

### This week in techniques

| Approach  | Summary  | Licensing status                        | Publication and contact information   |
|---|--|---|---|
| <b>Drug platforms</b>   |  |   |   |
| Medial ganglionic eminence (MGE)-like progenitor cell transplantation to treat memory and learning deficits | <p>Cell culture and mouse studies suggest transplantation of MGE-like progenitor cells could help treat learning and memory deficits. Human embryonic stem cells were induced into MGE-like progenitor cells that could differentiate into basal forebrain cholinergic neurons and <math>\gamma</math>-aminobutyric acid (GABA) interneurons. In mice with immunotoxin-mediated destruction of hippocampal basal forebrain cholinergic neurons and GABA neurons, hippocampal transplantation of the human MGE progenitor cells increased memory, learning and spatial cognition compared with transplantation of human spinal progenitor cells. Next steps could include testing the procedure in animal models for neurodegeneration or neurological disease.</p> <p><b>SciBX 6(18); doi:10.1038/scibx.2013.448</b><br/>           Published online May 9, 2013</p> | Patent and licensing status unavailable | <p>Liu, Y. <i>et al. Nat. Biotechnol.</i>; published online April 21, 2013; doi:10.1038/nbt.2565<br/> <b>Contact:</b> Su-Chun Zhang, University of Wisconsin–Madison, Madison, Wis.<br/>           e-mail: <a href="mailto:zhang@waisman.wisc.edu">zhang@waisman.wisc.edu</a></p> |