

Polymer Coatings in 3D Printed Fluidic Device Channels for Improved Cellular Adherence Prior to Electrical Lysis

Bethany C. Gross, Kari B. Anderson, Jayda E. Meisel,
Megan I. McNitt, and Dana M. Spence

Department of Chemistry

Michigan State University

East Lansing, MI, 48823

dspence@chemistry.msu.edu

517.355.9715 x174

Supporting Information Available

Supporting Information Available: This material is available free of charge via the Internet at <http://pubs.acs.org>.

Figure S1. Bright field image of endothelial cells displaying characteristic cobblestone patterning within a PDMS-coated 3D printed channel.

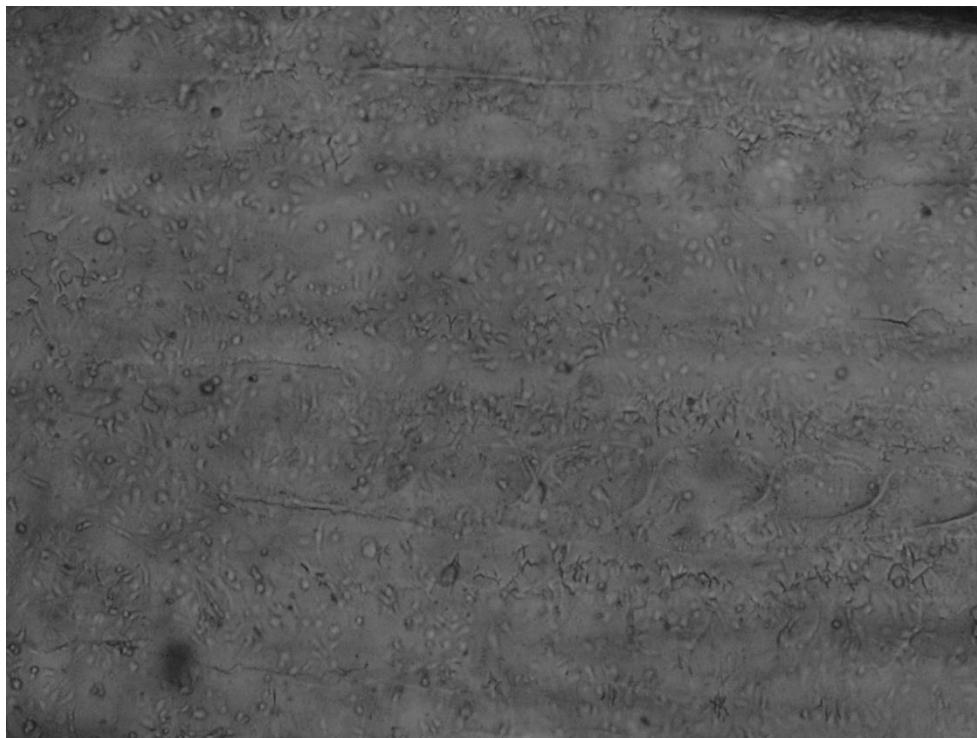
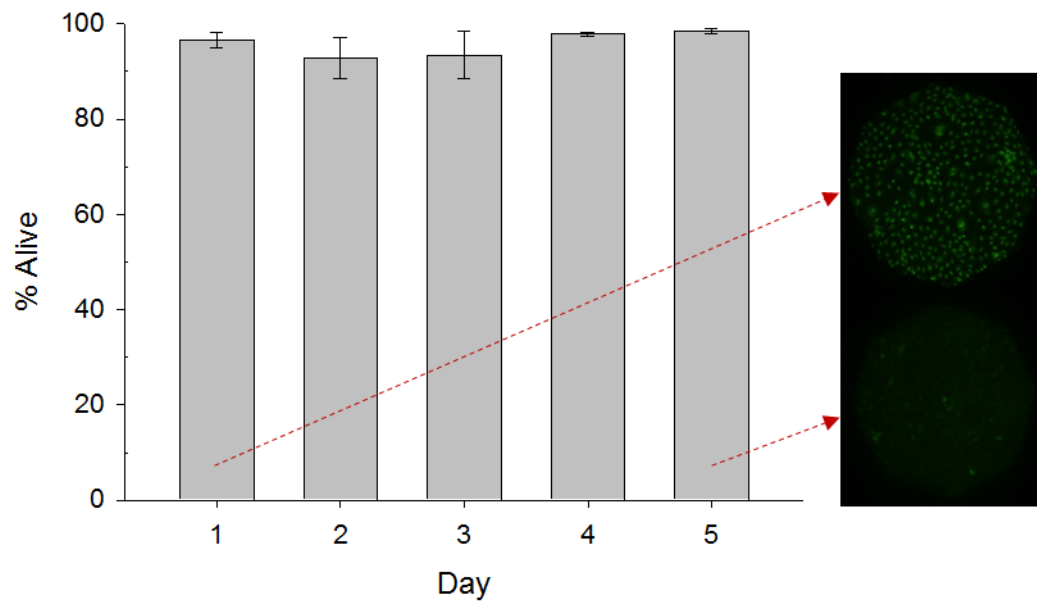


Figure S2. Viability of cells on the device when media delivery was static. Propidium iodide (Ex 493/ Em 636 nm) and Syto 9 (Ex 485/ Em 498nm) were used to determine viability. $n \geq 4$; Error = S.E.M. (left). Cell coverage on the device through day 5 (right).



Video S1. Lysis of adhered endothelial cells on a channel coated with PDMS within a 3D printed fluidic device when a 100 V potential was applied. Cells visualized with Hoechst 33342. Device 1 geometry shown.



Cell lysis movie march 2.wmv