

Robotic Surgeries Are the Star of Stony Brook Southampton Medical Advancements Showcase



 Michael Wright on Jul 21, 2025

   

Hunched over a microscope-like viewfinder, his thumbs and forefingers strapped into fingertip control panels, Dr. Georgios Georgakis put the spider-like arms of the Da Vinci Surgical System into motion inside a simulated body cavity.

On a video screen in the theater of the Southampton Arts Center on Monday afternoon, July 14, several dozen community members and Stony Brook Medicine staff watched as the titanium digits of the Da Vinci, wielding a tiny scalpel, approached the skin of ... a grape.

Georgakis, wearing a jacket and tie instead of hospital scrubs, guided the Da Vinci's long, jointed arms into the blue-lighted cavity and carefully sliced the skin of the grape open, peeling it back ever so delicately.

Then he used the machine to sew it back together — to applause from the audience.

The Da Vinci was the crown jewel of the showcase put on by the Stony Brook Southampton Hospital and its parent Stony Brook Medicine to spotlight the advancements the hospital has brought to health care in the Southampton community in recent years.

Stony Brook Southampton Hospital unveiled its \$2 million Da Vinci system in February and has already used it to perform dozens of surgeries more efficiently, less invasively, or with more precision and complexity than was possible before.

“The precision is unparalleled, the trauma is less, the blood loss is less, the patient returns to their baseline in much shorter time, and you can do more complex surgeries than could be done previously,” said Dr. Konstantino Spaniolas, a surgeon with Stony Brook Medicine who works with the robotic surgery systems regularly. “We have several very happy patients.”

The Da Vinci system has allowed the Stony Brook’s Comprehensive Hernia Center to perform complicated hernia surgeries that could not be performed laparoscopically before to be done with the same minimized invasiveness — turning a five-day recovery period into a single overnight stay for a patient.

Visitors to the symposium were invited to try out the Da Vinci system for themselves, using the robotic digits to pick up small rubber rings inside the simulated body cavity and place them over rubber fingers — the controls so surprisingly intuitive that test-drivers were able to manipulate the machine with precision almost immediately.

The hospital is now also employing a Mako robotic arm, developed specifically to help doctors perform more precise knee surgeries, using a 3D scan of the knee and making it easier for the surgeon to avoid damaging other soft tissue while repairing damaged tissue or implanting artificial components.

Along with directly improving the care of patients under their care, the hospital’s physicians say, the robotic systems are also helping to recruit more young doctors.

“They are trained from the very beginning of their surgical career on this robot,” Spaniolas said. “So if you are saying, I need to hire a new surgeon, they say, ‘Well, do you have a robot? Because how else am I going to come and do surgery?’ So that is also a big part of why we wanted to get a robot.”

Stony Brook Medicine also has a training program for doctors who have already been performing laparoscopic surgeries to be brought into the robotic era. “The delivery is the same as laparoscopic surgery, but the vehicle is different,” Spaniolas said. “So we have an online curriculum to familiarize yourself with the XYZ, then a training program and then someone who is experienced with the robot observes them on 10 cases.”

At Monday’s open house, staff from various departments at the hospital also showed off the services the it offers — and provided free massages and acupressure, cholesterol tests, stroke prevention guidance and health care advice.

At the top of the expanding services showcased on June 14 by Chief Administrative Officer Emily Mastaler was the new East Hampton Emergency Department that opened a month ago and is already taking in the bulk of the emergency calls from that region — saving ambulance drivers hours of travel time each day.