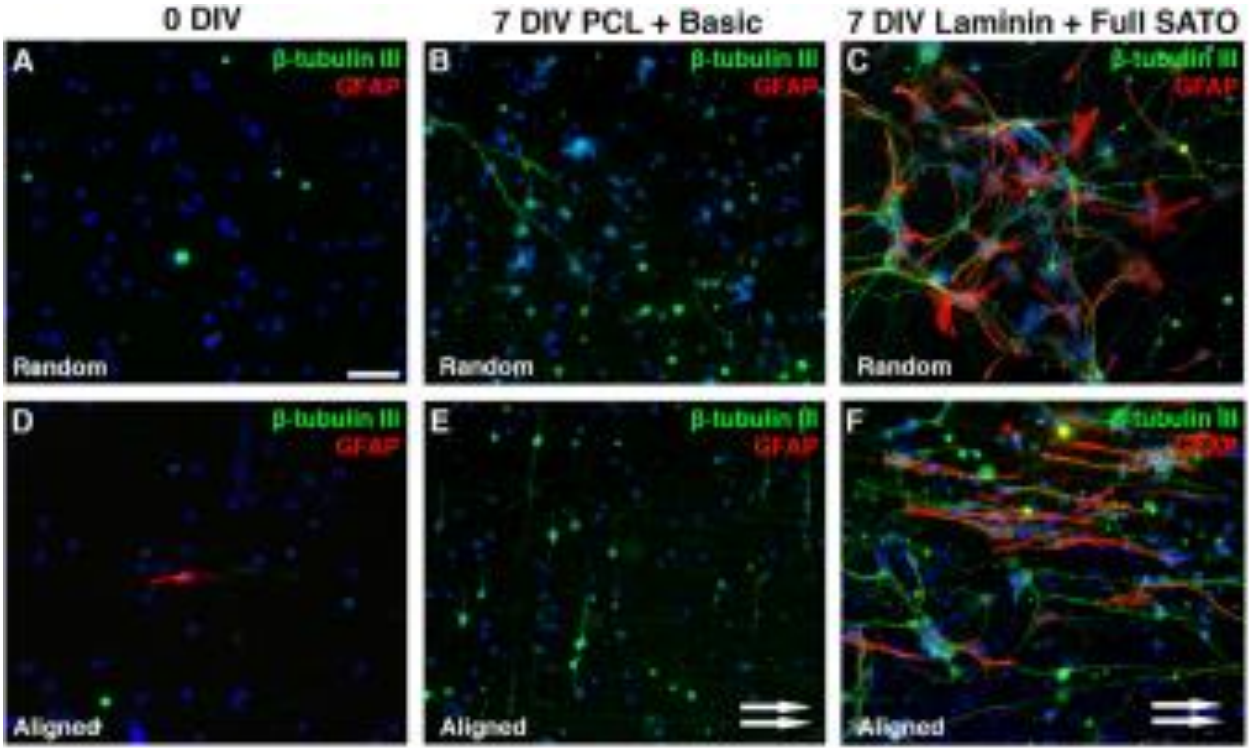

Fig. 5. Fiber topography effect on formation of neuronal- and glial cell morphological profiles. Double-immunolabeling of RPNCs at 7 DIV with neuronal marker β-tubulin III (green) and Astrocyte marker GFAP (red). Nuclei are labeled with DAPI (blue). At 0 DIV majority of the cells present round cell morphology. During 7 days in culture, on both fiber substrates, the RPNCs extended cell processes but formed very complex neuronal- and glial morphologies when cultured on laminin coated substrates and Full-SATO medium (compare 0 DIV with 7 DIV).

Notably, on randomly oriented fibers more multipolar cell profiles were detected (C) while on aligned fibers bipolar cell morphologies were more frequently found (F). This was observed both for neurons- and astrocytes, at the respective substrate type. Arrows indicate fiber orientation. Scale bar: 50 µm. (Zalis et al., 2016)