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THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Instrumentation			
Spinal cord stimulation for treating motor symptoms in Parkinson's disease (PD)	Spinal cord stimulation could complement dopamine replacement therapy to help treat PD-associated motor symptoms. Epidural spinal cord stimulation is a less invasive procedure than deep brain stimulation. In a mouse model of PD using pharmacological dopamine depletion, stimulation of the spinal cord via implanted epidural electrodes significantly increased the speed and duration of locomotive behavior compared with what was seen using no stimulation (p=0.005). Spinal cord stimulation also increased locomotive behaviors in non–dopamine depleted mice but to a lesser degree than in the dopamine-depletion PD models. In a separate PD mouse model, administration of one-fifth the total 3,4-dihydroxy-L-phenylalanine (L-dopa) dose in combination with spinal cord stimulation restored locomotion to the same extent as L-dopa alone. Next steps include evaluating the safety and efficacy of spinal cord stimulation approach in nonhuman primate models of PD. *SciBX* 2(13); doi:10.1038/scibx.2009.560 Published online April 2, 2009	Patent and licensing status undisclosed	Fuentes, R. *et al. Science*; published online March 19, 2009; doi:10.1126/science.1164901 **Contact:** Romulo Fuentes, Duke University, Durham, N.C. e-mail: fuentes@neuro.duke.edu