The American College of Radiology (ACR) is a professional medical society dedicated to serving patients and society by empowering radiology professionals to advance the practice, science and professions of radiological care.

In 2008, ACR launched its Education Center, located in Reston, VA, which combines faculty lectures and one-on-one interaction with intensive, self-paced case review. Each course mimics a mini-fellowship and provides the immersion necessary to increase skills to perform at peak level.

**THE CHALLENGE**

ACR’s Education Center was inspired by the need to make education emulate the daily practice of a clinician. “We needed to get away from a passive learning environment with PowerPoints and text books; we needed to simulate the real working environment. That was the genesis of the learning center,” says Vinay Sandhir, Director, American College of Radiology Education Center.

The ACR’s Education Center offers approximately 50 courses annually, covering a range of modalities including but not limited to on Abdominal Imaging, Body and Pelvic MR, Cardiac MR, Emergency Radiology, High-Resolution CT of the Chest, MSK MR, Neuroradiology and more.

In an effort to provide a more comprehensive educational experience, the ACR ventured to find an enterprise imaging solution that could be tailored and customized to its unique educational needs. An educational center of this magnitude requires that 60 students are able to review hundreds of cases on individual workstations and gain access to vast datasets and reports simultaneously without performance issues.

**THE SOLUTION**

The ACR partnered with Fujifilm and installed Synapse® PACS at the center’s inception, and has since also installed Fujifilm’s Synapse 3D. “The ACR leadership, as well as the physician leadership of the Education Center, vetted all of the major PACS vendors, and we selected Fujifilm,” says Sandhir.

Citing many reasons for the vendor selection, Sandhir notes the speed, usability, technical support, and commitment as major contributing factors. “Everyone talks about intuitiveness, speed of loading cases, and the functionality… I can’t recall a single feature that someone has asked for that isn’t readily available in Fujifilm’s Synapse PACS,” Sandhir adds.

Dr. Jeffrey Kanne, Course Director of High-Resolution CT of the Chest, has been teaching courses using Fujifilm’s technology at the Education Center since 2012. Dr. Kanne notes, “The Education Center was my first exposure to Fujifilm’s Synapse PACS - it is very easy to learn, students pick it up quickly, and after 3-4 cases, students were no longer pushing their technical help button.”

Dr. Kanne sees a mix of students come through the Education Center’s doors - “some are younger and tech-savvy, some are older radiologists hoping to learn new skills” - and everyone reacts positively to working with the system. In just a few cases, they can perform tasks on their own such as navigating a case, selecting a new case and modifying how the images appear on their screen.

Radiologists come to the Education Center for 2-3 day training sessions on a specific topic and face a full agenda during the “mini fellowships.” As such, students have limited time to learn nuances, remember keystrokes, and adjust to new workflow systems prior to getting into the meat of the courses; learning to better interpret actual clinical studies and ultimately improving the way they treat patients. “Image manipulation is very easy use - it flows very quickly, renders images very quickly. It is responsive and efficient,” Dr. Kanne notes. “They can master it rather quickly, allowing us to focus on the educational component.”
Dr. Kanne adds, “I watch students walk in with limited knowledge and the leave with a vast amount of knowledge.”

In addition, Sandhir expresses gratitude for the 24-hour support Fujifilm provides. “We’ve never had to use Fujifilm’s support during a course due to hardware and software failures, but we’ve always had the ability to call on them if we needed to. I don’t take vendor relationships lightly, and I’ve had the upmost respect for Fujifilm and the way they support us.”

**RESULTS & NEXT STEPS**

Early on, the Education Center hosted training sessions the evening before courses started in an effort to let students familiarize themselves with the technology. They quickly realized that the added session was unnecessary. “People got the hang of Synapse so fast that we just canceled that extra session altogether,” Sandhir says. “And that led to more people showing up, because now they don’t have to fly in earlier the day before. It made the courses much more convenient.”

Up next, ACR is upgrading to Fujifilm’s latest Synapse 5, the next-generation, secure server-side PACS that enables instant access of massive datasets.

“Version 5 is going to make things easier,” Sandhir says. “From what I have seen with version 5, I am amazed at the seamlessness of its functionality and its incorporation of digital breast tomosynthesis as well as other advanced imaging functions. Using this latest update is going to be incredibly helpful for all of us at the ACR, and I can’t wait to get it installed in our environment.”

Another big change that comes with the move to version 5 is the possibility that students will be able to continue looking at cases post-training from their own homes. This means, training doesn’t have to end when the sessions do. Sandhir notes that having had more than 13,000 students come through the Education Center doors, a common question always ensues: “Can we continue to look at cases from home?”

“Previous versions of Synapse required local study caching and they weren’t browser-agnostic, but this latest version is different,” he says. “We’ll have the capability to offer continued training to users once they get back home from taking our course. We’re all really excited about that.” Sandhir notes that the upgrade to Synapse 5 will help the organization expand its offerings and capabilities in the educational space.

“We are not a clinical setting; we are an educational environment” Sandhir notes. “They’ve customized a solution for us and they’ve created it in a way that’s easy to employ. I haven’t had any challenges and for that, I am thankful.”

Fujifilm and ACR look forward to continuing their partnership to pave the road to success for thousands of Radiologists across the United States and Australia and perhaps someday, worldwide.

To learn more about Fujifilm, visit www.fujimed.com.

To learn more about the American College of Radiology, visit www.acr.org.