

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Disease models</b>			
Embryonic stem cell (ESC)-based generation of gene knockout models in rats	<p>An ESC-based gene targeting technology for creating gene knockouts may generate new rat models of human disease. Microinjection of <i>tumor protein p53</i> (<i>Tp53</i>; <i>p53</i>)-deficient rat ESCs into rat blastocysts produced one germline chimera. Of the 76 offspring, 3 were heterozygous <i>p53</i> germline pups, which were subsequently crossed to produce 2 homozygous <i>p53</i>-deficient rats. Next steps include improving the efficiency of the gene knockout technology and investigating <i>p53</i> gene knockout rats as models of <i>p53</i>-deficient cancers.</p> <p><b>SciBX 3(34); doi:10.1038/scibx.2010.1049</b>  <b>Published online Sept. 2, 2010</b></p>	Patent application filed; licensed to StemCells Inc.	<p>Tong, C. <i>et al. Nature</i>; published online Aug. 11, 2010; doi:10.1038/nature09368</p> <p><b>Contact:</b> Qi-Long Ying, University of Southern California, Los Angeles, Calif.            e-mail: <a href="mailto:qying@usc.edu">qying@usc.edu</a></p>