This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Assembly of multiple protein units, tagged with sensitive factor attachment protein receptor (SNARE), to produce therapeutic toxins	<p><i>In vitro</i> studies suggest that assemblies of SNARE-tagged protein units expressed in <i>Escherichia coli</i> could be used to produce multi-subunit protein therapeutics, such as Botox botulinum neurotoxin type A. As proof of principle, incubating three <i>E. coli</i>-expressed, SNARE-tagged Botox domains led to the formation of a fully assembled botulinum toxin. In neuronal assays and brain slices, the toxin assembly prevented neurotransmitter release and suppressed circadian pacemaking as effectively as the wild-type toxin. Next steps include testing the reassembled neurotoxin in animal models of pain.</p> <p>SciBX 3(41); doi:10.1038/scibx.2010.1249 Published online Oct. 21, 2010</p>	Patent applications filed in the U.S. and U.K.; available for licensing	<p>Darios, F. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 4, 2010; doi:10.1073/pnas.1007125107 Contact: Bazbek Davletov, Medical Research Council Laboratory of Molecular Biology, Cambridge, U.K. e-mail: bazbek@mrc-lmb.cam.ac.uk</p>