This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Small molecule target discovery using forward genetics	<p><i>In vitro</i>, cell culture and mouse studies suggest a high throughput small hairpin RNA screening platform could be useful for identifying the targets of lead compounds. A cell culture screen for small molecule inhibitors of acute lymphoblastic leukemia growth identified STF-11804, which inhibited tumor growth at nanomolar concentrations in a range of tumor lines. In a genome-wide screen for shRNAs that enhance STF-118804 activity, shRNA against nicotinamide phosphoribosyl transferase (NamPRT; NAMPT) increased STF-118804 sensitivity compared with shRNAs against other targets. <i>In vitro</i>, STF-118804 inhibited NAMPT activity. Next steps include optimization and preclinical development of STF-118804 for hematological malignancies.</p> <p>SciBX 6(45); doi:10.1038/scibx.2013.1306 Published online Nov. 21, 2013</p>	<p>Stanford University has pending patents on STF-118804; University of California has filed patents on use of its shRNA screening platform for target identification; both sets of patents available for licensing</p>	<p>Mattheny, C.J. <i>et al. Chem. Biol.</i>; published online Oct. 31, 2013; doi:10.1016/j.chembiol.2013.09.014 Contact: Michael L. Cleary, Stanford University School of Medicine, Stanford, Calif. e-mail: mcleary@stanford.edu</p>