

SPOTLIGHT ON

The Ohio State Veterinary Medicine

Advancing animal health and welfare through research.

Impactful research is improving animal health through a one health approach

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Collaboration across the university and beyond is a core tenet of our research program and a key strategy for our One Health and comparative and translational biomedical approach to creating a healthy and sustainable world for animals, people, and the environment. We're addressing grand challenges such as transboundary, (re)emerging, and zoonotic diseases, antimicrobial resistance, and others while pursuing our ambition to Be The Model™ comprehensive college of veterinary medicine in the world, impacting animal and human health through innovation, collaboration, and excellence. Below are a few highlights of our impactful research program.

Viral Surveillance

Throughout the COVID-19 pandemic, our researchers led and partnered across the university and beyond to provide guidance and conduct studies in areas of predictive modeling, diagnostic testing, treatment strategies, vaccine development, immune response, guidance on vaccine protection, and preparation for response to future outbreaks from other viruses.

Our research scientists play an important role in the university's Infectious Disease Institute (IDI), which encompasses 6 interdisciplinary research networks from 13 colleges and Nationwide Children's Hospital. The IDI director and one-third of the program directors are members of our faculty.

Our researchers established Environmental Surveillance for COVID-19 in Ohio: Understanding Transmission (eSCOUT) to study wastewater and storm water to identify circulating viral strains within populations, allowing early detection of outbreaks. eSCOUT also tests pets, shelter and agricultural animals, and wildlife to identify which animals can be infected and whether they can transmit the virus to other species.

The college's comprehensive Animal Influenza Ecology and Epidemiology Research Program plays a critical role in protecting swine, poultry and potential future outbreaks in people.

Antimicrobial Resistance

Ohio State's IDI is 1 of 8 Reference Centres for Antimicrobial Resistance worldwide as designated by the Food and Agriculture Organization of the United Nations. Our comprehensive antimicrobial stewardship program in veterinary clinics, farms and human healthcare facilities is revolutionizing the



Advancing animal health through viral surveillance, antimicrobial resistance, and clinical trials research.

way antibiotics are used—working to battle antibiotic resistance and help prevent the next global health crisis.

In 2022, we were 1 of 9 projects selected to receive \$5 million from the U.S. Department of Agriculture's National Institute of Food and Agriculture to help mitigate antimicrobial resistance across the food chain.

Clinical Trials

Our Blue Buffalo Veterinary Clinical Trials Office conducted almost 300 trials and enrolled more than 3,200 patients in the last 6 years, offering unique expertise in several specialty areas. Faculty in oncology have a strong history of partnering with scientists and industry to develop new cancer therapies, and faculty in internal medicine offer high-level expertise in kidney and urinary tract diseases as well as in microbiome science.

We recognize the importance of veterinary clinical trials to inform translational research to advance human health, thus partnering with the therapeutic development industry and with other university academic units and human healthcare systems, on studies that move new treatments toward the veterinary clinical setting and human clinical trials.

We have one of the largest veterinary biospecimen repositories in the U.S. and have distributed more than 4,000 samples to researchers over the last 7 years for use in cancer, and other research including assay validation

To learn more, visit www.vet.osu.edu/spotlight.