



BioMed Research International

Special Issue on
Inductive Biomaterials for Muscle Tissue Engineering

CALL FOR PAPERS

Striated muscle, divided cardiac and skeletal one, is the most copious tissue in mammals' body. Numerous pathological conditions, congenital, traumatic, and degenerative, can affect body muscles and lead to tissue damage and function failure. Among the various clinical experimental approaches being tried at present, tissue engineering seems to be a promising route to recover or replace failing or missing tissue.

Tissue engineering aims to regenerate or replace tissue and/or organs exploiting biomaterials as scaffold matrix to support stem cell implantation and actively enhance their differentiation capability, survival, and engraftment.

Recently, new emerging cues are revealing an active role of biomaterials, aside pattern geometry and topographic ledges, in influencing stem cell behavior and fate, hence ameliorating differentiation capabilities and tissue reconstruction efficacy.

We invite researchers to share their results and findings contributing reviews and original papers in the field of tissue engineering, with particular focus on biomaterial inductive topography and specific patterning.

Potential topics include, but are not limited to:

- ▶ Skeletal muscle tissue engineering
- ▶ Myocardial tissue engineering
- ▶ Muscle contraction through external stimulation
- ▶ Biomaterial matrices for muscle function amelioration (vascularization, innervation, etc.)
- ▶ Matrix scaffolds for tissue engineering: preformed scaffold, electrospun fibrous meshes, hydrogels, or decellularized tissue
- ▶ Pattern geometry and topography to enhance stem cell differentiation

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/tissue.engineering/eamt/>.

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Friday, 6 May 2016

First Round of Reviews

Friday, 29 July 2016

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