LITTLE ROCK — The University of Arkansas for Medical Sciences (UAMS) on Friday began hosting colorectal surgeons to demonstrate robotic surgery in action, as one of 15 designated da Vinci Observation Epicenters nationwide. UAMS is the only hospital in Arkansas designated as an Epicenter.

Conan Mustain, M.D., a colorectal surgeon who heads UAMS’ robotics steering committee and is the most prolific UAMS provider of robotic surgery, hosted Keith Goldberg, M.D., a general surgeon in the Nashville, Tennessee, area.

The da Vinci Surgical System is used in more than 1,500 hospitals in the United States. Intuitive Surgical, the company that makes it, recently established the epicenters to provide surgeons who are new to the technology a daylong opportunity to observe and consult with skilled practitioners such as Mustain to learn techniques and best practices. Additional training follows.

According to Intuitive Surgical, a case observation center is “a hospital that leads by example, demonstrating the highest quality of care, efficiency and outcomes using Intuitive technologies while hosting surgeons across the United States.”

“My goal is to help visiting surgeons take better care of their patients,” Mustain said. “That could be through technical maneuvers, modeling professionalism in the OR or simply demonstrating what high-quality colorectal surgery should look like.”

Robotic surgery is a rapidly expanding field that allows for minimally invasive procedures in many situations where open surgery was once the only option. Benefits include increased accuracy, less pain and discomfort, faster recovery and shorter hospital stays.

“Despite the proven benefits of minimally invasive surgery in colorectal, still more than 40% of colon resections in the United States are done open,” said Mustain, who has performed more than 200 robotic-assisted surgeries since early 2020.
“The switch to the robot has enabled me to steadily switch to more minimally invasive procedures,” he said. “I would say over 80% of my colon resections are now done with daVinci.”

UAMS is a national leader in robotic surgery, with 16 certified robotic surgeons across nine specialties including colorectal, general surgery, surgical oncology, thoracic surgery, otolaryngology, urology, urologic oncology, gynecology and gynecological oncology.

UAMS surgeons are constantly exploring innovative ways to use robotic surgery techniques to help patients.

In the fall, UAMS became the only hospital in Arkansas to acquire the Ion Endoluminal Robotic Bronchoscopy System, also made by Intuitive, which allows doctors to discover and biopsy previously undetectable nodules in the farthest reaches of the lungs, where about 70% of nodules reside.

Nikhil Meena, M.D., an interventional pulmonologist, and Katy Marion, M.D., a thoracic surgeon, then used it in conjunction with the da Vinci robot to provide the first combination robotic procedure in the state.

This resulted in the discovery of a cancerous nodule deep in a patient’s lungs, where it wouldn’t have been detected using previous equipment, immediately followed by removal of the nodule while the patient remained under a single round of anesthesia.

Before the robots, the nodule wouldn’t have been detected and biopsied until it became more advanced, and weeks would have passed before the scheduled surgery.

“This allows us to increase survival rates,” Meena said.

UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS' clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,047 students, 873 medical residents and fellows, and six dental residents. It is the state's largest public employer with more than 11,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, Twitter, YouTube or Instagram.