This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
<i>In vivo</i> imaging, tracking and targeting of cancer stem cells (CSCs)	<p>A fluorescent ornithine decarboxylase (ODC) fusion protein may be useful for imaging, tracking and targeting CSCs <i>in vivo</i>. The ZsGreen-ODC fluorescent fusion protein accumulates in cells with low proteasome activity, which is a characteristic of CSCs. In nude mice, glioblastoma cells that were positive for ZsGreen had about 100-fold higher tumorigenicity than ZsGreen-negative glioblastoma cells, suggesting CSCs can be imaged and tracked. In tumor-bearing mice receiving the tyrosine kinase substrate ganciclovir, the fluorescent fusion protein linked to a tyrosine kinase increased tumor regression compared with that seen in mice treated with control ZsGreen-ODC fluorescent fusion protein ($p=0.0125$). Next steps include using the approach to image and target CSCs in humans.</p> <p>SciBX 2(9); doi:10.1038/scibx.2009.386 Published online March 5, 2009</p>	Findings unpatented; available for licensing from the University of California, Los Angeles Office of Intellectual Property	<p>Vlashi, E. <i>et al.</i> <i>J. Natl. Cancer Inst.</i>; published online Feb. 25, 2009; doi:10.1093/jnci/djn509</p> <p>Contact: Frank Pajonk, University of California, Los Angeles, Calif. e-mail: fpajonk@mednet.ucla.edu</p>