

## Accepted Manuscript

Store depletion-induced *h*-channel plasticity rescues a channelopathy linked to Alzheimer's disease

Timothy F. Musial, Elizabeth Molina-Campos, Linda A. Bean, Natividad Ybarra, Ronen Borenstein, Matthew L. Russo, Eric W. Buss, Daniel Justus, Krystina M. Neuman, Gelique D. Ayala, Sheila A. Mullen, Yuliya Voskobiynyk, Christopher T. Tulisiak, Jasmine A. Fels, Nicola J. Corbett, Gabriel Carballo, Colette D. Kennedy, Jelena Popovic, Josefina Ramos-Franco, Michael Fill, Melissa R. Pergande, Jeffrey A. Borgia, Grant T. Corbett, Kalipada Pahan, Ye Han, Dane M. Chetkovich, Robert J. Vassar, Richard W. Byrne, M. Matthew Oh, Travis R. Stoub, Stefan Remy, John F. Disterhoft, Daniel A. Nicholson

PII: S1074-7427(18)30141-2  
DOI: <https://doi.org/10.1016/j.nlm.2018.06.004>  
Reference: YNLME 6885

To appear in: *Neurobiology of Learning and Memory*

Received Date: 12 December 2017  
Revised Date: 25 May 2018  
Accepted Date: 11 June 2018

Please cite this article as: Musial, T.F., Molina-Campos, E., Bean, L.A., Ybarra, N., Borenstein, R., Russo, M.L., Buss, E.W., Justus, D., Neuman, K.M., Ayala, G.D., Mullen, S.A., Voskobiynyk, Y., Tulisiak, C.T., Fels, J.A., Corbett, N.J., Carballo, G., Kennedy, C.D., Popovic, J., Ramos-Franco, J., Fill, M., Pergande, M.R., Borgia, J.A., Corbett, G.T., Pahan, K., Han, Y., Chetkovich, D.M., Vassar, R.J., Byrne, R.W., Matthew Oh, M., Stoub, T.R., Remy, S., Disterhoft, J.F., Nicholson, D.A., Store depletion-induced *h*-channel plasticity rescues a channelopathy linked to Alzheimer's disease, *Neurobiology of Learning and Memory* (2018), doi: <https://doi.org/10.1016/j.nlm.2018.06.004>

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.



# Store depletion-induced *h*-channel plasticity rescues a channelopathy linked to Alzheimer's disease

Timothy F. Musial<sup>1,11</sup>, Elizabeth Molina-Campos<sup>1,11</sup>, Linda A. Bean<sup>1</sup>, Natividad Ybarra<sup>1</sup>, Ronen Borenstein<sup>1</sup>, Matthew L. Russo<sup>1</sup>, Eric W. Buss<sup>1</sup>, Daniel Justus<sup>2</sup>, Krystina M. Neuman<sup>1</sup>, Gelique D. Ayala<sup>1</sup>, Sheila A. Mullen<sup>1</sup>, Yuliya Voskobiynyk<sup>1</sup>, Christopher T. Tulisak<sup>1</sup>, Jasmine A. Fels<sup>1</sup>, Nicola J. Corbett<sup>1</sup>, Gabriel Carballo<sup>1</sup>, Colette D. Kennedy<sup>1</sup>, Jelena Popovic<sup>3</sup>, Josefina Ramos-Franco<sup>4</sup>, Michael Fill<sup>4</sup>, Melissa R. Pergande<sup>5</sup>, Jeffrey A. Borgia<sup>5,6</sup>, Grant T. Corbett<sup>1</sup>, Kalipada Pahan<sup>1</sup>, Ye Han<sup>7</sup>, Dane M. Chetkovich<sup>7</sup>, Robert J. Vassar<sup>3</sup>, Richard W. Byrne<sup>8</sup>, M. Matthew Oh<sup>9</sup>, Travis R. Stoub<sup>1,8</sup>, Stefan Remy<sup>2,10</sup>, John F. Disterhoft<sup>9\*</sup> and Daniel A. Nicholson<sup>1\*</sup>

<sup>1</sup>Department of Neurological Sciences, Rush University Medical Center, Chicago, IL 60612, USA

<sup>2</sup>Neuronal Networks Group, Deutsches Zentrum für Neurodegenerative Erkrankungen, Ludwig-Erhard-Allee 2, 53175 Bonn, Germany

<sup>3</sup>Department of Cell and Molecular Biology, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, USA

<sup>4</sup>Department of Molecular Biophysics and Physiology, Rush University Medical Center, Chicago, IL 60612, USA

<sup>5</sup>Department of Pathology, Rush University Medical Center, Chicago IL 60612, USA

<sup>6</sup>Department of Biochemistry, Rush University Medical Center, Chicago IL 60612, USA

<sup>7</sup>Davee Department of Neurology and Clinical Neurosciences, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, USA

<sup>8</sup>Department of Neurosurgery, Rush University Medical Center, Chicago, IL 60612, USA

<sup>9</sup>Department of Physiology, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, USA

<sup>10</sup>Department of Epileptology, University of Bonn Medical Center, Sigmund-Freud-Straße 25, 53125, Bonn, Germany

<sup>11</sup>co-first author

\*Correspondence: [dan\\_nicholson@rush.edu](mailto:dan_nicholson@rush.edu); [jdisterhoft@northwestern.edu](mailto:jdisterhoft@northwestern.edu)

Download English Version:

<https://daneshyari.com/en/article/10153658>

Download Persian Version:

<https://daneshyari.com/article/10153658>

[Daneshyari.com](https://daneshyari.com)