

Groundbreaking U.S. Patent Allowed to Surgical Theater

Surgical Theater

Platform to Premiere at Congress of Neurological Surgeons Annual Meeting

Cleveland-based startup, Surgical Theater, LLC, (<http://www.surgicaltheater.net> [1]) announced today the allowance of a United States patent that covers transforming any given patient's own static CT and MR images into a realistic, interactive, 3D computer-based model of that patient. The premier neurosurgery imaging platform, known as the Selman Surgical Rehearsal Platform™, is being launched at the Congress of Neurological Surgeons 2012 annual meeting in Chicago Oct. 6-10.

This first Surgical Rehearsal Platform allows surgeons to plan and rehearse microsurgical techniques for clipping intracranial aneurysms and extracting brain tumors. Using standard scanned images from any patient, the Platform generates 3D images that enable the accurate modeling of interactions between life-like tissue and surgical instruments. The tissue responds "naturally" to actions taken by the surgeon, thus allowing accurate pre-surgery planning and rehearsal. The unique software utilizes flight simulator technology to permit remote connection of multiple platforms; participants anywhere in the world can simultaneously view and practice the same case with real-time feedback and collaborate on the planning of a specific surgery case.

"This is an exciting time for Surgical Theater," said Moty Avisar, company CEO and President. "Not only are we here presenting at the Congress of Neurological Surgeons after being selected by this prestigious Congress to be featured as the 'new technology to watch,' we have just received our first broad patent approval, and our application to the US Food and Drug Administration has just been made. It's good news to share here at the Congress' meeting."

The platform was developed in conjunction with Dr. Warren Selman, Neurosurgeon-in-Chief at University Hospitals Case Medical Center, and Harvey Huntington Brown Jr. Professor and Chairman, Department of Neurological Surgery at Case Western Reserve University School of Medicine in Cleveland, Ohio. "As a surgeon at an academic medical center, being able to collaborate with peers and guide younger surgeons through a complex neurosurgical procedure—on a model with life-like response—in advance of taking the patient to the operating room is ideal. It's something that just wasn't possible until now," Selman said. "The ability of the Surgical Rehearsal Platform to allow collaboration and rehearsal is a tremendous advancement in neurosurgical practice and education, and I'm proud to be a part of it."

Research is currently underway with Dr. Andrew Sloan, Director of University Hospitals Neurological Institute Brain Tumor and Neuro-Oncology Center and Peter

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D. Cristal Associate Professor of Neurosurgery at Case Western Reserve University, on utilization of the platform in complex brain tumor cases. More work is underway to permit rehearsal of other intracranial procedures, including expanded endonasal skull base surgery, microvascular decompressions as well as complex spinal surgery.

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[1] <http://www.surgicaltheater.net/>