This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Micelle drug delivery with a modified tumor-targeting Tat peptide	<p><i>In vitro</i> and mouse studies identified modified Tat peptides that could improve drug delivery to tumors. Tat can be used to target compounds to tumors, but the peptide's positive charges can cause nonspecific blood interactions and cardiotoxicity. In tumor cells, micelles functionalized with Tat where positively charged lysine residues were replaced with succinylamides showed greater tumor cell penetration than micelles functionalized with unmodified Tat. In a mouse xenograft model of human breast cancer, doxorubicin-loaded micelles with the modified Tat had longer blood circulation times and led to less tumor growth and cardiotoxicity than micelles using unmodified Tat. Next steps could include using the modified Tat peptide to enhance delivery of other cancer drugs.</p> <p>SciBX 6(3); doi:10.1038/scibx.2013.75 Published online Jan. 24, 2013</p>	Patent and licensing status unavailable	<p>Jin, E. <i>et al.</i> <i>J. Am. Chem. Soc.</i>; published online Dec. 19, 2012; doi:10.1021/ja311180x</p> <p>Contact: Maciej Radosz, University of Wyoming, Laramie, Wyo. e-mail: radosz@uwyo.edu</p>