

Vascularization in Tissue Engineering Highlighted at 12th New Jersey Symposium on Biomaterials Science

Vascularization in tissue engineering and regenerative medicine will be highlighted at The NJ Center for Biomaterials' 12th New Jersey Symposium on Biomaterials Science- *Bioactive Scaffolds: From Synthetic Polymers to ECM and Decellularized Tissues*, scheduled for October 6-7, 2014 at New Brunswick New Jersey's Heldrich Hotel.

Piscataway, NJ (PR Web) August 18, 2014 – The [New Jersey Center for Biomaterials](#), at Rutgers University.

One of the major limitations in tissue engineering and regenerative medicine is an inadequate vascular supply. Nutrient and gas transport throughout synthetic tissue engineered constructs and decellularized tissues is critical for successful regeneration and integration into the patient's body. Researchers have attempted to mitigate deficiencies in vascularization and promote angiogenesis in a variety of ways, including adding scaffold bioactivity, optimizing scaffold design and architecture, and enhancing scaffolds with stem cells. These new treatments may enable the body to repair, replace, restore and regenerate damaged tissues and organs at a scale previously unattainable in regenerative medicine.

Several speakers at the New Jersey Symposium will highlight highly innovative approaches to promoting vascularization. These include:

- Christopher Chen, MD, PhD, Boston University, "A Materials Approach to Studying Vascularization"
- Michael Sefton, PhD, University of Toronto, "The Magic of an Angiogenic MAA Containing Biomaterial"
- Matthew Becker, PhD, University of Akron, "Building Blood Vessels de novo Using Characterization-enabled Strategies"
- Laura Niklason, MD, Yale University, "Progress in Vascular and Lung Engineering"
- Elazer Edelman, MD, PhD, Harvard-MIT Biomedical Engineering Center, "Tissue Engineering in Vascular and Cancer Biology and Medicine"

Registration for the 12th NJ Symposium on Biomaterials Science is available at <http://www.njbiomaterials.org/biomaterials-symposia.htm>

The [New Jersey Center for Biomaterials](#) (NJCBM) was founded in 1997. Based at Rutgers, the State University of New Jersey, the center spans academia, industry, and government. Staffed by biomaterial scientists, the Center works to improve health care and quality of life by developing advanced biomedical products for tissue repair and replacement as well as the delivery of pharmaceutical agents. The Center's technologies

have been translated into clinical and pre-clinical products including surgical meshes, cardiovascular stents, bone regeneration scaffolds, and ocular drug delivery systems.

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