

THE DISTILLERY

This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|--|---|--|---|
| Drug platforms | | | |
| Protein-functionalized polyethylene glycol (PEG) hydrogels for increasing β cell function | A protein-functionalized PEG hydrogel could help improve the function of implanted β cells to treat diabetes. Fc fusions of the EPH receptor A5 (EPHA5) protein and ephrin-A5 (EFNA5; AL-1) ligand, a ligand-receptor pair involved in signaling between β cells, were conjugated to a PEG hydrogel. β cells added to the functionalized hydrogel showed greater insulin secretion and survival than β cells added to control hydrogels implanted with an IgG-Fc fusion protein (<i>p</i> <0.05). Next steps could include embedding additional cell signaling proteins and anchoring other cell types into the PEG hydrogel. <i>SciBX</i> 4(16); doi:10.1038/scibx.2011.470 Published online April 21, 2011 | Unpatented; licensing status undisclosed | Lin, CC. & Anseth, K.S. <i>Proc. Natl.</i> <i>Acad. Sci. USA</i> ; published online April 4, 2011; doi:10.1073/pnas.1014026108 Contact: Kristi S. Anseth, University of Colorado, Boulder, Colo. e-mail: kristi.anseth@colorado.edu Contact: Chien-Chi Lin, Indiana University–Purdue University Indianapolis, Indianapolis, Ind. e-mail: lincc@iupui.edu |