

### This week in techniques

Approach	Summary	Licensing status	Publication and contact information
<b>Imaging</b>			
Real-time measurement of protein transport into live cells	A fluorescence detection system could be useful for measuring how well drug delivery vectors transport protein therapeutics across cell membranes and other biological barriers. The method consists of a delivery vector that is conjugated to a fluorophore reporter and also linked to the protein cargo with a disulfide bond. The variable fluorescence of this construct distinguishes protein cargo in endocytic compartments from protein cargo in the cytosol and also measures the extent of protein cargo degradation within the cytosol. The proof-of-concept delivery vector-protein cargo was mostly trapped in endocytic compartments or degraded before being released into the cytosol. The researchers are using the technique to test various peptides as delivery vehicles and hope to identify compounds that improve the efficiency of macromolecular delivery by promoting endosomal release.	No patent applications filed; Texas A&M is interested in partnering to further develop the technology	Lee, Y.-J. et al. J. Am. Chem. Soc.; published online Feb. 2, 2008; doi:10.1021/ja7102026 <b>Contact:</b> Jean-Philippe Pellois, Texas A&M University, College Station, Texas e-mail: <a href="mailto:pellois@tamu.edu">pellois@tamu.edu</a>