Accepted Manuscript

Title: Microelectrode array analysis of hippocampal network dynamics following theta-burst stimulation *via* current source density reconstruction by Gaussian interpolation

Author: Hyun-Bum Kim Tong-In Oh Kelley M. Swanberg Mun-Bae Lee Tae-Woo Kim Eung-Je Woo Ji-Ho Park Oh-In Kwon

PII: S0165-0270(16)00063-7
DOI: http://dx.doi.org/doi:10.1016/j.jneumeth.2016.02.011
Reference: NSM 7454

To appear in: *Journal of Neuroscience Methods*

Received date: 10-12-2015
Revised date: 5-2-2016
Accepted date: 6-2-2016

Please cite this article as: Kim H-B, Oh T-I, Swanberg KM, Lee M-B, Kim T-W, Woo E-J, Park J-H, Kwon O-I, Microelectrode array analysis of hippocampal network dynamics following theta-burst stimulation *via* current source density reconstruction by Gaussian interpolation, *Journal of Neuroscience Methods* (2016), http://dx.doi.org/10.1016/j.jneumeth.2016.02.011

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Manuscript Highlights

- Current source density mapping provides a finer-grained and more direct proxy for neural firing than the voltage density analyses currently ubiquitous in the field of neural electrophysiology.
- The total sink values calculated by the current source density map showed a positive relationship over several cases with the more conventional analysis of whole-tissue activation pre- and post- stimulation, suggesting their root in a common phenomenology.
- Our current source density analysis method was sensitive enough to uncover not only regional but also inter-individual differences in network response to TBS, even while demonstrating commonalities among the multiple cases to which it was applied.

Accepted Manuscript

Download English Version:

https://daneshyari.com/en/article/6267798

Download Persian Version:

https://daneshyari.com/article/6267798

Daneshyari.com