This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Obesity; obsessive compulsive disorder (OCD)	Discs large homolog-associated protein 3 (DLGAP3; SAPAP3); melanocortin 4 receptor (MC4R);	<p>Mouse studies suggest inhibition of MC4R could help treat OCD and inhibition of SAPAP3 could help treat obesity. In a <i>Sapap3</i> knockout mouse model for OCD, <i>Mc4r</i> knockout or intracerebroventricular infusion of a small molecule MC4R antagonist normalized compulsive grooming behaviors. In an <i>Mc4r</i> knockout mouse model for obesity, <i>Sapap3</i> knockout reversed excessive weight gain and metabolic markers of obesity. Next steps include dissecting downstream pathways of MC4R and SAPAP3 using the same mouse models and determining whether the results extend to other OCD and obesity models.</p> <p>SciBX 6(27); doi:10.1038/scibx.2013.696 Published online July 18, 2013</p>	Unpatented; licensing status not applicable	<p>Xu, P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online June 10, 2013; doi:10.1073/pnas.1308195110 Contact: Andrew A. Pieper, The University of Iowa, Iowa City, Iowa e-mail: andrew-pieper@uiowa.edu Contact: Michael Lutter, same affiliation as above e-mail: michael-lutter@uiowa.edu Contact: Robert C. Malenka, Stanford University, Stanford, Calif. e-mail: malenka@stanford.edu</p>