

**Pritzker Institute of Biomedical Science and Engineering  
Along with  
The Department of Biomedical Engineering  
Presents**

## **Robert A. Pritzker Distinguished Lecturer**

***Martin L. Yarmush, MD, PhD***

Paul and Mary Monroe Chair  
Distinguished Professor of Biomedical Engineering  
Rutgers University

**Friday, April 24, 2015  
1:50 pm – Wishnick Hall 113  
Reception to follow**

### ***“New Approaches to Mesenchymal Stem Cell Therapy”***

**Recently there has been a paradigm shift in what is considered to be the therapeutic promise of mesenchymal stem cells (MSCs) in diseases of vital organs. Originally, research focused on MSCs as a source of regenerative cells through the differentiation of transplanted cells into lost cell types. It is now clear that trophic modulation of inflammation, cell death, fibrosis, and tissue repair are primary mechanisms of MSC therapy. This has been clarified in studies where delivery of growth factors, cytokines, and other signaling molecules secreted by MSCs is often sufficient to obtain the therapeutic effects. In this presentation, examples of MSC therapy in disease models of vital organs using models of acute liver failure, acute renal injury, and spinal cord injury will be described.**

**This event is free and open to the IIT Community**