

Tentative Outline
Special Issue for CURRENT STEM CELL RESEARCH & THERAPY
Guest Editor: Wasim Khan
STEM CELL THERAPY AND TISSUE ENGINEERING
APPLICATIONS FOR CARTILAGE

Aims & Scope:

Cartilage disorders and injuries range from acute injuries to chronic, debilitating diseases and significantly affect an individual's well-being. This results in a significant disease burden on society as a whole. In recent years there has been great interest in the cell-based treatment strategies and the potential of stem cell-based treatment options for the repair of cartilage. Being an avascular, aneural and alymphatic tissue, it is well suited to stem cell and tissue engineering applications.

In this issue, we will look at stem cells from various sources and discuss their isolation, proliferation and differentiation. We will also consider the associated use of bioreactors, biomaterials, scaffolds and growth factors. We will cover the use of stem cell applications for cartilage, and discuss the basic sciences, pre-clinical and clinical studies in the field.

Keywords: Stem Cells, Tissue Engineering, Cartilage, Bioreactors, Biomaterials.

Subtopics:

Adult Mesenchymal Stem Cells and Cell Surface Characterisation Sources of Adult Mesenchymal Stem Cells and Applicability for Cartilage and Musculoskeletal Applications Chondrogenic Differentiation of Adult Mesenchymal Stem Cells Chondrogenesis and Developments in our Understanding Stem Cells Applications in Cartilage Repair Advances in Cartilage Tissue Engineering Scaffolds in Cartilage and Musculoskeletal Tissue Engineering
The Role of Bioreactors in Cartilage Tissue Engineering

Schedule:

Manuscript submission deadline:	28 February 2012
Peer Review Due:	15 March 2012
Revision Due:	15 April 2012
Notification of acceptance by the Guest Editor:	15 May 2012
Final manuscripts due:	30 May 2012