This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Cell-based therapy for photoreceptor layer reconstruction to treat age-related macular degeneration (AMD) and retinitis	Transplantation of rod precursors could help reconstruct the outer nuclear layer of photoreceptors to treat AMD and retinitis. In a mouse model of severe human retinitis pigmentosa, subretinal transplantation of photoreceptor precursor cells from postnatal mice led to regeneration of the outer retinal layer of lost photoreceptors. In the same mice, the precursor cells differentiated into mature light-sensing rods that integrated with neuronal synapses, leading to visual function as characterized by the pupil light response. Next steps include differentiating embryonic stem cells to rod precursors for use in subretinal transplantation.	Unpatented; licensing status not applicable	Singh, M.S. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Jan. 3, 2013; doi:10.1073/pnas.1119416110 Contact: Robert E. MacLaren, University of Oxford, Oxford, U.K. e-mail: enquiries@eye.ox.ac.uk
	SciBX 6(3); doi:10.1038/scibx.2013.71 Published online Jan. 24, 2013		