

## Special Issue

# Molecular Advances in Wound Healing and Skin Regeneration

### Message from the Guest Editors

Skin injuries due to trauma and disease are prevalent worldwide, which becomes even more severe for communities with diabetes and aging. While skin exhibits an intrinsic healing capacity, a limited number of endogenous stem cells and progenitor cells as well as prolonged inflammatory responses impede the self-regenerability of skin. Wound healing is an interactive cooperation among several different cell types, well-regulated inflammatory responses, extracellular matrix production, and skin appendages formation. Artificial dressings, which can leverage a conducive environment for wound healing, and enable scarless skin tissue regeneration, inflammation resolution, and hair follicle regeneration, have garnered the attention of the scientific community. The aim of this Special Issue is to gain further insight into the molecular advances and advanced approaches at the interface of polymeric biomaterials, regenerative medicine, and tissue engineering which have been leveraged to enable functional skin tissue repair. Recently, different types of innovative solutions have been proposed for in vitro skin tissue production as well as in vivo scarless wound repair, such as exosomes.

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