

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
MRI of magnetic nanoparticles to detect islet inflammation and monitor diabetes progression	Imaging studies suggest that MRI of magnetic nanoparticles in the pancreas could help assess progression of type 1 diabetes. MRI scans taken before and after injection of the nanoparticles showed that type 1 diabetes patients had greater pancreatic particle accumulation than healthy controls, which indicated islet inflammation and fluid leakage from the pancreatic vasculature—both of which are early signs of diabetes. The MRI scans also showed that pancreatic volume was lower in type 1 diabetes patients than in healthy controls. Next steps include testing whether the strategy can predict diabetes development and detect the effect of immunomodulatory drugs. <i>SciBX</i> 3(48); doi:10.1038/scibx.2010.1463 Published online Dec. 16, 2010	Patent application filed in U.S. for diabetes diagnosing and monitoring; available for licensing	Gaglia, J.L. et al. J. Clin. Invest.; published online Dec. 1, 2010; doi:10.1172/JCI44339 Contact: Diane Mathis, Harvard Medical School, Boston, Mass. e-mail: cbdm@hms.harvard.edu Contact: Ralph Weissleder, Massachusetts General Hospital, Boston, Mass. e-mail: rweissleder@mgh.harvard.edu