This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Liposome-supported peritoneal dialysis for detoxification	<p>Rat studies suggest liposome-supported dialysis could be useful for extracting excess metabolites and drugs from the peritoneal cavity. In rats, i.p. infusion of an icodextrin-based medium containing polyethylene glycol-conjugated liposomes with an internal acidic environment enabled sequestration of endogenous ammonium into the peritoneal space within 3 hours at concentrations more than 20-fold higher than normal plasma levels. In rats orally overdosed with the calcium channel blocker verapamil, dialysis with the liposome-containing medium for 11 hours enabled up to 80-fold greater extraction of the drug compared with medium without the liposomes and accelerated recovery from the drug's effects on hemodynamics and blood pressure. Next steps include further optimization of the peritoneal fluid preparation process. Verapamil is a generic drug used to treat hypertension.</p> <p>SciBX 7(43); doi:10.1038/scibx.2014.1278 Published online Nov. 6, 2014</p>	Patent application filed; unavailable for licensing; available for partnering	<p>Forster, V. <i>et al. Sci. Transl. Med.</i>; published online Oct. 15, 2014; doi:10.1126/scitranslmed.3009135 Contact: Jean-Christophe Leroux, Swiss Federal Institute of Technology Zurich (ETHZ), Zurich, Switzerland e-mail: jleroux@ethz.ch</p>