



New Strategies to Treat Corneal Endothelial Diseases: Cell Therapy, Bioengineering of Corneal Grafts and Pharmacological Treatment

Guest Editors:

Dr. Zhiguo He

Prof. Dr. Gilles Thuret

Dr. Sylvain Poinard

Deadline for manuscript
submissions:

31 May 2024

Message from the Guest Editors

This Special Issue will focus on recent developments in the three strategies for the treatment of endothelial dystrophy: cell therapy, bioengineering of corneal grafts and pharmacological treatment.

The journal will be accepting contributions (both original articles and reviews) mainly centered on the following topics:

- Progress in primary cell culture of corneal endothelial cells (CECs) and in differentiation methods based on other types of stem cells or iPS;
- Bioengineering of endothelial grafts (realistic new material and/or process);
- Advances in pharmacological treatment, gene therapy and any new strategies/procedures for the treatment of FECD or endothelial dystrophy;
- Any clinical cases of the application of the three strategies;
- Any significant progress for supporting the development of the three strategies and their industrialization, such as ex vivo or in vitro models/tools for validation of the functionality of cultured CECs or of bioengineered endothelial grafts, and methods for the preservation of the human corneas, cultured cells and bioengineered endothelial grafts for industrialization;





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical
Engineering, Texas A&M
University, College Station, TX
77843, USA

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Engineering, Biomedical*)

Contact Us

Bioengineering Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/bioengineering
bioengineering@mdpi.com
[X@Bioeng_MDPI](https://twitter.com/Bioeng_MDPI)