

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Imaging</b>			
MRI of $\beta$ cell function using a zinc ion-responsive contrast agent	<p>Mouse studies identified an MRI contrast agent that could image <math>\beta</math> cell function to assess therapeutic responses in diabetes patients. Insulin release from <math>\beta</math> cells upon glucose stimulation is accompanied by zinc ion (<math>Zn^{2+}</math>) release. MRIs of mice injected with glucose followed by the <math>Zn^{2+}</math>-responsive contrast agent had greater pancreatic image contrast than mice given saline plus contrast agent. MRIs showed mice with diet-induced obesity had greater <math>\beta</math> cell area and those with toxin-induced type 1 diabetes had lower <math>\beta</math> cell area than control mice. Next steps include evaluating the method in larger animals and assessing the toxicity of the contrast agent.</p> <p><i>SciBX</i> 4(44); doi:10.1038/scibx.2011.1252 Published online Nov. 10, 2011</p>	Patent pending; unavailable for licensing	<p>Lubag, A.J.M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 24, 2011; doi:10.1073/pnas.1109649108 <b>Contact:</b> A. Dean Sherry, The University of Texas Southwestern Medical Center at Dallas, Dallas, Texas e-mail: <a href="mailto:dean.sherry@utsouthwestern.edu">dean.sherry@utsouthwestern.edu</a></p>