This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Diffuse reflectance spectroscopy to detect microcalcified breast cancer lesions	<p>Studies of breast cancer samples suggest diffuse reflectance spectroscopy could help detect microcalcified breast cancer lesions during standard biopsies. Breast cancer biopsy techniques target microcalcified lesions because lesions lacking microcalcifications can result in false negative hits. In core biopsy samples from 23 patients, diffuse reflectance spectra were obtained for cancerous lesions with and without microcalcifications and for benign lesions. A computational algorithm incorporating the spectra detected microcalcified lesions with 97% positive predictive power and 88% negative predictive power. Next steps include devising a miniature optical fiber probe to conduct the studies with the needle device currently used in breast biopsies and conducting a large-scale clinical trial.</p> <p>SciBX 6(3); doi:10.1038/scibx.2013.76 Published online Jan. 24, 2013</p>	<p>Patent application filed by Massachusetts Institutes of Technology and co-inventors; will be available for licensing in the near future</p>	<p>Soares, J.S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 24, 2012; doi:10.1073/pnas.1215473110 Contact: Maryann Fitzmaurice, Case Western Reserve University, Cleveland, Ohio e-mail: maryann.fitzmaurice@case.edu</p>