

Addressing Challenges in Tissue Engineering Research and Education

Researchers in the fields of tissue engineering and regenerative medicine are investigating new technologies that enable building tissue for the replacement of lost or damaged tissues. The broad application of these techniques to challenges in medical practice is hindered by a number of challenges. In this presentation, research will be described that is addressing some of these challenges. Specifically, research will be discussed that addresses issues of vascularization of large tissues for clinical application, new imaging tools that enable comprehensive assessment of engineered tissues and regenerating tissues with appropriate, or even enhanced, function. In addition, educational challenges and opportunities for growth of a successful biomedical engineering program will be presented.