## Accepted Manuscript

Neuronal levels and sequence of tau modulate the power of brain rhythms

Melanie Das, Sumihiro Maeda, Bozhong Hu, Gui-Qiu Yu, Weikun Guo, Isabel Lopez, Xinxing Yu, Chao Tai, Xin Wang, Lennart Mucke

PII: S0969-9961(18)30158-X

DOI: doi:10.1016/j.nbd.2018.05.020

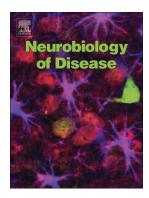
Reference: YNBDI 4182

To appear in: Neurobiology of Disease

Received date: 13 March 2018 Revised date: 23 May 2018 Accepted date: 30 May 2018

Please cite this article as: Melanie Das, Sumihiro Maeda, Bozhong Hu, Gui-Qiu Yu, Weikun Guo, Isabel Lopez, Xinxing Yu, Chao Tai, Xin Wang, Lennart Mucke, Neuronal levels and sequence of tau modulate the power of brain rhythms. Ynbdi (2017), doi:10.1016/j.nbd.2018.05.020

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

Das et al.

Journal: Neurobiology of Disease

Neuronal levels and sequence of tau modulate the power of brain rhythms

Melanie Das<sup>a,\*</sup>, Sumihiro Maeda<sup>a,\*,#</sup>, Bozhong Hu<sup>a</sup>, Gui-Qiu Yu<sup>a</sup>, Weikun Guo<sup>a</sup>, Isabel Lopez<sup>a</sup>,

Xinxing Yu<sup>a</sup>, Chao Tai<sup>a</sup>, Xin Wang<sup>a</sup>, and Lennart Mucke<sup>a,b,+</sup>

<sup>a</sup> Gladstone Institute of Neurological Disease, Gladstone Institutes, San Francisco, CA 94158.

USA

<sup>b</sup> Department of Neurology, University of California, San Francisco, San Francisco, CA 94158,

USA

\*Current address: Department of Physiology, Keio University School of Medicine, Shinjuku-ku,

Tokyo Japan

\*These authors contributed equally to this study.

<sup>+</sup>Correspondence to: Lennart Mucke, MD, Gladstone Institutes, 1650 Owens Street, CA 94158.

Tel: 415-734-2504. Fax: 415-355-0131. Email: lennart.mucke@gladstone.ucsf.edu.

**Keywords:** A152T, Alzheimer's disease, biomarker, brain rhythms, EEG, epilepsy,

levetiracetam, network dysfunction, oscillations, spectrum, tau

## **Highlights:**

Soluble tau modulates the power of specific brain oscillations in resting mice.

Delta/theta power is enhanced more strongly by A152T-variant than wildtype tau.

Tau reduction and treatment with the antiepileptic levetiracetam reverse this effect.

EEG spectral analysis may provide useful biomarkers for tau-targeting therapeutics.

## Download English Version:

## https://daneshyari.com/en/article/8686334

Download Persian Version:

https://daneshyari.com/article/8686334

<u>Daneshyari.com</u>