

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
LIM homeobox transcription factor 1 α (LMX1A) expression for efficient production of mesencephalic dopamine (mesDA) neurons	<p>Forced expression of LMX1A could be useful for converting embryonic stem (ES) cells into mesDA neurons for use in cell replacement therapies. In mouse ES cells, forced expression of Lmx1a during differentiation increased the proportion of resulting mesDA neurons compared with what was seen using expression of a control vector. The cells had gene expression and electrophysiology profiles that were indistinguishable from primary mesDA neurons. Similar results were obtained with human ES cells. Grafting mouse mesDA cells into rats with neuronal lesions resulted in integrated mesDA neurons in about 50% of the rats.</p> <p>Next steps could include optimizing the grafting procedure and studying animal disease models.</p> <p>SciBX 2(18); doi:10.1028/scibx.2009.770 Published online May 7, 2009</p>	Patent and licensing status unavailable	<p>Friling, S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 22, 2009; doi:10.1073/pnas.0902396106</p> <p>Contact: Johan Ericson, Karolinska Institute, Stockholm, Sweden e-mail: johan.ericson@ki.se</p> <p>Contact: Thomas Perlmann, same affiliation as above e-mail: thomas.perlmann@licr.ki.se</p>