

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Fluorescent transgenic zebrafish model of tauopathy	<p>A fluorescent zebrafish model of tauopathy could be used to quickly identify therapeutics for Alzheimer's disease (AD) or frontotemporal dementia. Transgenic expression of fluorescently labeled human τ-protein in zebrafish neurons led to τ-protein accumulation, higher neuronal death and progression of AD behavioral pathology compared with what was seen in controls. Using the model, structure-based design identified a new inhibitor of glycogen synthase kinase 3β (GSK3B) that blocked τ-kinase more potently than existing inhibitors both <i>in vitro</i> and in the zebrafish. The group also generated transgenic zebrafish expressing other amyloid proteins, such as β-amyloid (Aβ), TDP-43 and α-synuclein. Next steps could include testing the new inhibitor in additional animal models of neurological disease.</p> <p>Neurim Pharmaceuticals Ltd.'s Neu-120, a GSK3B inhibitor, is in Phase II testing to treat Parkinson's disease (PD).</p> <p>Noscira S.A.'s NP 12, also a GSK3 inhibitor, is in Phase II testing to treat AD.</p> <p>SciBX 2(17); doi:10.1038/scibx.2009.727 Published online April 30, 2009</p>	Patent and licensing status unavailable	<p>Haass, C. <i>et al. J. Clin. Invest.</i>; published online April 13, 2009; doi:10.1172/JCI37537</p> <p>Contact: Christian Haass, Ludwig Maximilians University of Munich, Munich, Germany e-mail: chaass@med.uni-muenchen.de</p>