

# RadArt: Supporting Education in Radiology and Community Building Through the Arts

By Erin A. Cooke, MD

**As educators in radiology know very well**, there is more information than ever to teach our trainees, and our radiology communities have substantial challenges such as rising volumes and physical separation of individuals with more remote work and virtual learning. In this complex setting, how can the arts possibly help us in radiology education?



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Radiology is a visual specialty that is not only rooted in physics and anatomy but also historically intertwined with the visual arts. When x-rays were discovered at the end of the 19th century, there was great interest in both the science and the arts communities about how to apply this novel technology in visual representation and exploration.<sup>1</sup> Today, many of us in radiology know colleagues who have hobbies such as photography, painting, or music and are quietly pursuing art outside of work. Often these artistic endeavors are totally separate from their practice in radiology. However, incorporation of the arts, especially the visual arts, can provide substantial benefit to those learning radiology and to our greater communities in the field.

Early studies have shown that introducing art activities can provide a measurable boost in the diagnostic skills of radiology residents. For example, radiology residents who have been guided in techniques employed in art appreciation have demonstrated improved skills in perception when interpreting radiographs after an arts training session.<sup>2</sup> Guided tours led by educators at local art museums or galleries can be an effective and fun way to grow skills of observation and analysis.<sup>3</sup> Arts-based activities such as visual thinking strategies can foster communication, empathy, and a humanistic approach to medicine.<sup>4</sup> Interactive sessions involving drawing and describing sketches embed thoughtful analysis of how we perceive and interpret images into the radiology curriculum to highlight different points of view and sources of error in observation.

In addition to supporting growth in core diagnostic skills, arts-related activities can support efforts in diversity and inclusion and build a sense of community, which is much needed in these times of remote work and growth of academic medical centers across large territories. Hosting arts events provides opportunities for people to come together during or after work hours for shared experiences and mentorship. At Vanderbilt University Medical Center, we have held events such as a local art walk in downtown Nashville and an outing at the Vanderbilt University Fine Arts Gallery to take advantage of our local resources. To foster inclusion and community building, these activities are open to our trainees, faculty, and staff.

By their very nature, arts-focused events support a sense of wellness and connection with others. In addition to organized events, art can be incorporated in radiology departments through the enrichment of physical spaces with displays of artworks, especially those created by individuals in our departments or in our local communities. In our department at Vanderbilt, we have showcased artwork produced by our residents, fellows, faculty, staff, and family members in our own art gallery in a conference room. Led by a small arts committee, we have organized annual exhibitions in this space and more recently held a gallery opening as a social event open to all members of the department. The department offers art mini-grants to support artistic connection. The gallery has served as a focal point for getting to know other members in the various sections, who are otherwise spread out, and to highlight the hidden artistic talents of our department members.

Beyond local initiatives, art and humanities efforts at the national level have also been growing in our radiological societies and associations. For example, since 2021 the ACR has hosted exhibits of artworks submitted by radiology residents, faculty, and medical students at their annual national meeting.<sup>5</sup> At the most recent Association of University Radiologists meeting in 2023, a wide range of art activities including art displays, interactive art activities, music, and a talent show was offered to attendees to highlight the creative side of radiology. These types of events promote wellness among current radiology residents and faculty and also connect medical students to radiologists across the country, allowing an entry point to explore our specialty via shared interests in the visual nature of art and radiology. Visual depiction of radiologists' work through paintings has also been shown to help medical students understand our profession.<sup>6</sup>

While the core of our daily work in radiology is patient care based on science, including arts and humanities in our practice environment is an effective and enjoyable way to support a wide range of important initiatives in radiology. The arts enhance diagnostic skills in radiology education and also promote community, well-being, diversity, and new ways of looking at the world and our work.

## References

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Vanderbilt Radiology Art Gallery. All photographs are courtesy of Erin A. Cooke, MD.



Vanderbilt Radiology Art Gallery.



A 2023 submission to Vanderbilt Radiology Art Gallery by Katherine Frederick-Dyer, MD, radiologist, medical director of computed tomography and Vanderbilt-Ingram Cancer Center Radiology.



An interactive Describe and Draw arts session in a radiology resident noon conference.



Vanderbilt Radiology trip to Vanderbilt University Fine Arts Gallery, 2023.



Art display sponsored by the ACR Patient- and Family-Centered Care Art Subcommittee at the 2023 ACR annual meeting in Washington, DC.



Drawing activities at the 2023 Association of University Radiologists meeting in Austin, Texas.



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