

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Drug delivery</b>			
Fc fragment of IgG receptor transporter- $\alpha$ (FCGRT; FCRN)-targeted nanoparticles for oral nanoparticle delivery	<p><i>In vitro</i> and mouse studies suggest FCRN-targeted nanoparticles could be used for oral drug delivery. Polylactic acid (PLA)-polyethylene glycol (PEG) nanoparticles with an IgG Fc fragment conjugated to the PEG shell had increased transport across a human epithelial colorectal adenocarcinoma monolayer and across the intestinal epithelium in mice compared with untargeted controls. In fasted mice, oral Fcrn-targeted nanoparticles encapsulating insulin caused a hypoglycemic response that lasted longer than injection of free insulin, whereas oral delivery of untargeted nanoparticles had no effect. Next steps include testing whether the nanoparticle platform can be used for delivery across other biological barriers.</p> <p><b>SciBX 6(48); doi:10.1038/scibx.2013.1406</b>  <b>Published online Dec. 19, 2013</b></p>	Patent application filed; available for licensing	<p>Pridgen, E.M. <i>et al. Sci. Transl. Med.</i>; published online Nov. 27, 2013; doi:10.1126/scitranslmed.3007049  <b>Contact:</b> Omid C. Farokhzad, Brigham and Women's Hospital, Boston, Mass.                      e-mail: <a href="mailto:ofarokhzad@zeus.bwh.harvard.edu">ofarokhzad@zeus.bwh.harvard.edu</a>  <b>Contact:</b> Frank Alexis, Harvard Medical School, Boston, Mass.                      e-mail: <a href="mailto:falexis@clemson.edu">falexis@clemson.edu</a>  <b>Contact:</b> Rohit Karnik, Massachusetts Institute of Technology, Cambridge, Mass.                      e-mail: <a href="mailto:karnik@mit.edu">karnik@mit.edu</a></p>