This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
<i>In vivo</i> fluorescent imaging of β cell mass using a glucagon-like peptide-1 receptor (GLP-1R; GLP1R)-targeted exendin-4 analog	<i>In vitro</i> and mouse studies identified an exendin-4 analog-based fluorescent probe that could help assess therapeutic efficacy and disease progression in diabetes. <i>In vitro</i> , the probe increased fluorescence signal from baseline in cells expressing the β cell marker GLP-1R compared with no signal increase in GLP-1R-negative cells. In mice, the agent localized to pancreatic β cells and could be used to measure β cell mass and β cell loss. Next steps include studies to evaluate probe toxicity. Byetta exenatide, a synthetic exendin-4 from Amylin Pharmaceuticals Inc. and Eli Lilly and Co., is marketed to treat type 2 diabetes. SciBX 4(30); doi:10.1038/scibx.2011.865 Published online Aug. 4, 2011	Patent application filed covering use in measurement of β cell mass for endoscopic, laparoscopic and intraoperative imaging; available for licensing	Reiner, T. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online July 18, 2011; doi:10.1073/pnas.1109859108 Contact: Ralph Weissleder, Harvard Medical School, Boston, Mass. e-mail: rweissleder@mgh.harvard.edu Contact: Diane Mathis, same affiliation as above e-mail: dm@hms.harvard.edu