

Written Statement
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Subcommittee on Military Construction and Veterans Affairs
Appropriations Committee

In Support of FY 2027 Appropriations and Animal Models at the Department of Veterans Affairs

Chair Boozman, Ranking Member Ossoff, and members of the Subcommittee, on behalf of the Society for Neuroscience (SfN), I am honored to present this testimony in support of robust funding for the Department of Veterans Affairs (VA) Medical and Prosthetic Research Program at a level of \$1.2 billion in Fiscal Year (FY) 2027 and for the continued responsible and ethical use of animals in biomedical research at the VA. For researchers nationwide, the ability to make life-changing advancements in neuroscience depends on the availability of animal models.

One focus of my lab's research at the University of California, San Diego is the study of neurotransmitter switching, a newly recognized form of brain plasticity in which neurons change the transmitters, the biochemicals they produce and release in response to prolonged sensory, motor, or emotional activity to signal to other nerve cells. Our work examines the environmental and molecular cues that trigger neurotransmitter switching in both developing and adult brains and explores its role in memory, stress responses, and cognitive disorders from exposure to drugs of abuse. Understanding these processes offers new opportunities to promote healthy brain function and to develop therapeutic approaches for neuropsychiatric and neurodegenerative disorders. Continued progress in biomedical research like mine depends on robust and sustained federal investment.

The VA Medical and Prosthetic Research Program seeks to improve the health and well-being of veterans through basic, translational, clinical, health service, and rehabilitative research. Continued support for research at the VA is essential to preserve the VA's legacy of scientific excellence and will empower the VA to recruit and retain top scientific talent, fuel groundbreaking discoveries, and ensure veterans continue to benefit from cutting-edge treatments. With support from this committee, the VA can remain at the forefront of medical research, delivering breakthroughs that improve veterans' lives and strengthen the U.S. global leadership in research.

The Importance of the Use of Animals in VA-Funded Research

SfN is grateful to Congress for its support of the important mission of the VA Medical and Prosthetic Research Program, which includes a focus on improving the lives of veterans through basic, translational, and clinical research. Animal models are essential to advancing this research, as they remain the most effective tools available for developing lifesaving medicines and treatments in neuroscience. Their use is already subject to federal and state regulations, including requirements to minimize the number of animals used while still ensuring reliable scientific results. More than 99 percent of the animals studied in VA research are rats and mice because these are good models for answering many scientific questions. However, some questions that need to be answered cannot be addressed by studying rats or mice alone, thus scientific researchers require access to canines, felines, and non-human primates (NHPs) as well.

Large animal models share closer physiological, genetic, and metabolic similarities with humans, making them indispensable for studying complex diseases such as amyotrophic lateral sclerosis (ALS), Parkinson's Disease, and heart disease. For the United States to remain the world leader

in biomedical research and to maintain and grow opportunities across areas of science, Congress must continue to allow the use of animal models at the VA. If the U.S. does not maintain strong support for responsible animal research, it risks losing its leadership position to countries like China. Although nonanimal models or new approach methodologies (NAMs) like organ chips, 3D cell cultures, AI models, and others provide valuable insights into biological processes, they cannot replicate the complexity of a whole living system, like animals, and do not provide the same level of validation. Neuroscientists use a wide range of animal models that create discoveries – sometimes unexpected discoveries – expanding knowledge of biological processes. This level of discovery reveals new targets for research to treat all kinds of brain disorders affecting millions of people in the United States including veterans as seen in the below example of VA-funded research.

VA Researchers Develop Drug to Protect the Brain from Injury and Alzheimer's

VA-supported researchers have developed a new drug that protects the brain by preventing breakdown of the blood brain barrier—a key defense against cognitive decline caused by traumatic brain injury (TBI) and Alzheimer's disease. Building on more than a decade of research and preclinical studies, the drug preserved the integrity of the blood brain barrier, prevented neuroinflammation, and fully protected animals from cognitive impairment following TBI or Alzheimer's. Because TBI is a leading risk factor for dementia amongst veterans, this work offers a promising new path for prevention and treatment. This study exemplifies how sustained federal investment in VA research and the use of animal models drives innovation that directly benefits veterans and advances brain health for all Americans.

Congress Must Support Access to Models Necessary for Neuroscience Discovery

SfN urges the Committee to appropriate funding for biomedical research without restriction of the use of animal models. Adequate funding is necessary to advance our understanding of the brain; however, full realization of this funding's promise requires appropriate access to research models, such as canines, felines, non-human primates, rodents, and more. Animal research is highly regulated to ensure the ethical and responsible care and treatment of animals, and SfN and its members are committed to the highest legal and ethical standards.

While SfN embraces the goal of the reduction, refinement, and eventual replacement of animal models in biomedical research, much more research and time are needed before such a goal is attainable. Premature replacement of animal models may delay or prevent the discovery of treatments and cures—not only for neurological diseases like Alzheimer's disease, addiction, and traumatic brain injury, but also for communicable diseases and many other conditions. SfN supports the thoughtful incorporation of validated and appropriate NAMs in biomedical research, however, these tools must complement, not replace, proven animal models. A hybrid approach, combining NAMs with essential animal models, enables researchers to refine their studies, reduce the number of animals used, and enhance the efficiency of biomedical research.

There are currently no viable alternatives available for studying biomedical systems that advance our understanding of the brain and nervous system; or when seeking treatments for diseases and disorders like depression, addiction, neurodegenerative disorders, and post-traumatic stress disorders. SfN urges Congress to work with the VA to ensure this important and well-regulated research with animal models can continue to improve the lives of veterans across the country. Specifically, SfN calls for the Committee to remove or amend Section 246 of the FY 2026

MilConVA appropriations bill, which mandates the elimination of VA funded research involving dogs, cats, and NHPs, by September 30, 2026. SfN supports a science-driven approach that responsibly reduces animal use while protecting ongoing, veteran-focused research, ensuring that VA researchers maintain access to all validated tools necessary to advance care for America's veterans. Premature, mandated restrictions such as Section 246 risk undermining essential research and delaying medical advances critical to improving care for veterans.

Call for Stable Funding to the Research Enterprise

SfN joins the biomedical research community in supporting an increase in VA Medical and Prosthetic Research Program funding to \$1.2 billion in FY 2027. Equally as important as providing a reliable increase in funding for biomedical research is ensuring funding is approved in a timely manner. Government shutdowns and continuing resolutions have significant consequences on research, including restricting the VA's ability to fund new grants and delays in current grant funding. For some of our members, this means waiting for a final decision to be made on funding before knowing if their highly scored grant will be realized or if they will be operating a lab at a diminished capacity until appropriations are final. These consequences can be particularly devastating for trainees seeking to begin their careers. Reliable funding allows researchers to plan long-term studies, develop technologies, and engage in groundbreaking science without disruption.

Ensuring federal funding for biomedical research remains robust and reliable is essential to the future of research in the United States. SfN strongly supports the timely and efficient appropriation of funding for the VA Medical and Prosthetic Research Program to prevent delays in the approval of new research grants and to ensure continued access to animal models essential for this work. In our efforts to advance the care of our veterans through research, we need to maximize the availability of all tools to achieve this goal.