

## This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Imaging</b>			
Self-assembling fluorescent small molecule probe to image tumor response to chemotherapy <i>in vivo</i>	<p>Cell culture and mouse studies have identified an apoptosis-sensing molecular probe that could be used to image tumor response to treatment <i>in vivo</i>. A biocompatible, caspase-sensitive fluorescent probe that self-assembles within cells after caspase cleavage and thiol-mediated cyclization was identified. In cultured tumor cell lines, staurosporine- or doxorubicin-induced apoptosis led to a dose- and time-dependent increase in probe fluorescence within cells compared with no treatment. In a mouse xenograft model of cervical cancer, i.v. infusion of the probe plus doxorubicin led to greater fluorescence within tumor cells than either infusion of the probe plus saline or doxorubicin alone. Next steps include adapting the probe for PET or MRI imaging. Staurosporine is a research reagent that acts as a pan-kinase inhibitor. Doxorubicin is a generic chemotherapy drug.</p> <p><b>SciBX 7(21); doi:10.1038/scibx.2014.630</b> Published online May 29, 2014</p>	Patented; available for licensing	<p>Ye, D. <i>et al. Nat. Chem.</i>; published online April 28, 2014; doi:10.1038/nchem.1920 <b>Contact:</b> Jianguo Rao, Stanford University, Stanford, Calif. e-mail: <a href="mailto:jrao@stanford.edu">jrao@stanford.edu</a></p>