Special Issue

Translational Al and Computational Tools for Ophthalmic Disease

Message from the Guest Editor

Over the past several years, there have been rapid advancements in machine/deep learning and artificial intelligence (AI). These advancements have had a large impact across many fields of study, including medicine. Given the data-rich nature of modern ophthalmic care, which makes use of not only patient information and clinical tests, but also extensive imaging and functional testing, this field is especially amenable to Al and other computational approaches. However, despite the large body of work applying AI techniques to ophthalmology, relatively little has been translated into clinical settings so far. This Special Issue focuses on the application of All and other computational tools in building translational tools that address pressing needs in ophthalmic care. Topics of interest include (but are not limited to) work in developing and/or evaluating AI tools to address screening and diagnosis of ophthalmic diseases, predicting disease progression, forecasting the need for interventions, and clinical decision support for disease management. Work across all aspects of ophthalmic care is relevant and the focus should be on translation into clinical settings to improve care.

Guest Editor

Dr. Mark Christopher

Hamilton Glaucoma Center, Shiley Eye Institute, Viterbi Family Department of Ophthalmology, University of California San Diego, La Jolla, CA, USA

Deadline for manuscript submissions

closed (31 January 2025)



Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed



mdpi.com/si/193105

Bioengineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bioengineering@mdpi.com

mdpi.com/journal/bioengineering





Bioengineering

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 5.3 Indexed in PubMed



About the Journal

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.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Biomedical) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

