This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Combined microscopy system to image tumors during tissue-conserving surgery	<p>A combined autofluorescence and Raman scattering microscopy system could help with the rapid identification of tumor regions during tissue-conserving surgery without a tissue preparation step. The system relies on an automated sampling strategy that uses autofluorescence imaging to select and prioritize areas for Raman spectroscopy. In patient skin tissue samples, the combined system enabled diagnosis of basal cell carcinoma (BCC) regions with 100% sensitivity and 92% specificity. The total time to diagnosis for the combined method was estimated at 20–60 minutes, whereas frozen-section histopathology has a 45–120 minute tissue preparation step plus another 10–15 minute diagnosis step. Next steps could include further optimizing the speed and accuracy of the approach and evaluating it in clinical trials.</p> <p>SciBX 6(38); doi:10.1038/scibx.2013.1081 Published online Oct. 3, 2013</p>	Patent application filed; licensing status unavailable	<p>Kong, K. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 3, 2013; doi:10.1073/pnas.1311289110</p> <p>Contact: Ioan Notingher, The University of Nottingham, Nottingham, U.K. e-mail: ioan.notingher@nottingham.ac.uk</p>