SOCIETY for NEUROSCIENCE

1121 14th Street NW
Suite 1010
Washington, DC 20005

Phone (202) 962-4000
Fax (202) 962-4941
Web SfN.org

April 2025

The Honorable Susan Collins
Chair
Senate Committee on Appropriations
Washington, DC 20510

The Honorable Patty Murray
Ranking Member
Senate Committee on Appropriations
Washington, DC 20510

Dear Chair Collins and Ranking Member Murray,

On behalf of the Society for Neuroscience (SfN), thank you for the opportunity to provide comments for your hearing, "Biomedical Research: Keeping America's Edge in Innovation." As the world's largest organization of scientists and physicians devoted to understanding the brain and central nervous system, SfN is committed to advancing biomedical research that drives innovation, improves public health, and maintains the United States' global leadership in scientific discovery. Our members work at the forefront of neuroscience, and we appreciate the Committee's attention to the critical role that sustained and robust federal investment plays in fostering groundbreaking research and training the next generation of scientists especially at agencies such as the National Institutes of Health (NIH), the National Science Foundation (NSF), and the Department of Veterans Affairs (VA). For researchers across the nation, the ability to make life-changing advancements in the field of neuroscience is contingent upon significant and sustained federal funding.

SfN believes strongly in the research continuum—a pipeline, in which basic science leads to clinical innovations, which leads to translational uses impacting the public's health, reducing long-term medical costs and generating new jobs across the country. Basic science is the foundation upon which all health advances are built. To cure diseases, we need to understand them through fundamental discovery-based research. SfN is grateful to Congress for its investments in biomedical research, but it is critical that funding is sustained to achieve the goals of these investments.

Federal funding for basic research is not only critical for facilitating groundbreaking discoveries; it is essential for building our scientific workforce. For the United States to remain the world leader in biomedical research, Congress must continue to provide funding to fuel discoveries as well as the economy. Neuroscientists use a wide range of experimental, animal, and human models not used elsewhere in the research pipeline. These opportunities 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 and beyond.

Biomedical research is also a key economic driver of science in the United States through funding universities and research organizations across the country and generates jobs in all states across the

nation. According to United for Medical Research, in FY24 NIH funding indirectly supported 407,782 jobs and produced $94.58 billion in new economic activity nationwide. Federal investments in scientific research fuel the nation's pharmaceutical, biotechnology, and medical device industries. Basic science generates the knowledge needed to uncover the mysteries behind human diseases, ultimately leading the private sector to develop new treatments and therapeutics. Importantly, industry rarely funds this early-stage research given the long-term path of basic science and pressure for shorter-term return on investments. Congressional investment in basic science is essential and irreplaceable for development of drugs, biologics, devices, and other treatments for brain-related diseases and disorders.

For example, the Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) Initiative is key program that has demonstrated NIH's success through its development of remarkable technologies for the entire research community enabling discoveries across neuroscience and related scientific disciplines, previously thought to be unimaginable. For more than a decade, research supported by the BRAIN Initiative has led to major breakthroughs – researchers have gained new knowledge of how the brain encodes, stores, and retrieves information and the first complete cell atlas of a whole mouse brain was developed. Basic research such as this is critically important to find cures and treatments for diseases and brain disorders. The BRAIN Initiative is lifting all boats ranging from basic science to disease-focused research in a complex neuroscience research ecosystem involving government, industry, philanthropy, and healthcare systems and is a critical piece of the biomedical research enterprise.

Additionally, to maintain the United States' global leadership in scientific discovery and fully realize the potential of our investment in biomedical research, the use of animal models including canines, felines, and non-human primates must not be further restricted or regulated. Animal research is already highly regulated to ensure the ethical and responsible care and treatment of the 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 is 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 countless other conditions. There are currently no viable alternatives available for studying biomedical systems that advance our understanding of the brain and nervous system or replicate the complexity of a whole living system like animals do. Thus, it is imperative that access to animal models remains unobstructed to continue seeking treatments for diseases and disorders like depression, addiction, epilepsy, neurodevelopmental disorders such as autism, neurodegenerative disorders, and post-traumatic stress disorders.

Lastly, continued cuts to discretionary spending would have a devastating impact on medical research and would hurt the country's ability to maintain its international competitiveness in this space. In addition, recent federal agency communication and funding freezes, workforce layoffs, agency restructuring, and the breakdown of regular order and processes have left neuroscientists deeply concerned about whether their vital work will continue and what the future of research in the United

States looks like. Uncertainties surrounding the research enterprise have led to canceled grants, institutions pausing the admission of new PhD students, and early career scientists considering leaving the field altogether. On top of this, efforts to cap NIH facilities and administration (F&A) grant costs to just 15% would inherently result in diminished research activity and fewer discoveries being made in the United States. F&A costs are an essential component of biomedical research, including construction and upkeep of laboratory facilities and equipment, IT, safety measures and security personnel, and other critical infrastructure and functions. If the NIH F&A reimbursement rate is capped at 15%, research institutions of all sizes would have to downsize their biomedical research programs; they would not have funds to cover the costs of laboratories and expenses currently paid by F&A reimbursement. Thousands of skilled workers would lose their jobs along with a larger number of jobs in their communities due to reduced economic activity, and tragically, some independent biomedical research institutes would be forced to close. Ensuring federal funding for biomedical research remains uninterrupted is essential to the future of research in the United States. All the positive benefits research provides in this country are negatively impacted by these real time considerations and destabilization efforts.

Thank you for your leadership and continued support of biomedical research and SfN looks forward to working with you to ensure the United States remains the global leader in biomedical research and discovery. Collaboration among Congress, federal research agencies, and the scientific community has created great benefits for not only the United States but also for people around the globe suffering from brain-related diseases and disorders. Please contact SfN's Director of Advocacy and Training, Adam Katz at akatz@sfn.org with any questions.

Sincerely,

Diane Lipscombe, PhD
Chair, SfN Government and Public Affairs Committee