### Joint Meeting of the House and Senate Agriculture Committees

Rustin M. Moore, DVM, PhD, Diplomate ACVS Dean, The Ohio State University College of Veterinary Medicine The Ohio State Fairgrounds – August 1, 2023

Chairpersons Schaffer and Creech, Vice Chairs Landis and Klopfenstein, Ranking Members Hicks-Hudson and Brent, and members of the Senate Agriculture and Natural Resources Committee and the House Agriculture Committee, thank you for inviting me to join you today to offer my testimony and provide insight into the current state and future needs regarding the veterinary profession and animal health-related industries in Ohio. My name is Rustin Moore, and I have been the Dean of The Ohio State University College of Veterinary Medicine for eight years. I have met and worked with many of you, and it is my honor to be here at the Ohio State Fair sharing my experiences and perceptions with you. A little about me. For those I have not met, I am a first-generation college graduate from the center of Appalachia, in West Virginia, where I was raised on a small farm. I received my DVM and PhD degrees from Ohio State in 1989 and 1994, and have lived in Ohio longer than anywhere else. Thus, my Buckeye State roots extend broad and deep into Ohio's fertile soil.

I would first like to extend my sincere gratitude to the General Assembly for the support of the college in the existing operating budget line item, and the commitment and work to increase it. I have had the pleasure several times in the past to offer my testimony before House and Senate Committees, but since some members may be new to the College of Veterinary Medicine, please allow me to begin with a few highlights about The Ohio State University College of Veterinary Medicine.

- We are the sole veterinary college in Ohio and one of only 33 in the United States.
- As a land-grant university, our mission is to provide education, research, outreach, and patient care and to serve Ohio's citizens and their animals across all communities.
- Founded in 1885, we are one of the oldest and largest veterinary colleges, not only in the nation but also among the 55 AVMA-accredited colleges in the world that are members of the American Association of Veterinary Medical Colleges.
- Each year we admit 165 DVM students, we have graduated more than 10,000 alumni representing DVM, MS, and PhD programs, and our alumni practice in all 50 states and 40 countries. Admission is highly competitive with about 16 applicants for every seat.
- More than 80 percent of the approximately 3,500 veterinarians in Ohio are alumni of our program.

The College of Veterinary Medicine proudly holds the distinction of being Ohio State's highest-ranked graduate/professional program, securing an impressive #3 ranking among the 33 US colleges of veterinary medicine according to the 2023 *U.S. News & World Report's* Best Veterinary Colleges, moving up from #4 four years ago and from #5 to #4 eight years ago.

Of the top 15 ranked colleges of veterinary medicine in the US, Ohio State receives the least amount of state support. Data from last year's AAVMC Institutional Data Report shows state support ranges from \$14.6 million to \$81 million with the mean and median being \$36 million and \$32 million, respectively, with several other colleges receiving substantially more than Ohio State. We are at the bottom of the top 15, yet ranked #3. Imagine our ranking and the impact we could have if we were at even the median level of state funding.

Last year we received more than 2,650 applications for 165 seats available for the class of 2027. The Veterinary Medical Center has been named a CBUS Best veterinary hospital by the Dispatch's annual ranking for the last seven years. Our college is well respected in the veterinary profession and animal health industry, highly sought after by prospective students, and beloved by our grateful clients. Across all four years of the program, we currently have at least one student from 68 of Ohio's 88 counties.

We are focused on advancing our mission to discover the latest breakthroughs in animal, human, and environmental health through a One Health approach, provide compassionate care for patients and clients, and educate the next generation of veterinarians. Thus, it is fitting for us to be here today at The Ohio State Fair, an annual celebration of Ohio's strong and deep agricultural roots, discussing Ohio's only college of veterinary medicine and the role the college and the veterinary profession play, and the importance and impact they have on the state and for all Ohioans. Faculty at the College of Veterinary Medicine make more than 3,000 farm calls each year and treat more than 80,000 animals in our hospitals and on farms across Ohio; conduct research to advance livestock and poultry health, production, and welfare; protect and ensure a safe and plentiful food supply; provide outreach education and applied research findings to farm owners, workers, and others; prepare the next generation of veterinarians and leaders to support the agricultural industry; and grow Ohio's workforce.

The college has made significant strides to fortify Ohio's preparedness and response capabilities for animal health emergencies. Through collaborations with the Ohio Department of Agriculture (ODA) and the State Veterinarian's Office, a dedication to training and research, and a commitment to humane and responsible practices, our faculty have demonstrated the pivotal role veterinarians play in safeguarding animal and public health and our food supply.

Together with the ODA and the State Veterinarian's Office, we are working to protect herds and flocks across the state and helping to mitigate potential devastating consequences for the animal agricultural sector. Through the development of comprehensive Emergency Preparedness protocols, the college has focused on early detection, containment, and prevention of outbreaks caused by highly pathogenic avian influenza, African swine fever, and porcine epidemic diarrhea virus, among others. Recognizing the importance of animal welfare and humane practices in times of animal health crises, our scientists are also investigating, developing, and testing humane methods for mass depopulation when necessary.

In a feature article published recently in the New York Times on July 25, 2023, faculty in the College of Veterinary Medicine were highlighted for their important and impactful research involving monitoring swine flu at county fairs and teaching young people about biosecurity and safe livestock handling practices. This important work provides data on how swine flu spreads from animal to animal and helps to predict and perhaps prevent future issues where infectious diseases in animals spill over to people leading to zoonotic disease outbreaks and potential pandemics.

The college is a leader in antimicrobial stewardship, which refers to the proper selection and use of antibiotics, whether it be in companion animals, livestock, poultry, fish, honeybees, wildlife, and/or other animals. Through established guidelines and surveillance efforts, we actively promote the safe and effective selection and use of antimicrobial drugs in veterinary practices and on farms across Ohio. We provide crucial antibiotic stewardship training to farm workers, contributing to the responsible use of antibiotics and helping combat the growing concern of antimicrobial resistance.

The college is a central part of the worldwide designated International Reference Centers for Antimicrobial Resistance by the United Nations Food and Agriculture Organization (FAO). This prestigious recognition highlights Ohio State University College of Veterinary Medicine's commitment to global efforts in addressing antimicrobial resistance, placing it among only five such centers worldwide. Ohio State's Infectious Disease Institute, with leadership from the College of Veterinary Medicine faculty, has also been designated as an FAO International Reference Center for Zoonotic Coronaviruses.

Collaboration is a key tenet of our research efforts, and we view problems from a One Health perspective and how we can improve the lives of animals and people while protecting our environment. We are home to Signature Programs in Comparative and Translational Oncology (cancer), Infectious Diseases, Neuromusculoskeletal Sciences, and an emerging area of One Welfare and Sustainability. These programs represent our multidisciplinary and innovative approaches to the discovery and dissemination of knowledge, practices, and products that advance both veterinary medicine and human health. Grounded in strong and impactful research within the college, these programs utilize extensive collaborative networks that extend throughout the seven health science colleges, the College of Food, Agriculture and Environmental Sciences, the College of Engineering, the College of Arts and Sciences, and the Research Institute at Nationwide Children's Hospital, among others.

We also recognize the importance and impact of veterinary clinical trials in contributing to translational research, which ultimately advances human health. We actively collaborate with the therapeutic development industry, university academic units, and human healthcare systems to conduct studies that facilitate the progress of new treatments from preclinical stages to veterinary clinical trials and eventually human clinical trials. Through these partnerships, we aim to drive forward innovations that benefit both animals and humans alike. In the last six years, our clinical trials office conducted more than 300 trials, enrolling more than 3,200 patients with spontaneous naturally-acquired disease conditions.

Ohio State veterinarians play a vital role in every aspect of our daily lives, from tending to Ohio's farms and caring for our beloved pets to safeguarding the health and well-being of the state's working dogs. Every year during the month of May our Veterinary Medical Center (VMC) provides free eye exams to eligible service and working dogs. In order to do their best work, service dogs must be healthy and a critical part of that is their sight. In addition, the VMC works with 75 local, state, and federal agencies to provide care for the dogs and horses who work in partnership with their human handlers to protect our communities. From the Austin Mounted Unit in Cincinnati to the Zanesville Police Department, in the last five years, we've provided care during more than 130 appointments for these animals and their handlers, including emergent life-saving care.

In Ohio, veterinarians are critical to protecting our state's robust \$120 billion agriculture industry. In addition to protecting Ohio's agricultural economy, the veterinary profession has far-reaching contributions and impacts on the state and its people. About 70 percent of households in Ohio have at least one pet. More than 90 percent of those households consider their pet a part of the family and expect to have access to high-quality veterinary care in their community. Americans spent nearly \$137 billion on their pets in 2022 and Ohioans were an important contributor. A national study commissioned by the Human Animal Bond Research Institute based on 2021 data showed a major economic benefit with a total annual healthcare cost savings of at least \$22.7 billion per year in the U.S. simply related to pet ownership.

An economic impact study commissioned by the Ohio Veterinary Medical Association and the College showed that based on the most recent data available, in 2021, veterinary services, other animal-related industries, and support services supported 128,000 jobs contributing \$7.4 billion in wages and more than \$19 billion to Ohio's economy. A robust veterinary profession is vital to protecting and supporting animal agriculture, the human-animal bond, advances in comparative biomedical research, and public health. You and all members of the General Assembly will be receiving a copy of the summary report in the mail in the near future.

However, the veterinary profession is facing a workforce shortage across the US that is impacting every corner of our state. Estimates predict we're facing a looming crisis with as many as 40,000 too few veterinarians in the US by 2030, and Ohio is no different with upward of 1,000 too few veterinarians by 2030. This impacts all areas of the profession, from the veterinarians who work in our communities, to the veterinary specialists who care for the most complex cases, to the faculty who conduct research and prepare the next generation of veterinarians, and to every other career path veterinarians can choose to work and serve. And you can already see the impact in Ohio, where according to the USDA, 22 counties are designated as "underserved" by veterinarians. This shortage hits especially hard in Ohio's rural counties, not unlike similar counties across the United States where it is estimated that 500 counties are underserved by veterinarians with many communities not having access to veterinary care, leading to unnecessary travel and long wait times for the preventive care essential to keeping animals healthy.

To address the shortage, it is clear colleges of veterinary medicine across the country must prepare and graduate more veterinarians to meet the current and future workforce needs of their communities. At Ohio State, we formed a Veterinary Workforce Shortage Working Group, including stakeholders from across the state and industries, to identify innovative solutions to address the issue. I received their report and recommendations last week and will soon be prepared to discuss this in more detail with those interested. In short, the recommendations outline three possible paths to address the shortage of veterinarians as well as three to address the shortage of veterinary assistants and veterinary technicians (or nurses). Simply put, the only way to have a notable impact on the number of veterinarians we graduate is for us to increase class size and admit more students. However, in order to do that, additional resources are required to educate and train more students. Expanded facilities and proper infrastructure are necessary to accommodate an increased number of students, and we must also hire additional faculty and staff before we admit any more students to ensure we provide a quality education with a reasonable student-to-faculty ratio. While our college is taking the lead on these initiatives, the solution will require a cooperative and collaborative partnership of many stakeholders and we look forward to partnering with these committees and other members of the Ohio legislature to address this pressing challenge. We believe it is prudent and most economical and logical to invest in Ohio State's College of Veterinary Medicine to address these and other challenges and meet the workforce needs and other demands that will be best led and solved by those in the veterinary profession.

While we explore the details of what it would take to increase student enrollment, we are also committed to supporting our current students and launching them into successful, satisfying, and sustainable careers. We recognize the substantial debt burden veterinary students face upon graduation, and we have been addressing this concern. Through growing philanthropic scholarship dollars by 765% from \$370,000 to \$3.2 million and limiting

tuition increases to no more than two percent per year during the last eight years, we have helped reduce average student debt from over \$200,000 to \$160,000, along with significantly lowering the debt-to-income ratio from 2.66 to 1.45. This debt load is still too high, and we are committed to continuing to address this moving forward.

We have also placed a strategic focus on streamlining operations, identifying, and implementing cost efficiencies, and tapping into the generosity of our many alumni and grateful clients. Robust fundraising has resulted in a dramatic increase in philanthropically derived revenue totaling over \$250M in gifts in the last eight years, and we have quadrupled our endowment principal from \$25M to over \$105M. At the Veterinary Medical Center, hospital-derived revenue has increased more than 75 percent from less than \$20M to around \$35M. We're doing everything we can to identify additional revenue sources and operate efficiently and cost-effectively, but additional support is necessary to sustain our programmatic excellence and expand our services to continue to meet the growing needs of Ohio's communities and the animal-owning public.

In the last decade, the college has expanded and modernized many of our facilities, including projects totaling nearly \$40 million to expand and enhance the Veterinary Medical Center to allow us to care for more patients. A new \$10 million Veterinary Clinical and Professional Skills Center enables us to provide early and frequent handson clinical training for our students. The new \$20 million Frank Stanton Veterinary Spectrum of Care Clinic facilitates our students by training in a primary care setting that prepares them to be competent, confident, and career-ready veterinarians upon graduation. Our latest projects, which are under construction, include a new \$11 million state-of-the-art Equine Performance Evaluation Arena and a \$2.5 million expansion and enhancement of our Marysville Large Animal Clinic, both of which are expected to be completed by December 2023. It is important to note that the college has not received any public funds for capital expenses for 25 years – since 1998 – when we received funds to help build the Veterinary Medicine Academic Building, which was completed in 2003. Yet we have invested over \$85 million to build new and renovate existing facilities in the last eight years, principally from philanthropic support (see appendix).

These innovative spaces are what sets our college apart from our peers. They are pivotal to our success, and likely a contributing factor to why so many prospective veterinary students apply to our program. Over 10 colleges of veterinary medicine from the US, Canada, and the UK have visited us in the last year to see our facilities and learn more about our innovative curriculum and student services. In the last few years, our applicant numbers for veterinary school have more than doubled whereas nationally applicant numbers have increased by approximately 60%. To our surprise and dismay, we learned we have a substantial number of food-insecure students and to address this we opened a College Community Cupboard where we provide food and supplies to these students.

As a land-grant university, we are called upon to provide extension and outreach activities and services to share our research findings, knowledge, and expertise with the public. We take this role and responsibility very seriously, despite having less than 3.0 full-time equivalent faculty funded through extension. Since 2008, more than 12,000 participants have attended programs that translate science-based knowledge and skills into practical solutions for immediate use. We have also provided youth programs for more than 9,000 children, including activities here at the State Fair this year. As we work to address the veterinary shortage, these programs are especially important to encourage students to pursue STEM careers, including veterinary medicine, from all communities across Ohio. We could do more and would do more with more extension-funded faculty.

Hopefully, it is clear how Ohio's College of Veterinary Medicine plays a pivotal role in addressing the crucial needs of our communities, advancing research, and preparing the next generation of veterinary professionals and leaders. By collaborating and investing in our collective future, I am confident we can overcome challenges to ensure a more prosperous and healthier future for Ohio's people and animals. Thank you for the opportunity to share with you today. I would be happy to answer any questions and look forward to working with all of you and others to help ensure our college can best serve and protect all Ohioans and their animals now and in the future.

Respectfully and appreciatively,

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### Appendix

# The Ohio State University College of Veterinary Medicine Campuses & Facilities

#### Columbus

Veterinary Medical Center
Hummel & Trueman Hospital for Companion Animals
Hospital for Farm Animals
Galbreath Equine Center
Ralph Rogan Equine Performance Evaluation Arena
Frank Stanton Veterinary Spectrum of Care Clinic
Veterinary Clinical and Professional Skills Center
Veterinary Medicine Academic Building
Sisson Hall
Goss Lab
<u>Marysville</u> – Large Animal Clinic
Dublin – Veterinary Medical Center at Dublin
West Jefferson – Alice Lloyd Finley Memorial Veterinary Teaching & Research Farm

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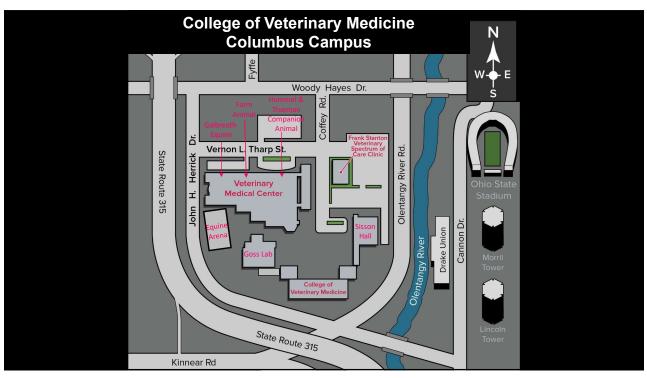
## The Ohio State University College of Veterinary Medicine Facility Expansion & Enhancement

#### Completed or Near-Completed Facilities

- Veterinary Medical Center Expansion & Enhancement \$35 million – 2017
- Veterinary Clinical and Professional Skills Center \$10 million 2018
- VMC Integrated Oncology & Emergency Triage \$1.5 million 2020
- Frank Stanton Veterinary Spectrum of Care Clinic \$20 million 2021
- Research Lab Expansion & Enhancement \$4 million 2022
- Marysville Large Animal Clinic Expansion & Enhancement \$2.5 million 2023
- Ralph Rogan Equine Performance Evaluation Arena \$11 million 2023
- Veterinary Medical Center Renovation \$3 million 2024

#### Facility Needs

- Finley Farm Barn Renovation
- Clinical Diagnostic Lab Expansion & Enhancement
- Academic Classroom & Student Learning Space Enhancement
- Clinical & Translational Research Enhancement
  - Academic Building Addition
    - Teaching/Learning Space
    - Research Space
    - Faculty and Staff Office Space





### The Ohio State University College of Veterinary Medicine Image: State University College of Veterinary Medicine<



The Ohio State University Veterinary Medical Center at Dublin – Opened 2012





Sisson Hall – Department of Veterinary Preventive Medicine Completed in 1987 – Front Addition Completed 2003





## Veterinary Medical Center Built 1973 – Expansion & Enhancement 2017



## **Department of Veterinary Clinical Sciences**













