Tentative Outline

Special Issue for CURRENT STEM CELL RESEARCH & THERAPY

(Guest Editor: Naveen Kumar Mekala)

ROLE OF MESENCHYMAL STEM CELLS (MSCs) IN REGENERATIVE MEDICINE AND CELL BASED THERAPIES

Aims & Scope:

Inside our human body, MSCs function to supply repair components for the differentiated cells that naturally perish by an injury or disease. The process of cell based regeneration, repair and replacement decreases with age after reaching its peak in the late 20s in humans. Therefore, after the age of 30, supplementation and management of the innate cell mediated renewal will enhance the tissue performance and repair. In this context, it is proven that tissue engineering/regenerative medicine play vital role in repair and replacement of damaged tissues or organs. On the other hand, many genetical disorders can be treated with “cell based therapies”, where host cells will be replaced by donor cells that do not carry genetic flaws. For example, replacement of MSCs from the donor can cure bone, cartilage and heart defects. Our special issue entitled “Role of mesenchymal stem cells (MSCs) in regenerative medicine and cell based therapies” will cover the broad areas of tissue engineering/regenerative medicine and cell based treatment methods. So, we invite the authors to submit their valuable research work and reviews for this special issue.

Key words:
Mesenchymal stem cells; tissue engineering; regenerative medicine; cell based therapies; biomaterials.

Subtopics:
Mesenchymal stem cells in tissue engineering
Mesenchymal stem cells in regenerative medicine
Role of biomaterials in three dimensional (3D) cell based therapies
Stem cells for cancer therapy
Stem cells for auto-immune diseases
Stem cells and future challenges
**Schedule:**

Manuscript submission deadline: February 2014

Peer Review Due: April 2014

Revision Due: May 2014

Notification of acceptance by the Guest Editor: May 2014

Final manuscripts due: June 2014