RSNA Press Release

AAPM, ACR, RSNA, and SIIM Announce Joint Effort to Develop Innovative AI Educational Framework for Radiology

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October 1, 2025, Leesburg, VA - In a groundbreaking collaboration led by the SIIM Machine Learning Education Subcommittee, the American Association of Physicists in Medicine (AAPM), Radiological Society of North America (RSNA), and Society for Imaging Informatics in Medicine (SIIM) are proud to announce the simultaneous co-publication of **"Teaching AI for Radiology Applications: A Multisociety-Recommended Syllabus from the AAPM, ACR, RSNA, and SIIM"**in these three flagship journals: *Medical Physics, Radiology: Artificial Intelligence,* and the *Journal of Imaging Informatics in Medicine (JIIM).*

Developed through a unique alliance between AAPM, the American College of Radiology (ACR), RSNA, and SIIM, this syllabus represents a major step forward in defining essential AI literacy across the radiology ecosystem. Nearly 30 experts from the four societies collaborated on the project led by the SIIM Machine Learning Education Subcommittee and Dr. Neil Tenenholtz, who is also a Senior Scientist in the ACR Data Science Institute.

A Framework for the Future of Imaging AI Education

As artificial intelligence rapidly transforms medical imaging, the need for well-structured, multidisciplinary education has become increasingly urgent. This syllabus provides a society-endorsed framework that outlines critical competencies for four key stakeholder groups:

- Users – who apply AI in clinical workflows
- Purchasers – who evaluate and acquire AI technologies
- Clinical Collaborators – who guide development with domain expertise
- Developers – who build algorithms for real-world deployment

Designed as a **syllabus - not a curriculum**, this flexible structure allows educators and institutions to adapt content to specific learning environments while ensuring consistent, high-quality instruction on AI fundamentals, clinical integration, regulatory issues, and ethical considerations.

*"The Syllabus is a crucial checklist for users, purchasers, clinicians, and developers of AI,"**said Maryellen Giger, PhD, FAAPM, FAIMBE, FSPIE, FIEEE, MNAE, Principal Investigator in the MIDRC initiative on behalf of the AAPM**. "It will expand as the field of AI in Radiology evolves."*

*"We must educate and equip radiology professionals to help them harness AI tools that will serve an increasing role in helping radiologists and their teams provide better, more efficient patient care," **said Christoph Wald, MD, PhD, FACR, vice chair of the American College of Radiology Board of Chancellors and chair of the ACR Commission on Informatics**. "By segmenting competencies according to common institutional roles—from clinical users to purchasers to developers—this practical AI syllabus can help all radiology practices effectively upskill their workforce for safe, effective AI implementation."*

*"In a new field like AI, it's often difficult to know where to start in identifying what you need to learn," **said John Mongan, MD, PhD, Chair of the RSNA AI Committee**. "This syllabus addresses that need by providing an expert consensus role-specific roadmap to what people working with AI should know. Use of the syllabus will help to eliminate gaps in knowledge and skills, increasing the safety and effectiveness of AI in radiology."*

*"It has been a privilege to contribute to a project that brought together leaders from across the radiology, informatics, and physics communities to define what AI literacy should look like for our field," **said Felipe Kitamura, MD, PhD, MS, Chair, SIIM Machine Learning Committee**. "Beyond the syllabus itself, this effort represents a rare consensus across disciplines and societies, providing a shared foundation that we believe could help make imaging AI safer, fairer, and genuinely useful for patients", he added.*

Empowering the Radiology Community

This joint publication highlights a unified commitment by leading societies to ensure the radiology community is well-equipped to safely and effectively navigate the AI landscape. By fostering a shared understanding of roles and responsibilities, the syllabus is expected to serve as a foundation for academic programs, residency training, continuing education, and institutional deployment strategies.

Access the Publication

The full syllabus is available now in the following journals:

- *Medical Physics* (AAPM) – https://doi.org/10.1002/mp.17779
- *Radiology: Artificial Intelligence* (RSNA) – https://doi.org/10.1148/ryai.250137
- *Journal of Imaging Informatics in Medicine (JIIM)* – https://doi.org/10.1007/s10278-025-01485-8

About the Participating Societies

American Association of Physicists in Medicine (AAPM) AAPM is the premier organization in medical physics, a scientific and professional discipline that uses physics principles to address a wide range of biological and medical needs. The mission of AAPM is to advance medicine through excellence in the science, education, and professional practice of medical physics. Currently, AAPM represents over 10,000 medical physicists in over 96 countries.

American College of Radiology (ACR)

The American College of Radiology (ACR), founded in 1924, is a 42,000-member medical association that advances the practice and science of radiological care through advocacy, quality standards, research and education. www.acr.org.

About the ACR Data Science Institute (DSI)

The ACR Data Science Institute® (DSI) was established in 2017 to empower the advancement, validation, and implementation of artificial intelligence (AI) in medical imaging for the benefit of patients, society, and the radiological professions. The DSI collaborates with radiology subspecialty societies, industry, and governmental regulatory agencies on developing, evaluating, validating, and monitoring AI algorithms. Visit us at https://www.acrdsi.org/.

Radiological Society of North America (RSNA)

RSNA is an association of radiologists, radiation oncologists, medical physicists and related scientists promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Illinois. (RSNA.org)

Society for Imaging Informatics in Medicine (SIIM)

SIIM is the leading healthcare professional organization for those interested in the current and future use of informatics in medical imaging. The Society's mission is to advance medical imaging informatics across the Enterprise through education, research, and innovation in a multi-disciplinary community. SIIM brings together clinicians, researchers, engineers, developers, imaging IT professionals, and industry partners, spanning all image-producing specialties, including radiology, pathology, cardiology, dermatology, ophthalmology, etc.

For media inquiries or to arrange interviews with the authors or society leaders, please contact:

AAPM: Glen Hawkins, Manager, Communications | media.contact@aapm.org | 571.298.1354

ACR: Shawn Farley, MA, FSBI, Director of Public Affairs | sfarley@acr.org or PR@acr.org | 703.869.0292

RSNA: Linda Brooks, Senior Manager, Media Relations | lbrooks@rsna.org | 630.590.7762

SIIM: Allegra Tasaki, Director of Marketing & Communications | atasaki@siim.org | 301.332.9777