



HEALTHCARE

Radiation Therapy Draws On Pen Display Capabilities



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Discover how the Radiation Therapy staff at OHSU is employing Wacom’s interactive pen display technology to accurately handle its growing case volume while still maintaining its high-quality patient care.

Oregon Health & Science University (OHSU) in Portland, Oregon is one of the leading teaching, research and treatment hospitals in the nation. The Image-Guided Radiation Therapy (IGRT) program, led by Professor Martin Fuss, MD, is a shining example of how technology, when combined with sound leadership and vision, can alter the effectiveness and efficiency of radiation therapy health care.

Natural, Accurate Workflow with Astounding Production Rates

Dr. Fuss’ active role in the adoption of new technology tools for radiation therapy focuses on better ways to localize treatment targets, and monitor the success of patient therapy. One of the indispensable tools shaping the future of IGRT is an interactive pen display from Wacom. Upon first seeing Wacom’s DTZ-2100, Dr. Fuss immediately recognized its potential for contouring on study images to delineate target volumes for radiation therapy. Having the physician or dosimetrist use the digital pen to draw directly on the screen where the image is shown is inherently easier than the traditional workflow.



Dr. Martin Fuss, professor and leading authority on Image-guided Radiation Therapy, demonstrates the Wacom DTZ-2100

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Dr. Fuss states, and his staff and residents concur, that “The pen-on-screen experience delivers a natural, accurate workflow with little or no learning curve, and the time consuming process of radiation target volume definition has become much faster using the pen. The pen’s intuitive use delivers more control than a traditional mouse”.

In fact, since deploying the DTZ-2100 and tracking times to define radiation target volumes, Dr. Fuss estimates that the interactive pen display has cut time requirements by as much as 60%. As such, the IGRT Group has confidently been able to handle a significant increase in case volumes and still maintain its dedication to quality patient care.

Enhancing Applications with Pen-on-Screen Input

The IGRT Group uses the DTZ-2100 with Varian Medical Systems’ Eclipse application software, specifically designed for radiation therapy planning. “Eclipse lends itself very well to pen use,” said Dr. Fuss. “The pen response is smooth and accurate when highlighting targets of interest and the non-dominant hand features of the DTZ-2100 allow one to pan, zoom, and scroll through data sets with hundreds of images easily and quickly. Contouring around the affected area is critical to calculating the clinical target volume, and the pen is the perfect instrument for this type of work.” The ability to work efficiently and with consistent quality levels breeds a comfort level that only the DTZ-2100 can provide. Additionally, the DTZ-2100 and Eclipse combine to deliver an accurate finished target to help speed the entire radiation therapy process.

Next Generation Doctors

The DTZ-2100 has also been instrumental as an education tool, especially for residents at OHSU. “Not only are future radiation oncologists and radiation therapists trained at OHSU using the most advanced technology of our discipline, but they are taking and sharing this knowledge with others as they embark on their own medical careers,” says Dr. Fuss. “The ability to draw, highlight and write on an image provides collaboration opportunities that are literally changing the communication landscape within the radiation therapy field.”

Wacom DTZ-2100

With a generous 21.3” LCD monitor, the DTZ-2100 provides a large-screen experience with superior resolution, display quality, and advanced features. It combines a high-resolution display and a dynamically adjustable stand that allows the display to be rotated and inclined for optimal viewing and ergonomic comfort. The ability to work directly on your source material, along with the DTZ-2100’s precise cursor control and programmable ExpressKeys™ and Touch Strips, increases productivity and efficiency. It is an excellent choice for medical professionals who want to realize the benefits of working with a pen on screen.

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