

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Saccharide-sensitive mesoporous silica nanoparticles for drug delivery	<p><i>In vitro</i> studies suggest that phenyl-boronic acid functionalized nanoparticles could be useful for delivering diabetes therapeutics. The nanoparticles carried gluconic acid-modified insulin on the outside and cAMP inside, and they released their payload upon exposure to saccharide. <i>In vitro</i>, cAMP induced pancreatic insulin secretion, thereby ensuring the maintenance of base levels of insulin following repeated treatment cycles. Next steps include testing the therapeutic effects of the nanoparticles in animals.</p> <p>SciBX 2(23); doi:10.1038/scibx.2009.958 Published online June 11, 2009</p>	<p>U.S. and Patent Cooperation Treaty patent applications filed covering the capped mesoporous silica nanoparticles; available for licensing in the U.S. from the Iowa State University Research Foundation for drug delivery</p>	<p>Zhao, Y. <i>et al. J. Am. Chem. Soc.</i>; published online May 29, 2009; doi:10.1021/ja901831u Contact: Victor S.-Y. Lin, Iowa State University, Ames, Iowa e-mail: vsylin@iastate.edu</p>