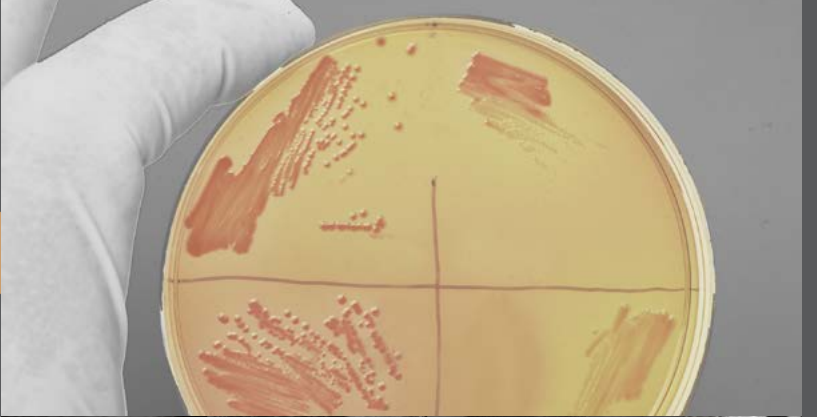


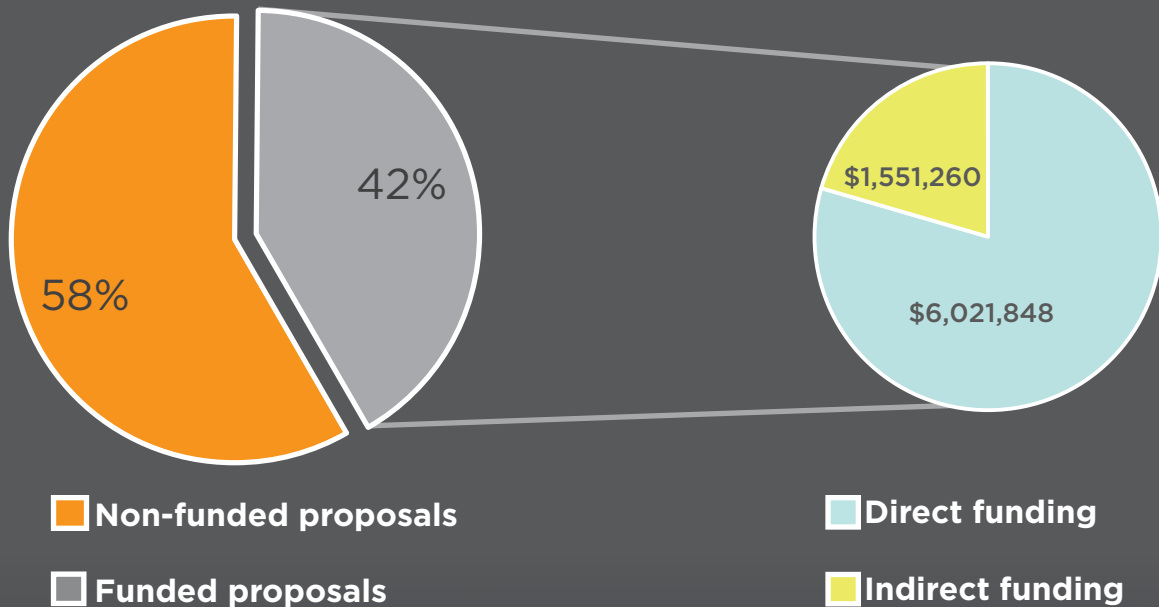


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2014 RESEARCH ANNUAL REPORT



External Grant Proposal Submissions



A Letter from the Associate Dean for Research

Research at the University of Tennessee College of Veterinary Medicine (UTCVM) embodies the concept of “One Health,” which recognizes the essential inter-relatedness of humans, animals, and the environment, and takes advantage of our diverse and rich opportunities in comparative medicine. Investigators at the UTCVM are making basic biomedical, translational, and clinical science discoveries in state-of-the-art facilities, studying methods to improve pedagogy, and training the next generation of researchers.

The University of Tennessee is considered a research institution with “very high research activity” by the Carnegie Classification of Institutions of Higher Education. As such, the university and the UTCVM expect their faculty to maintain excellence in research to help improve the state and global community of the 21st century. Within this report, we show how the UTCVM is helping the institution achieve its goal of becoming a Top 25 public research university. All financial data are for fiscal year 2014; other data are based on the 2014 calendar year.

Dr. Michael McEntee

THE UNIVERSITY OF TENNESSEE
VETERINARY MEDICAL CENTER

129

SCIENTIFIC JOURNAL ARTICLES

BY THE
NUMBERS

published book chapters

441

36

GRADUATE STUDENTS
MENTORED

19

*post-doc
and visiting
scholars
trained*

29

faculty on editorial boards

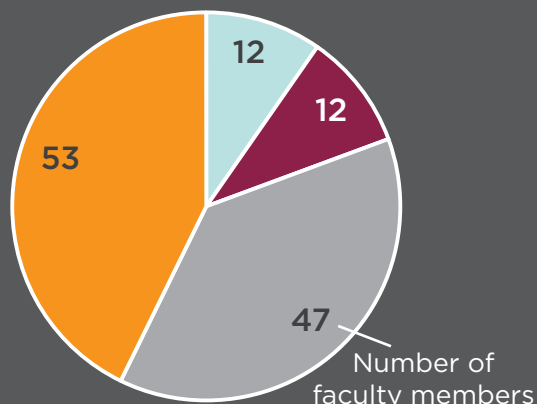
Dr. Madhu Dhar

Dr. Dhar, Research Associate Professor in the Large Animal Clinical Sciences Department, studies adult stem cells and their capacity to differentiate and improve healing in the musculoskeletal system.

She has been studying the effects of graphene as a way to treat bone loss injuries. Her work thus far has been working with goats and horses to test a combination of graphene and adult stem cells as a potential construct for bone tissue engineering.



Faculty Time Committed to Research



- Above 70%
- 30-69%
- 11-29%
- 0-10%

Dr. Richard Gerhold

Dr. Gerhold, assistant professor of parasitology in the Department of Biomedical and Diagnostic Sciences, has been researching turkey population decline in middle Tennessee.

Dr. Gerhold and his team have been working with communities to determine the cause of the decline and are focusing on pathogens like avian poxvirus and *Histomonas meleagridis*.



Dr. Darryl Millis

As a professor in the Small Animal Clinical Sciences Department, Dr. Millis has been working to develop a method to rehabilitate poor joint function in dogs.

In one study, he compared the effect of physical therapy applied after two surgical methods to repair cranial cruciate ligament rupture (tibial plateau leveling osteotomy and lateral fabellar-tibial technique).

Dr. Millis determined that rehabilitation has specific benefits in the treatment of various orthopedic and neurologic conditions.



Honors & Awards



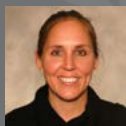
Dr. Linda Frank — Zoetis Award for Veterinary Research Excellence



Dr. Agricola Odoi — Inducted Fellow, American College of Epidemiology



Dr. Barry Rouse — Medal of Merit, Warsaw University of Life Sciences, University of Poland



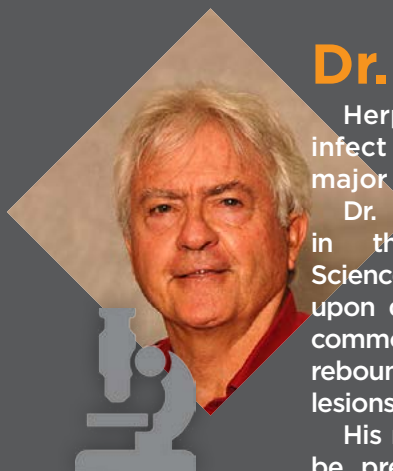
Dr. Katie Tolbert — Young Investigator Award, American Veterinary Medical Association & American Veterinary Medical Foundation

Dr. Barry Rouse

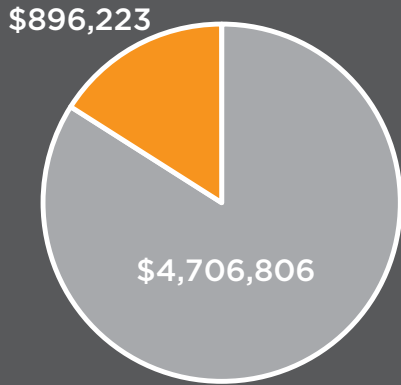
Herpes simplex virus-1 (HSV-1) can infect the cornea, and HSV-1 keratitis is a major cause of blindness worldwide.

Dr. Rouse, distinguished professor in the Biomedical and Diagnostic Sciences Department, has found that upon discontinuation of treatment with a commonly-prescribed drug, HSV-1 lesions rebound, possibly resulting in more severe lesions than if no treatment had taken place.

His results have shown the relapse may be preventable using a combination of drugs.

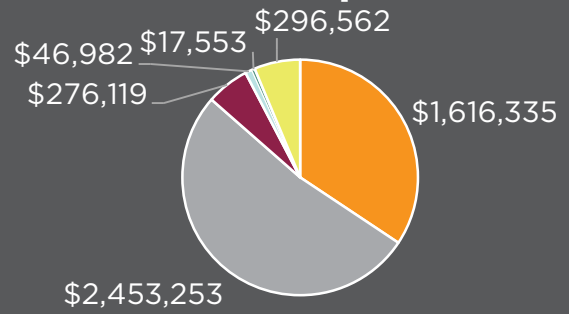


Total Expenditures



■ Direct Costs
 ■ Indirect Costs

Direct Cost Expenditures

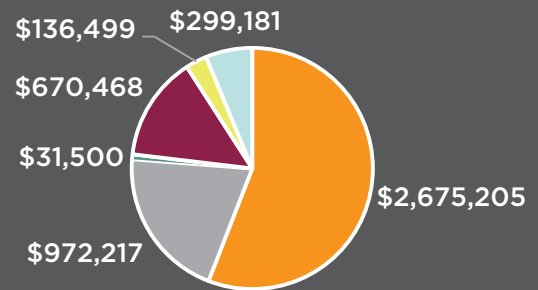


■ Instruction ■ Research
■ Public Service ■ Academic Support
■ Institutional Support ■ Student Aid

2014 Grant Supporters

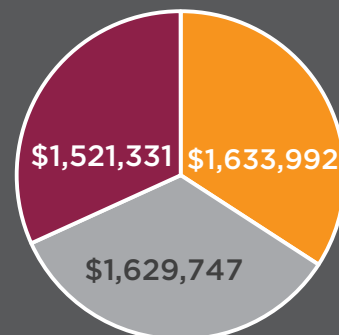
AB Science
 Alliance of Women Philanthropists
 American College of Veterinary Internal Medicine
 American Society for the Prevention of Cruelty of Animals
 Boehringer Ingelheim Vetmedica
 Comparative Gastroenterology Society
 Department of Homeland Security
 Egyptian Cultural & Educational Bureau
 Food and Drug Administration
 Hill's Pet Nutrition
 IAMS Company
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 Montana Fish, Wildlife & Parks
 Morris Animal Foundation
 National Ecological Observatory Network
 NellOne Therapeutics
 National Institutes of Health
 Oak Ridge National Laboratory
 PetSmart Charities
 Physician's Medical Education and Research Foundation
 Radio Systems Corporation
 Tennessee Department of Agriculture
 Tennessee Wildlife Resources Agency
 University of Nebraska — Lincoln
 Oklahoma State University Foundation
 University of Tennessee — Knoxville
 University of Tennessee Graduate School of Medicine
 US Department of Agriculture
 VCA Antech
 Winn Feline Foundation

External Funding by Source



■ Federal ■ Industry
■ International ■ Private/Foundation
■ State ■ University

External Funding by Type



■ Training ■ Basic Research ■ Clinical Research

Real. Life. Solutions.



College of Veterinary Medicine
2407 River Dr., Rm. A102
Knoxville, TN 37996-1529
865-974-0227

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