This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Drosophila model for identifying Parkinson's disease (PD) therapeutics	A *Drosophila* model that expresses a mutant form of the human *leucine-rich repeat kinase* (*LRRK2*) gene could be useful for identifying compounds to treat PD. Mutations in the *LRRK2* gene caused late-onset autosomal dominant PD, and expression of the most common mutation, LLRK2-G2019S, in fly photoreceptor cells caused retinal degeneration. Expression of the same mutation in fly neurons produced adult-onset loss of dopaminergic neurons, locomotor dysfunction and early mortality, showing a more severe "parkinsonism-like phenotype" than wild-type LLRK2. L-DOPA treatment improved locomotor dysfunction but did not prevent the loss of neurons. Next steps include discovering compounds that prevent neuronal loss and improve locomotor dysfunction in the *Drosophila* model.	Provisional patent application filed by Johns Hopkins University for the *Drosophila* model; available for worldwide licensing to for-profit companies for in-house research; the model is also being deposited with a fly repository that not-for-profit entities can access at no charge	Liu, Z. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 7, 2008; doi:10.1073/pnas.0708452105 **Contact:** Wanli W. Smith, Johns Hopkins University School of Medicine, Baltimore, Md. e-mail: wsmith60@jhmi.edu