



# News Release

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## 3D Systems Delivers Breakthrough 3D Virtual Surgical Training Solutions

- New LAP Mentor™ Lobectomy module trains on complicated procedure of Video-Assisted Thoracoscopic Surgery (VATS)
- GI Endoscopy – Fundamental Skills training module helps learners prepare for flexible endoscopic surgery assessment
- RobotiX Mentor™ is the only VR simulator to offer training for robotic clinical procedures

**ROCK HILL, South Carolina, April 13, 2015** – [3D Systems](#) (NYSE:DDD) announced today a new range of breakthrough virtual modules and simulators designed to enhance the training of surgeons and ultimately to improve patient outcomes. The company's newest products include a virtual reality [Lobectomy training module](#), a new GI Endoscopy – Fundamental Skills module, and the [RobotiX Mentor](#) for robotic surgery training. 3DS will showcase these new surgical training products and 3D printed anatomical models at the 2015 Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) annual meeting in Nashville, Tennessee, April 15-18, in booth #432.

3DS has been at the forefront of [surgical planning and personalized medical solutions](#) for almost two decades. With an end-to-end digital thread that integrates surgical simulation and training with [virtual surgical planning \(VSP®\)](#) and 3D printing of anatomical models, surgical instruments and medical devices, 3DS has helped doctors in tens of thousands of complex medical cases to achieve better patient outcomes with faster surgeries. <sup>1,2,3</sup>

All of 3DS' exceptional training tools can be customized to the exact needs of a program or used for patient-specific pre-operative preparation, providing a broader range of true-to-life training experiences.

"We are fortunate to work with leading experts to develop true patient-specific healthcare solutions, that are transforming personalized medicine," said Kevin McAlea, Chief Operating Officer, Healthcare, 3DS. "Our surgical simulators already offer the most realistic hands-on experience to master critical skills to ensure procedural efficiency while reducing patient risk. Our new virtual module and actual 3D printed anatomical models further enhance the effectiveness of our tools and are part of our continuing commitment to deliver training and planning tools that are designed to improve the quality of patient outcomes."

The lobectomy training module, which is now available on the [Simbionix LAP Mentor](#), helps surgeons prepare for the technically complex video-assisted (VATS) thoracoscopic lobectomy procedure. This training module is based on an existing modality with comprehensive training tools, and it allows practice in all key components of a lap lobectomy procedure. [Click here to watch a video of the module in action.](#)



Following 3DS' collaboration with [SAGES](#) to develop the first-ever validated VR assessment model for endoscopy, the company will present a preliminary version of the [GI Endoscopy – Fundamental Skills](#) training module. This module will provide vital knowledge and training and was developed to help prepare trainees for the skills

required for flexible endoscopic surgery. The unique training module will be made available on three of [3DS' Simbionix simulation platforms](#), which are also the only official platforms for the SAGES FES hands-on exam. As of today there are 24 FES test

centers across North America. This number is expected to grow annually now that the FES test, as a component of the larger Flexible Endoscopy Curriculum, is becoming a requirement for certification by the American Board of Surgery (ABS) for residents in surgery graduating in the 2017-2018 academic year.

Along with these new products featured at upcoming SAGES, 3DS will demonstrate its RobotiX Mentor simulator, the only fully interactive, cross-specialty system that addresses the increased demand for robotic surgery training. The RobotiX Mentor enables surgeons and residents to experience partial and entire robotic clinical procedures alongside basic skills and suturing modules for surgeons of all levels of expertise.

Learn more about 3DS' commitment to manufacturing the future today at [www.3dsystems.com](http://www.3dsystems.com).

### **About 3D Systems**

3D Systems provides the most advanced and comprehensive 3D digital design and fabrication solutions available today, including 3D printers, print materials and cloud-sourced custom parts. Its powerful ecosystem transforms entire industries by empowering professionals and consumers everywhere to bring their ideas to life using its vast material selection, including plastics, metals, ceramics and edibles. 3DS' leading personalized medicine capabilities save lives and include end-to-end simulation, training and planning, and printing of surgical instruments and devices for personalized surgery and patient specific medical and dental devices. Its democratized 3D digital design, fabrication and inspection products provide seamless interoperability and incorporate the latest immersive computing technologies. 3DS' products and services disrupt traditional methods, deliver improved results and empower its customers to manufacture the future now.

### **Leadership Through Innovation and Technology**

- 3DS invented 3D printing with its Stereolithography (SLA) printer and was the first to commercialize it in 1989.

- 3DS invented Selective Laser Sintering (SLS) printing and was the first to commercialize it in 1992.
- 3DS invented the ColorJet Printing (CJP) class of 3D printers and was the first to commercialize 3D powder-based systems in 1994.
- 3DS invented MultiJet Printing (MJP) printers and was the first to commercialize it in 1996.
- 3DS Medical Modeling pioneered virtual surgical planning (VSP) and its services are world-leading, helping many thousands of patients on an annual basis.

Today its comprehensive range of 3D printers is the industry's benchmark for production-grade manufacturing in aerospace, automotive, patient specific medical device and a variety of consumer, electronic and fashion accessories.

More information on the company is available at [www.3dsystems.com](http://www.3dsystems.com).

### **References**

<sup>1</sup> Roser SM, Ramachandra S, Blair H, Grist W, Carlson GW, Christensen AM, Weimer KA, Steed MB: The accuracy of virtual surgical planning in free fibula mandibular reconstruction: comparison of planned and final results. *J Oral Maxillofac Surg* 68:2824-2832, 2010.

<sup>2</sup> Hsu SS, Gateno J, Bell RB, Hirsch DL, Markiewicz MR, Teichgraeber JF, Zhou X, Xia JJ: Accuracy of a computer-aided surgical simulation protocol for orthognathic surgery: a prospective multicenter study. *J Oral Maxillofac Surg* 71:128-142, 2013.

<sup>3</sup> Sink J, Hamlar D, Kademani D, Khariwala SS: Computer-aided stereolithography for presurgical planning in fibula free tissue reconstruction of the mandible. *J Reconstr Microsurg* 28:395-404, 2012.