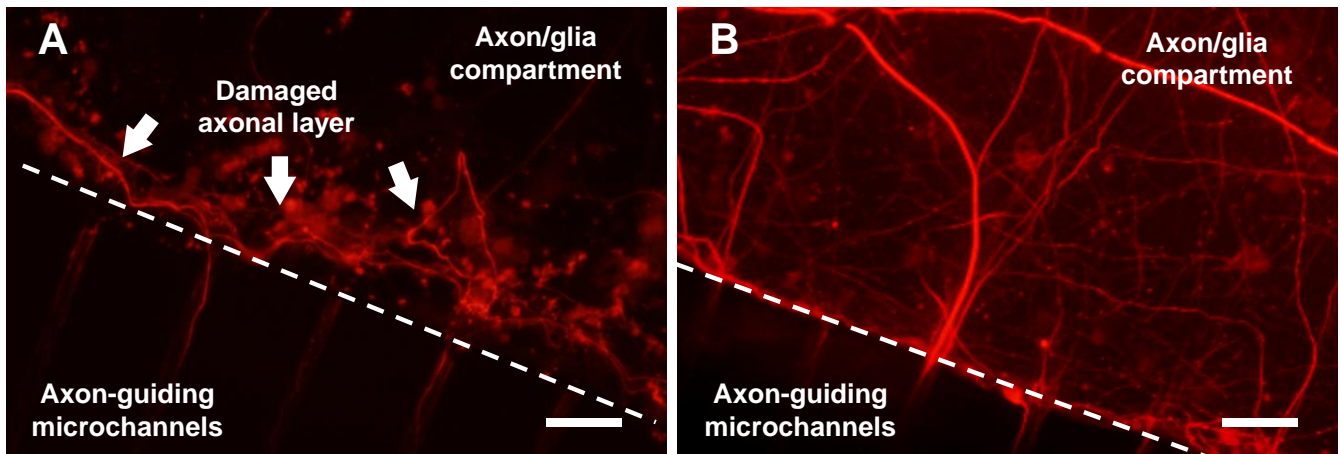


Supplementary Information

Title: Multi-Compartment Neuron-Glia Co-culture Platform for Localized CNS Axon-glia Interaction Study



Supplementary Fig. 1 Immunostained images of isolated axons inside the axon/glia compartment at DIV 27 (Stained for NF = red). (A) Isolated axons damaged by astrocytes (500 cells/mm^2) that have been added on top of pre-established axonal layer. Astrocytes grew underneath the axons and most pre-established axonal layer was lost and remaining axons were physically pushed toward the channel area after two weeks of co-culture. Neurons (500 cells/mm^2) were cultured for two weeks prior to adding astrocytes. (B) Isolated axon layer not co-cultured with astrocytes. No axonal damage can be observed and axons form uniform distribution inside the axon/glia compartment. The white dotted lines delineate compartment boundary. Scale bars = $50 \mu\text{m}$.