



## This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disea	ise			
Multiple sclerosis (MS)	Chemokine CXC motif ligand 12 (CXCL12; SDF-1); CXC chemokine receptor 4 (CXCR4; NPY3R)	Studies in mice suggest that activating CXCL12 signaling through CXCR4 could help treat MS. In a mouse model of MS, Cxcl12 signaling through Cxcr4 promoted neural stem cell (NSC)-mediated remyelination. In a mouse model of demyelination, a CXCR4 antagonist or small hairpin RNA targeting the Cxcr4 gene both prevented remyelination compared with saline control buffer or nonsense control shRNA. Next steps include confirming the CXCL12 pathway in other mouse models of MS.  SciBX 3(23); doi:10.1038/scibx.2010.696 Published online June 10, 2010	Work unpatented; available for licensing from the University of California, Irvine Office of Technology Alliance	Carbajal, K.S. et al. Proc. Natl. Acad. Sci. USA; published online May 31, 2010; doi:10.1073/pnas.1006375107  Contact: Thomas E. Lane, University of California, Irvine, Calif. e-mail: tlane@uci.edu  Patel, J.R. et al. Proc. Natl. Acad. Sci. USA; published online May 31, 2010; doi:10.1073/pnas.1006301107  Contact: Robyn S. Klein, Washington University in St. Louis School of Medicine, St. Louis, Mo. e-mail: rklein@id.wustl.edu