

RSNA Fosters AI Research, Education

The Radiological Society of North America (RSNA) is a trusted source for peer-reviewed research, high-quality education, grant funding, and other valuable opportunities and resources for the practical and ethical application of artificial intelligence (AI) in medical imaging.

The [RSNA Imaging AI Certificate Program](#)—the first-ever radiology-specific AI certificate program—blends a case-based curriculum with practical application and delivers a pathway for all radiologists to understand how to leverage AI for their practices and careers.

RSNA's peer-reviewed [journals](#) publish the latest advances in radiology, including numerous articles exploring the use of AI to aid in patient care and clinical workflow management, as well as informative perspectives from thought leaders in the field. [Radiology: Artificial Intelligence](#) is dedicated to highlighting emerging AI medical imaging research across multiple disciplines.

RSNA's [AI Challenges](#) spur the creation of AI tools for radiology to improve patient care.

The [RSNA Research & Education Foundation](#) provides millions of dollars in funding for innovative radiology research and education across a broad spectrum of topics, including AI.

RSNA's AI [Community](#) allows imaging professionals and AI researchers to connect and discuss AI advances and challenges, while RSNA's comprehensive [education](#) program offers live and online AI learning opportunities throughout the year.

RSNA 2023 AI HIGHLIGHTS

RSNA 2023 has an abundance of papers, posters, courses and education exhibits spotlighting AI and machine learning applications.

Imaging AI in Practice Demonstration

The Imaging AI in Practice (IAIP) demonstration is an interoperability demonstration that takes place during the RSNA annual meeting to showcase new technologies and communication standards needed to integrate artificial intelligence (AI) into the diagnostic radiology workflow. The demonstration uses real-world clinical scenarios and interoperability standards to demonstrate new tools and practice enhancements enabled by AI. It includes many steps in the radiology workflow where AI can assist the radiologist and improve the efficiency and quality of care.

The diagrams linked here give a visual overview of the flow of information among systems in a radiology practice with AI tools integrated:

- [Imaging AI Workflow](#)
- [Post-Imaging AI Workflow](#)

RSNA AI Challenge Recognition Event

A recognition event will be held in the AI Theater at RSNA 2023 for the winners of the 2023 [RSNA Abdominal Trauma Detection AI Challenge](#). The challenge invited participants to develop machine learning

models that match radiologists' performance in detecting, locating and classifying the severity of traumatic abdominal injuries.

To create the ground truth dataset, the challenge planning task force collected imaging data sourced from 23 sites in 14 countries on six continents, including more than 4,000 CT exams with various abdominal injuries and a roughly equal number of cases without injury.

The winners of the [RSNA Screening Mammography Breast Cancer Detection AI Challenge](#), held earlier this year, will also be recognized. That challenge invited participants to develop AI models that can aid in the detection of breast cancer and attracted 2,146 competitors forming 1,687 teams.

AI Showcase

The [AI Showcase](#) is the center of all the latest imaging AI technology at RSNA 2023. Connect with industry leaders and visit more than 100 exhibitor booths to see new products and technical solutions in action. Located within the showcase is the [AI Theater](#), where attendees can view daily industry presentations from companies highlighting the innovations fueling the future of AI, and the [RSNAI Resource Center](#), which will provide attendees with the opportunity to learn and ask questions about a wide variety of RSNA-led or co-sponsored medical imaging AI initiatives.