Written Statement John H. Morrison, PhD, President, Society for Neuroscience Subcommittee on Commerce, Justice, Science and Related Agencies Appropriations Committee In Support of FY26 Appropriations for the National Science Foundation

Chair Rogers, Ranking Member Meng, and members of the Subcommittee, on behalf of the Society for Neuroscience (SfN), I am honored to present this testimony in support of robust appropriations for biomedical research at the National Science Foundation (NSF). SfN urges you to provide at least \$9.9 billion, an increase of approximately \$840 million, in base-level funding for NSF in FY26. For researchers nationwide, the ability to make life-changing advancements in neuroscience depends on significant and sustained federal funding.

One area of my lab's research at the University of California, Davis focuses on the neurobiology of aging and neurodegenerative disorders, particularly as they relate to cellular and synaptic organization of the cerebral cortex. My lab is developing a comprehensive model of synaptic health in the cerebral cortex and how molecular and structural deviations from this profile induced by age and Alzheimer's Disease impact cortical circuitry and cognitive performance. Continued progress depends on sustained federal funding at a level that at a minimum, keeps pace with inflation.

The Importance of the Research Continuum

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 must first understand them through fundamental discovery-based research.

SfN is grateful to Congress for its support of the important mission of the NSF, which includes a focus on promoting the progress of science and advancing the national health, prosperity, and welfare, through increased appropriations in recent years. NSF funding for basic research is not only critical for enabling groundbreaking discoveries; it is essential for building our scientific workforce. 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 fund the training pipeline of the scientific workforce. Young trainees today are the ones who will make the key discoveries of the future. The deeper our grasp of basic science, the more successful those focused on clinical and translational research will be. 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.

NSF basic research funding is also a key economic driver of science at universities and research organizations across the country and generates jobs in all states across the nation. Federal investments in scientific research fuel the nation's pharmaceutical, biotechnology and medical device industries. The private sector leverages NSF-funded scientific discoveries to improve health outcomes and sustain America's Research and Development (R&D) enterprise. 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 in the pipeline for development of drugs, devices, and other treatments for brain related diseases and disorders as seen in the below examples of NSF-funded research.

Understanding the Brain Project

Understanding the Brain Project (UtB) is an example of NSF's success by enabling scientific understanding of the full complexity of the brain through targeted, cross-disciplinary investments in research, technology, and workforce development. NSF's strategic investments in neural mechanisms and processes, brain function modeling, and neurotechnology will support research and infrastructure designed to transform our view of who we are and understanding the structure and function of the brain.

Researchers Develop New Framework for Studying Human Decision Making

Understanding the mechanisms driving human decision-making has been a long-standing goal of neuroscientists. NSF-funded researchers at the University of Texas El Paso have developed a new framework to study the human decision-making process. The new framework allows for testing in a natural, unrestricted environment which greatly augments the capacity to model challenges inherent to daily living. The NSF funding these researchers allowed them to develop this framework, and without sustained federal funding, scientists may still be relying on frameworks with limited transferability. Sustained federal funding for research is crucial to ensure that researchers can continue to make groundbreaking discoveries.

Call for Funding in Regular Order and Stabilization to the Research Enterprise

SfN joins the biomedical research community in supporting an increase in NSF funding to at least \$9.9 billion in FY26. This proposed increase is necessary to provide certainty to the field of science, allow for the exploration of new scientific inquiry, train the next generation of scientists, and foster increased economic growth and further improvements in the public's health. Further cuts to discretionary investments would have a devastating impact on NSF-funded research and would hurt the country's ability to maintain its international competitiveness in this space. Year-long continuing resolutions have significant consequences on research, including restricting NSF's ability to fund new grants and to fully fund continuation grants. 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 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.

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, capping NSF facilities and administration (F&A) grant costs to just 15% will 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. Capping the NSF F&A reimbursement rate to 15% will cause research institutions of all sizes 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. 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. SfN strongly supports the appropriation of NSF funding in a timely and efficient manner to avoid delays in approving new research grants or reductions in funding for already approved research projects.

SfN thanks the subcommittee for its continued bipartisan support of foundational research and looks forward to working with you to ensure the United States remains the global leader in neuroscience research and discovery. Collaboration among Congress, the NSF, and the scientific research community has created great benefits for not only the United States but also people around the globe suffering from brain-related diseases and disorders. On behalf of the Society for Neuroscience, we urge you to continue this critical cooperation and support of biomedical research.