This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Automated, <i>in vitro</i> generation of specific neuronal subtypes from human pluripotent stem cells	An automated, <i>in vitro</i> protocol for generating neuronal subtypes from human pluripotent stem cells could be useful for developing cellular therapies to treat neurological diseases. The protocol involves treating human pluripotent stem cells with four compounds—a wingless-type MMTV integration site pathway agonist, a hedgehog pathway agonist, retinoic acid and fibroblast growth factor 2 (FGF2)—to induce their differentiation into progenitors of specific neuronal subtypes, including spinal motor neurons and cranial motor neurons. In the resulting progenitor cells, treatment with a γ -secretase inhibitor promoted their growth and maturation into neurons that showed markers and electrophysiological properties of the respective neuron subtype. Next steps could include extending the protocol to generate other specific human neuronal cell types.	Patent and licensing status unavailable	Maury, Y. <i>et al. Nat. Biotechnol.</i> ; published online Nov. 10, 2014; doi:10.1038/nbt.3049 Contact: Stéphane Nedelec, Institut National de la Santé et de la Recherche Médicale (INSERM), Evry, France e-mail: stephane.nedelec@inserm.fr
	SciBX 7(46); doi:10.1038/scibx.2014.1363 Published online Dec. 4, 2014		