

Supplementary Information

Microfluidics-enabled 96-well perfusion system for high-throughput tissue engineering and long-term all-optical electrophysiology

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S1 – Supplementary Video

Video S1: Food dye perfusion test with 0.4mL/min volume flow rate.

File name: HT- μ UPS perfusion test video.mp4

S2 – Design files for the HT- μ UPS microfluidic cover

File Name: HT- μ UPS channel layer mold.STL

- This is the STL file for the top (channel) layer of the HT- μ UPS microfluidic cover.

File Name: HT- μ UPS channel layer mold.STEP

- This is the STEP file for the top (channel) layer of the HT- μ UPS microfluidic cover.

File Name: HT- μ UPS bottom layer mold.STL

- This is the STL file for the bottom (button) layer of the HT- μ UPS microfluidic cover.

File Name: HT- μ UPS bottom layer mold.STEP

- This is the STEP file for the bottom (button) layer of the HT- μ UPS microfluidic cover.

S3 - COMSOL Multiphysics 5.4 Simulation Source File

File name: HT- μ UPS CFD simulation for single well.mph

- This file is the COMSOL Multiphysics CFD simulation file used in this paper.