This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Enhancing cancer drug efficacy with an unconjugated, tumor-penetrating peptide	<p>An unconjugated, tumor-penetrating peptide could enhance the efficacy of chemotherapy and antibody-based cancer treatments. In mouse models of breast and prostate cancer, injection of a tumor-penetrating peptide plus a nanoparticle formulation of either paclitaxel, doxorubicin or Herceptin trastuzumab led to greater accumulation of drug in the tumor and a greater reduction in tumor growth compared with those in animals treated with drug only. Further studies showed that the peptide could also enhance tumor uptake of liposomal doxorubicin and two nanoparticle types. Ongoing work includes testing the peptide in combination with therapeutic small interfering RNA or orally delivered drugs in models of breast, prostate and pancreatic cancers.</p> <p>Herceptin, a humanized mAb against epidermal growth factor receptor 2 (HER2; ErbB2; neu) from Roche's Genentech, Inc. unit, is marketed to treat breast cancer.</p> <p>SciBX 3(16); doi:10.1038/scibx.2010.509 Published online April 22, 2010</p>	Patented by the Sanford-Burnham Medical Research Institute; available for licensing	<p>Sugahara, K. <i>et al. Science</i>; published online April 8, 2010; doi:10.1126/science.1183057</p> <p>Contact: Erkki Ruoslahti, University of California, Santa Barbara, Santa Barbara, Calif. e-mail: ruoslahti@burnham.org</p>