This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Synthesis of therapeutic peptides resistant to degradation by serine proteases	<p>A method to render therapeutic peptides resistant to serine proteases could increase their <i>in vivo</i> stability. The method involves replacing the amino acid adjacent to a serine protease cleavage site with an analog containing a substituted β-carbon during peptide synthesis. Modified versions of glucagon-like peptide-1 (GLP-1), neuropeptide Y (NPY) and other therapeutic peptides incubated with dipeptidyl peptidase-4 (DPP-4; CD26), DPP-8 or other serine proteases had <i>in vitro</i> half-lives at least 10-fold greater than those of the corresponding unmodified peptides. Ongoing work includes testing the modified GLP-1 peptide in animal models of diabetes and metabolic syndrome.</p> <p>Arisaph Pharmaceuticals Inc. has stabilized GLP-1s in preclinical development to treat diabetes.</p> <p>SciBX 6(40); doi:10.1038/scibx.2013.1146 Published online Oct. 17, 2013</p>	Patented by the Tufts University School of Medicine; licensed to Arisaph Pharmaceuticals	<p>Heard, K.R. <i>et al. J. Med. Chem.</i>; published online Sept. 17, 2013; doi:10.1021/jm400423p</p> <p>Contact: William W. Bachovchin, Tufts University Sackler School of Graduate Biomedical Sciences, Boston, Mass. e-mail: william.bachovchin@tufts.edu</p>