

Email Comments:

1. *Please track the changes within the manuscript to identify all of the edits.*
Yes, we have used red font to mark all edits in the revised manuscript.
2. *Please also upload a separate rebuttal document that addresses each of the editorial and peer review comments individually.*
This is the rebuttal document, where we address each comment individually.
3. *Please submit each figure as a vector image file to ensure high resolution throughout production: (.svg, .eps, .ai). If submitting as a .tif or .psd, please ensure that the image is 1920 x 1080 pixels or 300 dpi.*
Yes, we are submitting .tif file with required resolution for each figure.

Editorial Comments:

1. *Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues. The JoVE editor will not copy-edit your manuscript and any errors in the submitted revision may be present in the published version.*
We have proof-read the manuscript. We have made some edits based on the following comments. For these edits, we have tracked the changes.
2. *Please do not abbreviate journal titles.*
We thank the editorial for their comment. We have now removed abbreviations for all journal titles under references.
3. *What are the units in Figure 1A and 4B?*
The figure legends for both Fig.1A and Fig.4B already stated that the dimensions are in millimeters. In the revised version, we have also added a line in the figure, saying "All measurements are in millimeters".
4. *Please rephrase the Short Abstract to avoid bulleted lists.*
We thank the editorial for this comment. We have now rephrased the short abstract.
5. *Please remove the references from the Short Abstract. After doing so, you may need to renumber the references so they appear in order of appearance.*
We removed the reference from the Short Abstract. However, we didn't need to renumber the references, since they were still in order of appearance.
6. *Please revise the text to avoid the use of any personal pronouns (e.g., "we", "you", "our" etc.).*
We found 27 occurrences of personal pronouns in the manuscript. We have revised the text to remove pronouns from the following 27 lines:
Line numbers: 29, 32, 38, 50, 53, 55, 57, 61, 67, 73, 75, 88, 92, 97, 251, 253, 256, 260, 262, 267, 338, 340, 342, 345, 369, 373, and 375.

7. *Please add more details to your protocol steps. Please ensure you answer the “how” question, i.e., how is the step performed? Alternatively, add references to published material specifying how to perform the protocol action.*

We have added more details to protocol steps 2.8, 2.11, 3.4, 4.1, 5.2 and 5.3. We have also added steps 5.1, 5.4, and 5.5.

8. *3.4: How much is added?*

We thank the editorial for pointing this missing volume. We have now edited protocol step 3.4 in the revised manuscript to read, “Add 200 microliters of 100 millimolar (3-Aminopropyl)triethoxysilane...”

9. *3.5: How much is added?*

We thank the editorial for pointing this missing volume. We have now edited protocol step 3.5 in the revised manuscript to read, “Incubate the plates with 150 microliters solution of molecular crosslinker...”.

10. *Please specify all volumes and concentrations used throughout.*

We thank the editorial for pointing out that the volumes are missing in a few places. We have now edited the text in the revised manuscript to add more details, including volumes and concentrations of all reagents used.

11. *Please do not use contractions in the manuscript.*

We have removed all contractions in the revised manuscript.

12. *Please obtain explicit copyright permission to reuse any figures from a previous publication. Explicit permission can be expressed in the form of a letter from the editor or a link to the editorial policy that allows re-prints. Please upload this information as a .doc or .docx file to your Editorial Manager account. The Figure must be cited appropriately in the Figure Legend, i.e. “This figure has been modified from [citation].”*

Figures 1B, 1C, 5D, and 6 have been adapted from Makhija et al. *Frontiers in Cellular Neuroscience* (2018), as already stated in the figure legends. We checked the re-print policy on the Frontiers website. Their website (link below) states that as long as the original publication is cited, and no third-party licenses apply within the article, we are free to reprint parts from our article. Frontiers does not provide any formal permissions for reuse. We have now uploaded a .pdf file of their webpage stating their re-print policy in our JOVE Editorial Manager Account. Here is the link: <https://zendesk.frontiersin.org/hc/en-us/articles/201904562--Do-I-need-permission-to-reprint-my-article-or-parts-of-my-article-published-with-Frontiers->

We also checked with Frontiers editorial office their re-print policy via email. They said we can reuse the figure as long as we acknowledge the original source. Pdf file of the email communication is also uploaded.