DESCRIPTION

As the name implies, the Journal of Immunology and Regenerative Medicine provides a forum for the publication of studies that explore the potential and essential roles of the immune system in tissue and organ development, maintenance, response to environmental stressors, response to injury, and in the processes of tissue repair and regeneration.

The field of tissue engineering and regenerative medicine (TE/RM) has only recently recognized the potential benefits of modulating or instructing the immune system, rather than suppressing the immune response, as a viable strategy for promoting tissue reconstruction and improving functional outcomes. Biomaterials, both synthetic and naturally occurring, play an important role in TE/RM strategies. Therefore, it is only logical that the immune response to biomaterials is a critical consideration with respect to clinical outcomes.

Similarly, the immunology community has only recently recognized the potential benefits of cross-disciplinary interactions between biomaterials and stem cell scientists who target regenerative medicine applications and clinical translation. The immunomodulatory effects of various stem and tissue progenitor cells, signaling molecules derived from extracellular matrix, and the essential contribution of regulatory macrophages, T-cells, and other immune cells in functional tissue restoration and maintenance has also taken center stage.

These newly recognized targets of research and development provide exciting opportunities for immunologists, regenerative medicine scientists, biomaterial and stem cell scientists, and clinicians alike. The Journal of Immunology and Regenerative Medicine provides a venue for publication of this research. The journal will accept basic and applied research manuscripts, selected review articles, clinical study reports, and short communications for peer review and publication.

Scope of Subject Matter:
- Role of the innate and adaptive immune system in TE/RM strategies for functional tissue repair, regeneration or replacement
- Cross talk between "immune cells" and "stem cells"
- The host response to Biomaterials and the effect upon outcome
- The role of the immune system in tissue and organ development
- Nanoparticles as immune modulators
- Animal models that facilitate exploration of the role of the immune system in TE/RM strategies
• Clinical studies and case reports of the role of the immune system in regenerative vs non-regenerative tissues and organs
• Manipulation of the innate or adaptive immune system to facilitate success TE/RM strategies
• The effects of age upon the immune system and its role in TE/RM

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