This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Lentiviral vector-based mouse models of early-stage, tissue-specific cancers	<p>Targeted lentiviral vector-based expression of oncogenes in as few as 50 cells can be used to generate cell type-specific cancers in mice that more accurately recapitulate tumorigenesis than xenograft or transgenic approaches. In a proof-of-concept study, immunocompetent mice injected with lentiviral vectors carrying H-RasV12 and protein kinase B (PKB; Akt) developed tumors with characteristics similar to human high-grade gliomas. Injection of as few as 10 brain tumor-causing stem cells from those model gliomas into immunodeficient mice led to tumor formation that mimicked natural brain tumor-initiating stem cells. Next steps include using the approach to create a lung cancer model in mice.</p> <p>SciBX 2(4); doi:10.1038/scibx.2009.164 Published online Jan. 29, 2009</p>	<p>Patent application filed covering method and models; available for licensing from the Salk Institute for Biological Studies Office of Technology Management and Development</p> <p>Contact: Dave Odelson, Salk Institute for Biological Studies, La Jolla, Calif. phone: 858-453-4100 x1223 e-mail: dodelson@salk.edu</p>	<p>Marumoto, T. <i>et al. Nat. Med.</i>; published online Jan. 4, 2009; doi:10.1038/nm.1863</p> <p>Contact: Inder M. Verma, Salk Institute for Biological Studies, La Jolla, Calif. e-mail: verma@salk.edu</p>