

Institute for Regenerative Medicine • IREM







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## **Growing Tissues with Architected Scaffold**

The development of functional engineered tissues can be greatly enhanced through the use of scaffolds which contain cell-instructive cues. Materials which are composed of individual microgels are bettered positioned to provide these important cell signals compared to bulk materials. Microgels can promote biological processes such as cell migration, cell viability, and cell proliferation due to the increased diffusional properties afforded by the natural void spaces. Microgels can also direct the spatial deposition of extracellular matrix and cell morphology. I will discuss how microgels can be incorporated into different strategies such as extrusion bioprinting and filamented light biofabrication.

