

### This week in techniques

| Approach   | Summary   | Licensing status   | Publication and contact information   |
|--|---|--|---|
| <b>Drug delivery</b>   |   |  |   |
| pH-sensitive, pegylated nanoparticles for small interfering RNA delivery | <p>pH-sensitive, pegylated nanoparticles containing siRNA could be useful for treating a variety of conditions. As proof of concept, nanoparticles were loaded with siRNAs targeting the hepatitis B surface antigen (HBsAg) and coupled to polyethylene glycol (PEG) via a pH-sensitive linker, which enabled liver-specific release of the siRNA payload. In a mouse model of chronic HBV infection, the nanoparticles significantly lowered serum HBsAg and virion concentrations compared with nanoparticles containing nonfunctional siRNA (<math>p &lt; 0.05</math>). Next steps include further modifying the nanoparticle and HBsAg-targeting siRNAs to increase potency.</p> <p><b>SciBX 2(8); doi:10.1038/scibx.2009.338</b><br/> <b>Published online Feb. 26, 2009</b></p> | <p>Multiple patents filed covering delivery technology; available for licensing<br/> <b>Contact:</b> Andrew D. Miller, Imperial College London, London, U.K.<br/>                     e-mail: <a href="mailto:a.miller@imperial.ac.uk">a.miller@imperial.ac.uk</a></p> | <p>Carmona, S. <i>et al. Mol. Pharm.</i>; published online Jan. 21, 2009; doi:10.1021/mp800157x<br/> <b>Contact:</b> Andrew D. Miller, Imperial College London, London, U.K.<br/>                     e-mail: <a href="mailto:a.miller@imperial.ac.uk">a.miller@imperial.ac.uk</a><br/> <b>Contact:</b> Patrick Arbuthnot, University of the Witwatersrand Medical School, WITS, South Africa<br/>                     e-mail: <a href="mailto:patrick.arbuthnot@wits.ac.za">patrick.arbuthnot@wits.ac.za</a></p> |