

Supporting Information

Nerve Guidance Conduits (NGCs) Based on Double-layered Scaffolds of Electrospun Nanofibers for Repairing the Peripheral Nervous System

Jingwei Xie,^{†,§,‡} Matthew R. MacEwan,^{†,§} Wenyong Liu,[⊥] Nithya Jesuraj,[§] Xiaoran Li,[§]

Daniel Hunter,[±] and Younan Xia^{⊥,¶,}*

[§]Department of Biomedical Engineering, Washington University, St. Louis, Missouri 63130, United States

[⊥]School of Chemical and Biomolecular Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332, United States

[±]Division of Plastic and Reconstructive Surgery, Department of Surgery, Washington University School of Medicine, St. Louis, Missouri 63110, United States

[¶]The Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology and Emory University; School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia 30332, United States

*Address correspondence to Younan Xia (younan.xia@biomed.gatech.edu)

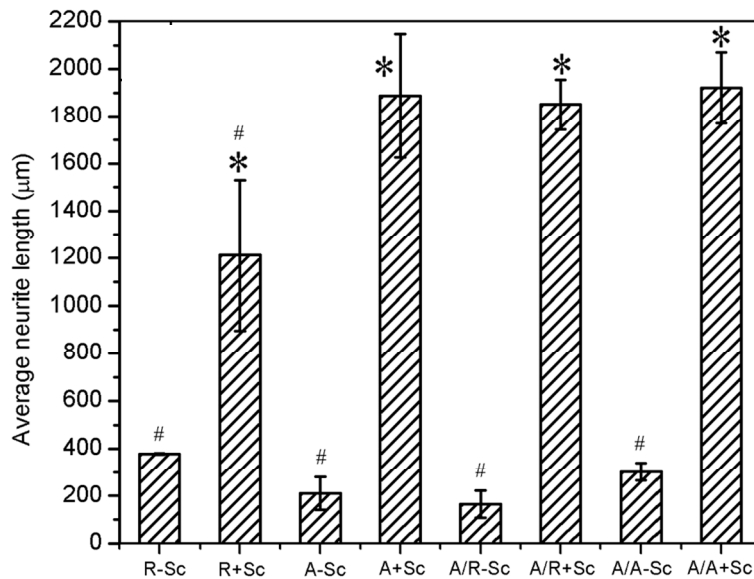


Figure S1. Average neurite length for DRGs cultured on different types of scaffolds. * indicates $p < 0.05$ for Samples +Sc compared with Samples -Sc under the same condition; # indicates $p < 0.05$ for samples compared with A+Sc. Abbreviations: R-Sc and R+Sc: random PCL nanofibers in the absence and presence of pre-seeded Schwann cells. A-Sc and A+Sc: aligned PCL nanofibers in the absence and presence of pre-seeded Schwann cells. A/R-Sc and A/R+Sc: double-layered nanofiber scaffolds with aligned fibers in the top layer and random fibers in the bottom layer and in the absence or presence of pre-seeded Schwann cells. A/A-Sc and A/A+Sc: double-layered nanofiber scaffolds with aligned fibers in both layers but oriented perpendicular to each other and in the absence or presence of pre-seeded Schwann cells.