This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Integrin $\alpha_v\beta_3$ (CD51/CD61)-targeting nanoparticles for retinal capillary endothelial cell drug delivery	<i>In vitro</i> and mouse studies suggest integrin $\alpha_v\beta_3$ -targeted nanoparticles could be useful for delivering drugs to retinal capillary endothelial cells to help treat ophthalmic diseases such as age-related macular degeneration (AMD) and diabetic retinopathy. In culture, integrin $\alpha_v\beta_3$ -targeted quantum dots showed increased binding to human endothelial cells compared with nontargeted controls. Binding was not increased in other cell types. In healthy mice, integrin $\alpha_v\beta_3$ -targeted quantum dots showed specific and increased accumulation in retinal vascular endothelial cells compared with nontargeted controls. Next steps could include evaluating the use of the targeted nanoparticles for delivering drugs in models for ophthalmic disease.	Patent and licensing status unavailable	Pollinger, K. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online March 25, 2013; doi:10.1073/pnas.1220281110 Contact: Achim Goepferich, University of Regensburg, Regensburg, Germany e-mail: achim.goepferich@chemie.uni-regensburg.de
	SciBX 6(15); doi:10.1038/scibx.2013.375 Published online April 18, 2013		