March 1, 2023

The Honorable Brian J. Feldman
Senate Education, Energy, and the Environment Committee
2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Re: Testimony in SUPPORT of S.B. 495, Research Facilities and Testing Facilities That Use Animals - Licensing and Regulation

Dear Chairman Feldman, Vice-Chair Kagan, and Members of the Senate Education, Energy, and the Environment Committee,

Thank you for the opportunity to submit written testimony for S.B. 495, a bill that outlines a comprehensive approach to address several important issues surrounding the use of animals in research and testing in the state of Maryland. Founded in 1883, the American Anti-Vivisection Society (AAVS) is the first non-profit animal advocacy and educational organization in the United States dedicated to ending the use of animals in research, testing, and education. AAVS works with individuals, students and parents, educators, grassroots groups, corporate and government decision makers, and members of the scientific community. We also receive frequent inquiries and communications about the use of animals in research and testing, and we know that Americans are concerned and care about what happens to animals behind closed laboratory doors.

Based on the traditional assumption that animals respond the same way that humans do when exposed to certain products, unknown numbers of animals are subject to tests that assess the safety of cosmetic, personal care, household products, chemicals, medical devices, and their component ingredients. Exposed to substances that can cause a variety of reactions, including burning, vomiting, and seizures, animals are forced to endure enormous suffering, often with little pain relief. Animals in labs are also kept in sterile, stressful environments that cause them to develop abnormal physiological and behavioral responses, which, despite increasing recognition that such conditions can affect research data, is tolerated because the animals have no voice, and there is no incentive to change. The Maryland legislature has an opportunity to model innovative ways to conduct animal research that are aligned with the interests of the public.

On behalf of our members and supporters, including those in Maryland, I submit this testimony in SUPPORT of S.B. 495, with a focus on three key areas.

Licensing and Reporting
Licensing and subsequent required reporting will protect the public interest, provide a level of accountability, and, in the case of animal laboratories, set some sort of minimal standards to protect animal wellbeing. We know from our interactions with the public that Americans care about animals used in research and testing, especially dogs and cats, and rely on government regulatory bodies, such as the U.S. Department of Agriculture (USDA) to ensure that animals are protected and laboratories held accountable if animal lives are endangered. The USDA oversight has not been effective in preventing violations of the federal Animal Welfare Act (AWA), generally limiting penalties and fines, so S.B. 495 will offer another important layer of accountability and protection for animals.

There are 34 laboratory facilities in Maryland registered with the USDA, as required by the AWA. However, there are likely more animal labs operating without USDA oversight because they use vertebrate animals not covered by the AWA, like mice, rats, and fish. S.B. 495 would require all these facilities to be licensed and to report their animal use, regardless of AWA coverage.

It's generally acknowledged in the scientific community that approximately 90 percent of all animals used in research and testing are mice, followed by rats and fish, yet, because they are not covered by the AWA, scientists are not required to consider alternatives and their numbers are not reported. S.B. 495 will provide some much-needed oversight for facilities using these animals, and its reporting requirements will provide the public more information about animal use in research and testing in Maryland, knowing that alternatives to their use were considered and that those violating the law will face penalties.

Additionally, preparing an annual report containing all required data submission will help give a view into the use of animals in research and testing and will be a great resource for the public and organizations like AAVS.

Prioritizing Non-Animal Methods
An important component of S.B. 495 is the requirement to use "alternative test methods" instead of animals in toxicological testing, or if an alternative is not available, to use the fewest number of animals possible and cause the least amount of suffering. There are several reasons to advocate for the use of alternatives instead of animals in research and testing, including concerns over animal welfare, reliability of the science, and the availability of non-animal testing methods.

Besides the obvious welfare implications, differences between animals and humans also cast doubt on the validity of any results obtained using animals. As a result, animal-based testing methods continue to fail legitimate human needs, while new discoveries in the field of alternatives have led to new and improved techniques that do not involve live animals. For example, the Food and Drug Administration has reported that approximately 90 percent of new drugs that have shown to be safe in animal studies, fail in human clinical trials. Even within the same species, similar disparities can be found among different sexes,

breeds, age and weight ranges. However, alternatives can use human cells and tissues, producing study data that is directly applicable to human conditions.

Researchers have made tremendous progress developing alternatives in recent years and we are just beginning to reap some of the exciting scientific rewards. For example, recognizing the promise of microphysiological systems (including Organs-on-chips or organelles) for drug development, the National Institutes of Health recently announced funding to establish research centers to accelerate the translational use of this new technology. Additionally, recent federal legislation has cleared the way for the Food and Drug Administration to consider new drug applications without requiring animal testing, relying instead on human-relevant, non-animal methods, which again indicates the accelerating importance of these technologies.

Requiring facilities to report how animals will be used in research and testing and a justification for their use, along with potential alternatives to replace animals, not only helps with keeping facilities accountable, but it will also provide a way to measure upward trends in alternatives use and how many lives are saved by their use instead of animals.

Because scientists tend to be traditional and hold steadfast to the use of animals in research and testing, it will be important to include incentives, such increased funding, to spur more interest in using alternatives. It would also be prudent to encourage researchers to participate in the Animal Welfare Information Center's free training (https://www.nal.usda.gov/about-us/events/awic-workshop) on the use of alternatives and alternatives searches. A motivated shift towards alternatives use could also give a booster to testing facilities in Maryland, including those already operating there.

Special Consideration for Dogs and Cats

AAVS strongly believes that all animals used in research and testing are entitled to humane care and treatment and beyond what is provided under the federal Animal Welfare Act. However, we recognize that the public has a special concern for dogs and cats, which has been amplified following national media coverage of the serious welfare issues uncovered at the Envigo dog breeding facility in Virginia and the Inotiv testing labs in Indiana.

Dogs are often used in biomedical research investigating heart and lung disease, cancer, and orthopedics. They are also used in toxicity studies to test the safety of drugs and industrial chemicals, but are rarely used to assess the safety of personal care and household products. Most dogs used in research are purpose-bred in laboratories or by private companies that sell strictly to labs. Dogs can be bred to be pathogen-free or genetically manipulated to be a model of human disease.

Cats are frequently used in neurology research to study spinal cord injury, as well as problems related to vision, sleep, and hearing, and continue to be used because so much is known about their neurological functions. This type of research is extremely invasive, and almost always results in the euthanasia of the cats after they are subjected to grueling vivisection procedures. They can also be used to study Parkinson's disease, cancer, genetic disorders, and other human conditions and ailments

Animal testing is generally recognized to be costly, time-consuming, and unreliable, and much of the research is neither appropriate nor applicable to humans. Fortunately, people do not have to choose between inflicting pain and suffering on animals and establishing the safety of products.

For more information about animal testing and alternatives, please refer to our 2019 issue of the *AV Magazine*, "Chemical Testing on Animals: Driving Change" at https://issuu.com/aavs/docs/av-mag_2019_issue1.

S.B. 495 offers reasonable solutions to offer dogs, cats, and other animals utilized in research facilities protection from inhumane treatment. AAVS strongly supports this legislation and urges the Senate Education, Health, and the Environment Committee to give S.B. 495 a ***favorable report***.

Sincerely,

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