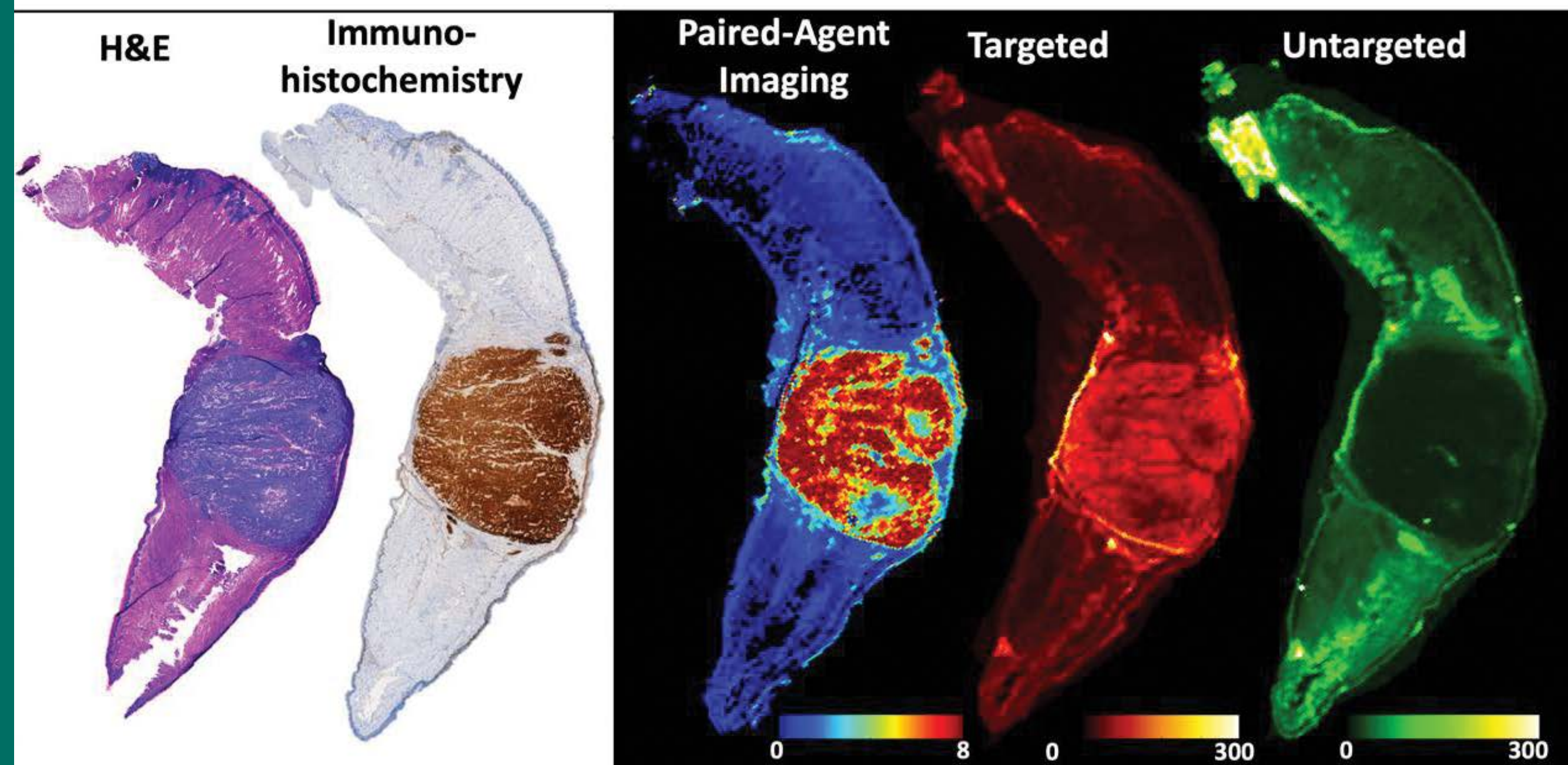


Analyzing Tumor Margins in Real Time



“Combining technologies to achieve real-time intra-operative margin analysis will allow for complete cancer removal and improved patient outcomes.”

MATTHEW LEBOEUF, MD, PhD



A team of bioengineers, pathologists, and surgeons is developing artificial intelligence algorithms based on squamous cell cancer specimens and models to innovate a new approach for tumor margin analysis in real time during an operation.

STUDY NAME Analysis of squamous cell carcinoma tumor margins by the combined use of in vivo paired agent imaging and machine learning driven pathologic analysis

PRINCIPAL INVESTIGATORS Matthew LeBoeuf, MD, PhD // Kimberley Samkoe, PhD // Eunice Chen, MD, PhD // Louis Vaickus, MD, PhD

FOCUS To innovate a new approach that allows surgeons to visualize tumor margins in real time during an operation.

Our team of bioengineering, pathology, and surgical specialists is combining molecular-targeted imaging approaches with artificial intelligence so that surgeons can actually see the edges of a tumor in real-time and be better equipped to remove cancer completely in a single procedure. Doing so will lead to improved surgical outcomes for patients and decreased recurrence rates.