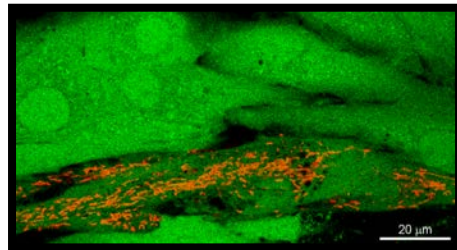
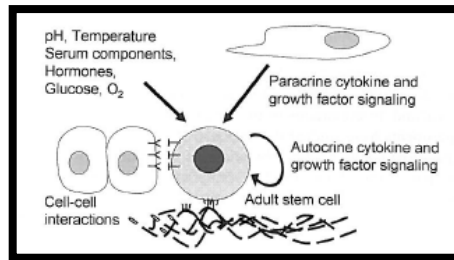


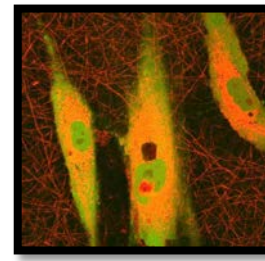
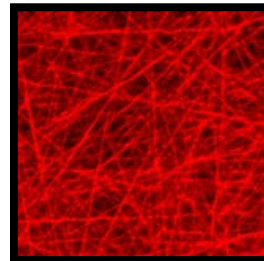


Dr. Barbara Muller-Borer
 Professor, Biomedical Engineering
 Biomedical Engineering Graduate Program Director
 Director of the Cell Based Therapy and Tissue Engineering Laboratory

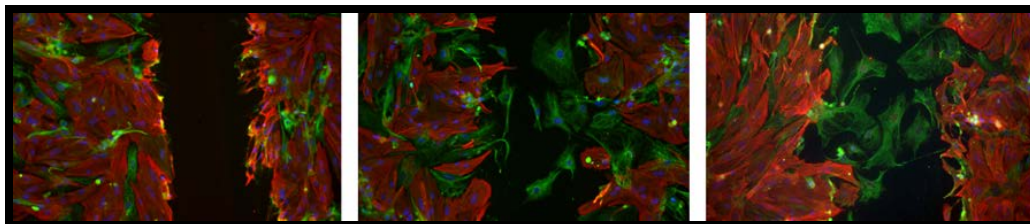
Stem Cell Reprogramming and Tissue Regeneration



3D Bioengineered Tissue Scaffolds



Live Cell Imaging and Cell-Cell Signaling



Tissue Engineering

- *Electrospin biocompatible scaffolds for 3D microenvironments*
- *Bioreactor system to model 3D cardiac micro-mechanical environment*
- *Micro-electrode arrays to assess electrical activity*

Physiological Modeling

- *Computational modeling of calcium signaling in cardiomyocytes and stem cells*
- *Applied biomedical engineering*

Micro-Electrode Arrays

