

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Controlled microfluidic formulation of small interfering RNA-containing lipid nanoparticles	Controlled microfluidic formulation of siRNA-containing lipid nanoparticles could aid the development of siRNA-based therapeutics. The system promotes the self-assembly of siRNA lipid nanoparticles by using microfluidic channels with trenches and ridges to mix an ethanol solution containing cationic lipids with an equal volume of siRNA in aqueous solution. Using this system, 7 siRNA-containing lipid nanoparticle formulations were generated that achieved more than 90% gene silencing in mice at a 1 mg/kg dose. Next steps could include studies to compare the knockdown efficacy of conventional siRNA-loaded nanoparticles with those created using the microfluidic system.	Patent and licensing status unavailable	Chen, D. <i>et al.</i> <i>J. Am. Chem. Soc.</i> ; published online April 5, 2012; doi:10.1021/ja301621z Contact: Daniel G. Anderson, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: dgander@mit.edu
	<i>SciBX</i> 5(17); doi:10.1038/scibx.2012.452 Published online April 26, 2012		