

July XX, 2023

The Honorable Senator Tammy Baldwin
Chair
U.S. Senate Appropriations Committee
Subcommittee on Labor, Health and Human
Services, Education, and Related Agencies
Washington, D.C., 20510

The Honorable Senator Shelley Moore Capito
Ranking Member
U.S. Senate Appropriations Committee
Subcommittee on Labor, Health and Human
Services, Education, and Related Agencies
Washington, D.C., 20510

Dear Chair Baldwin and Ranking Member Capito,

On behalf of the 48 undersigned organizations representing biomedical professional societies, academic institutions, veterinary medicine groups, and pharmaceutical companies, we are writing to the Senate Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies (LHHS) to request increased federal support for scientific research with nonhuman primates (NHPs). A new National Academies for Sciences, Engineering, and Medicine (NASEM) report, “*Nonhuman Primate Model Systems: State of the Science and Future Needs*,” underscores the value of NHP research in understanding fundamental biology and diseases that affect humans and animals alike.¹ However, the current research environment is unstable and unsustainable, jeopardizing our national security and public health readiness.

NHP research is vital for biomedical progress, public health, and scientific competitiveness. The scientific community is committed to the 3Rs (Reduce, Refine, Replace) and uses NHPs only when necessary. NHPs make up just 0.5% of animals in biomedical research and are subject to strict regulations at the federal, state, and local levels. While nonanimal technologies such as organ chips and computer models show promise, these methods are only useful for specific applications and often require further study in an entire living species. Only NHPs accurately replicate complex biological processes and diseases such as Alzheimer’s, cancer, and autoimmune conditions.

As the U.S. enters a new era of strategic competition in an ever-changing global economy, it is crucial to address the various factors causing instability in the research environment. Challenges that are of key concern to the scientific community include growing supply shortages of NHPs amid increasing demand; a diminishing workforce; and fragmented resource allocation causing skyrocketing costs and prolonged wait times.

To address these challenges, long-term solutions are needed that require immediate funding and attention. Therefore, we offer the following three recommendations:

1. Allocate dedicated infrastructure funding for the National Institutes of Health (NIH) to expand domestic breeding centers;
2. Provide dedicated funding to support and expand the NHP research workforce;
3. Direct federal agencies to work together to establish a national plan for NHP resources

Additional context and details for each recommendation are included below, which draw upon the recent conclusions of the NASEM report. As this Committee considers potential next steps, we strongly encourage robust engagement with the biomedical research community to ensure open communication and evidence-based decision-making.

Recommendation 1: Allocate Dedicated Infrastructure Funding for NIH to Expand Domestic Breeding Centers

We recommend the House LHHS Appropriations Subcommittee include targeted infrastructure funding for NIH to prioritize the expansion of its NHP breeding programs. Currently, NIH supports domestic NHP breeding colonies and research through research project grants and research center grants. The latter provides

¹ National Academies of Sciences, Engineering, and Medicine. 2023. *Nonhuman Primate Models in Biomedical Research: State of the Science and Future Needs*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26857>.

funding for the National Primate Research Centers (NPRCs), a network of seven research centers across the U.S. that breed and care for primates while providing centralized expertise and resources for investigators to conduct innovative research. However, over the last decade, the absolute number of NHPs held in the U.S. decreased by 11 percent and funding for the NPRCs decreased by more than 23 percent due to inflation.^{2,3} The lack of funding and diminishing supply of animals—despite overwhelming demand—has resulted in missed opportunities for the U.S. to solidify its standing as the leader in science, medicine, and technology.

Expanding and/or establishing new NHP colonies requires a tremendous amount of space, time, and upfront costs. We believe dedicated NIH funding for infrastructure improvements will enable the agency to increase primate capacity and reduce our dependence on foreign animal imports without compromising existing research funding mechanisms. As noted in the NASEM report, continued reliance on imported NHPs is an unsustainable strategy that jeopardizes our ability to respond to future public health emergencies. China's halting of exports during the early stages of the COVID-19 pandemic identified several infrastructural gaps within the U.S. Despite this revelation, no federal action has been taken, and investigators are facing difficulties in navigating the delicate supply-demand dynamics.

Finally, to maximize the benefits of an expanded domestic breeding program, infrastructure funding must be consistently strong rather than a one-time investment. A reliable funding stream that is separate from existing research or center grants will ensure NIH and its partners have sufficient time to develop new facilities and maintain them with the capacity and resources necessary to meet research needs.

Recommendation 2: Provide Dedicated Funding to Support and Expand the NHP Research Workforce

Support for a diverse and skilled workforce is crucially interconnected with a robust biomedical research ecosystem. In addition to infrastructure funds, we urge the House LHHS Appropriations Subcommittee to provide equal funding for NIH to support the NHP research workforce and ensure research centers possess the expertise needed to maintain animal colonies. This includes veterinarians, animal care staff, veterinary nurses/technicians, behaviorists, and pathologists, among many others.

Over the last decade, academic centers such as the NPRCs have faced tremendous difficulty in recruiting and retaining experienced staff.⁴ The COVID-19 pandemic further intensified these challenges as staff turnover and burnout reached historic records, leaving research centers struggling to restore work productivity to pre-pandemic levels. Consistent, targeted appropriations for the NHP research workforce will enable NIH to provide increased support for early-career investigators (T- and K-grants) and veterinary training (R25) for personnel to pursue laboratory animal medicine careers. These grant opportunities are currently limited in number due to funding constraints but are particularly vital for preparing the next generation of scientists, veterinarians, behaviorists, and technicians that propel biomedical research forward.

Recommendation 3: Direct Federal Agencies to Work Together to Establish a National Plan for NHP Research Resources

The U.S. cannot afford to overlook the NHP supply and workforce shortages if we are to remain an international powerhouse of scientific innovation that is prepared to meet future public health threats. To achieve this, we recommend the House LHHS Appropriations Subcommittee direct federal agencies such as NIH, Centers for Disease Control and Prevention, and Food and Drug Administration to develop a national plan for NHP resources. While different agencies may have their own individual strategies to meet research requirements, this fragmented approach is unreliable and hinders the U.S. from being prepared for unforeseen and developing threats. Thus, a federally mandated national plan could serve as a systematic way for agencies

² See Figure 3-2 and Figure 3-4, National Academies of Sciences, Engineering, and Medicine. 2023. Nonhuman Primate Models in Biomedical Research: State of the Science and Future Needs. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26857>.

³ See pgs. 77-78 and Chapter 3: *State of Current NHP Research Infrastructure: Gaps and Needs.*, National Academies of Sciences, Engineering, and Medicine. 2023. Nonhuman Primate Models in Biomedical Research: State of the Science and Future Needs. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26857>.

⁴ National Institutes of Health Office of Research Infrastructure Programs. 2018. Nonhuman Primate Evaluation and Analysis, Part 1: Analysis of Future Demand and Supply. Bethesda, MD.

to ensure NHPs and associated resources (e.g., infrastructure, workforce, supplemental funding) are readily available for research centers and their investigators.

In the absence of a national plan, the U.S. struggles to effectively establish collaborations between researchers and evaluate stakeholder needs in a proactive manner. According to a 2022 survey conducted by the NASEM NHP Committee, 64 percent of investigators reported difficulties in obtaining NHPs for current awards, a 14 percent increase from 2018. The NPRCs also shared that 10 to 25 percent of investigator requests for primates were denied between 2018 and 2021 due to the primate shortage and lack of sufficient transportation options. Financially, the average price of purpose-bred NHPs has increased between 10 and 22 percent.⁵ As unknown scientific and medical challenges lay ahead of us and we continue to search for answers to devastating diseases, the demand for NHPs in biomedical research will inevitably increase. A national strategy will not only address short and long-term needs essential to advance scientific priorities but will also foster a culture of openness and cooperation in primate research. Such exchange of data and best practices between organizations ultimately leads to improvements in both human and animal health.

Conclusion

To remain leaders in science and technology and protect public health, the U.S. must have the NHP resources, infrastructure, and workforce to meet evolving demands. Robust and consistent Congressional funding for these three recommendations represents the first step in enabling funding agencies such as NIH to respond and coordinate resources effectively.

Sincerely,

Academy of Surgical Research
American Academy of Neurology (AAN)
American Association for Anatomy (AAA)
American Association of Immunologists (AAI)
American Association of Laboratory Animal Practitioners (ASLAP)
American Association of Veterinary Medical Colleges (AAVMC)
American College of Laboratory Animal Medicine (ACLAM)
American College of Neuropsychopharmacology
Americans for Medical Progress (AMP)
American Physiological Society (APS)
American Psychological Associations Services Inc.
American Society for Pharmacology and Experimental Therapeutics (ASPET)
American Society of Transplantation (AST)
American Society of Transplant Surgeons
American Veterinary Medical Association (AVMA)
Association for American Universities (AAU)
Association for Behavior Analysis International (ABAI) Executive Council
Association for Research in Vision and Ophthalmology (ARVO)
Association of American Medical Colleges (AAMC)
Association of Primate Veterinarians (APV)
Association of Public and Land-Grant Universities (APLU)
California National Primate Research Center (CNPRC)
Charles River Laboratories
Developmental Neurotoxicology Society (DNTS)
Emory National Primate Research Center

⁵ *Appendix E: Nonhuman Primate Investigator Survey Responses*. National Academies of Sciences, Engineering, and Medicine. 2023. *Nonhuman Primate Models in Biomedical Research: State of the Science and Future Needs*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26857>.

European Animal Research Association (EARA)
Federation of American Societies for Experimental Biology (FASEB)
Icahn School of Medicine at Mount Sinai
Labcorp Early Development
National Association for Biomedical Research (NABR)
New Jersey Association for Biomedical Research (NJABR)
New York University
Oregon Health & Science University (OHSU)
Oregon National Primate Research Center
Pennsylvania Society for Biomedical Research (PSBR)
Public Responsibility in Medicine and Research (PRIM&R)
Society for Experimental Biology and Medicine (SEBM)
Society for Neuroscience (SfN)
Southwest National Primate Research Center
Texas Biomedical Research Institute
Tufts University
Tulane National Primate Research Center
Understanding Animal Research
University of Pittsburgh
University of California, Davis
University of California, Los Angeles (UCLA)
Washington National Primate Research Center
Yale University