This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Huntington's disease (HD)	Jumonji/ARID domain containing protein 1C (KDM5C; JARID1C)	<p>Studies in patient samples, cultured cells and flies suggest inhibiting JARID1C could help to treat HD. In brain tissue from HD patients, trimethylation of histone H3 at lysine 4 (H3K4) was decreased on genes that were expressed at lower levels compared with tissues from healthy individuals. In cultured mouse neurons expressing mutant Huntingtin (<i>Htt</i>), shRNA knockdown of the H3K4 demethylase-encoding <i>Kdm5c</i> increased the expression of these target genes compared with control shRNA. In a fly model of HD, insects lacking one copy of a gene encoding an H3K4 demethylase had a less severe disease phenotype compared with flies carrying both copies of the gene. Next steps could include identifying downstream genes regulated by JARID1C that contribute to HD pathology.</p> <p>SciBX 6(31); doi:10.1038/scibx.2013.830 Published online Aug. 15, 2013</p>	Patent and licensing status unavailable	<p>Vashishtha, M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online July 19, 2013; doi:10.1073/pnas.1311323110 Contact: Leslie M. Thompson, University of California, Irvine, Calif. e-mail: lmthomps@uci.edu Contact: Ernest Fraenkel, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: fraenkel-admin@mit.edu Contact: David E. Housman, same affiliation as above e-mail: dhousman@mit.edu</p>