This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	cAMP responsive element-binding protein (CREB1; CREB); phospho- diesterase 4 (PDE4A; PDE-4)	<p>High throughput screening identified enhancers of CREB signaling that may help treat long-term memory disorders and AD. A screen of about 73,000 small molecules with a CREB pathway signaling assay yielded 77 enhancers of CREB-mediated gene expression. Of these, 53 inhibited PDE-4, a negative regulator of the CREB pathway, whereas the others targeted other steps in the CREB pathway. Next steps include optimization of the compounds with medicinal chemistry and analyzing the molecules in animals.</p> <p>At least four companies have compounds targeting PDE-4 in development stages ranging from preclinical to marketed to treat neurological conditions.</p> <p>SciBX 2(6); doi:10.1038/scibx.2009.237 Published online Feb. 12, 2009</p>	Compounds in paper unpatented; a new series of PDE-4 inhibitors derived from a compound found through this work is patented; unpatented compounds not available for licensing; patented PDE-4 inhibitors available for licensing	<p>Xia, M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Feb. 2, 2009; doi:10.1073/pnas.0813020106</p> <p>Contact: Marshall Nirenberg, National Institutes of Health, Bethesda, Md. e-mail: mnirenberg@nih.gov</p> <p>Contact: Christopher P. Austin, same affiliation as above e-mail: austinc@mail.nih.gov</p>