



OPEN ACCESS

EDITED AND REVIEWED BY

Jie Wang,
Wuhan Institute of Physics and
Mathematics (CAS), China

*CORRESPONDENCE

Nian Wang
nianwang@iu.edu

SPECIALTY SECTION

This article was submitted to
Brain Imaging Methods,
a section of the journal
Frontiers in Neuroscience

RECEIVED 22 August 2021

ACCEPTED 21 September 2021

PUBLISHED 13 October 2022

CITATION

Maharjan S, Tsai AP, Lin PB,
Ingraham C, Jewett MR, Landreth GE,
Oblak AL and Wang N (2022)
Corrigendum: Age-dependent
microstructure alterations in 5xFAD
mice by high-resolution diffusion
tensor imaging.
Front. Neurosci. 16:1025457.
doi: 10.3389/fnins.2022.1025457

COPYRIGHT

© 2022 Maharjan, Tsai, Lin, Ingraham,
Jewett, Landreth, Oblak and Wang.
This is an open-access article
distributed under the terms of the
[Creative Commons Attribution License
\(CC BY\)](#). The use, distribution or
reproduction in other forums is
permitted, provided the original
author(s) and the copyright owner(s)
are credited and that the original
publication in this journal is cited, in
accordance with accepted academic
practice. No use, distribution or
reproduction is permitted which does
not comply with these terms.

Corrigendum: Age-dependent microstructure alterations in 5xFAD mice by high-resolution diffusion tensor imaging

Surendra Maharjan¹, Andy P. Tsai², Peter B. Lin²,
Cynthia Ingraham², Megan R. Jewett¹, Gary E. Landreth^{2,3},
Adrian L. Oblak^{1,2} and Nian Wang^{1,2*}

¹Department of Radiology and Imaging Sciences, Indiana University, Indianapolis, IN, United States,

²Stark Neurosciences Research Institute, Indiana University, Indianapolis, IN, United States,

³Department of Anatomy, Cell Biology and Physiology, Indiana University, Indianapolis, IN, United States

KEYWORDS

Alzheimer's disease, 5xFAD, MRI, DTI, diffusion MRI (dMRI)

A corrigendum on

[Age-dependent microstructure alterations in 5xFAD mice by high-resolution diffusion tensor imaging](#)

by Maharjan, S., Tsai, A. P., Lin, P. B., Ingraham, C., Jewett, M. R., Landreth, G. E., Oblak, A. L., and Wang, N. (2022). *Front. Neurosci.* 16:964654. doi: 10.3389/fnins.2022.964654

In the published article, there was an error in **Materials and methods**, “*Histology*,” paragraph 1. The incorrect histology protocol was used and the description of the histology (slice thickness, antibody of NeuN, microscope) was therefore incorrect. The paragraph previously stated:

“Histological examinations were performed on the mice brains as previous described (Oblak et al., 2021; Tsai et al., 2021). Coronal 8- μ m thick slices were stained immunocytochemically stained for the neuronal nuclear antigen (NeuN) (MAB377, lot 2967854, Millipore, Burlington, MA, United States) and 6E10 staining (BioLegend #803001 in mouse, 1:1000; AB_2564653) for beta-amyloid plaques. The slides were imaged using Axioscop2 FSmot optical microscope with EC PlanNeofluar Zeiss lens at 20 \times magnification, 0.3 aperture under the same settings and light conditions.”

The corrected paragraph appears below:

“Histological examinations were performed on the mice brains as previous described (Oblak et al., 2021; Tsai et al., 2021). Thirty micron-thick sections were stained to visualize neuronal cell bodies and beta-amyloid plaques using antibodies directed against NeuN (Abcam #ab104225, 1:1000, Boston, MA) and 6E10 (BioLegend #803001, 1:1000). The slides were imaged using Leica DVM6 digital microscope.”

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated

organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

Oblak, A. L., Lin, P. B., Kotredes, K. P., Pandey, R. S., Garceau, D., Williams, H. M., et al. (2021). Comprehensive evaluation of the 5xFAD mouse model for preclinical testing applications: A MODEL-AD study. *Front. Aging Neurosci.* 13:713726. doi: 10.3389/fnagi.2021.713726

Tsai, A. P., Lin, P. B.-C., Dong, C., Moutinho, M., Casali, B. T., et al. (2021). INPP5D expression is associated with risk for Alzheimer's disease and induced by plaque-associated microglia. *Neurobiol. Dis.* 153:105303. doi: 10.1016/j.nbd.2021.105303