



This week in techniques

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Approach	Summary	Licensing status	Publication and contact information
Disease models			
Disease models Dopamine D2 receptor expression as a measure of Huntington's disease (HD) pathology	Measuring <i>dopamine D2 receptor</i> expression in mouse models of HD could aid the study of therapeutics to treat the disease. Alterations in dopamine signaling have previously been linked to HD pathology. Four genetic mouse models of HD were engineered to express a fusion of a dopamine D2 receptor and a fluorescent protein to monitor dopamine signaling during disease progression. In the models, fluorescence levels decreased with age compared with those in healthy controls. In one of the models, small hairpin RNA against mutant <i>huntingtin</i> (<i>HTT</i>) led to greater fluorescence levels than control shRNA. Next steps could include using the models to screen for compounds that increase dopamine D2 receptor expression.	Patent and licensing status unavailable	Crook, Z.R. & Housman, D.E. <i>Proc. Natl. Acad. Sci. USA</i> ; published online April 23, 2012; doi:10.1073/pnas.1204542109 Contact: David E. Housman, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: dhousman@mit.edu
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