**Written Testimony for the Record**

**Carolyn Meltzer MD, Chair of the Board of Directors,**

**Radiological Society of North America (RSNA)**

**Subcommittee on Labor, Health and Human Services, Education,**

**and Related Agencies Senate Appropriations Committee**

***Agency: National Institutes of Health (NIH)***

The Radiological Society of North America (RSNA) is a non-profit organization representing over 53,000 medical imaging professionals in more than 150 countries around the world. Our mission is to promote excellence in patient care and healthcare delivery through education, research, and technological innovation. RSNA appreciates the opportunity to submit testimony to the Senate Appropriations Committee in strong support of robust and sustained federal funding for medical research. **We strongly support at least $51.3 billion for the National Institutes of Health (NIH) for fiscal year (FY) 2027, which would represent a $4.087 billion, or 8.7%, increase over the final FY 2026 funding level.** RSNA sincerely appreciates Congress's efforts to support biomedical research funding in the FY 2026 appropriations cycle and urges the continuation of this commitment in FY 2027.

Robust federal support for medical research improves health for all Americans. Investments in medical imaging research—largely funded through the NIH, the National Institute of Biomedical Imaging and Bioengineering (NIBIB), and other federal agencies—have advanced early disease detection, enabled precision medicine, and transformed patient care. NIH-supported research underpins nearly every diagnostic test, intervention, treatment, and cure in use in medical practice today. Continued federal investment is essential to sustaining United States leadership in medical innovation and ensuring that all Americans benefit from timely, accurate, and effective healthcare. Sustained and robust NIH funding is critical to advancing our efforts to characterize and treat a range of diseases and disorders—every American knows someone, or is themselves personally impacted, by one of the conditions under careful study by the NIH.

For patients, powerful advances in medical imaging are enabling earlier diagnosis, increased personalized treatment, and better outcomes over the complete course of care. Many of the most significant advancements in imaging technology— and the corresponding improvements in disease detection and treatment —have been directly supported by federally funded research, including:

- **MRI and CT technology advancements**: NIH supported research has improved the resolution, speed, and accuracy of magnetic resonance imaging (MRI) and computed tomography (CT), helping clinicians identify cardiovascular disease, stroke, and cancer earlier and with greater precision. For patients, these advances can mean faster answers, earlier intervention, and better-informed treatment decisions at critical moments in care.
- **Molecular and functional imaging**: NIH supported advances in positron emission tomography (PET) are making it possible to detect conditions such as Alzheimer's disease, Parkinson's disease, and cancer at earlier stages. For patients and families, earlier diagnosis can provide a clearer path to treatment, more time for care planning, and a better opportunity to manage disease before it progresses.
- **Ultrasound and non-invasive imaging**: NIH funding has accelerated the development of portable, non-invasive ultrasound technology, allowing clinicians to deliver safe, cost-effective imaging closer to where patients live. In underserved regions and communities, these tools can reduce barriers to diagnosis, expand access to timely care, and help patients receive needed evaluation without the burden of traveling long distances.
- **Image-guided interventions:** NIH funding has helped expand the use of image-guided, minimally invasive procedures that improve precision in diagnosis and treatment while reducing the need for more invasive care. For patients and the healthcare system alike, these advances can mean fewer complications, shorter hospital stays, and more efficient delivery of high-quality care.

Artificial Intelligence (AI) is also transforming medical imaging and will dramatically improve diagnostic accuracy, enhance clinical efficiency, and optimize patient health outcomes. Radiology is among the most data-intensive fields in medicine and has experienced the highest level of AI tool development and deployment. Of the over 1,000 AI algorithms cleared by the Food and Drug Administration (FDA), more than 76 percent are designed for radiological applications. These tools strengthen physicians' ability to care for patients by enhancing disease detection, reducing diagnostic errors, improving throughput, and supporting treatment planning.

NIH supported research has been critical to the development, validation, and safe integration of AI into clinical workflows. Within the NIH Common Fund, the Bridge2AI and PRIMED-AI programs are critical investments in the data resources and infrastructure needed to accelerate AI-enabled research that addresses key health challenges. These efforts are also helping drive the development of AI-powered clinical decision support tools that can advance personalized medicine.

RSNA plays a central role in advancing AI research through its peer reviewed journals, including *Radiology: Artificial Intelligence*, which has become a trusted source of high-quality research for clinicians, researchers, and developers. For example, research published by RSNA in *Radiology: Artificial Intelligence* demonstrates how deep learning helps radiologists predict how individual patients will respond to breast cancer treatments, enabling more personalized and effective care.[1]

Beyond publishing high-quality AI research, RSNA has also played a leadership role in advancing the infrastructure needed to support health AI innovation through its convening of the Medical Imaging and Data Resource Center (MIDRC) project. A collaborative effort between RSNA, the America College of Radiology (ACR), and the American Association of Physicists in Medicine (AAPM), the MIDRC project has delivered significant value by creating a nationally coordinated, high-quality imaging data infrastructure that supports rapid, rigorous research and innovation. Federal investment in MIDRC enables secure sharing of largescale, standardized medical imaging datasets linked with clinical data—resources that individual institutions could not build alone. This investment has accelerated the development and evaluation of AI tools, strengthened collaborative research across academia, industry, and government, and improved preparedness for future public health threats. More broadly, MIDRC demonstrates how targeted federal support can translate collective data assets into lasting research capacity, advancing both medical imaging science and the broader biomedical innovation ecosystem.

Federally funded research through NIH, NIBIB, and the National Science Foundation (NSF) has been instrumental in the development of AI applications, such as:

- **AI in Emergency and Rural Settings** – AI-powered imaging tools can provide real-time triage in emergency departments and expand access to high-quality diagnostics in underserved rural communities, helping to address healthcare disparities.
- **AI-Assisted Disease Detection** – AI algorithms can identify subtle signs of cancer, stroke, and neurological disorders in medical images with accuracy comparable to human radiologists, often detecting abnormalities at earlier stages when treatment is most effective.
- **Predictive Analytics and Precision Medicine** – AI models trained on large imaging datasets can help predict disease progression, treatment response, and patient outcomes, enabling more personalized and targeted therapies designed for the individual undergoing treatment.

[1] Zhou L-Q, Kuai Z-X, et al. Radiopathomic graph deep learning for multiscale spatial–contextual modeling of intratumoral heterogeneity to predict breast cancer response to neoadjuvant therapy.

- **Workflow Optimization and Efficiency** – AI-driven automation reduces administrative burdens and image interpretation times, allowing radiologists to focus more on complex cases and patient care.

While AI holds immense promise, realizing its benefits in medical imaging will require sustained federal investment to address critical challenges, including ensuring AI safety, accuracy, and reliability; appropriate integration of AI tools into clinical decision-making; advancing AI regulatory science and oversight; expanding AI infrastructure and the AI-driven healthcare workforce; and ensuring AI is deployed in medicine fairly.

Beyond the direct benefits to patient care, medical imaging research is also an important driver of economic growth and technological innovation. According to United for Medical Research, in FY 2025 NIH research funding supported 390,863 jobs and produced $94.15 billion in economic activity nationwide, or $2.57 in economic activity for every $1 of research funding supported by the agency.[2] NIH-funded medical research supports economic activity and jobs directly and indirectly through companies that provide the tools, equipment, and technologies needed to conduct cutting-edge research, and it produces spin-out and startup companies that attract private capital and other innovative intensive businesses.

RSNA thanks the Senate Appropriations Committee for your commitment to advancing medical research. NIH has received longstanding bipartisan support that has directly contributed to the agency's ability to support this lifesaving research. Continued support of the NIH through sustained and robust funding is essential to drive the next generation of imaging breakthroughs, support economic growth, and maintain U.S. leadership in biomedical innovation. RSNA joins the Ad Hoc Group for Medical Research in recommending at least $51.3 billion for the NIH base appropriation for fiscal year (FY) 2027.

[2] United for Medical Research, 2026 Annual Economic Report: NIH's Role in Sustaining the U.S. Economy; https://www.unitedformedicalresearch.org/annual-economic-report-toolkit/