The Singapore Bioimaging Consortium (SBIC)
presents a seminar

on

"Stem-Cell Friendly Bone Allograft: A new cell-free Implant with Improved Integration"

Speaker: **Dr Zsombor Lacza, MD, PhD**
Laboratory of Tissue Engineering
Semmelweis University, Budapest
Hungary
Date : **Tuesday, 8 November 2011**
Time : **2.00pm – 3.00pm**
Venue : **SBIC Seminar Room**
11 Biopolis Way,
Level 2, Helios Building
Singapore 138667
(Please use Level 1 entrance)

Abstract

Human bone allograft is used with the assumption that bone marrow derived cells colonize and remodel them. However, only a very low number of seeded mesenchymal stem cells remained on the surface of freeze-dried human bone. In contrast, human albumin coating was facilitating both seeding and proliferation on allografts. In an animal model of non-union bone defect we observed that albumin coating alone was able to induce significantly better integration than the uncoated allograft and stem cell addition was not necessary to improve union rate. Then, they evaluated the biocompatibility of human albumin-coated structural allografts in 10 patients undergoing hip or knee revision arthroplasty with good early results. Thus, albumin coated bona graft offers cell therapy in situ without the need for adding exogenous cells.

About the Speaker

Dr Lacza is a physician-scientist, interested in developing new therapies for musculo-skeletal diseases. He is head of the Tissue Engineering workgroup at Semmelweis

University, an interdisciplinary R&D team which partly belongs to the Department of Human Physiology and the Department of Orthopedics (www.tissueengineering.hu).
Dr Lacza spent 3 years as a postdoc at Wake Forest University, Winston-Salem in the USA. He received 7 awards, published 40 scientific papers, and has 7 patents. Dr Lacza started 3 spin-off companies to commercialize technologies developed in the laboratory. He is also the CEO of Semmelweis Innovations, the technology transfer organization of the University.

--- Admission is free and all are welcome ---