This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Enhanced MRI of physiological changes in tumors	<p>Studies in mice suggest that hyperpolarized ¹H-MRI using an oxygen-sensitive contrast agent could help monitor tumor response to cancer therapy. The method uses dynamic nuclear polarization to increase the signal of the oxygen-sensitive contrast agent OX63 by up to 7,000% compared with the agent's nonpolarized, baseline state. The method determines tumor oxygenation levels and microvascular permeability <i>in vivo</i> and thus helps monitor drug delivery rates. In mouse models of cancer, the method quantified tumor vascular leakage and oxygen concentrations. Next steps include using the method in other animal models of cancer.</p> <p>SciBX 2(40); doi:10.1038/scibx.2009.1521 Published online Oct. 15, 2009</p>	Patent application filed; General Electric Co. holds the IP	<p>Matsumoto, S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 5, 2009; doi:10.1073/pnas.0908447106 Contact: Murali C. Krishna, National Institutes of Health, Bethesda, Md. e-mail: murali@helix.nih.gov</p>