This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Genetic lineage markers for identifying intestinal cancer stem cells	<p>Mouse studies suggest genetic lineage markers may be useful for identifying compounds that target intestinal cancer stem cells. A mouse model of <i>adenomatous polyposis coli</i> (<i>Apc</i>)-mutant intestinal adenoma was crossed with mice expressing <i>R26-Confetti</i>, a gene that marks leucine-rich repeat-containing G protein-coupled receptor 5 (<i>Lgr5</i>; <i>Gpr49</i>) in one of four different fluorescent colors. In the resulting mouse strain, the color-indicating <i>Lgr5</i>, an intestinal crypt stem cell marker, was enriched in a subpopulation of adenoma cells, suggesting the latter were cancer stem cells. Fluorescent tracking of the <i>Lgr5</i>-enriched adenoma cells confirmed they were multipotent and gave rise to the other cell types in the adenoma. Next steps could include isolating and further characterizing the stem cell properties of the <i>Lgr5</i>-enriched adenoma cells.</p> <p>SciBX 5(32); doi:10.1038/scibx.2012.855 Published online Aug. 16, 2012</p>	Patent and licensing status undisclosed	<p>Schepers, A.G. <i>et al. Science</i>; published online Aug. 1, 2012; doi:10.1126/science.1224676 Contact: Hans Clevers, Hubrecht Institute, Utrecht, the Netherlands e-mail: h.clevers@hubrecht.eu</p>