This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Zinc-finger nuclease (ZFN)-mediated generation of gene knockout rats	<p>Microinjection of ZFNs into rat embryos could be useful for generating new knockout rat models and mAbs to treat a variety of diseases. In rat embryos, injection of ZFNs targeting rat <i>IgM</i> induced gene knockout with no detectable off-target effects. When bred with wild-type rats, most transgenic animals passed the ZFN-mediated knockout to their offspring. Knockout occurred with a success rate of 10%–30%, and the rats were generated in as little as four months. Next steps include using the approach to create human mAb-producing rats and to generate new disease models.</p> <p>Sangamo BioSciences Inc.'s most advanced zinc-finger protein, SB-509, is in Phase II testing to treat diabetic neuropathy and amyotrophic lateral sclerosis (ALS).</p> <p>SciBX 2(29); doi:10.1038/scibx.2009.1162 Published online July 30, 2009</p>	Patents being filed based on findings; licensing status undisclosed	<p>Geurts, A. <i>et al. Science</i>; published online July 23, 2009; doi:10.1126/science.1172447</p> <p>Contact: Howard J. Jacob, Medical College of Wisconsin, Milwaukee, Wis. e-mail: jacob@mcw.edu</p> <p>Contact: Roland Buelow, Open Monoclonal Technology Inc., Palo Alto, Calif. e-mail: rbuelow@omtinc.net</p>