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Authors: Hui Chen, Huimeng Lei, Qunyuan Xu

PII: S0166-4328(17)31519-X
DOI: https://doi.org/10.1016/j.bbr.2017.12.018
Reference: BBR 11218

To appear in: *Behavioural Brain Research*

Received date: 12-9-2017
Revised date: 12-12-2017
Accepted date: 12-12-2017

Please cite this article as: Chen H, Lei H, Xu Q, Neuronal activity pattern defects in the striatum in awake mouse model of Parkinson's disease, *Behavioural Brain Research* (2010), https://doi.org/10.1016/j.bbr.2017.12.018

Neuronal activity pattern defects in the striatum in awake mouse model of Parkinson's disease

Hui Chen[1], Huimeng Lei[1*], Qunyuan Xu[1*]

1 Department of Neurobiology, Beijing Institute of Brain Disorders, Beijing Center of Neural Regeneration and Repair, Key Laboratory for Neurodegenerative Diseases of the Ministry of Education, Capital Medical University, Beijing 100069, China.
E-mail: chen_huirose@163.com

*Address correspondence to:

Qunyuan Xu. Department of Neurobiology, Beijing Institute of Brain Disorders, Beijing Center of Neural Regeneration and Repair, Key Laboratory for Neurodegenerative Diseases of the Ministry of Education, Capital Medical University, Beijing, China. 100069. Tel: +86-10-83911446. E-mail: xuqy@ccmu.edu.cn

Huimeng Lei. Department of Neurobiology, Capital Medical University, Beijing, China. 100069. Tel: +86-10-83911463. E-mail: leihm@ccmu.edu.cn

Highlights

- Bilateral DA depletion reduces MSNs firing rate and burst activity during movement.
- Uni and Bilateral DA depletion both decrease firing rate of FSIs during movement.
- Uni and Bilateral DA depletion change striatal LFP oscillations during movement.

Abstract

Previous studies showed the loss of dopaminergic neurons directly leads to both changes in firing rate and neuronal synchrony in the striatum by pharmacogenetic approach, but physiological observation of striatal neurons in awake animal is rare up