Our Mission
We are Missouri’s only College of Veterinary Medicine. Our mission is to educate and train outstanding clinicians and scientists, generate new knowledge, and foster economic growth, all of which promote and protect the health and welfare of animals and people. We are guided by a One Health/One Medicine philosophy, strengthened by campuswide collaborations with human medicine, animal and life sciences, agriculture, engineering, and the other health professions.

We define excellence as:
• Training professional leaders who think critically, solve problems and can adapt to the evolving demands of the veterinary profession,
• Creating flexibility in our systems, processes and resources to meet the changing needs of our industry and constituents,
• Leading the way in One Health/One Medicine based on our exceptional collaborations within and across disciplines,
• Maintaining a collegial and diverse environment that values integrity, accountability and respect for each individual,
• Achieving financial sustainability to thrive in any economic landscape, and
• Generating ongoing commitment and loyalty to the mission of the CVM.

Teaching • Healing • Discovery • Service
Teaching • Healing • Discovery • Service

Curriculum

- The College of Veterinary Medicine boasts a unique curricular structure that provides nearly two years of hands-on clinical training. Years one and two of the four-year program focus on instruction in high-tech, computer-based classrooms and labs. Years three and four provide clinical instruction in such areas as cardiology, community medicine, dentistry, emergency and critical care, equine medicine and surgery, food animal medicine and surgery, neurology, neurosurgery, oncology, ophthalmology, orthopedic and soft-tissue surgery, and reproduction.

- The DVM curriculum is integrated with MU veterinary services, including statewide animal disease diagnostic services, and extension and continuing education programs for animal owners and veterinarians.

- The college’s Shelter Medicine Program increases opportunities for students to develop hands-on clinical skills while simultaneously helping area humane societies serve Missouri communities.

- The North American Veterinary Licensing Examination Council on Education requires a minimum pass rate of 80 percent on the licensing examination to maintain full accreditation. Since 2009, University of Missouri College of Veterinary Medicine graduates have had a pass rate of at least 98 percent. In the past two years, the pass rate has been 100 percent!

Library Services

The Zalk Veterinary Medical Library provides access to a broad range of information resources essential to research, clinical practice and the training of veterinarians. Staff provide consultations, online research guides and face-to-face instruction in finding and evaluating veterinary literature.

In collaboration with other campus libraries, the CVM library supports entrepreneurial programs related to biodesign. It also supports compliance with NIH and other funder policies so that tax-funded research is available to taxpayers.

While no final decisions about budgets or cuts have been made, the MU Libraries are facing a $1 million shortfall to the collections budget for FY2017, a shortfall equivalent to a 14 percent cut to library collections. Upcoming journal cuts will affect all disciplines and will include basic and applied biomedical resources used by CVM students and faculty.

Additionally, library funds at the UM System are likely being cut $100,000 in FY2017. Since FY2007, the UM System funds have been cut by more than $1 million. Because consortial resources are highly used by students and faculty, MU Libraries pick up those subscriptions at the campus level and make cuts elsewhere.

Areas of Need

MINIMIZE DEBT

- Continue funding the Dr. Merrill Townley Large Animal Veterinary Student Loan Program. The program assists students currently enrolled or students who have been accepted into the CVM with their financial burden. The loan provides six individuals per academic year with $20,000 for living and educational expenses incurred during their veterinary education. The loans are forgiven provided the students practice large animal veterinary medicine in a defined area of need ($20,000 for each year of service provided). Although MU CVM student debt is significantly less than the national average of $150,000, continuation of the Townley Large Animal Veterinary Student Loan Program is important to maintain the supply of veterinarians to rural Missouri.

ACADEMIC FACILITIES

A new academic building, focused on the advancement of teaching and learning, in conjunction with our two-year clinical program, will:

- Serve as a recruitment tool to attract the brightest DVM prospects;
- Enhance educational opportunities needed to produce the next generation of veterinarians;
- Ease the strain on the physical logistics of the college’s current student population;
- Add immeasurably as a valuable resource sustaining collaborative efforts and pioneering works in the convergence of human and animal health.

Although students, alumni and practitioners are the primary beneficiaries of this initiative, the most significant stakeholder is the State of Missouri. In public health, food safety, bioterrorism and livestock-production medicine, we have witnessed the critical need for veterinary services and support, which will have a major economic impact on the state. If the college cannot provide adequate teaching facilities to serve the veterinary needs of Missouri, prospective veterinary students will turn to academ-
Vet erinarians must have an educational foundation vast enough to encompass the domain of One Health/One Medicine. Our academic building will provide the foundation of teaching and learning that can sustain the evolving demands for needed competencies of future veterinarians.  

**Phase one construction:** $45M  
**Phase two construction:** $30M  

**LIBRARY RESOURCES**  
**Upgrades to library facilities and services are needed** in order to provide educational support to the student body.  
- Flat budgets for collections, coupled with increases in journal and book prices, have meant purchasing fewer resources and fewer copies of resources such as reserve materials used in the curriculum.  
- A robust institutional subscription of course-required materials could lessen student expenses.  
- More and varied study spaces, from individual study carrels to collaborative group study rooms with the latest technology, will better meet student needs. A teaching classroom within the library would facilitate instructional sessions.  
- The ability to close off the library collections so that students can have swipe-card access to the library after hours would better serve student study needs.  
- The Veterinary Historical Collections are now housed at the Health Sciences Library due to a lack of proper storage and display space.  
- Compact shelving would decrease the footprint of books and journals allowing library staff to keep needed items close while permitting more room for study and collaboration.  
- The library needs to increase access to electronic materials so that students, researchers and clinicians can refer to high-quality information while on campus, at training sites around the state, or in the field.  

**STUDENT SUPPORT SERVICES**  
The Missouri Legislature has been a national leader in recognizing the depression and suicide epidemic in the medical field through the introduction of the Show-Me Compassionate Medical Education Act, which would establish a committee to study mental illness, suicide and depression in the state’s six medical schools.  

Unfortunately, veterinary students are also susceptible to elevated anxiety, stress and depression, and veterinarians have the highest suicide rate among the professions. MU College of Veterinary Medicine administrators are working to ameliorate this concern by hiring a full-time psychologist to assist students struggling with mental health issues.  

**Mid-range salary and benefits:**  
$94,500 per year  
**Equipment and supplies:**  
$1,500 per year  

**STUDENT SAFETY**  
Students, along with house officers, faculty and staff, provide emergency and intensive care to animals in our Veterinary Health Center around the clock. This results in members of the CVM community working late into the night. To help ensure the safety of students and employees leaving work at night, as well as animal patients housed in the VHC hospitals, the CVM would like to hire two security officers.  

**Mid-range salary and benefits:**  
$90,000 per year  
**Uniform, equipment and supplies:**  
$7,000  

---  

**CVM alumni live and work in each of the Missouri counties shown in gold in the map.**  

**Our Alumni: A Legacy of Leadership**  
There are more than 3,700 alumni of the MU College of Veterinary Medicine who have been successful in their chosen areas of the profession. Many have become involved in community affairs by becoming members of school boards or city councils, and mayors of towns and cities. Some have been elected to state legislative bodies. Many have held offices in state and national veterinary medical associations. Still other alumni have had prominent roles in the federal government. Others have advanced to leadership roles in veterinary medical colleges in teaching and research and as administrators. In the past 20 years, four of the presidents of the American Veterinary Medical Association, which represents approximately 88,000 veterinarians, were MU College of Veterinary Medicine graduates.
We are now in our third year of funding. Funds are being expended on a number of important current and future educational programs and related projects, including:

- Travel grants for CVM students to obtain unique large animal experiences that aren’t offered on our Columbia campus.
- Construction of an ambulatory teaching facility (final cost is approximately $3.1M).
- Funding for three post-DVM clinical trainees (two residents and one intern) involved in student teaching during clinical rotations.
- Starting in 2017, we will fund a food animal emphasis pathology resident in the Veterinary Medical Diagnostic Laboratory (VMDL) to further increase interactions between the VMDL and the Food Animal Hospital, particularly in field outbreak investigations, and also to improve the education of students rotating through the VMDL.
- We are searching for a swine extension veterinarian who will have preclinical and clinical teaching duties in the Food Animal Hospital and whose salary and benefits will be partially paid by these funds.
- We will hire an additional Food Animal Hospital teaching faculty member.
- We continue to collaborate with university teaching farms to increase student exposure to production animal caseload, and some of these costs are subsidized by this funding.
- Support for a food animal production medicine clinical elective.
- Support for a food animal surgery laboratory course.
- In 2015, we purchased endoscopy equipment for the Theriogenology Service to improve teaching small ruminant reproduction.
- Improved cattle-handling facilities and expanded herd size at our beef teaching unit (Middlebush Farm).
Veterinary Health Center Hospitals

Each year, the Veterinary Health Center hospitals care for about 17,000 hospitalized animals and thousands more on farms. Many of these animals come from the Columbia area for primary and emergency care, while others are referred by veterinarians throughout the Midwest for our specialized services. Working alongside faculty and staff, students pursuing the DVM degree and interns and residents engaged in postgraduate training actively participate in each phase of clinical care. MU’s location between two major cities and adjacent rural areas allows for a strong caseload in small animal, equine and food animal species. Featuring 152,000 square feet and advanced equipment, Clydesdale Hall is the central location for clinical care, and houses three specialized hospitals.

EQUINE SERVICES
The Equine Hospital occupies approximately one-third of the first floor and includes 32 stalls, a neonatal unit, two large surgery suites, a special diagnostics room, access to a 3-T magnetic resonance imaging (MRI) unit large enough to accommodate horses, an arena, and a treadmill for evaluation of equine lameness. An equine field-service program complements in-hospital services.

FOOD ANIMAL SERVICES
The Food Animal Hospital also occupies approximately one-third of the first floor and provides comprehensive health care for livestock. The design of the corrals, stalls and chutes permits efficient and safe movement and restraint of cattle. There are 35 stalls available; some are designed to manage paralyzed cattle and recumbent calves. The Food Animal Ambulatory Service provides individual and herd-health services for area livestock through fully equipped vehicles.

SMALL ANIMAL SERVICES
The Small Animal Hospital has 16 examination rooms, including specialized rooms for oncology, cardiology and ophthalmology exams, and more than 150 cages and runs. Each exam room contains a computer for quick access to the hospital information system so students can enter and retrieve client and patient data while examining patients. Veterinarians from the region refer clients to the Small Animal Hospital to take advantage of veterinarians with specialized training and access to state-of-the-art equipment.

The hospital also provides preventive medicine, dentistry and routine small animal outpatient care through the Community Practice Section. The Shelter Medicine program has...
a mobile surgery unit that can travel throughout the state to assist humane societies in cooperation with their local veterinarians. Veterinary students get additional experience in spay and neuter surgeries and preventive medicine while learning the value of community service.

The VHC has an emergency and critical care unit staffed 24 hours a day, a 3-T magnetic resonance imaging (MRI) unit, an underwater treadmill for cats and dogs recovering from orthopedic and neurological conditions, computerized tomography, a linear accelerator to administer radiation therapy, the Hill's Endoscopy Center, a cardiac catheterization laboratory, and specialized ophthalmology and orthopedic surgical suites. The VHC is one of only a few institutions in the United States that can offer veterinary positron emission tomography (PET) scans.

**VETERINARY HEALTH CENTER AT WENTZVILLE**
The Veterinary Health Center – Wentzville is a satellite facility offering radiation oncology therapy, behavioral services and dermatology care to cats and dogs referred there for treatment by their regular veterinarians. The Wentzville facility offers some new clinical trials for cancer treatment for animal patients that qualify.

**Areas of Need**

**TRANSPORTATION**
A cargo van is needed to transport animals to our shelter medicine facility at Middlebush Farm: $35,000

**CARDIOLOGY INSTRUCTION**
Catheterization lab observation monitors: $15,000

**SIMULATORS**
A colic simulator will teach students how to perform a physical work-up in suspected cases of equine colic: $30,000
A dental simulator provides opportunities for students to practice extractions: $1,000
Mizzou = Collaboration
At MU, preeminent scientists, physicians and clinicians pool knowledge to accelerate discoveries that prevent illness, heal the sick and serve humanity. MU is internationally recognized with a combination of health-related assets no other university can match:

- Schools of Medicine, Nursing, Business, Law and Health Professions; Colleges of Veterinary Medicine; Agriculture, Food and Natural Resources; Engineering; and Human Environmental Sciences; MU Health Care, which includes hospitals, clinics and more than 6,000 health care professionals; Bond Life Sciences Center, an interdisciplinary center of research; Clinical Research Center for conducting clinical trials; and MU Research Reactor, which provides unprecedented radiopharmaceutical and nanomedicine capabilities.

- Collaborative efforts between veterinary and human medicine researchers have helped create new pharmaceuticals and medical techniques even for people, including Quadramet, a radiopharmaceutical that relieves the pain of bone cancer.

- The Veterinary Health Center offers the most advanced imaging available in veterinary medicine. In addition to radiographs, ultrasound, magnetic resonance imaging and computed tomography, we have one of the few veterinary positron emission tomography (PET) scanners in the country, and a high-strength, 3-T MRI.

- Food animal investigators are researching cures for bovine respiratory disease and treatments for bacterial infections.

- The Research Center for Human-Animal Interaction is on the leading edge of programs and studies focused on the benefits of human-animal interaction. Areas of research focus include PTSD in veterans and autism.

- The MU College of Veterinary Medicine is home to one of the oldest, largest and most respected laboratory animal medicine residency/comparative medicine research training programs in the country. It has been continuously funded by competitive NIH grants for more than 30 years.

- The Comparative Orthopaedic Laboratory is a global leader in the convergence of human and animal medicine, conducting research on challenging joint and bone problems, including arthritis.

- Comparative Internal Medicine Laboratory investigators research diseases relevant to people and animals, such as asthma, develop tools for the practical diagnosis, treatment and prevention of disease, and train the next generation of medical specialists to facilitate continued application of ethical, translational research.

- The Comparative Neurology Laboratory is dedicated to finding solutions for animals suffering from diseases of the brain, spinal cord, peripheral nerves and muscles through clinical service, research and education. Research strategy focuses on movement disorders, developmental disorders, epilepsy, ALS, spinal cord disease and dysautonomia.

- The Lyons Feline and Comparative Genetics Laboratory, also known as the Lyons Den, researches the genetics of the domestic cat and the development of genetic tools and resources that assist gene mapping in the cat and other companion animals. Researchers hope to use the information learned from cats to treat diseases in people like polycystic kidney disease.

- The Ruth M. Kraeuchi Endowed Professorship funds the investigation of structural and functional aspects of retinal cell biology, comparative aspects of clinical retinal disease, corneal and retinal diseases and intraocular microsurgery.

- The E. Paige Laurie Program in Equine Lameness facilitates research to diagnose and treat lameness in horses. The program resulted in the development of a patented lameness detection system and spawned a commercial company that markets the device.

- The Charles and Charlene McKee Professorship in Microbial Pathogenesis endowed infectious disease research. Research focuses on virulence properties of zoonotic pathogens that cause disease in both people and animals.

- Betty Scott of Kansas City and the late Tom Scott endowed a program that has made the college a major Midwest referral center for animals with cancer and hub for translational cancer research.

- The Thelma Zalk Missouri Professorship in Tumor Angiogenesis integrates the college’s strong vascular biology and cancer programs.

- The Nestle Purina Missouri Program in Small Animal Nutrition supports training and research on problems related to nutrition of dogs and cats.
Veterinary Medical Diagnostic Laboratory

The Veterinary Medical Diagnostic Laboratory (VMDL) is an integral part of the College of Veterinary Medicine, and plays a significant role in safeguarding Missouri’s animal agriculture and public health.

- The VMDL is a full-service veterinary diagnostic laboratory and is Missouri’s only laboratory accredited by the American Association of Veterinary Laboratory Diagnosticians.
- The VMDL trains veterinary students during clinical rotations and residents in diagnostic medicine.
- The VMDL is a member of the National Animal Health Laboratory Network, and a Tier I laboratory of the Food and Drug Administration Veterinary Laboratory Investigation and Response Network. As such, the lab monitors potential outbreaks of emerging and foreign animal diseases, and food- or feed-borne diseases, including avian influenza, swine influenza, foot and mouth disease, West Nile, mycotoxins, and many others that have a significant impact on animal health and public health.
- The VMDL faculty and staff are national and international leaders in various diagnostic disciplines, including anatomical and clinical pathology, bacteriology, molecular biology, immunology, virology and toxicology.
- As a land-grant university lab, the VMDL provides in-depth laboratory diagnostic support to the livestock and poultry industries, stakeholders in companion animals and wildlife, veterinary practitioners, and state and federal regulatory officials.

- Each year, the VMDL performs nearly 100,000 tests, including more than 30,000 diagnostic tests for agricultural animals (cattle, turkeys, chickens, pigs, goats and sheep), and more than 60,000 tests related to companion animals (dogs, horses, cats and others), and research programs.
- The VMDL provides inexpensive, convenient diagnostic services. The lab has initiated a FedEx Overnight Delivery program for clients, which allows second-day delivery from the clients’ offices to the laboratory for testing. The VMDL also has an online portal for clients to check their results in real-time.
- Under the current fee structure, the lab absorbs a significant portion of the testing costs so that the service is affordable to owners, particularly of agricultural animals.

Areas of Need

While the VMDL serves the state of Missouri, the lab faces many challenges, including outdated equipment, some of which is 40 years old and does not meet current scientific standards, and a lack of funding to conduct complete investigations of emerging or re-emerging diseases in agricultural animals. To promote animal and public health and the state’s economy, the VMDL’s needs include:

**EQUIPMENT**

Replacing outmoded equipment, including autoclaves, centrifuges, chemical analyzers, and fluorescent microscopes: **$500,000**

**TESTING SUPPORT**

Subsidized laboratory testing for production animal diagnostics, which is essential to Missouri’s animal agriculture economy, export business and public health: **$100,000 per year**