This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Transcription activator-like effector nucleases (TALENs) selectively targeting individual microRNAs	<p>A library of TALEN-mediated miRNA knockouts could help study miRNA function. A library of TALEN pairs designed to disrupt 274 specific miRNA loci was designed and validated in human embryonic and leukemia cells. In breast cancer cells, TALEN pairs targeting miR-141 and miR-200C, which differ by one nucleotide in their target-selective seed regions, resulted in the upregulation of non-overlapping sets of target mRNAs and decreased cell proliferation rates compared with no TALENs. Next steps include using the TALEN library to selectively delete single miRNAs for research applications.</p> <p>SciBX 6(47); doi:10.1038/scibx.2013.1368 Published online Dec. 12, 2013</p>	Patent application filed for improved TALEN architecture; licensed by ToolGen Inc.; available for licensing	<p>Kim, Y.-K. <i>et al. Nat. Struct. Mol. Biol.</i>; published online Nov. 10, 2013; doi:10.1038/nsmb.2701 Contact: V. Narry Kim, Seoul National University, Seoul, South Korea e-mail: narrykim@snu.ac.kr Contact: Jin-Soo Kim, same affiliation as above e-mail: jskim01@snu.ac.kr</p>