

Supplementary Figure 1. SEM image of FF (A) and PF (B) surfaces after 28 days differentiation. White arrow indicates groove direction; yellow arrow indicates secondary cell/ECM alignment. Scale bar = 10 μm .

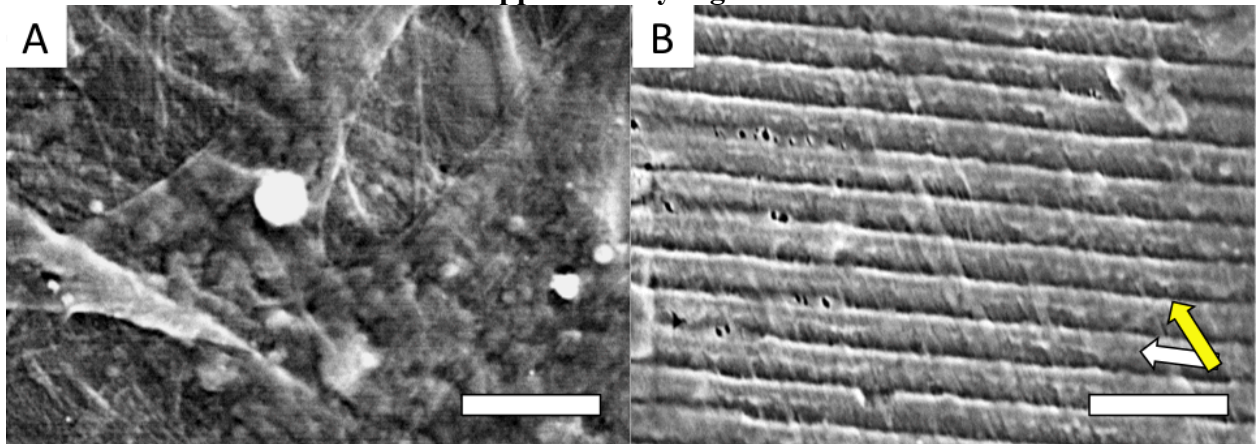
Supplementary Figure 2. Additional images illustrating secondary alignment of cells on PF after 28 days of differentiation. Top, 10x (A) and 20x (B) phase contrast images. Bottom, enlarged version of **Figure 7F** showing actin (red) and nuclei (green). White arrow indicates groove direction; yellow arrow indicates secondary cell alignment. Scale bars = 200 μm (A), 100 μm (B,C).

Supplementary Methods

Scanning Electron Microscopy (SEM)

Samples were fixed in 4% paraformaldehyde for 30 minutes and then dehydrated in a series of graded ethanol solutions. The dehydrated samples were punched from the bottom of the 24-well culture plates and affixed to a specimen stub with carbon tape. The cells and films were then sputtered with gold and imaged on a JEOL JSM-840 scanning electron microscope.

Supplementary Figure 1



Supplementary Figure 2

