October 7, 2019

Stratasys Introduces Digital Anatomy 3D Printer Bringing Ultra-Realistic Simulation and Realism to Functional Anatomical Models

The days of using cadavers or animals for medical training and surgical preparation may be numbered

EDEN PRAIRIE, Minn. & REHOVOT, Israel--(BUSINESS WIRE)-- 3D printing leader Stratasys Ltd. (NASDAQ: SSYS) is further extending its commitment to the medical industry with the new J750™ Digital Anatomy™ 3D Printer. Designed to replicate the feel, responsiveness, and biomechanics of human anatomy in medical models – the system improves surgical preparedness and training while helping bring new medical devices to market faster.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20191007005113/en/

3D printed heart model produced on the new Stratasys J750™ Digital Anatomy™ 3D Printer - replicating the feel, responsiveness, and biomechanics of human anatomy (Photo: Business Wire)

Today, medical professionals have a choice of cadavers, animal, traditional, or virtual reality models which all have significant limitations. Unlike animal models that only approximate human anatomy and may raise ethical concerns, or cadaver models that cannot retain live-tissue feel and require a controlled environment, the Digital Anatomy 3D Printer recreates actual tissue response - and can be used anywhere without specialized facilities. It also lets users focus on specific pathologies.

“We believe in the potential of 3D printing to provide better health care, and the Digital Anatomy 3D Printer is a major step forward,” said Stratasys Healthcare Business Unit Head Eyal Miller. “We’re giving surgeons a more realistic training environment in no-risk settings. We also anticipate this will enable medical device makers to improve how they bring products to market by performing design verification, validation, usability studies and failure analysis with these new models.”

The new 3D printer has already been tested at several organizations. The Jacobs Institute, a Buffalo, N.Y.-based medical innovation center focused on accelerating device development in vascular medicine, has been testing the Digital Anatomy 3D Printer to re-create key vascular components for advanced testing and training. “3D printing has been wonderful for recreating patient-specific anatomy compared to cadavers or animal models; however, the final frontier for organ model realism has been live-tissue feel and biomechanical realism,” said Dr. Adnan Siddiqui, Chief Medical Officer, Jacobs Institute. “That’s exactly what the Digital Anatomy 3D Printer gives us. We believe these models give us the best opportunity to recreate human physiological conditions to simulate actual clinical situations and to study new devices to establish their effectiveness before introducing them to patients.”

In conjunction with the 3D printer itself, Stratasys is also introducing three new materials – TissueMatrix™, GelMatrix™, and BoneMatrix™ - used to create cardiac, vascular, and orthopedic 3D printing applications. A Blood Vessel Cleaning Station that removes support material from inside 3D-printed blood vessels is also being released.

The new Stratasys 3D printer is expected to see adoption primarily by medical device companies, which require new ways to drive faster adoption of technologies and procedures - and academic medical centers, which are under increasing pressure to conduct training outside of the operating room to minimize risk to patients. The solution also supports efforts to move from time-based surgical training to proficiency-based evaluation.

The J750 Digital Anatomy 3D Printer builds on Stratasys’s investments and growing success in the healthcare market, both with medical practitioners and device makers. Last November, its J750 and J735 3D Printers and the Objet30 Prime 3D Printer were validated by partner Materialise for use with FDA-cleared Materialise Mimics inPrint software for creating anatomical models used in patient care. The company has worked closely with the Veterans Health Administration on applying both FDM® and PolyJet technologies to a variety of healthcare settings, including a jaw reconstruction application that reduced surgical time by 80-100 minutes. Additionally, Bordeaux University Hospital in France recently integrated the Stratasys J750 in their process to 3D print life-like transparent and color models of patient kidneys for complex tumor removal cases.

For more information on the new J750 Digital Anatomy 3D Printer and how 3D printing is transforming healthcare, please see https://www.stratasys.com/3d-printers/j735-j750.

Stratasys is a global leader in additive manufacturing or 3D printing technology and is the manufacturer of FDM® and PolyJet™ 3D printers. The company’s technologies are used to create prototypes, manufacturing tools, and production parts for industries, including aerospace, automotive, healthcare, consumer products and education. For 30 years, Stratasys products have helped manufacturers reduce product-development time, cost, and time-to-market, as well as reduce or eliminate tooling costs and improve product quality. The Stratasys 3D printing ecosystem of solutions and expertise includes 3D printers, materials,

software, expert services, and on-demand parts production. Online at: www.stratasys.com, http://blog.stratasys.com and LinkedIn.

Stratasys, PolyJet, J750, Digital Anatomy 3D Printer, TissueMatrix, GelMatrix, and BoneMatrix are trademarks of Stratasys Ltd. and/or its affiliates. All other trademarks are the property of their respective owners, and Stratasys assumes no responsibility with regard to the selection, performance, or use of these non-Stratasys products.

Attention Editors, if you publish reader-contact information, please use:

- USA +800-801-6491
- Europe/Middle East/Africa +49-7229-7772-0
- Asia Pacific +852 3944-8888

View source version on businesswire.com:
https://www.businesswire.com/news/home/20191007005113/en/

Stratasys Corporate & North America
Craig.Librett@Stratasys.com
+1 612-364-3208

Europe, Middle East, and Africa
Jonathan Wake / Miguel Afonso, Incus Media
stratasys@incus-media.com
+44 1737 215200

Mexico, Caribe
Carlos.ramirez@stratasys.com
00+52 (55) 15349791

Asia Pacific and Japan
Alice Chiu
alice.chiu@stratasys.com

Brazil, Central America and South America
Erica.massini@stratasys.com
+55 (11) 2626-9229

Source: Stratasys Ltd.