



[Home](#) / [News Releases](#) / [2017](#)

## Promising New Drug Development Could Help Treat Cachexia

Researchers seeking canine candidates for a pilot study testing drugs to treat the wasting disease often associated with cancer

**April 17, 2017**

**Story Contact(s):**

Jeff Sossamon, [sossamonj@missouri.edu](mailto:sossamonj@missouri.edu), 573-882-3346

Contact: Tracey Berry, Director of Communications, College of Veterinary Medicine, 573-884-2215, [berryt@missouri.edu](mailto:berryt@missouri.edu)

By Molly Peterson

COLUMBIA, Mo. – According to the National Cancer Institute, nearly one-third of cancer deaths can be attributed to a wasting syndrome known as cachexia. Cachexia, an indicator of the advanced stages of disease, is a debilitating disorder that causes loss of appetite, lean body mass and can lead to multi-organ failure. Now, researchers at the **University of Missouri** in partnership with Tensive Controls, Inc. have developed a drug that could reverse cachexia. The team currently is seeking canine candidates for a pilot study to test the new drug.

News Releases

News Videos

MU Experts

Student Honors

Resources for Media

### Subscribe

[SHARE](#) ...

[Releases by E-mail](#)

[News Feeds](#)

[Research News at Mizzou](#)

[@MizzouNews](#)

### For Media Inquiries

MU News Bureau  
329 Jesse Hall  
Columbia, MO 65211

Phone: 573-882-6211

Fax: 573-882-5489

[Contact by email](#)

[Staff contacts](#) »

### Related Media



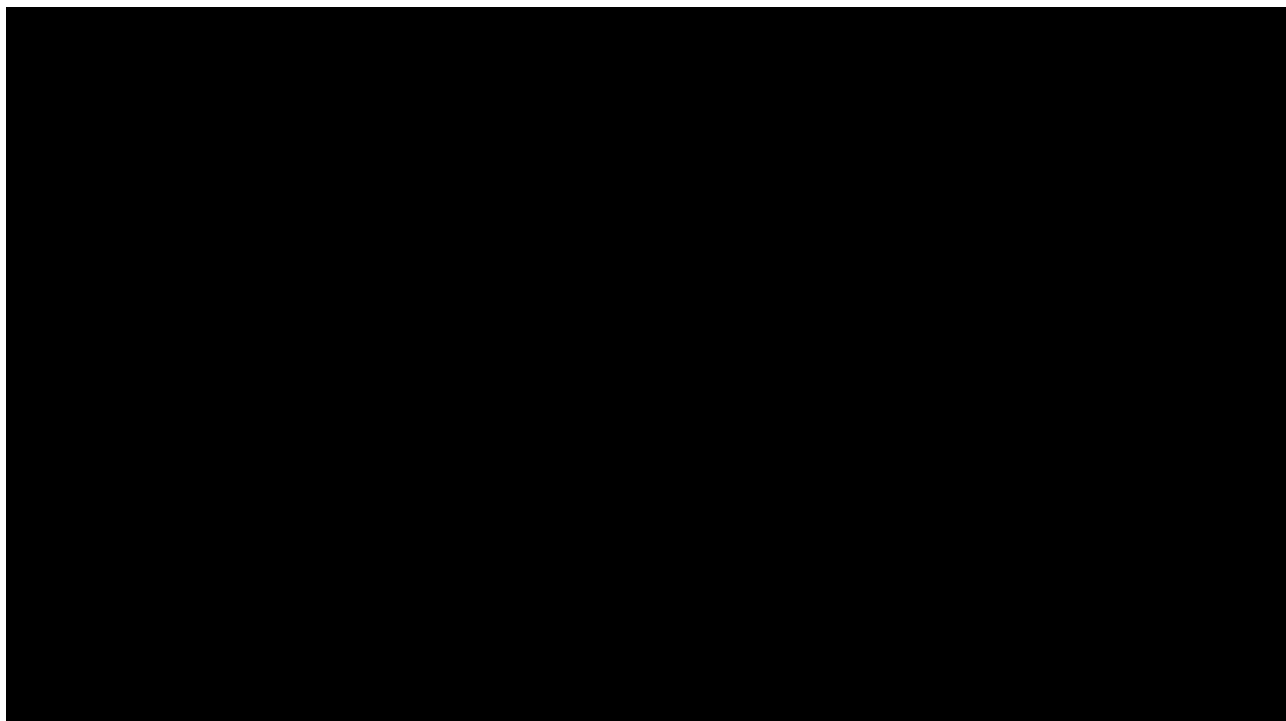
Sandra Bechtel in partnership with Tensive Controls, Inc. has developed a drug that could reverse cachexia. The team currently is seeking canine candidates for a pilot study to test the new drug.

**Photo**

[View all photos \(2\)](#)

**Video**

[View all video](#)



[Promising New Drug Development Could Help Treat Cachexia](#) from [MU News Bureau](#) on [Vimeo](#).

***This video is available for broadcast quality download and re-use. For more information, contact Nathan Hurst: [hurstn@missouri.edu](mailto:hurstn@missouri.edu)***

“The goal of this drug trial is to extend and improve the quality of life of cancer patients who are suffering from cachexia,” said Sandra Bechtel, associate professor of medical oncology at the [MU Veterinary Health Center](#) and principal investigator for the drug clinical trial. “The clinical trial is targeting a disease that significantly decreases quality of life. We are working to improve end-stage quality of life for our veterinary patients with the hopes of translating the improvements to human patients.”

Cachexia is caused by inflammatory cytokines, or small proteins that when released have an effect on the behavior of the cells around them. Certain cytokines in the brain cause the body to be hyperactive, decreasing appetite and causing weight loss in individuals with cachexia.

Kenneth A. Gruber, principal investigator at the MU Dalton Cardiovascular Research Center and president and founder of [Tensive Controls, Inc.](#), and his team have developed a drug that is able to cross the blood brain barrier, a protective barrier that typically prevents drugs, toxins or microbes from entering the brain, and inhibits overstimulation of the melanocortin system. The drug is administered via a subcutaneous, below the skin, injection.

“Preliminary results of the trial are promising,” said Gruber, who also holds an appointment as a professor of pharmacology and physiology in the MU School of Medicine. “Three dogs have already received the drug therapy and have gained an average of 7.5 percent of their body weight back over a 28-day trial. Dogs who have taken the drug for longer periods of time have improved to ideal body condition.”

The clinical trial is taking place at the [MU Small Animal Hospital](#) and is the first site to offer the drug as part of a clinical trial to patients. The trial is currently enrolling dogs for treatment. To inquire about enrolling a dog, call (573) 882-7821 and ask to speak to Deb Tate or Sandra Bechtel or email Deb Tate at [tated@missouri.edu](mailto:tated@missouri.edu) or Sandra Bechtel at [bechtels@missouri.edu](mailto:bechtels@missouri.edu).

The early-stage results of this research are promising. If additional studies are successful within the next few years, MU and Tensive Controls officials will request authority from the federal government to begin human drug development (this is commonly referred to as the “investigative new drug” status). After this status has been granted, researchers may conduct human clinical trials with the hope of developing new treatments for cancer cachexia in people.

The startup company associated with this research, Tensive Controls, Inc., highlights the university's impact on the state's economic development efforts, including commercialization of research conducted at Mizzou, workforce development and job growth, quality of life improvements for residents, and attracting corporations and businesses to the state. During the past five years, companies commercializing MU technologies have secured hundreds of millions of dollars in investments and grants to advance their commercialization efforts. In 2016, the Office of Technology Management and Industry Relations reported that Mizzou received \$14.9 million in revenue from more than 40 technology licenses.

