

Baltimore university to build AI-powered surgery center



The University of Maryland, Baltimore, is building a center to explore the intersection of AI and surgery. CALEY MILLIGAN/BBJ



By Matt Hooke - Reporter, Baltimore Business Journal Oct 21, 2025

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Story Highlights

University of Maryland, Baltimore plans Al-powered surgery center for training.

UMB partners with Axis Research & Technology for 36,000-square-foot facility.

Construction begins next year, location still undetermined.

The University of Maryland, Baltimore, plans to build a new surgery center that will use artificial intelligence to help train budding surgeons.

UMB will partner with Axis Research & Technology to build a 36,000-square-foot facility called the Surgical Performance Center, according to an announcement last week. The center will use a network of cameras in an operating room combined with AI to monitor surgeries. The collaboration will use the platform to enhance training by giving students and clinicians more data on their surgical performance and a chance to research novel techniques.

Construction on the center is expected to begin next year, with a groundbreaking taking place later this year, per the announcement. The location of the center is still being determined, according to reporting from the Baltimore Sun.

"This new partnership brings together the best elements of our clinical faculty and School of Medicine educational platforms in anatomy and medical simulation, excellence in shock-trauma, advanced general and specialty

surgery, and integrates AI and advanced computation technologies to pave the way to a future of medical education and medical-surgical device development," said Mark Gladwin, dean of the University of Maryland School of Medicine, in a release.

Irvine, California-based Axis already has a presence in Maryland, with an 11,000-square-foot training lab in Columbia. The firm specializes in training people for health care jobs and biology research and development. Its facilities are integrated with OMNIMED SmartOR, a health care software that gives physicians granular insights into the surgical process through a network of cameras and sensors. The software measures everything from the atmospheric pressure in a room to clinician performance to see how different factors impact surgical outcomes. The software also integrates operating room data into electronic health record systems, eliminating manual data entry to save clinicians time.

"Axis was built to provide platforms where surgeons, educators, and innovators can come together to push health care forward," Axis CEO Jill Goodwin said in a release. "Partnering with the University of Maryland, Baltimore allows us to expand that vision into a connected, data-rich training ecosystem that will shape the future of surgery."

The move is part of a push by health care institutions to implement AI into patient care and physician training. LifeBridge Health is establishing a similar institute for surgical innovation with a \$10 million gift from the Kahlert Institute. Baltimore researchers have also investigated the possibility of fully autonomous surgeries, with a Johns Hopkins University robot completing part of a gallbladder surgery without human help after being trained on surgical videos. Towson University has also embraced more modern technology, with its \$192 million College of Health Professions building including virtual cadavers to supplement traditional training methods.

The partnership with Axis could also be a way for UMB to expand its research portfolio by working with private companies as federal dollars for science

dwindle. Federal and state cuts to universities have forced the Baltimore institution to cut 30 jobs and slash salaries for 1,000 staff members.