

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Brain tumor imaging via triple-modal MRI, photoacoustic and Raman nanoparticles	A triple-modality approach to imaging nanoparticles could help improve surgical resection of brain tumors. In mouse models of brain cancer, modified gold nanoparticles preferentially accumulated in tumors and produced three types of signals—MRI, photoacoustic and Raman—which enabled whole-brain imaging of tumors and high-resolution definition of tumor margins. During surgical resection of mouse brain tumors, photoacoustic and Raman detection of the nanoparticles guided each resection step and confirmed removal of tumor tissue. Future studies could include developing handheld instruments that use the method.	Patent and licensing status unavailable	Kircher, M.F. <i>et al. Nat. Med.</i> ; published online April 15, 2012; doi:10.1038/nm.2721 Contact: Sanjiv S. Gambhir, Stanford University, Stanford, Calif. e-mail: sgambhir@stanford.edu
	<i>SciBX</i> 5(17); doi:10.1038/scibx.2012.453 Published online April 26, 2012		