Special Issue

Limbal Stem Cell Biology and Contribution to Cornea Homeostasis

Message from the Guest Editor

Corneal epithelium is replenished by a population of limbal epithelial stem cells (LESCs). In recent years, LESC transplantation has offered a therapeutic option, which helps successfully restore cornea morphology, transparency and visual acuity.
This Special Issue aims to highlight what we currently know on the role of LESCs in cornea stability, with a special focus on how they impact on corneal immune and angiogenic privilege, the signaling mechanisms involved in their own maintenance within the niche micro milieu, as well as their transition to the fast-replicating transient amplifying and fully differentiated corneal epithelial cells, and the curative effect on the corneal epithelial tissue upon transplantation. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

The role of LESC in corneal epithelial morphogenesis;
LESC polarity and mechanisms of differentiation;
LESC cross-talk with other cell types in the niche;
LESCs and cornea immune privilege;
The role of LESCs in cornea avascularity;
The restorative effect of LESC transplantation. We look forward to receiving your contributions

Guest Editor

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A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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