

Special Issue on

**Application of Stem Cells in the Oral and Maxillofacial Region**

## CALL FOR PAPERS

Conditions such as trauma-induced bone or cartilage defects and tumor or congenital defects are common in the oral and maxillofacial region. Bone grafts are the current gold standard strategy for repairing irreversible skeletal damage or defects. However, bone grafts can present problems such as the availability of bone graft material and donor-site morbidity. It is also still difficult to restore salivary glands that have been severely damaged by radiation therapy and to counteract the neurodegeneration induced by trauma or surgery. In addition, due to the limited self-healing ability of teeth, dental caries are treated by fillings (e.g., composite resin) or crowns, and missing teeth are replaced through dental bridges, removable dentures, or dental implants.

It is therefore necessary to establish new treatment strategies for these conditions, and one of the most recent effective strategies is to introduce stem cell-based tissue engineering technology in the oral and maxillofacial region. Accordingly, numerous studies have been conducted and many promising results have been reported. However, achieving effective stem cell-based tissue engineering therapy in this region of the body remains challenging.

This special issue invites researchers to contribute original research articles, clinical advances, and review articles that address current advances in stem cell and biomaterial research related to the development of the regeneration of oral and maxillofacial bone, cartilage, or neurons, in addition to salivary glands or teeth.

Potential topics include but are not limited to the following:

- ▶ Use of stem cells in oral and maxillofacial bone, cartilage, or neuron tissue engineering, as well as in salivary gland or tooth tissue engineering
- ▶ Scaffold technology and biomaterials for stem cell-based tissue regeneration in the oral and maxillofacial region
- ▶ Characterization and culture of stem cells derived from the oral and maxillofacial region (e.g., dental pulp stem cells, periodontal ligament stem cells)
- ▶ Delivery technologies for stem cell-based tissue regeneration in the oral and maxillofacial region

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=284682>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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