

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Drug platforms</b>			
Treating inflammation using mesenchymal stem cells (MSCs) overexpressing <i>P selectin glycoprotein ligand-1</i> ( <i>PSGL-1</i> ; <i>CD162</i> ; <i>SELPLG</i> ), <i>Sialyl-LewisX</i> ( <i>SLeX</i> ) and <i>IL-10</i>	<p>MSCs overexpressing <i>PSGL-1</i>, <i>SLeX</i> and <i>IL-10</i> could be used to treat inflammation. In mice with lipopolysaccharide (LPS)-induced ear inflammation, retro-orbitally injected MSCs transfected with <i>Psgl-1</i> and <i>SLeX</i>-synthesizing <math>\alpha(1,3)</math> fucosyltransferase (<i>Fut7</i>) mRNA had stronger interactions with the inflamed endothelium than unmodified MSCs.</p> <p>In the same model, systemically injected MSCs transfected with <i>Psgl-1</i>, <i>Fut7</i> and <i>Il-10</i> mRNA increased <i>Il-10</i> levels in the ear and decreased inflammation by about 50% compared with injected MSCs transfected with <i>Psgl-1</i> and <i>Fut7</i> mRNA. Next steps include testing the MSCs in several preclinical animal models.</p> <p>Wibi + Works LLC has Antimunocel, an anti-inflammatory, MSC-based product, in Phase I testing to treat rheumatoid arthritis (RA).</p> <p><b>SciBX 6(39); doi:10.1038/scibx.2013.1114</b>  <b>Published online Oct. 10, 2013</b></p>	Cell engineering approaches patented; available for licensing	<p>Levy, O. <i>et al. Blood</i>; published online Aug. 26, 2013;            doi:10.1182/blood-2013-04-495119  <b>Contact:</b> Jeffrey M. Karp, Harvard Medical School, Boston, Mass.            e-mail:  <a href="mailto:jeffkarp.bwh@gmail.com">jeffkarp.bwh@gmail.com</a></p>