCS faculty member willing to accept them as a graduate student before applying to a graduate degree offered through the Department. More information about faculty research interests, admission to graduate studies, and the department is available at http://vetmed.tamu.edu/vlcs.

Faculty

Arnold, Carolyn E, Associate Professor
Vet Large Animal Clinical Sc
DVM, Michigan State University, 1998

Bissett, Wesley T, Associate Professor
Vet Large Animal Clinical Sc
PHD, Texas A&M University, 2007
DVM, Texas A&M University, 1997

Brinsko, Steven P, Professor
Vet Large Animal Clinical Sc
PHD, Cornell University, 1995

Chafffin, Morgan K, Professor
Vet Large Animal Clinical Sc
MS, Texas A&M University, 1990
DVM, North Carolina State University, 1985

Cohen, Noah D, Professor
Vet Large Animal Clinical Sc
PHD, Johns Hopkins University, 1988
DVM, University of Pennsylvania, 1983

Coleman, Michelle C, Assistant Professor
Vet Large Animal Clinical Sc
DVM, University of Georgia, 2007

Dinges, Lewis R, Clinical Assistant Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 1995

Dominguez, Brandon J, Clinical Associate Professor
Vet Large Animal Clinical Sc
MS, Texas A&M University, 2007
DVM, Texas A&M University, 2005

Easterwood, Leslie A, Clinical Assistant Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 1995

Ellis, Cheryl L, Lecturer
Vet Large Animal Clinical Sc
DVM, University of California, Davis, 2010

Gibbons, Philippa M, Clinical Assistant Professor
Vet Large Animal Clinical Sc
MS, Texas A&M University, 2012
BVM, Texas A&M University, 2008

Gilmour, Lindsey J, Clinical Assistant Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 2009

Glass, Kati P, Clinical Assistant Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 2012

Green, Eleanor M, Professor
Vet Large Animal Clinical Sc
DVM, Auburn University, 1973

Griffin, Cleet E, Clinical Associate Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 1990

Griffin, Dicky D, Clinical Professor
Vet Large Animal Clinical Sc
MS, Purdue University, 1978
DVM, Oklahoma State University, 1975

Griffin, John F, Associate Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 2004

Hardy, Joanne, Clinical Associate Professor
Vet Large Animal Clinical Sc
PHD, The Ohio State University, 1996
DVM, University of Montreal, 1982

Hartnack, Amanda K, Assistant Professor
Vet Large Animal Clinical Sc
MS, The Ohio State University, 2014
DVM, Colorado State University, 2010

Jones, Meredyth L, Associate Professor
Vet Large Animal Clinical Sc
MS, Oklahoma State University, 2006
DVM, Oklahoma State University, 2002

Love, Charles C, Professor
Vet Large Animal Clinical Sc
DVM, University of Missouri - Columbia, 1984

Mays, Glennon B, Clinical Associate Professor
Vet Large Animal Clinical Sc
DVM, Texas A&M University, 1976
Navas De Solis, Cristobal, Clinical Assistant Professor  
Vet Large Animal Clinical Sc  
PHD, Universidad Autonoma de Barcelona, Spain, 2013  
DVM, Universidad Cardenal Herrera CEU, 2001

Posey, Richard D, Clinical Professor  
Vet Large Animal Clinical Sc  
DVM, Texas A&M University, 1982

Romano, Juan E, Associate Professor  
Vet Large Animal Clinical Sc  
PHD, Texas A&M University, 2004  
DVM, Universidad del Uruguay, 1985

Roussel, Allen J, Professor  
Vet Large Animal Clinical Sc  
DVM, Louisiana State University, 1977

Ruoff, Catherine M, Clinical Assistant Professor  
Vet Large Animal Clinical Sc  
MS, Texas A&M University, 2011  
DVM, Texas A&M University, 2006

Sampson, Sarah N, Clinical Assistant Professor  
Vet Large Animal Clinical Sc  
PHD, Washington State University, 2008  
DVM, Washington State University, 1999

Thompson, James A, Professor  
Vet Large Animal Clinical Sc  
DVM, University of Guelph, 1991

Varner, Dickson D, Professor  
Vet Large Animal Clinical Sc  
MS, Texas A&M University, 1990  
DVM, University of Missouri, 1978

Voges Gariepy, Andra-Kay, Clinical Associate Professor  
Vet Large Animal Clinical Sc  
DVM, Texas A&M University, 1991

Washburn, Kevin E, Professor  
Vet Large Animal Clinical Sc  
DVM, Oklahoma State University, 1993

Watkins, Jeffrey P, Professor  
Vet Large Animal Clinical Sc  
DVM, Kansas State University, 1980

Watts, Ashlee E, Assistant Professor  
Vet Large Animal Clinical Sc  
DVM, Colorado State University, 2003

Whitfield-Cargile, Canaan M, Assistant Professor  
Vet Large Animal Clinical Sc  
DVM, University of Georgia, 2006

Courses

**VLCS 622 Equine Epidemiology and Infectious Diseases**  
Credits 3. 3 Lecture Hours.  
Principles and methods of epidemiology applied to equine health and prevention and control of selected equine infectious diseases.  
**Prerequisites:** Enrollment in equine certificate and graduate classification, or approval of instructor.

**VLCS 681 Seminar**  
Credit 1. 1 Lecture Hour.  
Oral communication of current research and selected topics in large animal veterinary medicine and clinical research methodology to include lectures, presentations, interviews, and discussions.  
**Prerequisite:** Approval of instructor.

**VLCS 685 Directed Studies**  
Credits 1 to 8. 1 to 8 Other Hours.  
Original investigations of problems in the field of large animal surgery, therapeutics, preventive veterinary medicine or radiology. May be repeated for credit.  
**Prerequisites:** Approval of instructor.

**VLCS 691 Research**  
Credits 1 to 23. 1 to 23 Other Hours.  
Research for thesis.

**VLCS 910 Integrated Animal Care II**  
Credits 2. 1 Lecture Hour. 2 Lab Hours.  
Foundation in companion animal and large animal veterinary care; focus on day-one veterinary wellness and preventive care and herd-health concepts; exposure includes companion animal species, common large animal species, pocket pets, reptiles, camels, miniature pigs and birds; clinical application of topics including neonatal care, husbandry practices, animal behavior, parasite prevention, immunization protocols and healthy animal nutrition.  
**Prerequisites:** Enrollment in the first year of professional DVM curriculum.

**VLCS 924 Diagnostic Imaging & Interpretation I**  
Credits 2. 1 Lecture Hour. 2 Lab Hours.  
Diagnostic Imaging & Interpretation I. Fundamentals of diagnostic evaluation of radiographic and ultrasonographic images in companion animals; focus on importance of diagnostic and therapeutic imaging.  
**Prerequisite:** Enrollment in the second year of professional DVM curriculum.

**VLCS 925 Diagnostic Imaging & Interpretation II**  
Credits 2. 2 Lecture Hours.  
Diagnostic Imaging & Interpretation II. Fundamentals of diagnostic evaluation of radiographic and ultrasonographic images in small and large animals; focus on importance of diagnostic and therapeutic imaging.  
**Prerequisite:** Enrollment in the third year of professional DVM curriculum.

**VLCS 926 Professional & Clinical Skills IV**  
Credits 3. 1 Lecture Hour. 6 Lab Hours.  
Professional & Clinical Skills IV. Integration and reinforcement of foundational knowledge offered in concurrent courses through critical thinking exercises, professional skills application activities (ethics/contextual decision-making, leadership, skills for well-being, personal/practice financial literacy, core communication skills), and application of technical skills; opportunities for learning include didactic, hands-on and case-based interactions utilizing simulation, models, animals, actors and case scenarios; part IV of a VI part series.  
**Prerequisite:** Enrollment in the second year of professional DVM curriculum.

**VLCS 930 Advanced Equine Medicine and Surgery**  
Credits 3. 3 Lecture Hours.  
Advanced diagnostic techniques and management strategies for species specific disorders of horses.  
**Prerequisite:** Enrollment in the third year of professional curriculum.
Department of Veterinary Large Animal Clinical Sciences

VLCS 931 Advanced Ruminant Medicine and Surgery
Credits 2. 2 Lecture Hours.
Advanced diagnostic techniques and management strategies for species-specific disorders of ruminant species.
Prerequisite: Enrollment in the third year of professional curriculum.

VLCS 932 Advanced Ruminant Herd Health and Production
Credits 2. 2 Lecture Hours.
Principles needed to provide veterinary services to populations of ruminants including preventive health programs, record keeping and approaches to controlling herd/flock disease outbreak or production shortfalls.
Prerequisite: Third year veterinary student.

VLCS 940 Large Animal Clinics I
Credits 2. 35 Lab Hours.
Student participation with clinical cases in the large animal medicine services of the Veterinary Teaching Hospital. Must be taken two times.
Prerequisite: Fourth year classification in veterinary medicine or approval of department head.

VLCS 941 Large Animal Clinics II
Credits 2. 35 Lab Hours.
Student participation with clinical cases in the large animal surgery services of the Veterinary Teaching Hospital. Must be taken two times.
Prerequisite: Fourth year classification.

VLCS 945 Advanced Large Animal Clinical Elective
Credits 2. 35 Lab Hours.
Student participation with clinical cases for advanced study in selected services from the large animal medicine, surgery, theriogenology and field services of the Veterinary Teaching Hospital. May be taken 12 times.
Prerequisite: Fourth year classification.

VLCS 948 Large Animal Medicine and Surgery Elective
Credits 1 to 12. 1 to 12 Lecture Hours.
In-depth study of selected disease processes in the various disciplines of large animal medicine and surgery will be conducted emphasizing management, diagnostics and medical or surgical treatment. May be repeated for credit.
Prerequisite: Third year classification in veterinary medicine or approval of department head.

VLCS 953 Large Animal Clinical Skills
Credit 1. 4 Lab Hours.
Acquisition of basic technical skills useful in the diagnosis and treatment of large animals in general veterinary practice. Modular one month course.
Prerequisite: Third year classification in veterinary medicine in good standing.

VLCS 954 Large Animal Medicine
Credits 6. 5 Lecture Hours. 4 Lab Hours.
Medical disease of large animals; pathophysiology, diagnosis and therapy of diseases in large animals.
Prerequisite: Third year classification in veterinary medicine in good standing.

VLCS 956 Large Animal Diagnostics & Therapeutics I
Credits 3.5. 3.5 Lecture Hours.
Large Animal Diagnostics & Therapeutics I. Foundational content for the diagnosis, treatment and prevention of common diseases and conditions of horses, cattle, sheep, goats, pigs and poultry; promotes successful entry into large animal and rural practice.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 957 Large Animal Diagnostics & Therapeutics II
Credits 3.5. 3.5 Lecture Hours.
Large Animal Diagnostics & Therapeutics II. Foundational content for the diagnosis, treatment and prevention of common diseases and conditions of horses, cattle, sheep, goats, pigs and poultry; promotes successful entry into large animal and rural practice.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 958 Career-Focus Tracking I - Food Animal
Credits 2. 2 Lecture Hours.
Promote integration of previous and concurrent curricular content to diagram successful approaches to developing herd health plans, investigating and controlling herd production shortfalls and investigating disease outbreaks; opportunities to gain experience in communicating effectively with producers in written and verbal formats; didactic and hands-on observation of production systems on farms to offer interactions with producers and veterinary professionals; primary focus on domestic livestock production system components which may be applied to any species population system.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 959 Clinical Focus-Tracking I - Equine
Credits 2. 2 Lecture Hours.
Application of advanced topics in pathophysiology, diagnostics, medical and surgical management and prevention of equine diseases; emphasis on case-based learning and problem-solving skills.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 960 Clinical Focus-Tracking II - Equine
Credits 2. 2 Lecture Hours.
Application of advanced topics in pathophysiology, diagnostics, medical and surgical management and prevention of equine diseases; emphasis on case-based learning and problem-solving skills.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 961 Career-Focus Tracking II - Food Animal
Credits 2. 2 Lecture Hours.
Problem-solving of clinical herd and individual animal cases for beef and dairy cattle and small ruminants; builds on medical and surgical diseases of the ruminant, swine from large animal diagnostics and therapeutics and food animal career-focus tracking I.
Prerequisite: Enrollment in the third year of professional DVM curriculum.

VLCS 985 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Directed individual study of a selected problem in large animal medicine, surgery or radiology. May be repeated for credit.
Prerequisites: Enrollment in veterinary medicine and approval of the department head.