This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Safety mechanism assisted by the repressor of tetracycline (SMART) oncolytic <i>Vaccinia</i> vaccines	<p>Cell-based and mouse studies suggest tetracycline-inducible expression of interferon-γ (IFNγ; IFN-γ) could improve the safety of <i>Vaccinia</i> virus (VACV)-based oncolytic viral therapy. SMART vectors were generated to produce low basal expression and doxycycline-inducible high expression of IFN-γ. In immunodeficient mice infected with the SMART-IFN-γ virus, compared with mice infected with a vector lacking IFN-γ, doxycycline decreased infection-associated weight loss and increased survival. Next steps include testing these viruses in mouse xenograft models of cancer and developing next-generation, smallpox-based therapeutic vaccines using the strategy.</p> <p>SciBX 6(38); doi:10.1038/scibx.2013.1078 Published online Oct. 3, 2013</p>	Patent filed by University of Connecticut; available for licensing	<p>Grigg, P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 29, 2013; doi:10.1073/pnas.1314483110</p> <p>Contact: Paulo H. Verardi, University of Connecticut, Storrs, Conn. e-mail: paulo.verardi@uconn.edu</p> <p>Contact: Tilahun D. Yilma, University of California, Davis, Calif. e-mail: tdyilma@ucdavis.edu</p>