The ACADEMY for Radiology & Biomedical Imaging Research

Advancing Innovation in Imaging Science

Written Testimony for the Record

Renee L. Cruea, Academy for Radiology & Biomedical Imaging Research
202-347-5872; Email: lmarquis@acadrad.org

Subcommittee on Labor, Health and Human Services, Education and Related Agencies
House Appropriations Committee
In Support of FY2026 Appropriations for the National Institutes of Health

Chair Aderholt and members of the Subcommittee, I am Renee L. Cruea, Executive Director of the Academy for Radiology & Biomedical Imaging Research (Academy). It is my pleasure to submit this testimony on behalf of the Academy.

The Academy is comprised of more than 200 academic research departments, medical imaging societies, patient advocacy groups, and industry partners. It represents thousands of medical imaging researchers in all 50 states. We are the only advocacy organization representing the broad medical imaging research community by collectively advocating for robust and consistent federal research funding through education.[1] Thus, the Academy strongly supports at least $51.303 billion for the National Institutes of Health's base appropriation; $447 million for the National Institute of Biomedical Imaging and Bioengineering (NIBIB); and $1.5 billion for the Advanced Research Projects Agency for Health (ARPA-H).

The partnership between NIH and America's medical imaging scientists is a unique and highly productive relationship, leveraging our nation's research enterprise to develop pioneering innovative biomedical imaging technologies to transform our understanding of biological and disease processes for improving diagnostics, image-guided therapies, and human health. No other public, corporate, or charitable entity is willing or able to provide the broad and sustained funding for the cutting-edge basic research necessary to yield new innovations and technologies of the future.

As chronic health challenges persist and our understanding of medicine improves, the scope of scientific opportunity only continues to increase, yet NIH is able to support just a fraction of the promising proposals it receives from scientists nationwide. These challenges are compounded when the NIH budget remains flat and significant policy changes upend the research enterprise. As the Subcommittee has recognized, historically on a bipartisan basis, to remain a global leader in accelerating the development of innovative prevention strategies, advanced diagnostics, pioneering treatments, and life-changing cures, it is essential that Congress advance long-term, sustainable, robust increases in the NIH budget.

The Academy's support for at least $51.303 billion for the National Institutes of Health's base appropriation represents an increase of $3.222 billion over the Continuing Resolutions (CR) FY2025 funding level of $48.5 billion. Congress and the president enacted a CR to maintain funding for NIH and other agencies at essentially their FY 2024 funding levels through the end of the fiscal year. The CR represents the second year that NIH's funding level has lagged behind

[1] https://www.acadrad.org/about-the-academy/

inflation. To tackle the most persistent and complex health problems, and to restore trust in science and the value it brings to society, we need lawmakers to continue to ensure a funding allocation for the Labor-HHS Subcommittee that allows for the necessary investment in NIH to promote the health and well-being of all Americans.

The Academy also supports $447 million for the National Institute of Biomedical Imaging and Bioengineering (NIBIB). The NIBIB has sustained flat funding for the last four funding cycles, yet has been at the forefront of groundbreaking advancements, including the development of cutting-edge medical imaging technologies, wearable physiological monitors, artificial organs, and at-home diagnostic devices. These innovations have revolutionized healthcare, making diagnostics more accessible and improving patient outcomes. Also, although 24 of the 27 Institutes and Centers support imaging-based research on a broad spectrum of biomedical systems, they do not typically support funding for the development of these innovative and critical technological advances but rather research that uses already developed tools.

Finally, with the continued development of ARPA-H, the Academy supports maintaining a separate appropriation of $1.5 billion in FY2026 for this exciting and groundbreaking agency. The Academy is supportive of ARPA-H but believes its appropriations should be separate from NIH's advancement of basic science. ARPA-H fosters a distinct culture and business model focused on rapid, transformative biomedical breakthroughs. There is room for both approaches, and ARPA-H should supplement and not supplant NIH's budget and mission.

The Academy continues to be grateful to Congress for being bipartisan supporters of the NIH. For eight years, 2016-2023, Congress provided consistent, robust funding for the NIH. Now, the NIH is facing a crisis. Due to ongoing administration policies, grants are being cut and the NIH staff reductions in force are gutting the nation's ability to serve as the world leader in biomedical research. Moreover, universities are freezing hiring and admitting fewer graduate students. The Academy is quite concerned that the damage taking place at the NIH will take decades to recover from. It will hurt patients; slow progress on cures and treatments for disease; and rob communities of the economic investments that NIH funding brings to them. We need Congress to preserve and stand up for the NIH.

Facilities and Administrative Costs

Current administrative policies pose critical challenges to ongoing imaging research, particularly through reduced funding availability and heightened regulatory scrutiny, which could hinder innovation and slow the translation of promising research into clinical practice. Labs nationwide depend on institutional support for grant submission, management, and billing as well as facilities including lab space to perform this work. This allows scientific teams to focus on the science rather than administrative tasks, ensuring each person is performing according to their maximum abilities. Arbitrarily reducing Facilities & Administrative costs may appear to decrease 'administrative bloat' but in reality, it will slow progress of research and eliminate valuable and often blue-collar jobs. Workers such as electricians, janitors, HVAC specialists, animal care, and others are necessary to maintain lab space and research resources. These essential personnel are paid through F&A.

Imaging Advancements and Innovations Help Patients

Diagnostics and imaging technologies that NIH funded has led to great strides in improving human health, provided for earlier diagnosis of disease, and the continued development of medical technologies that are low-cost, effective, and accessible to everyone. Here are just a few research areas that exemplify the design, development, and dissemination of innovative technologies that seek to improve human health.

Procedure Offers Rapid, Non-Invasive Test for Liver Fibrosis[2]

Chronic liver diseases such as hepatitis, liver cirrhosis, and hepatocellular carcinoma are a major cause of morbidity and mortality worldwide. Fibrosis, the thickening and scarring of connective tissue, plays a major role in these liver diseases but detection of fibrosis is limited to biopsy, which suffers from limitations. To provide better diagnosis and treatment of chronic liver diseases, researchers, funded by NIBIB, are working to use non-invasive magnetic resonance imaging (MRI) to detect and quantify liver fibrosis throughout the entire organ, which would enable earlier detection and the ability to monitor disease progression as well as the effects of treatment over time. A research team led by Moungi G. Bawendi, Ph.D., at the Massachusetts Institute of Technology and Peter Caravan, Ph.D., at the Massachusetts General Hospital has developed a nanoparticle-based contrast agent with the properties necessary to successfully use MRI for targeted diagnosis of liver fibrosis. “This work addresses an unmet clinical need for a non-invasive diagnostic to detect fibrosis that develops in a number of liver disorders,” explained Guoying Liu, Ph.D., director of the program in magnetic resonance imaging at the NIBIB.

Creating Brain Temperature Methods

Candace Fleischer, PhD (Emory University) has an NIH NIBIB R21 Trailblazer grant to develop brain temperature methods for monitoring cooling therapy and used this to identify the first evidence for a 'resting state' for human brain temperature. The biggest challenge faced, specific to radiology and imaging, is the enormous support we receive from indirect costs to support medical imaging instrumentation, such as MRI scanners, for research and development using core facilities, as well as the support we receive from our institutions, GA CTSA, and other cores, to support clinical trials and find cures. MRI is a key part of studies that span improved outcomes for patients after stroke and cerebrovascular disease, monitoring traumatic brain injury, improving outcomes after brain cancer diagnoses, identifying a cure for HIV, and determining what is needed to maintain brain health (and determining what 'brain health' even is). Related to advances in imaging, much of the recent work has utilized Emory’s 7T scanner, which is facilitating a non-invasive window into the human brain at resolutions not previously possible. The PET/MR, which Emory received through an NIH-funded S10 grant for equipment has been critical to additional recent studies. As patients at Emory come from around the state of Georgia and across many states in the country, this research (and the clinical instrumentation) supports the entire state's healthcare infrastructure, not just the city of Atlanta.

Industry Partnership

The most impactful innovations in medical imaging over the past several decades—including the most advanced technologies in MRI, CT, and PET—were developed in the United States, made possible in part by NIH-funded academic-industry partnerships. These grants enable companies and academics to pursue high-risk, high-reward research that would not otherwise be feasible, accelerating innovation and patient impact. We are now at a critical inflection point as generative

[2] https://www.nibib.nih.gov/news-events/newsroom/targeted-mri-detects-chronic-liver-disease

AI transforms what is possible in imaging. Continued NIH support is essential to ensure that the next generation of imaging technologies is developed in the U.S., for the benefit of U.S. patients. NIH funding not only drives scientific discovery but safeguards the future of medical care for millions.

Training the Next Generation

NIH funding is also essential to training the next generation of scientists. The field of imaging is constantly evolving, so training the next generation of researchers is crucial for advancing scientific knowledge, developing innovative technologies, and improving healthcare through better diagnosis and treatment of disease. NIH's flagship training programs, the Ruth L . Kirschstein institutional training grants and individual fellowships (National Research Service Awards, or NRSAs), offer training both at the predoctoral and postdoctoral levels and are excellent training experiences. For instance, NIBIB's NRSA training programs support team-based training between basic and clinical researchers from the undergraduate to postgraduate levels, producing a new cadre of interdisciplinary researchers at the interface between engineering and the biological, computational, and physical sciences. NIBIB currently funds approximately 50 institutional training programs across the country.

Summary and Conclusion

Sustained and robust NIH funding is critical to advancing our efforts to understand and treat a myriad of diseases and disorders. NIH has received longstanding, bipartisan support that led to dependable budgets that fund lifesaving research. NIH research reaches every state in the country, with both health and economic benefits. In FY2024, NIH funds generated $2.56 in economic activity for every $1 of funded research.[3] Funding NIH's base with at least $51.303 billion will provide the robust support needed to sustain growth and secure advancements in biomedical research. Additionally, keeping NIH funding separate from the exciting efforts underway at ARPA-H will ensure we can take advantage of multiple pathways to achieve success.

While there are many priorities facing our country today, we cannot continue the trend of defunding or delaying grants, putting roadblocks for promising young scientists, and gutting the structure of the NIH as it will only delay the discovery of new cures, treatments, and diagnostic technologies that benefit all Americans. I urge you to continue this Committee's longstanding and substantive support for NIH. Thank you for your strong, continued support of NIH, NIBIB, and all the Institutes and Centers working to advance our biomedical research efforts and to improve the lives of patients worldwide.

[3] https://www.unitedformedicalresearch.org/annual-economic-report/