

ACER Connection

THE OFFICIAL E-NEWSLETTER OF THE ALLIANCE OF CLINICIAN EDUCATORS IN RADIOLOGY

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ACER Mission and Goals:

- Providing a formal organization and forum for clinician-educators to meet, exchange ideas, and learn new skills that promote and advance the careers of clinician educators.
- Providing programming at the annual AAR meeting targeted toward the needs of clinician educators.
- Developing and maintaining an information and networking database for the benefit, awareness, and nurturing clinician educators.
- Promoting and developing educational research activities relevant to clinician educators

ACER

Publications Committee:
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During Daytime*, Kelly, Pexels.com

AAR 74th Annual Meeting - ACER Agenda

Wednesday, March 18, 2026

8:00 AM - 9:15 AM East Coast USA Time

AMSER Lucy Squire and ACER-APDR Keynote Lecture: Bridging Generations in Radiology: Embracing Diversity for a Stronger Future

Location: Hilton Atlanta, Salon

Moderator: Mahan Mathur, M.D. – Yale-New Haven Health

Speaker: Arun Krishnaraj

Panelist: Marta E. Heilbrun, MD

Panelist: Juliana Bueno, MD – UVA Health

Panelist: Kristen Reeder, MD – University of Virginia

Panelist: Eric J. Fromke, MD – University of Virginia

11:15 AM - 12:15 PM East Coast USA Time

ACER: Bridging the Generational Gap in Radiology Education

Moderator: Reni Butler, MD – Yale School of Medicine

Moderator: Melissa Davis, MD, MBA – Yale University

3:00 PM - 4:00 PM East Coast USA Time

ACER: Wellness and Professionalism: Generational Expectations

Moderator: Mahan Mathur, M.D. – Yale New Haven Health

Moderator: Jamal Bokhari, MA, FASER – Yale University/Yale New Haven Hospital

Moderator: Monica Sheth, MD – NYU Langone Health

6:15 PM - 7:15 PM East Coast USA Time

AMSER/ACER Reception

Location: Hilton Atlanta, 214

AAR 74th Annual Meeting - ACER Agenda

Thursday, March 19, 2026

9:30 AM - 10:30 AM East Coast USA Time

ACER: Teaching the “Unlearnable” - Non-Interpretive Skills Across Generations

Moderator: Jamal Bokhari, MA, FASER – Yale University/Yale New Haven Hospital
Moderator: Tara Catanzano, MD – Stony Brook Medicine
Moderator: Mahan Mathur, M.D. – Yale-New Haven Health

9:30 AM - 9:40 AM East Coast USA Time

Generational Divide or Generational Bridge: Attending Perspective

Speaker: Melissa Davis, MD, MBA – Yale University

9:40 AM - 9:50 AM East Coast USA Time

Teaching QA and QI Generational Divide or Generational Bridge: Trainee Perspective

Speaker: Muhammad Zaid Qureshi

9:50 AM - 10:00 AM East Coast USA Time

Time Management

Speaker: Priscilla J. Slanetz, MD, MPH, FACR, FSBI, FAAWR, FAAR – Dartmouth Hitchcock Medical Center

10:00 AM - 10:10 AM East Coast USA Time

Public Speaking

Speaker: Jessica Robbins, MD – University of Wisconsin-Madison

10:10 AM - 10:20 AM East Coast USA Time

Developing Advocacy Skills

Speaker: Jocelyn Chertoff, MD, MS, MHCDS – Geisel School of Medicine at Dartmouth

10:20 AM - 10:30 AM East Coast USA Time

ACER: Teaching the “Unlearnable” - Non-Interpretive Skills Across Generations Q&A

AAR 74th Annual Meeting - ACER Agenda

Thursday, March 19, 2026 (continued)

1:15 PM - 2:15 PM East Coast USA Time

ACER/AMSER: Teaching the Learners the Unwritten Professionalism Expectations

Moderator: Christopher Straus, MD – University of Chicago

1:15 PM - 1:30 PM East Coast USA Time

Professionalism Needs

Speaker: Carl Flink

1:30 PM - 1:45 PM East Coast USA Time

Professionalism Challenges

Speaker: Tara Catanzano, MD – Stony Brook Medicine

1:45 PM - 2:00 PM East Coast USA Time

Professionalism Solutions

Speaker: Ann Jay

2:00 PM - 2:15 PM East Coast USA Time

Professionalism Dissemination and Adoption

Speaker: Christopher Straus, MD – University of Chicago

ACER - Committee Updates

Rules Committee:

Chair: George (Chip) J. Watts V, MD
Vice Chair of Education
Director, Radiology Residency Program
UMass Chan Medical School



At the ACER Business Meeting on March 12, 2025, during the 2025 AAR Annual Meeting in Los Angeles, California, two formal rules amendments were proposed and approved:

1. Publication Committee Description
 - a. ARTICLE VII, SECTION 1, Paragraph I
 - i. To be added to the end of the section: “The publication committee shall promote and encourage peer review articles in Academic Radiology.”
2. Language regarding “Junior Member” section
 - a. ARTICLE III, SECTION I, Paragraph D
 - b. The section title shall be: “Member-in-training (Junior Member)”
 - c. “Member-in-training” shall subsequently replace “junior member” for the remainder of that section

Awards Committee:

Chair: Mitva Patel MD
Vice Chair of Faculty Affairs
Breast Imaging Fellowship Director
The Ohio State University Wexner Medical Center



The AAR ACER Awards Committee reviews and votes on AAR ACER awards: The ACER Emerging Educator Award and the ACER Achievement Award. These awards recognize excellence and impact in radiology education across career stages- it is always so inspiring to review the meaningful work being done by our colleagues!

For those considering applying for an AAR award, or other professional society awards, a strong submission often comes down to preparation and alignment. Here are five practical tips to help strengthen any award application:

Top 5 Tips for a Strong Award Application

1. Pay attention to the criteria- Carefully review eligibility requirements and selection criteria and make sure you meet those criteria.
2. Plan ahead - Give yourself time to put together submission materials, especially if letters of recommendation are needed.
3. Highlight impact areas - Focus on your most meaningful contributions and clearly articulate why they matter.
4. Choose letter writers thoughtfully - Select individuals who know your work well and can speak to it.
5. Align your narrative with the award’s mission - Clearly explain how your contributions align with the intent of the award.

Academic Radiology

A Journal in Evolution

An update from Editor-in-Chief Dr. Priscilla Slanetz

*A*s the journal of the Association of Academic Radiology and its affinity groups and affiliated societies, *Academic Radiology* has now entered its next era. With the recent appointment of new editorial leadership, many changes have taken place and with change comes opportunity for more members to get involved.

First and foremost, the journal's scope has broadened, and the journal is actively seeking manuscripts that capture the breadth and depth academic radiology –

Journal scope: Academic Radiology publishes articles related to all aspects of academic radiology including medical education, health services research, quality improvement, practice administration, leadership, population health, health system redesign, and emerging research related to advances in diagnostic imaging and interventional techniques.

Second, although the journal emphasizes hypothesis-driven original research investigations, there are many other manuscript types, including brief reports on innovations related to all aspects of academic radiology, systematic reviews and meta-analyses, white papers, perspectives, and a variety of invited columns related to general practice dilemmas, arts and humanities, and medicolegal topics. The journal also welcomes ideas for focus issues – a an issue comprised of typically 12-15 manuscripts all focused on a single theme. In addition to contributing to a focus issue, opportunities to serve as a co-editor remain. At present, a focus issue on the annual meeting theme is currently underway.

Third, as the journal receives nearly 5000 submissions annually, there are opportunities for members to register as a peer reviewer or to join the Editorial Board as an Associate Editor or Deputy Editor. If you are already registered as a peer reviewer, please stop by the journal booth in the vendor area so that you can update your classifications. And if you are not registered, there will be a QR code to scan which will allow you to join the ranks of our many volunteers. And don't worry if you have not ever done peer review – the journal is planning on starting a hybrid training program in the fall and through this program, you will have an experienced mentor to guide you through your first assignments. In terms of other opportunities, Associate Editors support the Deputy Editors by reviewing 1-2 papers monthly and providing informal insight through the managerial system when asked. Deputy Editors are responsible for triaging papers – assessing them to determine whether a paper merits external review, and if so, selecting appropriate peer reviewers. Once such reviews return, the Deputy Editor also issues a preliminary decision that is reviewed by the Editor-in-Chief prior to a final decision being made. Another option would be to join the growing digital media team. The journal is in the process of expanding its presence on social media and other digital venues and welcomes expertise in this area as well.

Finally, although there is a lot of change, always remember that *Academic Radiology* belongs to you! The journal can only thrive when its members engage and support it. I look forward to many of you joining the team as together I know we will go far. Please email me at slanetzp@verizon.net or our editorial manager, Katie Costello at katie.costello@kwglobal.com if you are interested in getting more involved.

Warm regards,

Priscilla J. Slanetz MD MPH FAAR

Editor-in-Chief, Academic Radiology



Publications Committee Newsletter Updates

My name is Joe Fotos and I am the new Chair of the Publications Committee with ACER. I have been a member of this committee for many years and have always enjoyed not only working on articles for the newsletter, but also reading the excellent work that this committee puts together every year.



I would also like to acknowledge the excellent work by Dr. Biren Shah as the previous chair of this committee, whose work on this newsletter has made it into an excellent publication that is well regarded by ACER members, its leadership, and AAR at large. Thank you Dr. Shah for your hard work, guidance and support!

This year we opened the newsletter with an article by Dr. Priscilla Slanetz, the Editor-in-Chief of Academic Radiology. Under her leadership, the journal is undergoing an exciting innovative transition that will bring more opportunities for AAR members and exciting new formats to its already stellar content. Please take a few minutes to read that article if you haven't already!

As the journal evolves for AAR, we want the ACER Connection to continue to improve and evolve as well. We want to hear from you about what you value most about the newsletter, what you expect or wish to see in the its pages, and any suggestions that you may have for additional content, format or focus. We have created a survey where you can share you thoughts with us. You can find the link below, along with a QR code to make it easy to access. We also have open spots on our committee if you are interested in contributing - its the perfect time to join and help shape the future of newsletter.

Thank you to all of our committee members for their hard work on another excellent edition of the newsletter. I look forward to working with this committee on many issues into the future.

Joe Fotos, MD

Chair, Publications Committee

Scan the QR code to the right or click/follow the link below to fill out our survey and share your thoughts about the newsletter!

<https://forms.gle/KbdsWTnfC99HqZYA9>



Resolving Workplace Conflicts Through Intergenerational Communication

Inas Mohamed, MD, MS

Assistant Professor of Radiology

University Hospitals Cleveland Medical Center / Case Western Reserve University



The Multigenerational Reality of Academic Radiology

Our academic radiology departments are inherently multigenerational. Baby Boomers collaborating with Generation X, mentoring Millennials, and now training Generation Z residents. Each generation contributes valuable perspectives shaped by distinct social, technological, and cultural moments. Recognizing these shared experiences helps explain how people prefer to convey feedback, resolve conflict, and define professionalism. The key is to transform difference into dialogue through intentional communication.

Generation	Birth Years	Defining Characteristics
Baby Boomers	1946–1964	“Live to work,” postwar optimism, idealistic, value hierarchy and commitment
Generation X	1965–1980	“Work to live,” independent, pragmatic, skeptical but adaptable
Millennials	1981–1996	“Live while working,” digital natives, feedback-seeking, collaborative, purpose-driven, socially-conscious
Generation Z	1997–2010	“Work to innovate,” tech fluent, value creativity, globally connected, devoted to justice

Each generation is comfortable with different communication styles. Boomers and Gen X prefer in-person meetings and detailed emails, while Millennials and Gen Z prefer brief chats, teamwork apps, and visual messages. The solution is to communicate rather than make assumptions.



Themes of Conflict & Role of Communication

1. Work Ethic and Motivation → Communicating Purpose

Each generation defines “dedication” differently. Baby Boomers often equate hard work with long hours and institutional loyalty. Gen X values independence and work-life balance. Millennials and Gen Z prioritize outcomes, impact, and meaning.

Tip: Replace assumptions with questions: “How do you define a productive workday?”

2. Technology Use → Communicating Across Platforms

Technology can unite or divide teams. Boomers and some Gen X faculty may prefer formal emails or meetings, while Millennials and Gen Z thrive on instant messaging platforms and brief PACS or Epic notes.

Tip: Communicate expectations, not preferences. Clarity prevents confusion.

3. Feedback and Professional Growth → Communicating Respectfully

Feedback styles differ sharply across generations. Boomers may believe “no news is good news,” while Millennials and Gen Z expect frequent, affirming feedback. When feedback feels absent, younger trainees may interpret silence as disapproval. While, when it feels constant, senior faculty may view it as excessive reassurance-seeking.

Tip: Two-Way Feedback. Ask, “How do you best receive feedback?” and share your preferences, too.

4. Loyalty and Career Trajectories → Communicating Shared Goals

Loyalty once meant staying at one institution for decades. For newer generations, it often means loyalty to learning, mentorship, and mission rather than geography. A millennial or Gen Z faculty member who changes institutions is often seeking career advancement or balance.

Tip: Communicate curiosity, not criticism: “What are your long-term goals, and how can we help you arrive there?”



5. Work–Life Balance and Flexibility → Communicating Boundaries

“Live to work,” “work to live,” and “work while living” capture generational evolution in priorities. Boomers often value constant availability, Gen X demands balance, and Millennials and Gen Z insist on flexible boundaries. Conflict arises when one person’s dedication is another’s burnout risk.

Tip: Communication builds trust. Clarity about boundaries is not selfish. It is professional.

6. Team Culture and Social Connection → Communicating Inclusion

Not all generations recharge the same way. Some prefer formal retreats or dinners, while others prefer casual check-ins or wellness breaks during work hours. Mandating socialization risks resentment. Inviting inclusive participation builds connection. Communication allows teams to co-design activities that appeal across age groups.

Tip: Ask, don’t assume: “What kinds of team gatherings energize you most?”

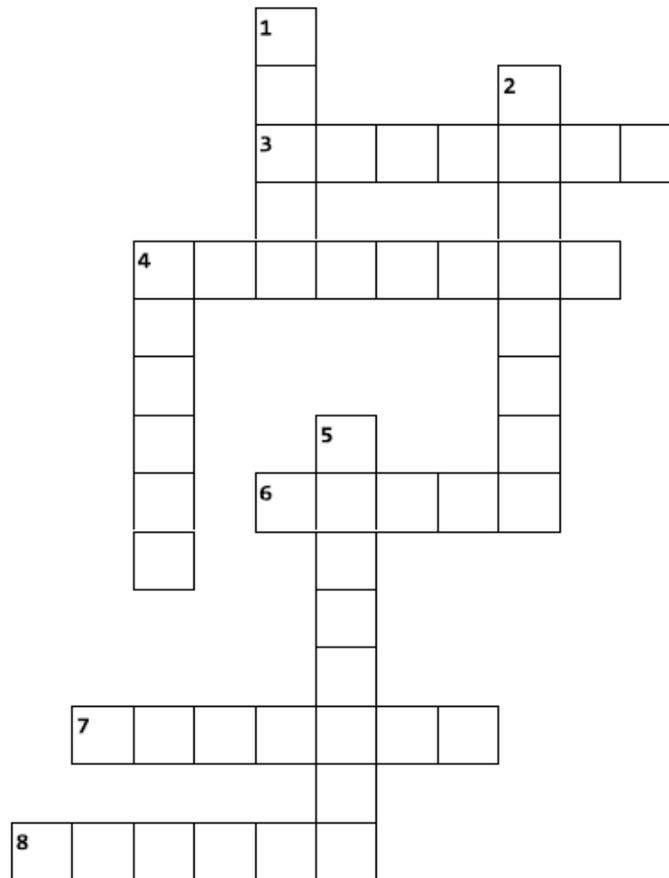
From Conflict to Collaboration

Every workplace conflict, whether related to email tone, work hours, or career ambition, stems from a communication gap rather than a generational discrepancy. Radiology departments can transform potential conflicts into opportunities for mentorship and learning by focusing on dialogue, curiosity, and flexibility. Understanding why colleagues approach work differently fosters empathy, not bias. A culture of open communication and psychological safety makes residents, faculty, and leaders feel valued and heard. Building a culture in which everyone feels heard leads to a self-sustaining learning environment.

Key Takeaways

- Acknowledge, don’t stereotype: Generational identity is one lens, not the whole picture.
- Clarify communication preferences: Ask; don’t assume.
- Bridge both ways: Feedback should flow up and down the hierarchy.
- Respect evolving values: Work ethic, technology, and loyalty can look different.
- Foster mentorship and belonging: Intergenerational teams are stronger together.

Atlanta History - Crossword Puzzle



Across

3. The Atlanta _____ is the busiest in the world
4. _____ Ali lit the flame at the 1996 Olympics opening ceremony
6. Airline founded in Atlanta, began as crop dusting company
7. The official symbol of the city of Atlanta
8. The Atlanta _____ is the oldest continuously operating professional sports franchise in America.

Down

1. The official fruit of the city of Atlanta
2. Famous soda company founded in Atlanta, started by a "druggist" in their back yard.
4. First name of the civil rights icon born in Atlanta
5. What was Atlanta's original name?

Radiology Education **A MOVING TARGET** IN A SEA OF CHANGING TECHNOLOGY



**Radiology Education:
A Moving Target in a Sea of Changing
Technology: Exploring the Evolution
and Future of Radiology Training**

Xuan V. Nguyen, MD, PhD
Professor of Radiology
The Ohio State University College of Medicine



Contributors: Amna A. Ajam, MD; James C. Hanreck, MD; and Zarine K. Shah, MD, FACR, FSAR

The Early Days: Apprenticeship and Analog Imaging

Decades ago, radiology education was rooted in apprenticeship-style training. Young physicians learned through hands-on experience, guided by seasoned mentors at the lightbox. Film-based radiographs, fluoroscopy, and rudimentary ultrasound machines were commonly used modalities. CT and MRI, although intrinsically digital, were interpreted primarily on film hard copies. Radiology reporting turnaround times were measured in days, since radiologists would dictate onto magnetic tape, submit the tapes to transcriptionists, review and correct typed reports, and sign them to produce the final report. Interpretation skills were honed by physically handling film and viewing images on lightboxes. Didactic lectures and case-based discussions supplemented the clinical experience, with textbooks serving as authoritative sources of knowledge.

As one established radiologist recalls:

“I started my Radiology journey as a resident in 1999, and my interest in this specialty peaked when I shadowed a private practice radiologist. I clearly remember discussing an Intravenous Pyelogram, an X-ray-based technique, not commonly practiced anymore, with injection of IV contrast, positioning of the patient supine with abdominal compression and then prone, to enhance visualization of the ureters. There were no topograms to help include anatomy in the field of the 14” x 17” film, nothing besides the clinical skill to palpate the ASIS and position the patient in the Xray beam. Acquiring the images was as much a part of the learning process as interpreting the radiographs.

Another aspect of learning radiology involved dark room processing of films, in the fixer solution and then the developer, ensuring that timing was enough to expose the image, but not excessively, which could lead to loss of information. Leaving the images out to dry was a necessary step before they could be included in the film jacket and taken into the reading rooms for interpretation. The “wet-read” for urgent cases is a term we still use every day; its origin came from the interpretation done while the film was still “wet”, not having had enough time to let it dry in the dark room.

Image libraries were Radiographs, CT scans and MRIs in paper jackets, indexed and stored in bins or filing cabinets, retrieved for case discussions and educational conferences.”

The Digital Revolution: PACS and Voice Recognition

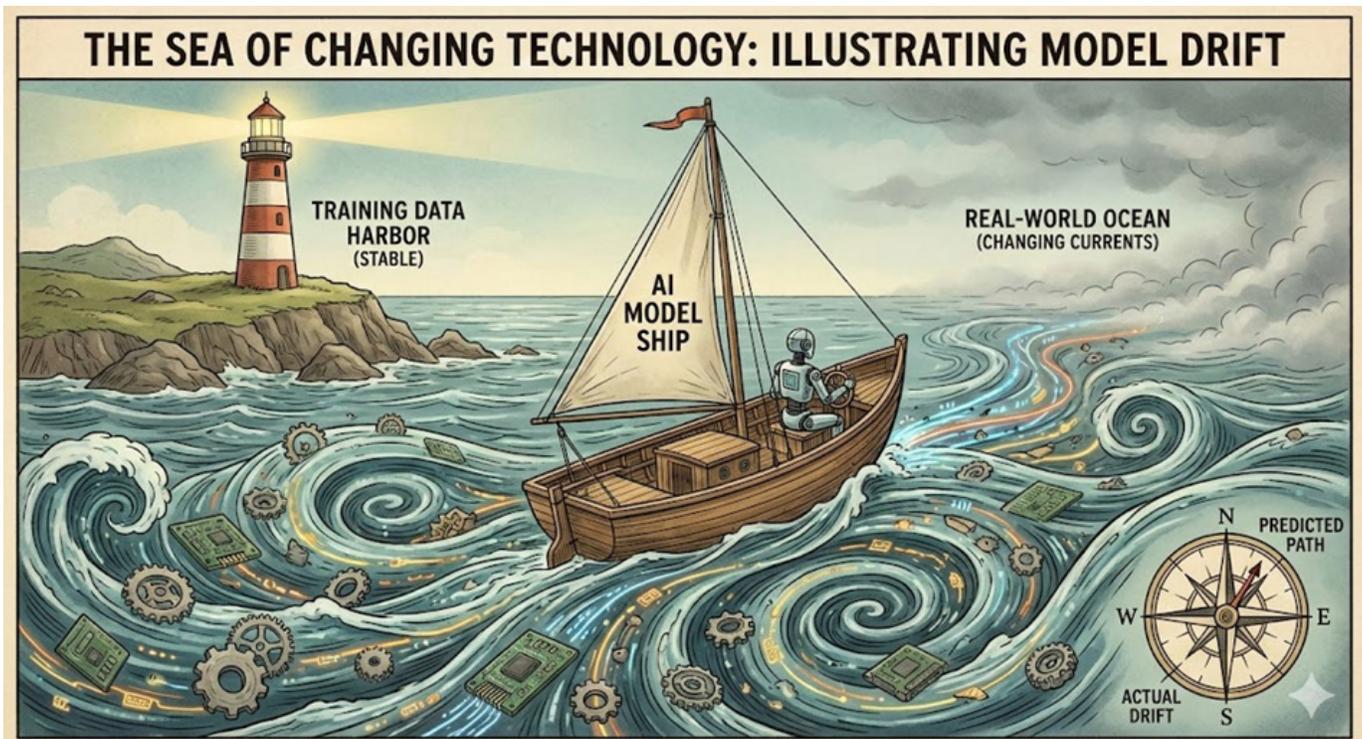
Some of us may recall the disruptive transition from film toward electronic image archiving systems around the beginning of the current millennium. Picture Archiving and Communication Systems (PACS) replaced film, permitting electronic storage, retrieval, and sharing of images. The number of images generated from CT or MR, due in part to spiral CT imaging and new MR sequences, made film interpretation impractical, while improvements in quality and resolution of monitors made electronic viewing more feasible. Increased availability of digital image libraries and online resources increased flexibility and accessibility of radiology education.

A radiologist who trained around the time of this transition describes a typical resident workflow as follows:

“In my first year of radiology residency in 2007, my morning tasks on one of my earliest rotations included (1) sorting paper requisitions that accumulated overnight on a local printer next to the PACS station; (2) previewing imaging studies sent to the PACS station if time permitted; (3) reviewing studies with the attending while frantically jotting notes on empty white space on the printed requisitions; and (4) batch-dictating my stack of notes to produce reports for each study that would be reviewed by the attending a few days later.”

The responsibilities of radiology residents during that era were often likened to those of an apprentice scribe, namely observing, note-taking, and dictating, with relatively little independent interpretation on most daytime rotations.

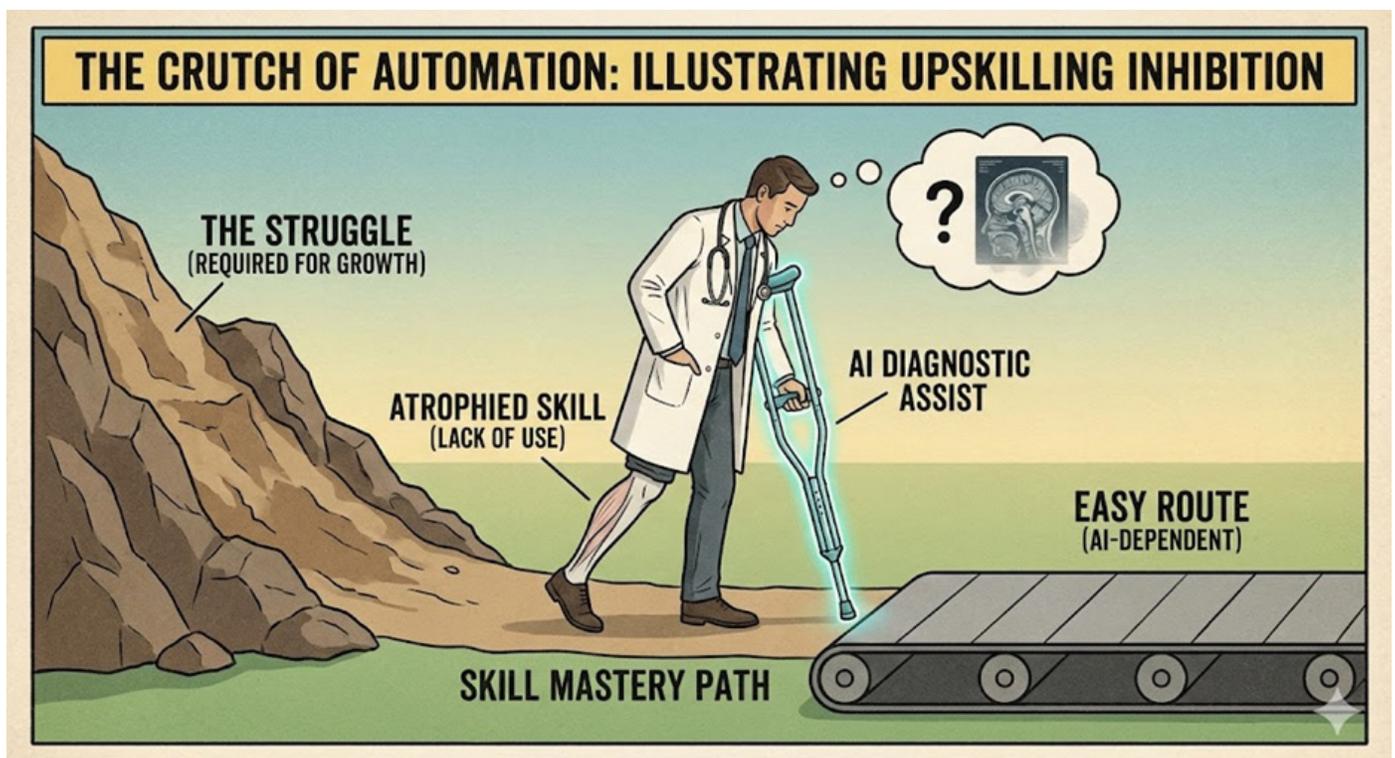
Shortly after PACS entered the scene, the process of report generation also began a digital transformation, with incorporation of voice recognition into reporting workflows promising dramatically reduced turnaround times. Removal of a transcription delay made it more practical for residents to review studies and generate preliminary drafts independently, serving a more active role as an initial screener for potentially actionable abnormalities. Resident reports can be edited and signed by supervising attendings within minutes after a trainee’s drafted interpretation, tightening the learner feedback loop. Radiology training began to more closely resemble a simulation system with relatively rapid feedback.



The Next Frontier: AI-Augmented Workflow

We are now entering uncharted waters. Deep learning algorithms are being developed to not only triage but also interpret. Some diagnostic imaging models already perform favorably relative to a first-year resident. For educators and trainees, this presents both opportunities and challenges. As more AI tools are developed and incorporated into clinical practice, the skills needed for clinical radiology practice will evolve, and radiology education will need to anticipate these changing needs to optimally prepare trainees for independent practice. How quickly our specialty will change is uncertain, and the ideal educational preparation for the future practice of radiology remains a moving target because of new skills and roles that would inevitably arise in the setting of AI-augmented workflows.

Among the new roles likely to be expected of radiologists will be as an AI auditor, serving as a form of quality control. For instance, automated detection tools may move radiologists toward a review-and-verify workflow rather than performing primary interpretations. Radiologists, as users of AI tools, might, for instance, be expected to detect model drift (where AI performance degrades due to population or technical shifts). Being aware



of specific limitations of AI tools, such as those related to the populations on which an AI model was trained, and their intended use, will be crucial in this process. Just as radiologists have learned to recognize and read through physics-based artifacts, we will also learn to detect and accommodate AI-based artifacts and hallucinations. There will be an ongoing calibration of trust as we learn whether and when to trust the AI outputs. As we become more familiar with the types of situations in which the AI tool underperforms, we may decide to proactively shift our attention toward these potential gaps at the expense of tasks for which AI tools perform well. Adapting radiology education for this new role would involve incorporation of AI literacy into radiology curricula, just as physics had been integrated into radiology residency training. RSNA, ACR, AAPM, and SIIM have jointly produced a syllabus for radiology AI education with proposed competencies for specific roles as AI users, purchasers, collaborators, or developers.

As perceptual errors are the most common type of radiology misinterpretation, it is not surprising that radiology

education has traditionally emphasized abnormality detection. After all, referring providers can usually correlate clinically to address a finding with an incorrect imaging differential diagnosis, but they can't really address abnormalities that are undetected. Emphasis was placed on a learner having seen enough cases of sufficient variety, both normal and abnormal, to accumulate enough "eye miles" to attain an aspirational "Eagle Eye Elite" status. As AI detection or diagnosis tools become more prevalent, radiologists' role in detection may give way to a Clinical Synthesizer role, in which we add value by integrating imaging AI outputs with genomics, pathology, and other electronic health information. To address this, the radiology resident experience may evolve to focus less on pixel-level detection and emphasize AI governance and ethics and more multidisciplinary integration and patient management.

These educational shifts have significant risks. If we adapt to adjudicate AI outputs, would our ability to detect findings without AI assistance suffer as a result? Will automation bias lead us to be less vigilant for abnormalities? Practicing radiologists would face the risk of skill decay, and trainees overly relying on AI assistance during training risk upskilling inhibition (failing to develop the requisite detection skills by never having struggled through the search pattern themselves).

AI also may affect radiology education in ways unrelated to its effect on clinical radiology practice. Large language models (LLM) are reshaping how residents learn. With 24/7 access to adaptive, AI-driven tutoring, the role of the human educator may evolve. Will the bulk of clinical radiology teaching shift to LLMs, while human radiology educators focus more on reviewing AI outputs for accuracy or assessing learning outcomes rather than direct teaching? In the near future, simulations combining generative AI and LLMs may introduce residents to the bulk of clinical radiology knowledge earlier during training, so that subspecialty rotations might serve only as evaluation sessions. Generative AI may even offer opportunities to correct disparities in case-mix exposure across training programs of different sizes or geographic locations, democratizing access to rare pathology. Changes to the educational process will be a necessary response to the disruptive effects of new technological innovations. As one experienced radiologist educator notes:

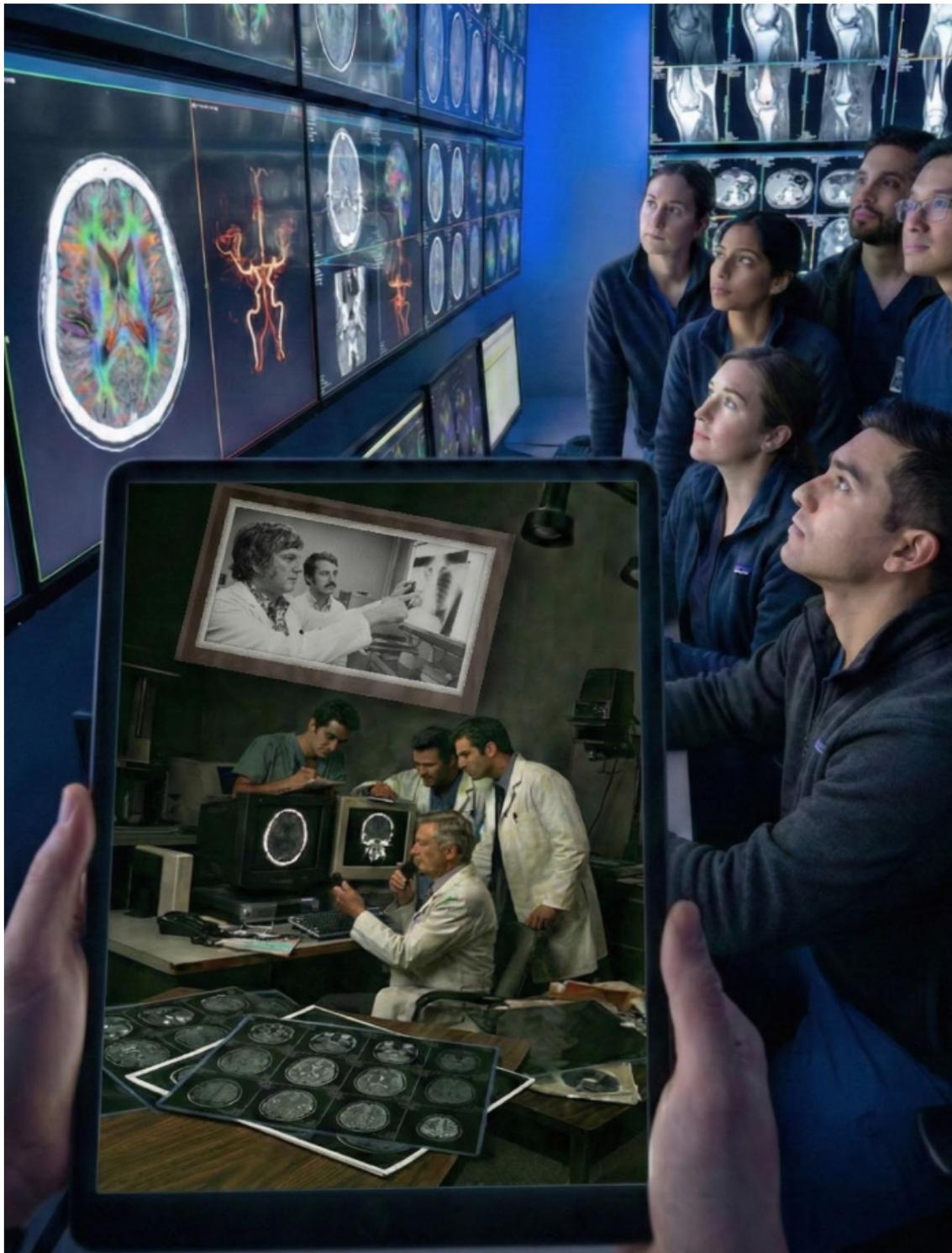
"The technical skills learned by our residents have already changed substantially just over the past 15 years. To take an example, at the time some of our mid-career radiologists trained, it was not uncommon for first-year radiology residents to perform emergent FAST ultrasound studies in the emergency department on overnight call shifts with very little supervision. This has since changed for various reasons, but graduating residents now have relatively less practical hands-on scanning experience than previous generations of radiologists. Of course, these scanning skills are replaced by new sets of skills that the more experienced among us might never have learned."

While the uncertainty related to how radiology learning and practice will evolve in the near future can generate anxiety among those entering the radiology profession, some trainees are optimistic and embrace the potential benefits of new workflows. As one advanced trainee describes:

"Over the course of my training, we used AI to help detect several abnormalities. This included endotracheal tube placement measurements as well as pneumothorax and fracture detection on plain films. We also had an application for pulmonary embolism detection on CT. These largely helped with speed and accuracy on busy call shifts; however, it required discipline to not check the AI results first and develop those search pattern skills for myself. We also used AI to flag non-STAT exams that had findings such as pneumothorax and push them to the top of the list for expedited interpretation. I personally found AI very useful for synthesizing clinical notes through a built-in tool in the electronic medical record, particularly when there was complex cancer, surgical and radiation history. When I run across something challenging on imaging, I am increasingly often consulting a large language model before traditional resources like STATdx, articles and textbooks. I think that the sophistication and breadth of AI applications in radiology will continue to expand. It's an exciting time to be a radiologist!"

Conclusion

From film to digital to algorithms, each technological leap has demanded new competencies and perspectives. While the tools change, the core skills of critical thinking, interdisciplinary collaboration, and clinical responsibility remain paramount to radiology practice. In radiology education, even as AI alters the learning dynamics, the human mentorship role remains irreplaceable. Radiology educators must ensure that the profession continues to deliver expert, compassionate care in a sea of changing technology.



Bibliography

1. Duong MT, Rauschecker AM, Rudie JD, et al. Artificial intelligence for precision education in radiology. *Br J Radiol.* 2019;92(1103):20190389. doi:10.1259/bjr.20190389
2. Kitamura F, Kline T, Warren D, et al. Teaching AI for Radiology Applications: A Multisociety-Recommended Syllabus from the AAPM, ACR, RSNA, and SIIM. *Radiol Artif Intell.* 2025;7(6):e250137. doi:10.1148/ryai.250137
3. Natali C, Marconi L, Dias Duran L, Cabitza F. AI-induced Deskillling in Medicine: A Mixed-Method Review and Research Agenda for Healthcare and Beyond. *Artif Intell Rev.* 2025;58(11):356. doi:10.1007/s10462-025-11352-1
4. Nguyen XV, Adams SJ, Hobbs SK, Ganeshan D, Wasnik AP. Radiologist as Lifelong Learner: Strategies for Ongoing Education. *Acad Radiol.* 2019;26(8):1120-1126. doi:10.1016/j.acra.2019.03.019
5. Scarsbrook AF, Graham RN, Perriss RW. Radiology education: a glimpse into the future. *Clin Radiol.* 2006;61(8):640-648. doi:10.1016/j.crad.2006.04.005
6. Venugopal VK, Kumar A, Tan MO, Szarf G. Curriculum check, 2025-equipping radiology residents for AI challenges of tomorrow. *Abdom Radiol (NY).* 2025;50(12):6251-6261. doi:10.1007/s00261-025-05016-5.
7. Volin J, van Assen M, Bala W, Safdar N, Balthazar P. Artificial Intelligence and Its Effect on Radiology Residency Education: Current Challenges, Opportunities, and Future Directions. *J Am Coll Radiol.* 2025;22(11):1264-1270. doi:10.1016/j.jacr.2025.07.004

Clearing The Hurdle: Strategies For Helping Residents Who Fail The ABR Core Exam

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INTRODUCTION

In 2025, nearly 1500 radiology residents took the American Board of Radiology (ABR) Qualifying (Core) Exam for the first time.¹ After years in their respective residency programs, these residents have seen thousands of imaging studies, rotated through every subspecialty, and performed under pressure while on call. They put in countless hours of dedicated study and sat through long hours of board review sessions. Question banks and flash cards filled every available moment in the months leading up to the exam itself. After these residents completed the grueling 3-day Core exam in the spring of their PGY-4 year, everyone, including program directors, held their collective breath awaiting the results to be published. Thankfully, the first-time pass rate for the Core exam has historically been quite high, ranging from 84 – 95% since 2016 (Table 1).¹ Our specialty is not unique in this regard, as similar first-time board exam pass rates are reported by the American Board of Internal Medicine (ABIM) and the American Board of Surgery (ABS).^{2,3} Expectedly, the ABR reported a 91% first-time pass rate on the Core exam for 2025. So, while most exam takers enjoyed the sensations of relief and accomplishment, nearly 1 out of 10 were racked with disappointment. As educators and residency program leaders, many of us have been through this experience with our trainees. The focus of this article is to equip radiology educators with some tools to help manage these difficult situations.

STEP-WISE APPROACH:

Step 1: Wellness Check.

An advisable first step when helping a resident who has recently learned of a Core exam failure is to assess their well-being. Each situation is unique, and there is no predictability when it comes to the response a resident might have when learning they have failed the Core exam, but there will always be an emotional/psychological impact. It is important as program leaders and mentors to acknowledge this fact and offer

ABR QUALIFYING (CORE) EXAM RESULTS - First Time Takers (Residents Only)		
Exam ID	Percent Passed	Total Examinees
2016	91	1281
2017	94	1283
2018	86	1287
2019	84	1337
2021 Feb	89	1392
2021 June	89	1486
2022	94	1477
2023	95	1458
2024	94	1445
2025	91	1485

appropriate support. Many programs and medical schools offer specific mental and behavioral health benefits and services for residents who need them. Familiarizing yourself with your institution's resources and making them available to trainees who need them is critically important. Additionally, some states may offer supportive resources for trainees through their respective Medical Board organizations. It is a good idea to investigate what mental health and support services are offered through your state's medical board, prior to meeting with a resident who recently failed the Core exam. Having an honest conversation about how a resident is feeling and coping with the situation is a good first step. It is equally important to maintain vigilance and check-in often, to preserve positive mental health and wellness as the resident returns to work and study. Re-entering that routine can be traumatic and triggers can pop up unexpectedly.

Step 2: Assess, Analyze, Adapt.

The next step is often the most difficult – identifying areas of weakness and formulating an adapted study plan. In some cases, poor exam performance can be linked to non-workplace stressors such as burnout, medical illness, or death in the family. Confidentially providing support in these areas and retaking the exam when non-workplace stressors have resolved can lead to future success. In other cases, the ABR score report may highlight a small number of specific organ system or modality-based domains that prevented a passing result. Cultivating study resources specific to those areas like case-review books, American College of Radiology (ACR) RAD-Exam modules, or modality-based question bank sections should be key components of the study plan leading up to a subsequent attempt at the Core Exam. For others, poor exam performance may not be linked to any specific domain but instead may be the result of a global lack of knowledge. Often, these instances may be the least surprising, as they tend to occur among trainees who have struggled in other areas of residency training. Unfortunately, these can also be among the most challenging. One strategy for such cases is to employ learning coaches (either within or outside the department) to provide personalized guidance and build confidence and competence.⁴ While radiology attendings, fellows, and senior residents can serve as learning coaches in certain instances, this may not be a practical solution given other work-related demands on their time. In some academic institutions, non-departmental learning coaches may be found through the affiliated university or office of Graduate Medical Education (GME).

Creating an individualized plan should be based on addressing the areas of identified weakness, but doing so with an underlying universally applied policy can be very helpful to trainees and program leaders, alike. As pointed out in Dr. Steven Harris' presentation *The Troubled Learner*, at the 2024 Spring APDR/RLI Program Director Bootcamp,⁵ having clear policies in place and communicating them effectively can help a program director support a struggling resident. Further, it is important for program directors to recruit a team of other department leaders and educators to establish norms and guidelines for how to handle exam failures. Setting standardized expectations and accommodations on the clinical service helps create a community of invested stakeholders, normalizes the process, and avoids separation or ostracization from the trainee's peers. In this regard, the Clinical Competency Committee and Associate Program Directors can be very helpful resources in establishing such policies and setting expectations for any remediation.

Step 3: Putting the plan into action.

At our institution, there is a policy for any potential ABR Core exam retake, defining the amount of non-clinical time granted to residents, setting expectations for regular meetings with program directors and learning coaches, and continued participation in regularly scheduled clinical rotations and educational activities. This policy

allows a resident who is retaking the exam to remain engaged on clinical service and in conference, without singling them out from their peers. Any evening, overnight, or weekend call responsibilities are rescheduled to allow more time for study during the two months leading up to the exam. Senior scholarly activity time, usually dedicated to completing any unfinished research or scholarly project prior to graduation, is shifted to the weeks immediately preceding the exam. Under the policy, the resident retaking the exam is also required to attend any case-based board review sessions being held for residents in the following year's class. In the period of months leading up to the exam, regular check-in meetings are held with the resident and program director, to review progress on clinical service and on an individualized study plan. This includes performance reviews of RAD-Exam modules and question banks, as well as test-taking strategy and pacing.

As mentors for residents who might be retaking the Core Exam, it is important to be familiar with the ABR Certification process, including the schedule for upcoming Core and Certifying exams, chronological component of the 'board-eligibility window,' and logistics of exam site readiness. With the recent announcement of upcoming changes to the Certifying exam format, along with updated scheduling of both Core and Certifying exams, having accurate information on hand is critical when advising residents who are navigating this process. When implementing the study plan, program directors should also be mindful of other requirements for radiology residency graduation. For example, during the PGY-5 year of training, residents often have scheduled time on the breast imaging and nuclear medicine services, to ensure compliance with specific educational, safety, and regulatory standards set forth by accrediting bodies like the ACGME. Any alteration of the resident's schedule should be done with those requirements in mind.

CONCLUSION

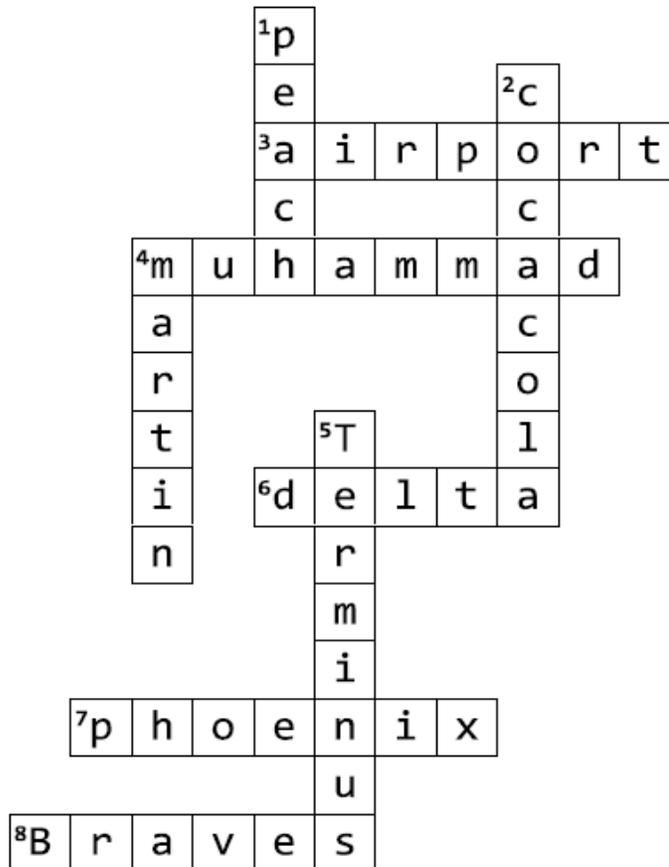
As program leaders and resident mentors, it is highly likely that at some point in our careers we will encounter a situation when one of our trainees does not pass the Core exam. The information and strategies described in this article are meant to equip radiology educators with tools to use when that happens. By being prepared, we can best help our trainees to clear the hurdle and ultimately achieve success on the Core exam.

References:

1. History of Aggregate Exam Results. Qualifying (Core) Exam. American Board of Radiology (ABR). Accessed January 21, 2026. <https://www.theabr.org/get-certified/diagnostic-radiology/#history-of-aggregate-exam-results>
2. Initial Certification Pass Rate (2008-2025). American Board of Internal Medicine (AIBM). Accessed January 21, 2026. <https://www.abim.org/media/5hhbskg2/certification-pass-rates.pdf>
3. Program Summary of First-Taker Examination Pass Rates on ABS Examinations (2020-2022). American Board of Surgery (ABS). Accessed January 21, 2026. https://www.absurgery.org/wp-content/uploads/2023/03/3yr_summary.pdf
4. Identifying and Supporting Struggling Radiology Residents: A Comprehensive Approach to Enhance Academic and Clinical Competence. Motii, Younes et al. *Academic Radiology*, Volume 32, Issue 11, 6409 – 6412. 2025
5. The Troubled Learner: How to Help Them, and What to Do About Remediation, Probation and Termination. Harris, S. 2024 Spring APDR/RLI Program Director Bootcamp



Atlanta History - Crossword Answers



Across

3. The Atlanta _____ is the busiest in the world
4. _____ Ali lit the flame at the 1996 Olympics opening ceremony
6. Arline founded in Atlanta, began as crop dusting company
7. The official symbol of the city of Atlanta
8. The Atlanta _____ is the oldest continuously operating professional sports franchise in America.

Down

1. The official fruit of the city of Atlanta
2. Famous soda company founded in Atlanta, started by a "druggist" in their back yard.
4. First name of the civil rights icon born in Atlanta
5. What was Atlanta's original name?

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