

Special Issue on
Skin Stem Cells: From the Niche to the Tool

CALL FOR PAPERS

Skin is the first organ in contact with the external environment, and, so, it is the most exposed organ to UV radiation, physical or chemical agents, and pathogens that can cause damage and injury. Epidermis, dermis, hypodermis, and skin appendages contain a lot of stem and precursor's cells that are involved in maintaining skin homeostasis and promote regeneration. With aging and the exposition to exogenous and endogenous factors, these stem cells may be modified and involved in pathological situations such as skin cancer. In other cases, default in stem cells may impair the wound healing process. The skin possesses a wealth in variety of stem cells, including epithelial, neural crest, and mesenchymal stem cells, and some of them present multipotent capacities. Skin stem cells represent an interesting biological material with great potentialities for regenerative medicine, autologous graft, and tool for study differentiation processes. In addition, they usually maintain their stem capacities in vitro. Finally, the great advantages of these skin stem cells are that they are easy to access, more ethically acceptable than embryonic stem cell, and not (genetically) modified in contrast to induced pluripotent stem (iPS) cells, decreasing the risk of potential tumour development after graft.

This special issue aims to propose a multidisciplinary gathering of points of view and an innovative approach on skin stem cells research, as a useful complement to iPS and embryonic stem cell research. Accepted paper will show diversity in new advances in the area of postnatal skin stem cells. This special issue accepts high quality review as well as original articles.

Potential topics include but are not limited to the following:

- ▶ Niches of skin stem cells
- ▶ Skin stem cells and environment (local or exogenous)
- ▶ Identification and markers of skin stem cells
- ▶ Physiological role of skin stem cells
- ▶ Pathological role of skin stem cells (including cancer)
- ▶ Model of skin stem cells
- ▶ Skin stem cells for regenerative medicine and graft surgery
- ▶ Skin stem cells production for regenerative medicine, according to GMP rules
- ▶ Potentiality of differentiation
- ▶ Interest for screening molecules
- ▶ Interest for the development of physiological or pathological models

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/sci/skin/>.

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

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