## Special Issue

# Artificial Intelligence Applications in Ophthalmology

## Message from the Guest Editors

Artificial intelligence (AI) applications in ophthalmology have emerged as transformative tools, reshaping various facets of eye care. Leveraging Al's capacity to analyze extensive datasets and interpret the intricate imaging, automated diagnosis and early detection of ocular diseases, including diabetic retinopathy and glaucoma, has become more precise. Machine learning algorithms exhibit exceptional accuracy in image analysis, facilitating swift and accurate diagnoses by clinicians. Furthermore, predictive modeling enhances prognosis and contributes to personalized treatment plans. The integration of AI not only streamlines clinical workflows and enhances efficiency, but also holds the promise in broadening access to eye care, especially in remote or underserved regions. Despite these promising advancements, numerous challenges and ethical concerns must be addressed before the safe deployment of AI in ophthalmic care. This Special Issue is dedicated to exploring advancements in the realm of Al applications within ophthalmology. We invite contributions that illustrate the diverse ways in which Al can positively impact various facets of eye care.

#### **Guest Editors**

Dr. Praveer Singh

Department of Ophthalmology, School of Medicine, University of Colorado, Denver, CO, USA

Dr. Lianggiong Qu

Department of Statistics and Actuarial Science, The University of Hong Kong, Hong Kong, China

## 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/195775

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).

