



KONICA MINOLTA

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FOR IMMEDIATE RELEASE

Konica Minolta Healthcare Sponsors SPIE Best Student Paper Award

Wayne, NJ, March 14, 2024 – [Konica Minolta Healthcare Americas](https://healthcare.konicaminolta.us) congratulates the winner and runners-up of the Best Student Paper Award given by the International Society for Optics and Photonics (SPIE) at its [2024 Medical Imaging Symposium](#) in San Diego. SPIE is a not-for-profit professional society that helps advance emerging light-based research and technologies across numerous industries. With a history of 150 years of innovation, Konica Minolta is committed to fostering the development of advanced technologies to visualize what is not visible. As a multinational company invested in research to deliver innovations in imaging technologies, Konica Minolta sponsored the award as part of its continued commitment to education and support of young scientists in medical imaging.

The winner was Olivia F. Sandvold, a PhD student in the Department of Bioengineering at the University of Pennsylvania for her paper, “Hybrid spectral CT system with clinical rapid kVp-switching X-ray tube and dual-layer detector for improved iodine quantification.” The introduction of clinical spectral CT imaging has enabled quantitative material information and increased diagnostic utility of CT. However, it is challenged by lack of sensitivity, particularly for the detection of low concentrations of iodine contrast material in pediatric patients. Sandvold and her collaborators investigated combining the benefits of both spectral CT techniques in use today, kVp-switching and energy sensitive detectors. They demonstrated the first use of a conventional X-ray source and detector in a prototype hybrid system, which delivered substantial increases in signal-to-noise ratio and image quality compared to current technology. This approach could lead to improved spectral imaging performance for a more diverse range of patients and disease conditions.

The runners-up were Rickard Brunskog, a PhD student in the Physics of Medical Imaging Division at The Royal Institute of Technology Stockholm, Sweden, for his paper, “Experimental Evaluation of a Micron-Resolution CT Detector,” and Grace M. Minesinger, a 2nd year Medical Physics PhD student at University of Wisconsin – Madison, for her paper, “FEM Deformable Liver Registration to Facilitate CBCT Guided Histotripsy.” Richard presented his work on the experimental validation of simulation tools for a very high resolution, energy-sensitive CT detector. Grace shared her research on the development and validation of a non-rigid motion model to improve the planning and accuracy of focused ultrasound histotripsy treatments.

“Konica Minolta is proud to be a sponsor of the SPIE Medical Imaging Symposium and excited to support research and innovation in basic science applied to medical imaging,” says John Sabol, Clinical Research Manager, Konica Minolta Healthcare. “We commend Olivia F. Sandvold, runners-up Rickard Brunskog and Grace M. Minesinger and all the student researchers for the excellent papers and presentations at the symposium. As a 150-year-old company dedicated to innovating imaging for many applications, we understand that scientific research is vital to advancing medical imaging to improve patient care and outcomes. We are pleased to recognize and support today’s student researchers as they work toward becoming the innovators of tomorrow.”

About Konica Minolta Healthcare Americas, Inc.

Konica Minolta Healthcare is a world-class provider and market leader in medical diagnostic imaging and healthcare information technology. The company’s focus is to contribute to life changing advances through the transformation of primary imaging, allowing the invisible to be seen. Primary imaging, the most commonly used medical imaging technologies, include X-ray, ultrasound and imaging management systems. By advancing these readily available technologies, we can bring greater diagnostic capabilities to the greatest number of people.

With 150 years of endless innovation, imaging is in Konica Minolta’s DNA. From roots as a camera and film manufacturer, the company has cultivated its own technologies and continues to evolve techniques for visualizing what is not visible. Innovation allows the company to be a strong strategic partner, understanding what value means to customers and how Konica Minolta’s innovations can address specific needs and lead to better decisions, sooner.

Konica Minolta Healthcare Americas, Inc., headquartered in Wayne, NJ, is a division of Konica Minolta, Inc. For more information on Konica Minolta Healthcare Americas, Inc., follow us on [LinkedIn](#), [Twitter](#) and [Facebook](#), or visit <https://healthcare.konicaminolta.us>.