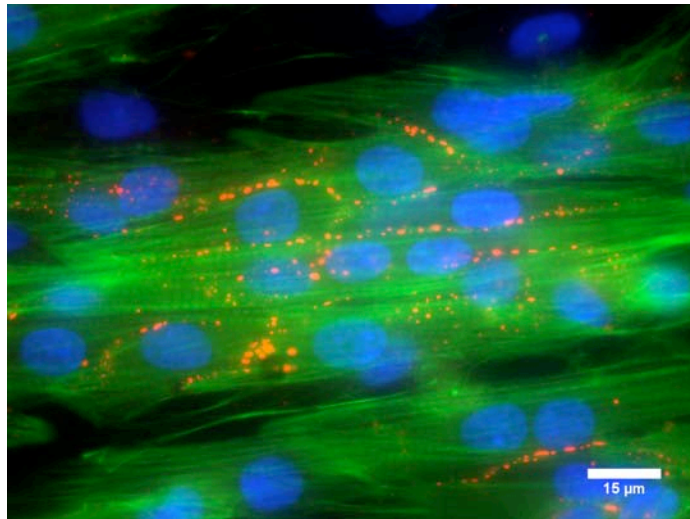


# Design and validation of a new method for engineering cell monolayers

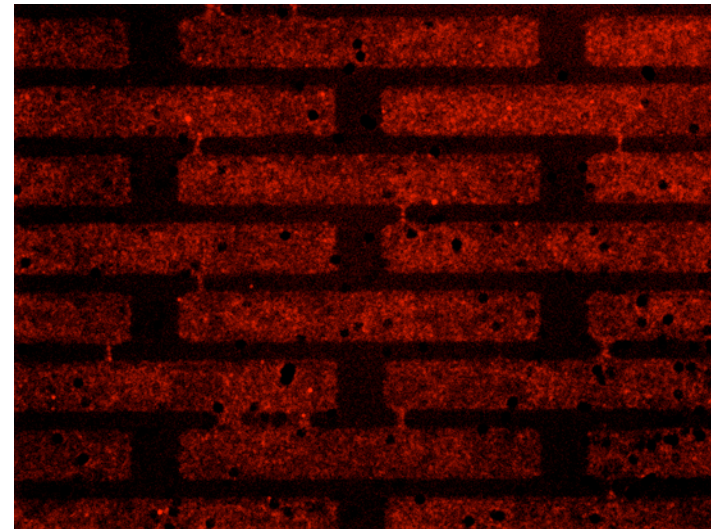
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The heart is comprised of anisotropic sheets of tissue. The present study is aimed to investigate new methods of producing these anisotropic sheets *in vitro* using photolithography and microprinting. The results produced monolayers with greater cell coverage and improved cellular alignment. The results have many potential applications such as improved studying electrical propagation in the heart. However, we believe this technique can be improved by further exploring aspects of cell binding.



Immunostain image of heart muscle cells *in vitro*.



Fibronectin microprinted in brickwall pattern on a cell culture substrate

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