

NIO Laser imaging system

Using Stimulated Raman Histology, the NIO Laser Imaging System captures three-dimensional imaging of a tissue sample without physical sectioning, making the tissue usable for analysis or banking without destroying the tissue. This technology has been used in over 1,500 brain tumor procedures across the United States, including 130+ at Dayton Children's Hospital.

Having rapid intraoperative histology can help in surgical decision-making by providing information not readily available. For patients, this ultimately can lead to better and more complete resections. This provides our neurosurgery team with surgical confidence to know that the best care possible was provided.

The NIO Laser Imaging System also provides the added benefit of preserving the collected tissue. Some of the tissue will be sent to pathology and the remaining sample is able to be used within the Living Biobank for pediatric cancer research.



did you know?

Dayton Children's Hospital is the only hospital in Ohio to utilize the NIO Laser Imaging System, and there is only one other children's hospital in the nation using this technology.

