This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
RNA-based inhibitors of endogenous antisense transcripts for locus-specific gene upregulation	<p>Mouse and cell culture studies have shown that knockdown of endogenous antisense transcripts could enable targeted upregulation of specific gene loci. In cultured human and mouse cell lines, small interfering RNA against an antisense transcript that targets <i>brain-derived neurotrophic factor (BDNF)</i> led to upregulation of <i>BDNF</i>. In mice, intracerebroventricular delivery of an oligonucleotide antagonist of the <i>Bdnf</i> antisense transcript led to greater <i>Bdnf</i> expression, neuronal survival and neuronal proliferation than delivery of control oligonucleotide. Next steps include testing this approach in mouse models of disease.</p> <p>RaNA Therapeutics Inc. has oligonucleotide inhibitors of long noncoding RNA in preclinical development to induce locus-specific gene expression.</p> <p>SciBX 5(16); doi:10.1038/scibx.2012.429 Published online April 19, 2012</p>	Patented; licensed to Curna Inc., which was acquired by Opko Health Inc.; available for partnering	<p>Modarresi, F. <i>et al. Nat. Biotechnol.</i>; published online March 25, 2012; doi:10.1038/nbt.2158</p> <p>Contact: Claes Wahlestedt, University of Miami Miller School of Medicine, Miami, Fla. e-mail: cwahlestedt@med.miami.edu</p>