



University of Missouri

College of Veterinary Medicine

[Applying](#) | [Calendars](#) | [Contact](#) | [News & Events](#)

Search

INFORMATION FOR:[Admissions Guide](#)[Current Students](#)[Alumni & Friends](#)[Faculty & Staff](#)[Veterinarians](#)[About the College](#)[Departments](#)[Teaching & Research](#)[Giving to Vet Med](#)[Teaching Hospital](#)[Veterinary Medical Diagnostic Laboratory \(VMDL\)](#)[CVM Employment](#)[Zalk Veterinary Medical Library](#)[CVM Course Materials](#)[MyZou](#)[Home](#)

NEWS & EVENTS

Multidisciplinary Research Team Gives Voice to Airway Problems

Two University of Missouri professors weren't exactly on the same page, but they were close enough to bring them together in the creation of a multidisciplinary University of Missouri center.

Two years ago, while flipping through the pages of an MU Archives edition that held an article featuring his work, Matthew Page, an assistant professor of otolaryngology in the School of Medicine, spotted an article featuring the research of Teresa Lever, assistant professor of communication science and disorders in the School of Health Professions.

Struck by the common threads in their research, Page was compelled to contact Lever to see how they might work together. Their meeting launched the University of Missouri Voice, Swallow and Airway Center (VSAC).

In the weeks following, Joan Coates, College of Veterinary Medicine professor of veterinary neurology and neurosurgery, joined them — bringing a veterinary perspective to the project.

Since that time, the center has grown to envelop MU experts from various medical, scientific, engineering and artistic fields. The result is a cross-trained team of clinicians and researchers with complementary interests and a desire to make progress in correcting voice, swallowing, and airway problems that have resisted conventional clinical and research strategies.

This broad, multidisciplinary approach is optimal for a number of reasons. The complex functions of voice and swallowing intersect in the upper airway, yet require the coordinated action of multiple body systems. Voice is central to being human, and it serves communication purposes in many other species. Swallowing is vital for nutrition in humans and animals alike. All functions are affected by aging and by common diseases.

The VSAC holds monthly think-tank meetings. In addition to Lever, Page, and Coates, there are several members who can be counted on to be at the table. Among them are Tony Mann, College of Veterinary Medicine professor of veterinary medicine and director of the small animal emergency and critical care service at the MU Veterinary Medical Teaching Hospital; Carol Reïnero, associate professor of small animal internal medicine at the College of Veterinary Medicine; Vamsi Guntur, assistant professor of pulmonary and environmental medicine at the School of Medicine; Vellore Gopalaratnam, professor of civil engineering; and Ann Harrell and Christine Seitz, associate professors of voice in the School of Music.

At this time, Arts and Science, Engineering, Health Professions, Medicine, and Veterinary Medicine are represented. Others, such as the College of Education and School of Journalism, are primed to jump on board.

Much of the center's research occurs in virtual core facilities spanning human and veterinary



medicine — with some instruments in both places.

With multiple disciplines come challenges. For example, in many cases, research data collection must bridge humans and animals, or small animals and large. To address such challenges, VSAC routinely relies on members from the College of Engineering to remove technology barriers and create new technology designs.

The VSAC has been quite prolific over a short period of time. Members have presented numerous posters locally and at national and international scientific meetings, and they have several publications in the works. They even have a patent pending on an innovative diagnostic tool that permits unrestrained testing of swallowing function in animals.

Financial support for VSAC activities has come from the College of Veterinary Medicine Faculty Research Award, the University of Missouri PRIME fund, Caring for Missourians initiative, and the Departments of Otolaryngology - Head and Neck Surgery, Communication Science and Disorders, and Biomedical Sciences. In 2012, the VSAC was awarded a Mizzou Advantage grant, and two members recently received NIH-R21 funding for two different projects.

Faculty researchers are not the only ones drawn to VSAC. The center has also been of great appeal to learners – from undergraduates to post-graduates. In fact, there is a waiting list for participation. Involved in VSAC research have been Freshman Howard Hughes Scholars, Mizzou Advantage Undergraduate Research Team award winners, medical and veterinary students, pre-medical students, and numerous undergraduate and graduate students in the Department of Communication Science and Disorders.

The VSAC is keenly focused on One Health/One Medicine and translational medicine. Their mission is to care for patients (humans and animals) with voice, swallow and airway problems. Toward this goal, they are developing a team of cross-trained clinicians and researchers at MU who are learning to disrupt traditional boundaries between seemingly unrelated professions. This trans-disciplinary approach is already fostering new areas of investigation to benefit humans and animals alike with voice, swallow and airway problems. VSAC members are constantly discovering and innovating as they learn from each other. In the process, they are training future generations of veterinary, medical, and allied-health professions students to become cross-species health care providers and researchers.

[Return to News and Events home](#)

College of Veterinary Medicine
W-203 Veterinary Medicine Building
Columbia, MO 65211
Phone: (573) 882-3554
E-mail: cvmwebmaster@missouri.edu



©2005 Curators of the University of Missouri
[DMCA](#) and other [copyright information](#).
an [equal opportunity/ADA institution](#)

Last Update: August 8, 2013