This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational models			
Gene regulatory network mapping in late-onset Alzheimer's disease (AD)	<p>A gene regulatory network map of late-onset AD could help identify and prioritize pathways and therapeutic targets in the disease. A bioinformatics analysis of gene expression data from 1,647 postmortem brain tissue samples from patients with late-onset AD was used to create a gene regulatory network of the condition. Analysis of the network found that a set of immunity- and microglia-specific genes had the strongest association with disease pathophysiology. The analysis also showed that TYRO protein tyrosine kinase binding protein (TYROBP) is upregulated in late-onset AD and acts as a key regulator in the network. Next steps include continuing functional studies in mouse models and in microglia and carrying out genetic tests to identify modules with effects on brain atrophy and dementia.</p> <p>SciBX 6(18); doi:10.1038/scibx.2013.446 Published online May 9, 2013</p>	Unpatented; licensing status not applicable	<p>Zhang, B. <i>et al. Cell</i>; published online April 25, 2013; doi:10.1016/j.cell.2013.03.030 Contact: Valur Emilsson, Icelandic Heart Association and University of Iceland, Kopavogur, Iceland e-mail: valur@hjarta.is Contact: Bin Zhang, Icahn School of Medicine at Mount Sinai, New York, N.Y. e-mail: bin.zhang@mssm.edu</p>