



Directed Blood Vessel Growth Using an Angiogenic Microfiber/Microparticle **Composite Patch**

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Abstract:

Therapeutic angiogenesis has emerged as a promising strategy to treat various acute and chronic vascular diseases, and to enhance tissue repair and regeneration.¹ Common revascularization therapies include the administration of angiogenic factors, such as vascular endothelial growth factor (VEGF).² The success of these therapies greatly relies on the ability to control the spatial organization of mature and functional neovessels at physiologically relevant micrometer scales; however, there is a lack of biomedical devices that control the directional growth and spacing of blood vessels.³ The objective of this study was to develop an angiogenic patch that releases angiogenic growth factors and ultimately regulates the directional growth of mature and functional blood vessels.



Seminar Presented by: