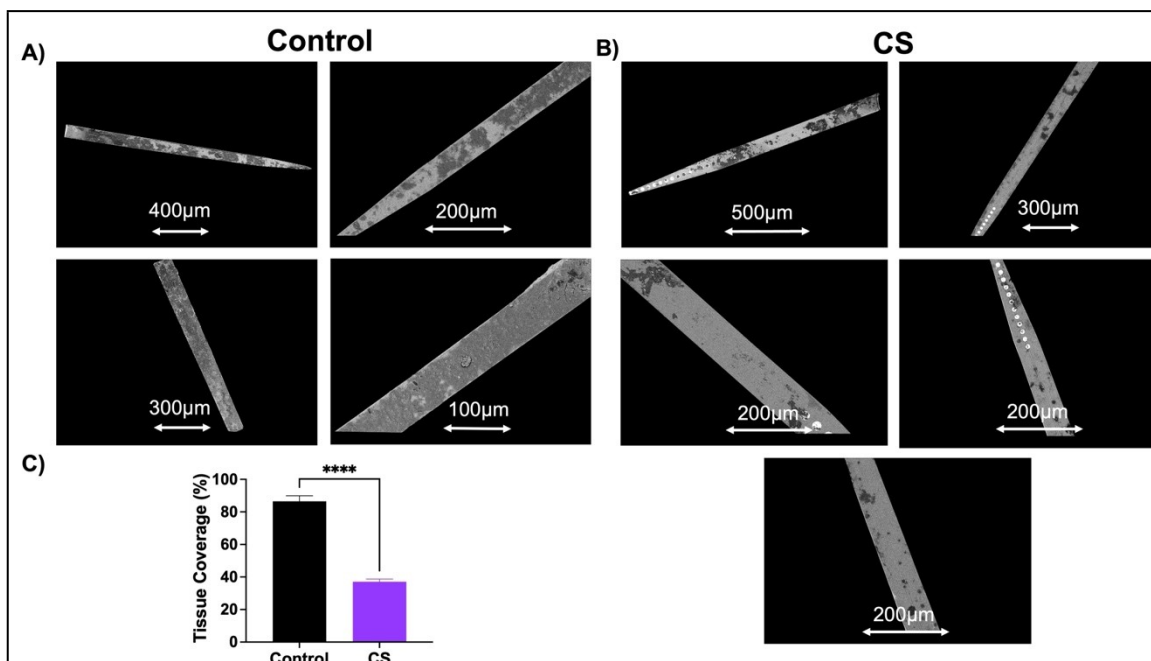
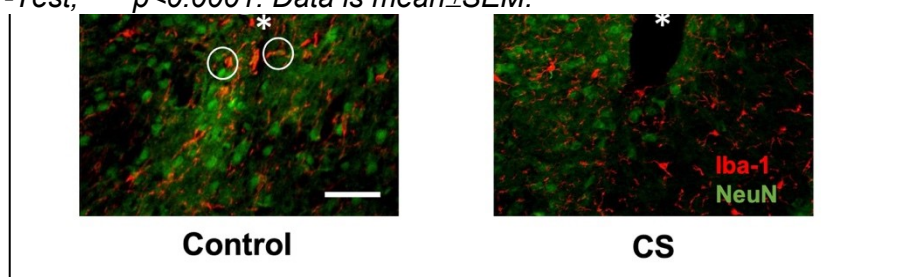


## 1. Supplementary Figures



**Supplementary Figure 1: Scanning electron microscopy images of explanted probes implanted for 1-week showing the tissue coverage in darker gray pixels on the probe surface. A) Uncoated control probes B) CS-coated probes. C) Quantified tissue coverage (% area covered) is reported for both groups, and significantly less area is covered by biological matter in explanted probes coated with CS as compared to the control group. Welch's T-Test, \*\*\*\* $p < 0.0001$ . Data is mean  $\pm$  SEM.**



**Supplementary Figure 2: Microglia engulfment of neurons shown by co-labeled neuronal nuclei (NeuN) in green and microglia (Iba-1) in red. White circles highlight neurons that coincide with microglia for approximately up to 50 microns away from the probe.**