Dear Editors:

We would like to submit the enclosed manuscript entitled “Behavioral Assessments of Spontaneous Locomotion in a Murine MPTP-induced Parkinson’ s Disease Model”, which we wish to be considered for publication in “JoVE”.

In this work, we evaluated how to establish a Murine Model for Parkinson's Disease by using MPTP and two effective behavioral tests, modified open field test and cylinder test, to measure this sort of lesion, which attaches vital importance to the study of Parkinson’s Disease. These two behavioral tests are used to measure motor ability traditionally. Here we modify them to adapt them in Parkinson’s disease study. And we took L-DOPA, one of the most commonly used PD drugs, as one example to show how to apply this model in the study of PD drugs. Our results indicate that MPTP neurotoxicity induces motor deficit and it can be reversed by L-DOPA. I hope this paper is suitable for “JoVE”.

No conflict of interest exits in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere, in whole or in part. All the authors listed have approved the manuscript that is enclosed.

We deeply appreciate your consideration of our manuscript, and we look forward to receiving comments from the reviewers. If you have any queries, please don’t hesitate to contact me at the address below.

Thank you and best regards.

Yours sincerely,

Dr. Prof. Xi-Zeng Feng

E-mail: xzfeng@nankai.edu.cn