OPEN PEER REVIEW REPORT 1

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Title: Expression Pattern of Slit1-3 and Robo1-2 in Injured Mouse Peripheral Nervous System
Reviewer's Name: C.A. Webber
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COMMENTS TO AUTHORS

The article is an overall well-executed display of imaging. It shows there are important changes in the Slit and Robo genes in different locations along the spinal cord and nerve during regeneration. The investigation into the contents of the nerve graft was important and the double-labeling with the various cell markers allowed for reasonable assumptions as to the cells expressing these mRNAs/proteins.

The paper investigates several times points post sciatic nerve injury which is appreciated. The immunos follow after the authors used the qRT-PCRs and western blots to identify the highest expression points for these proteins.

Major complaints: NeuN is a nuclear stain within neurons and the immune in Figures 3 D,G and 4 B, E do not look nuclear at all. In fact the NeuN stain should overlap with the DAPI stain. Therefore these immunos, although they morphologically look like neutrons, do not represent NeuN staining.

Figure 3C Robo1 staining is of much poorer quality than Figure 4A and I would suggest improving the image by decreasing background staining.

A cartoon at the end to summarize the location of the different Slit-Robo protein expression before and after injury (perhaps including a time-line of changes as well) would be much appreciated as alhtough I read the paper several times, it was difficult to retain the expression pattern changes.