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Cyrus Martin
Senior Scientific Editor
Current Biology

Ref.: Ms. No. CURRENT-BIOLOGY-D-16-01629

Dear Dr. Martin:

Thank you for considering our initial submission, "Electron microscopic reconstruction of functionally identified cells in a neural integrator." We were encouraged by referee #1, who thought our work was "beautiful" and "balanced". As you requested, we have revised the text to address all the points raised by referee #2:

- We have added a figure panel that shows correspondence between integrator cells in light and electron microscopic images.
- We performed statistical analyses to compare integrator neuron time constants and morphologies and have now reported these results.
- We have explained that confusion between cells from different "stripes" is extremely unlikely, by clarifying the location of the somata that were studied.

We have also addressed the minor issues raised by both referee #1 and referee #2.

Finally, referee #2 suggested that we reconstruct abducens neurons. We would love to do this, but the putative abducens cells are close to the boundaries of the imaged volume, so any reconstructions would be highly fragmentary—so much that we could never be sure whether they are indeed abducens cells.

Based on their comments, we have now uploaded a revised manuscript. We were able to address all the concerns posed by both the reviewers and feel that our manuscript will benefit the broader neuroscience community.

We have also provided a detailed, line-by-line response to the referees' comments and have uploaded this document to the journals website. The revised manuscript has benefited from the referees' comments. These changes have been highlighted with the corresponding line numbers in the detailed responses.

We hope that the revised manuscript is accepted for publication.

Sincerely,

Anthony B. Evnin ’62 Professor
Neuroscience Institute and Computer Science Department