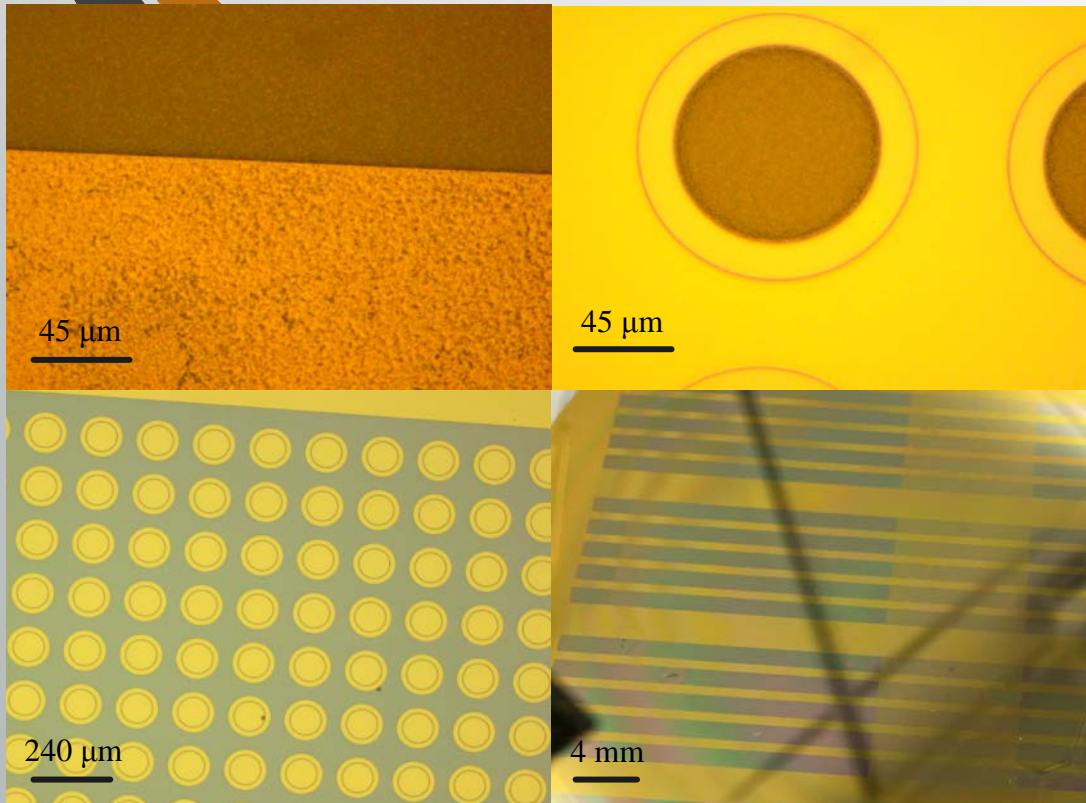


Fabricating a Flexible Biocompatible Microelectrode Array for 3-D Applications



Vivian Yu, Jenny Tang, Yasmin Afsar,
Naveen Verma and James Sturm

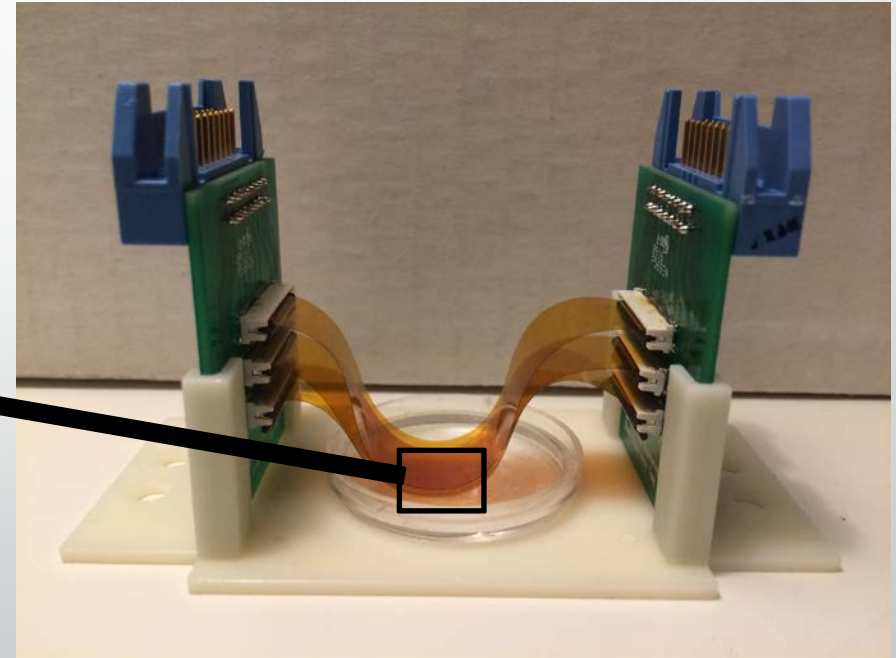
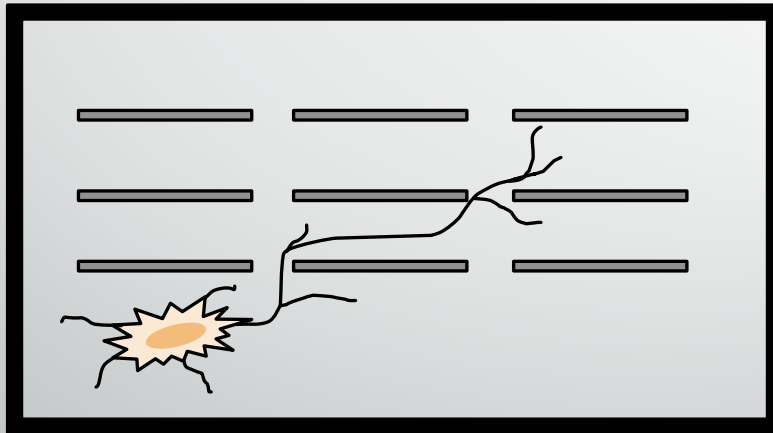
Princeton University, Princeton, NJ 08544

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MOTIVATION

Microelectrode arrays provide a powerful way to study brain function

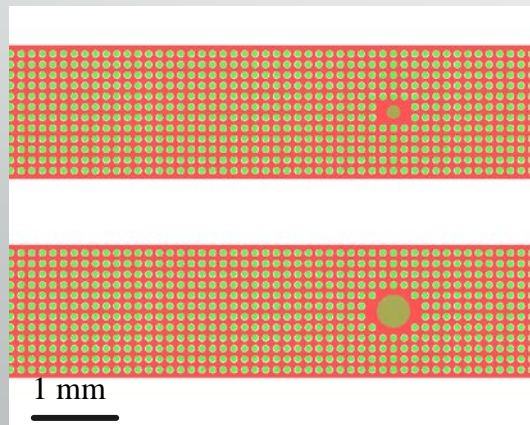
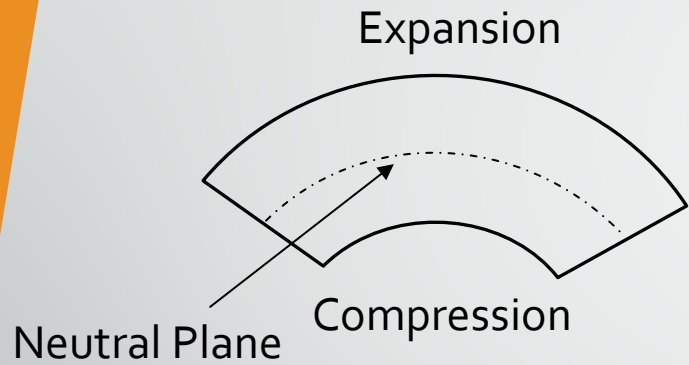
Less work has been done with electrodes that monitor cell growth in three dimensions



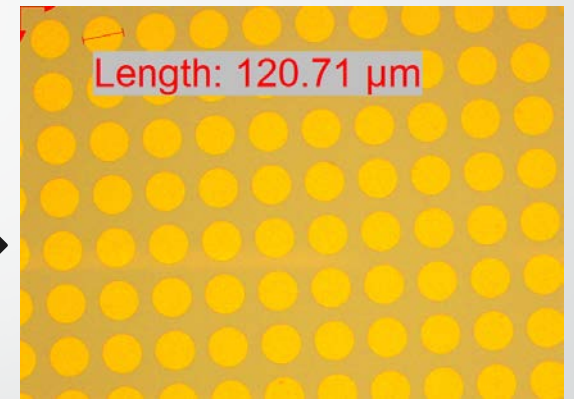
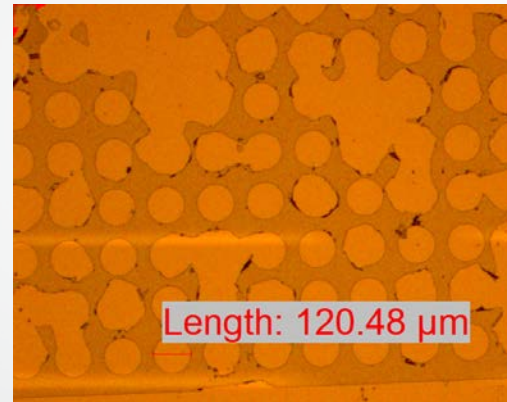
GOAL: To fabricate ultra-thin, biocompatible microelectrode arrays and layer them into a 3D structure to electrically monitor cell growth at each layer.

ELECTRODE DESIGN CONSIDERATIONS

Resistance to Breakage



Materials



FABRICATION PROCESS

