This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Lipid-coated silica nanoparticles for drug delivery, gene therapy and molecular imaging	Silica nanoparticles coated with polyethylene glycol (PEG)-based lipids could be used for drug delivery, gene therapy and molecular imaging. In mice, PEG lipid-coated silica nanoparticles had a ten-fold greater serum half-life compared with uncoated silica nanoparticles. In mouse liver and lungs, the lipid-coated particles were well dispersed, whereas uncoated particles formed aggregates. Moreover, lipid-coated nanoparticles showed no organ toxicity, whereas uncoated particles caused breathing problems and killed 3 out of 11 mice. Next steps include development of silica nanoparticles with paramagnetic properties for imaging experiments and testing of nanoparticles for gene delivery and targeted imaging of neural inflammatory processes.	Patent application filed; available for licensing through Utrecht Holdings of University Utrecht	van Schooneveld, M. *et al. Nano Lett.;* published online July 12, 2008; doi:10.1021/nl801596a **Contact:** Willem Mulder, Mount Sinai School of Medicine, New York, N.Y. email: willem.mulder@mountsinai.org