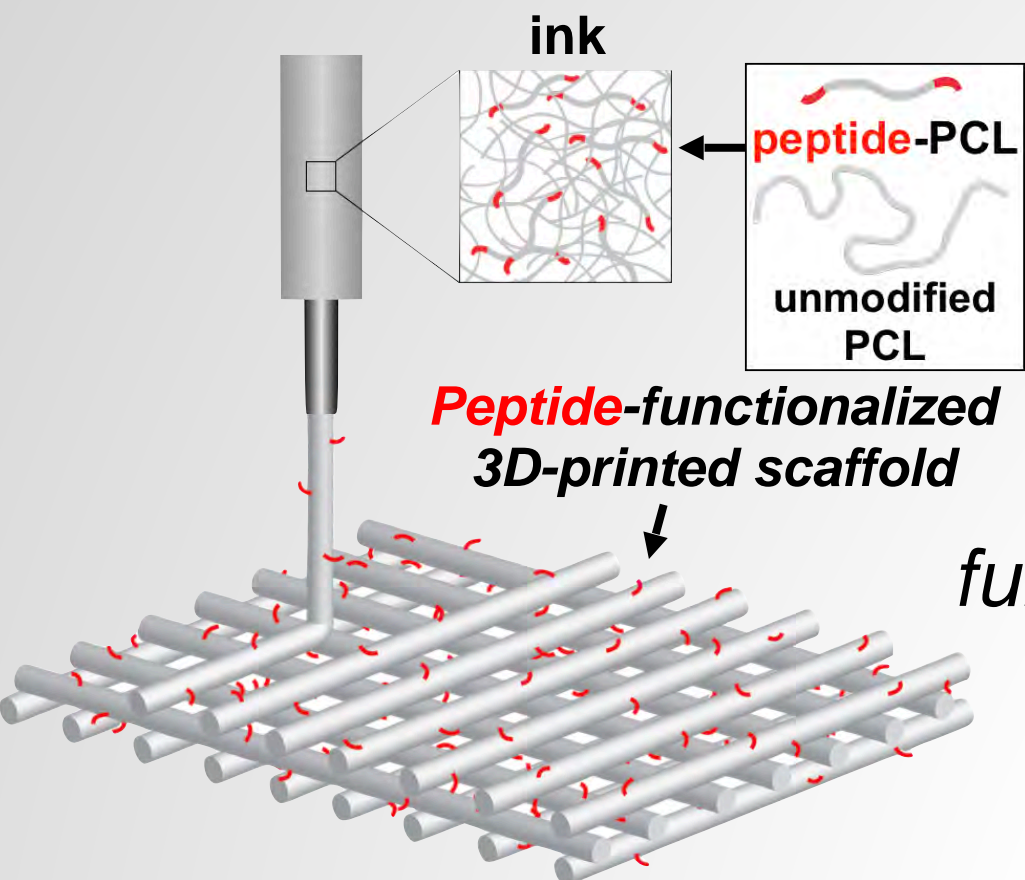
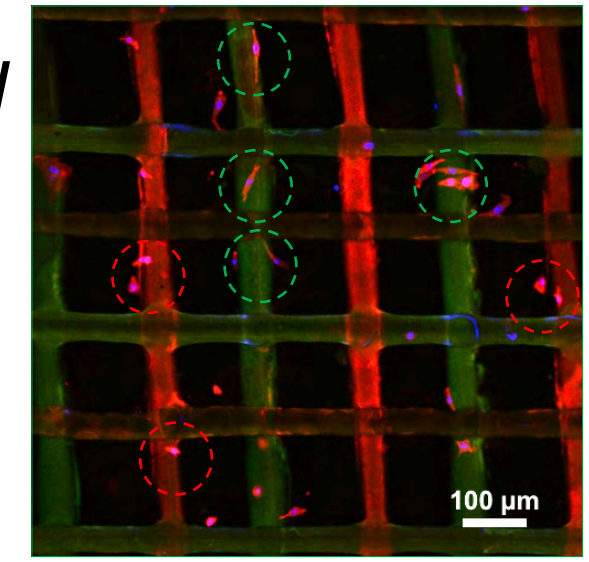


Modular Biomaterials Laboratory



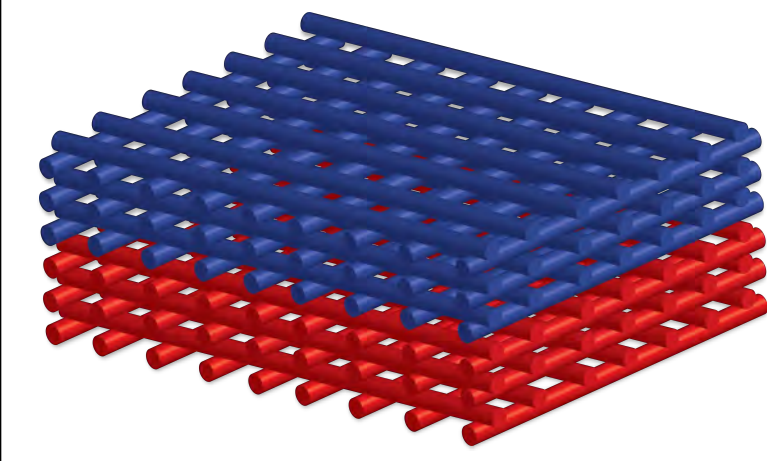
fiber-level control of cell behavior

functionalization during fabrication



HAbind (cartilage)

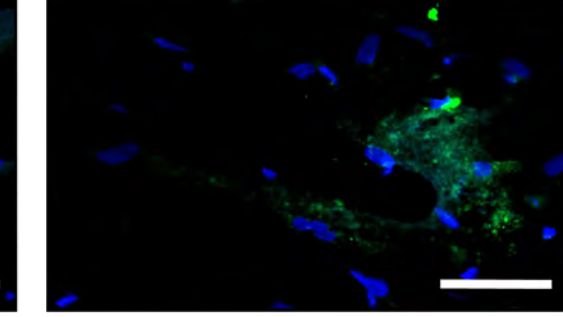
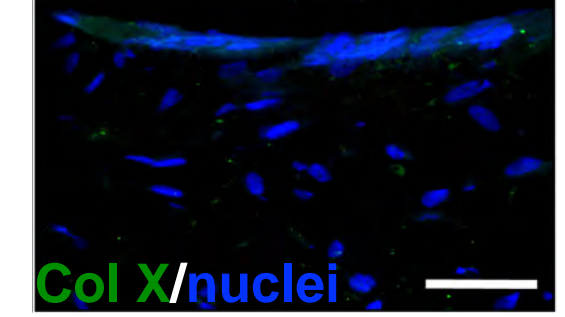
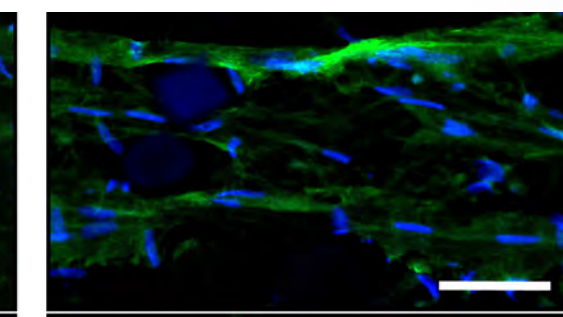
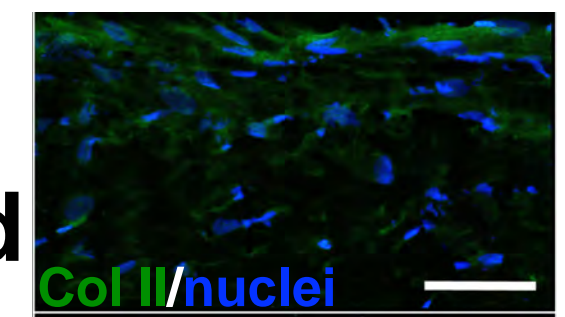
continuous scaffold with distinct peptide regions



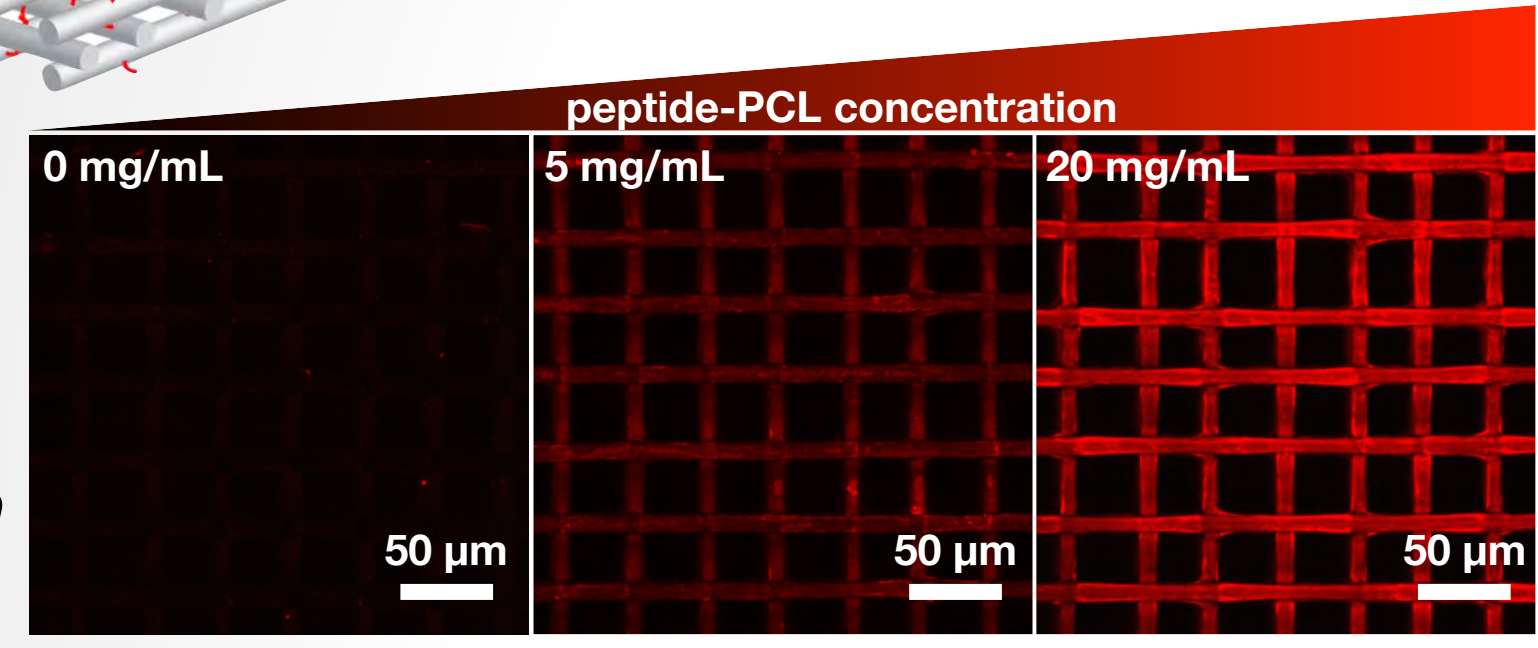
E3 (bone)

PCL

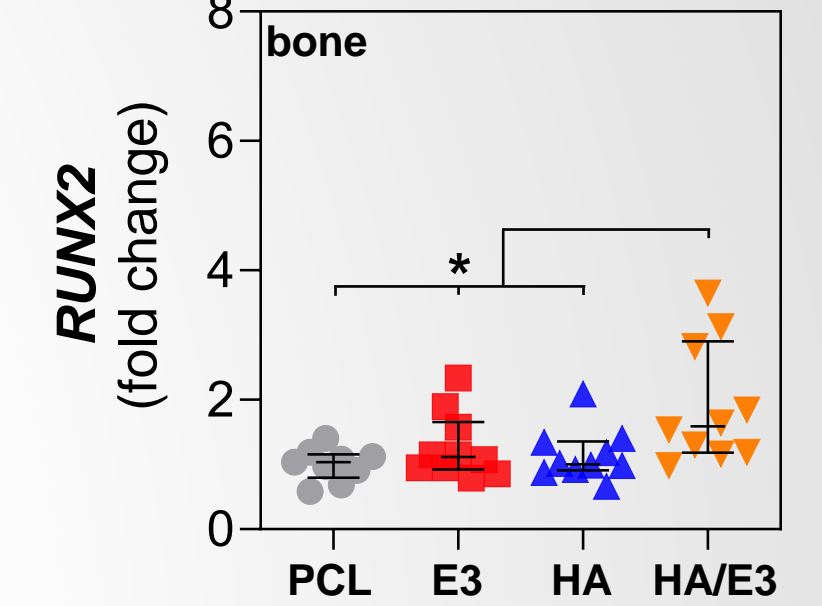
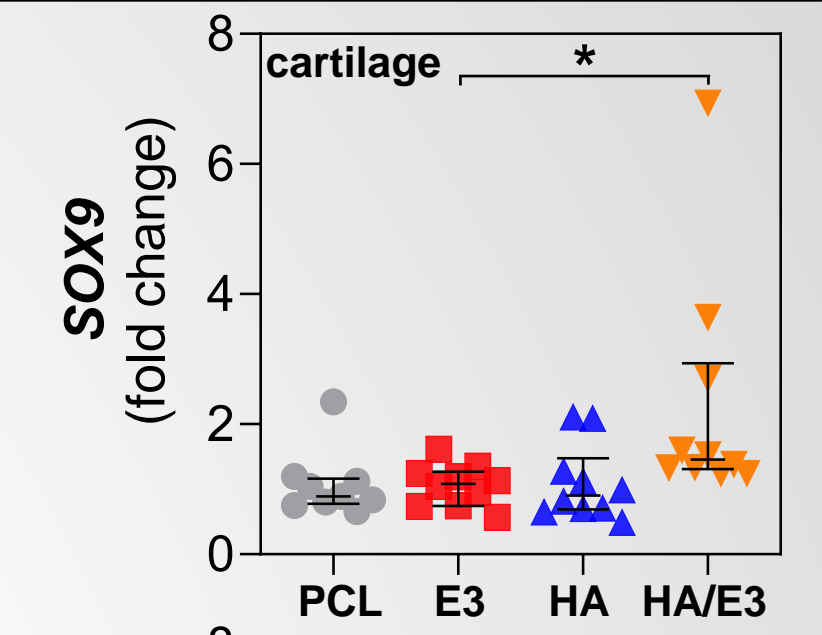
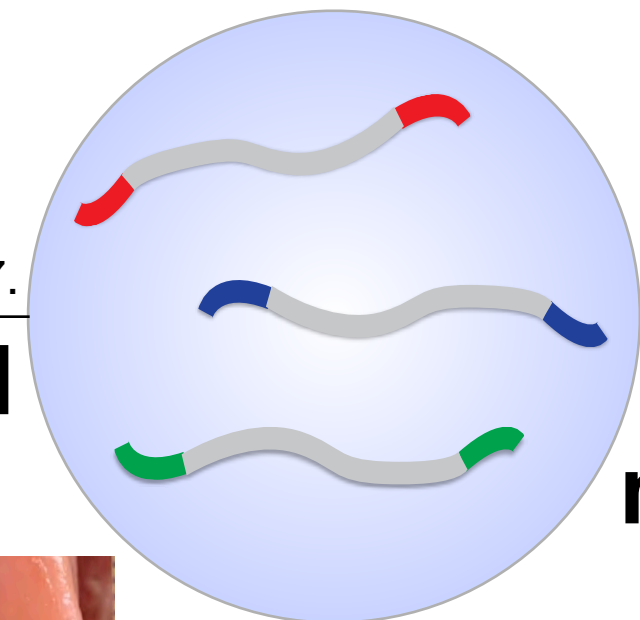
HA/E3



controllable peptide concentration



spatially organized bioactive cues



synergistic effect on stem cell response

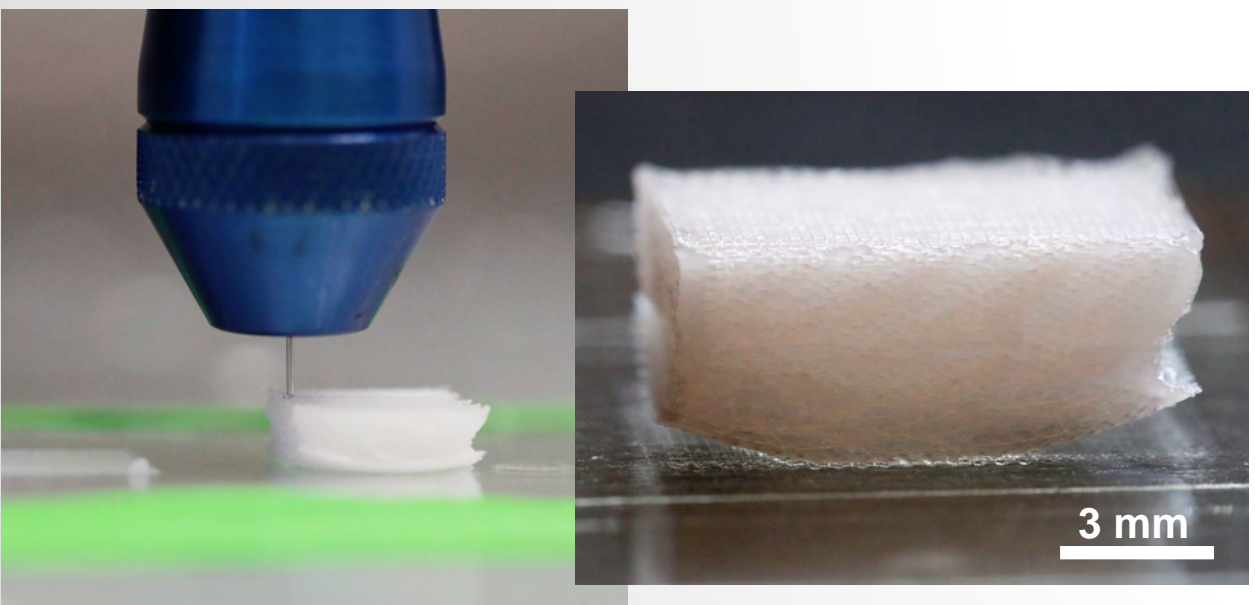
Camacho*, Busari*, Seims, Schwarzenberg, Dailey, Chow. *Biomaterials Science*, 2019, 7, 4237-4247.

Camacho, Fainor, Seims, Tolbert, Chow. *J Biol Methods*, 2021 (accepted).

tunable scaffold architecture

adaptable materials library

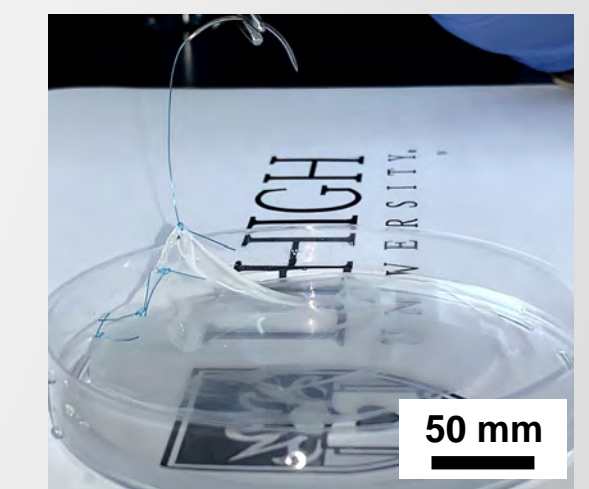
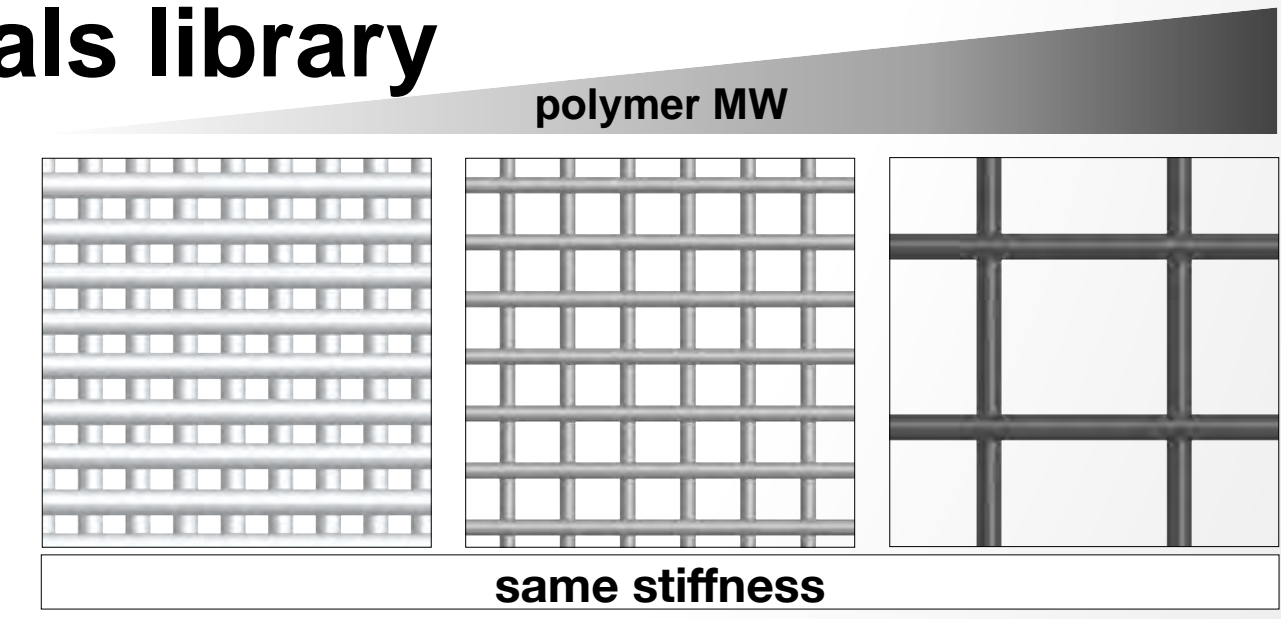
natural/synthetic polymer blend membranes



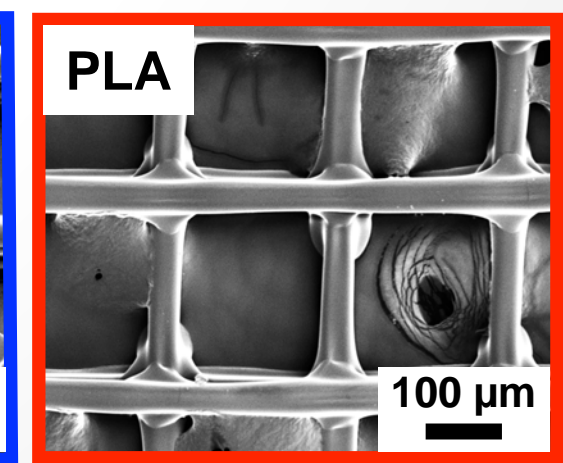
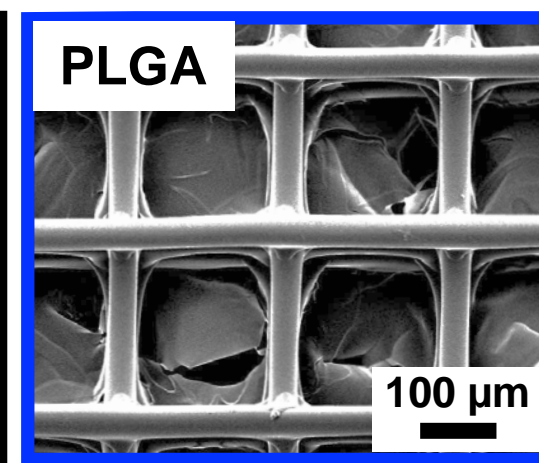
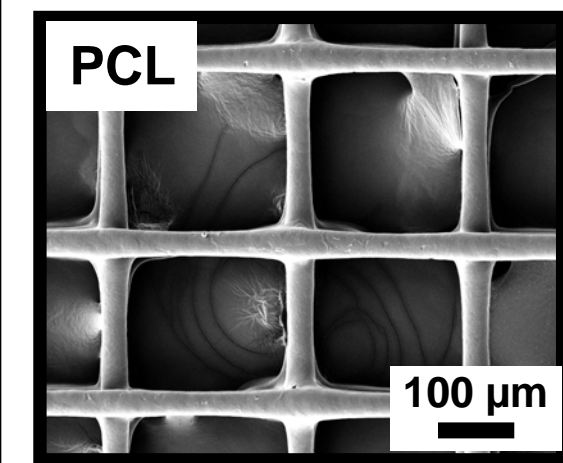
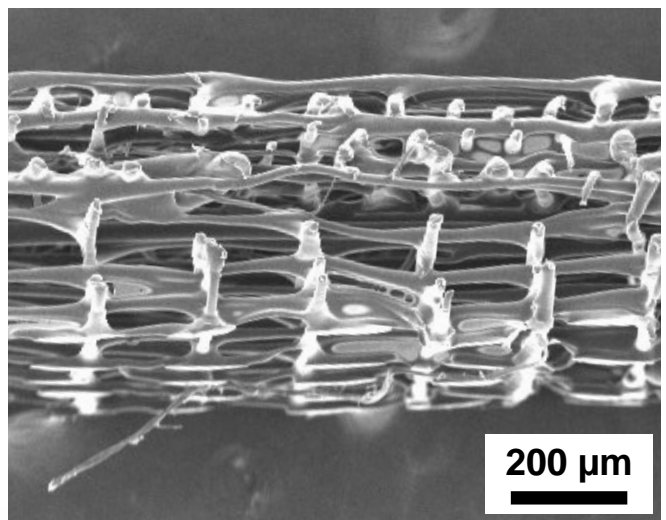
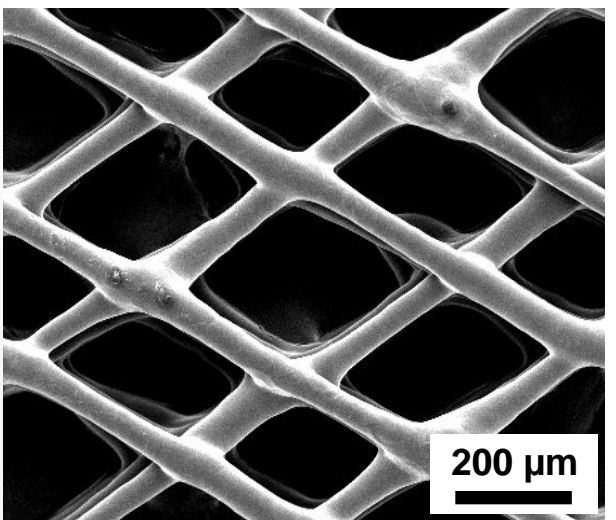
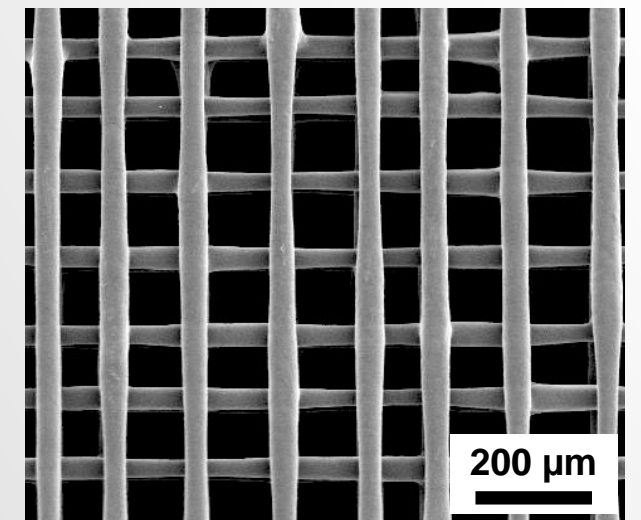
scalable platform for in vivo translation



tunable polymer molecular weight



user-defined scaffold architecture



tailorable bulk polymer