This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Structure-based design of peptide inhibitors and activators of ubiquitin enzymes	<i>In vitro</i> studies identified a strategy to develop peptide inhibitors and activators of ubiquitin pathway enzymes that could help treat various diseases. The crystal structures of ubiquitin with deubiquitinases or ligases were used to identify ubiquitin variants that could act as competitive inhibitors, allosteric inhibitors or activators of the enzymes. In human embryonic kidney cells, a ubiquitin variant with high binding affinity for the ubiquitin-specific peptidase 21 (USP21) blocked deubiquitination. Next steps include developing therapeutic delivery methods for the proteins.	Provisional patent application filed covering inhibitors and activators of deubiquitinases and ubiquitin ligases; available for licensing	Ernst, A. <i>et al. Science</i> ; published online Jan. 3, 2013; doi:10.1126/science.1230161 Contact: Sachdev S. Sidhu, University of Toronto, Toronto, Ontario, Canada e-mail: sachdev.sidhu@utoronto.ca
	SciBX 6(4); doi:10.1038/scibx.2013.103 Published online Jan. 31, 2013		