This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
3D neuronal culture model of Alzheimer's disease (AD)	A 3D neuronal culture model of AD could help screen for new therapeutics. Neuronal progenitor cells overexpressing AD-linked mutant amyloid precursor protein (APP) and presenilin 1 (PSEN1; PS1) were cultured on a 3D matrigel matrix and differentiated into neural and glial cells. The neurons expressed pathogenic β-amyloid (Aβ) and phosphorylated microtubule-associated protein-τ (tau; MAPT; FTDP-17) and developed extracellular Aβ deposits and tau neurofibrillary tangles. In the 3D culture model, β-secretase and γ-secretase inhibitors that block Aβ production decreased Aβ plaques and tau fibrils compared with vehicle control. Next steps include modifying the model to incorporate additional glial cells and other cell types. *SciBX* 7(43); doi:10.1038/scibx.2014.1272 Published online Nov. 6, 2014	Patented; available for licensing	Choi, S.H. *et al. Nature*; published online Oct. 12, 2014; doi:10.1038/nature13800 **Contact:** Doo Yeon Kim, Harvard Medical School, Boston, Mass. e-mail: dkim@helix.mgh.harvard.edu **Contact:** Rudolph E. Tanzi, same affiliation as above e-mail: tanzi@helix.mgh.harvard.edu