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Movement trajectories, each recorded during a 1-hour time period, for rats with brain lesions that reduce dopamine signaling. These animals serve as a model of Parkinson’s disease and display severe difficulty in initiating movements, as illustrated by the white trajectories (on black background) showing limited locomotion. Black trajectories (on white background) illustrate the recovery of locomotive activity induced by electrical stimulation of the dorsal columns of the spinal cord. See page 1578.

Photo illustration: Yoel Kats/Science; images: Per Petersson
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A. E. Aliev et al.
Applying a high voltage to very low density sheets of carbon nanotubes causes rapid expansion in one direction.
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1578 Spinal Cord StimulationRestoresLocomotion in Animal Models of Parkinson’s Disease
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Epidural stimulation of spinal neural pathways produces specific shifts in activity in neural circuits affecting movement.
>> News story p. 1554; Science Express Report by V. Gradinaru et al.

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