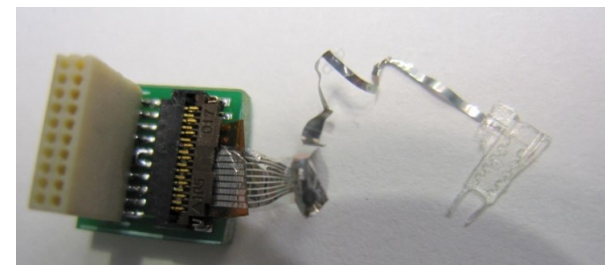
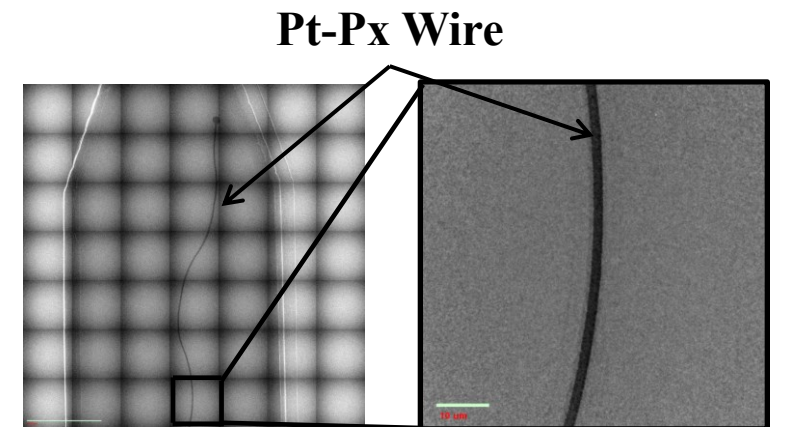
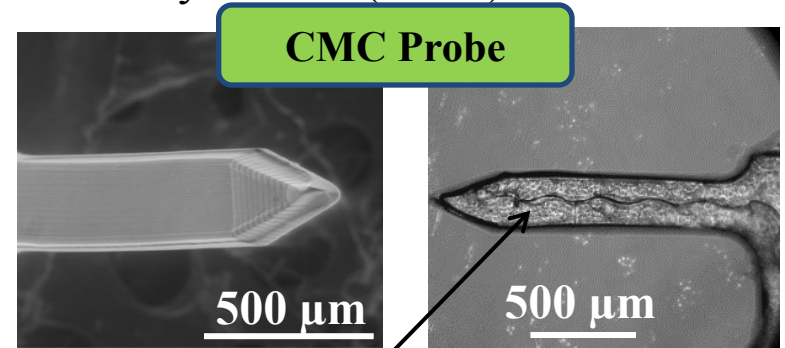
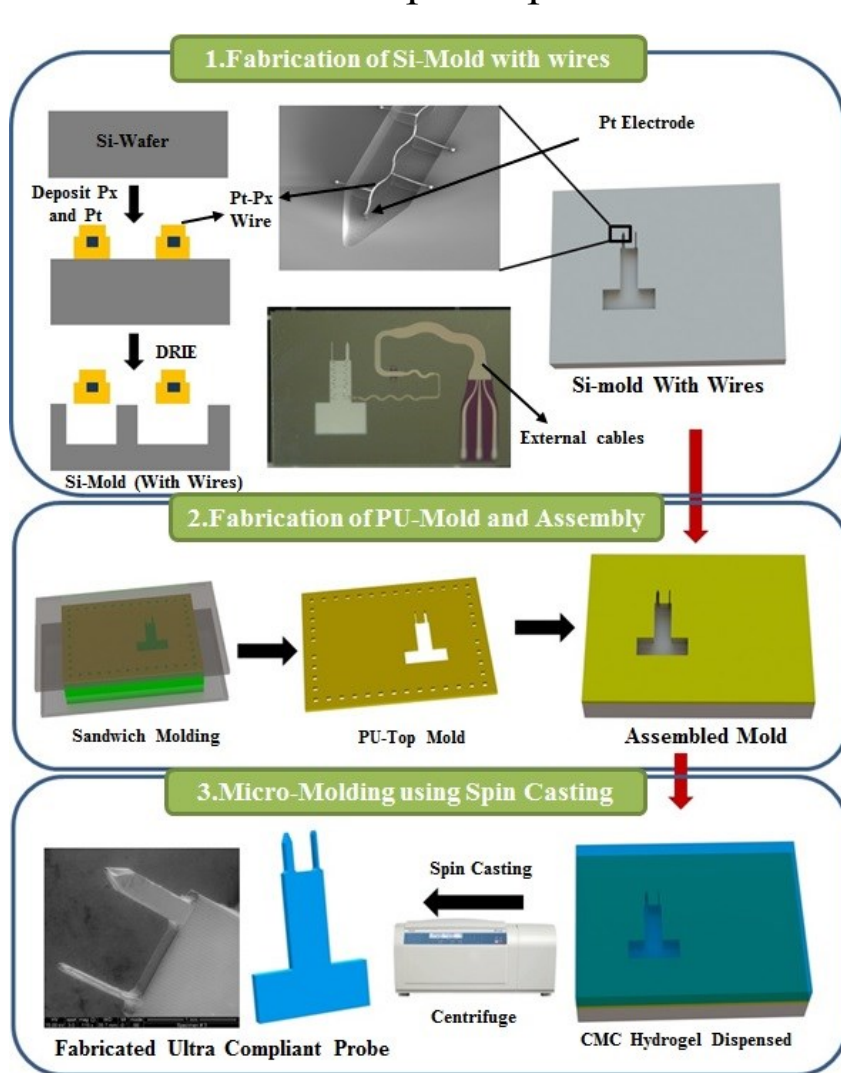


# Fabrication of Novel Dissolvable Delivery Vehicle for Flexible Neural Probes using Spin Casting

*R. Khilwani,, P.J. Gilgunn, G.K. Fedder, and O.B. Ozdoganlar*

**GOAL:** Develop a spin casting based fabrication method to encapsulate a meandered ultra miniature ultra compliant probe in a bio dissolvable delivery vehicle (CMC)



# FABRICATION OF WATER-SOLUBLE AND BIODEGRADABLE MICRONEEDLE ARRAYS FOR DRUG DELIVERY

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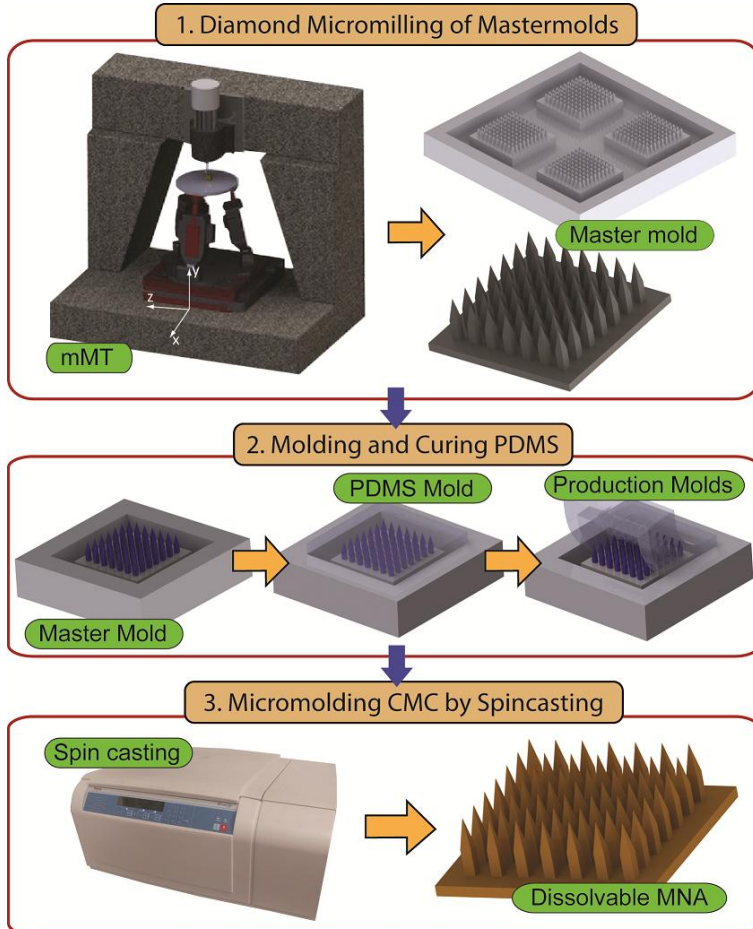
<sup>1</sup>Carnegie Mellon University, USA

<sup>2</sup>University of Pittsburgh School of Medicine, USA

**Goal:** To develop techniques in order to reproducibly fabricate microneedle arrays with parameterized designs

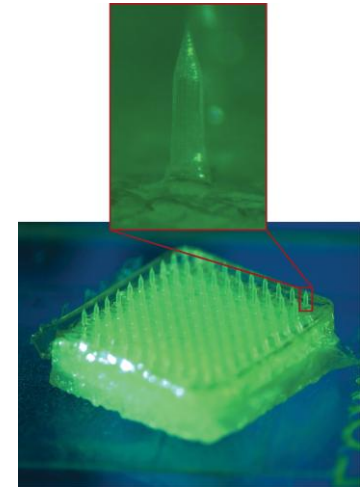
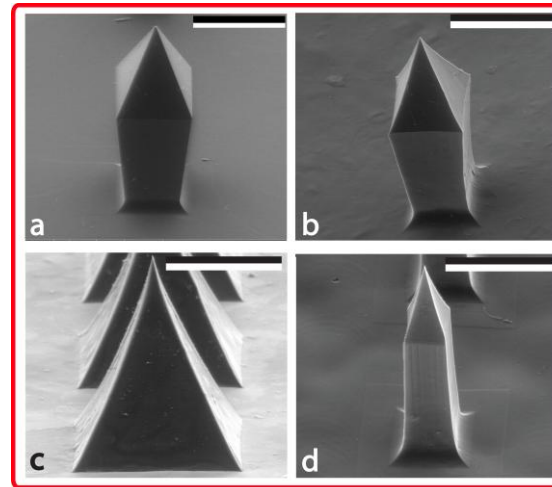
## FABRICATION TECHNIQUE

**A novel micromilling/spin-casting based approach**



## RESULTS AND DISCUSSION

**A. Scanning Electron Microscope and Optical Microscope Images**



**B. Penetration and Deposition Studies**

