

## Special Issue

# Artificial Intelligence in Medical Image Processing and Segmentation, Third Edition

### Message from the Guest Editor

In recent years, Artificial Intelligence (AI) has deeply revolutionized the field of medical image processing. In particular, image segmentation has benefited the most from such innovations. This boost has led to great advancements in the translation of AI algorithms from solely laboratory-based use to real clinical practice, especially for assisting with computer-aided diagnosis and image-guided surgery. We are pleased to invite you to submit your work to this Special Issue focused on the cutting-edge developments in AI applications in the medical imaging field. *Bioengineering* will be accepting contributions (both original articles and reviews) centered primarily on the following topics:

- Medical image segmentation;
- AI-based medical image registration;
- Medical image recognition;
- Patient/treatment stratification based on AI image processing;
- Human interactions for the improvement of AI image processing outcomes;
- Image-guided surgery/radiotherapy based on AI;
- Radiomics;
- Explainable AI in medicine.

---

### Guest Editor

Dr. Bernard Chiu

Department of Physics & Computer Science, Wilfrid Laurier University,  
Waterloo, ON, Canada

---

### Deadline for manuscript submissions

31 December 2025



**Bioengineering**

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.7**  
**CiteScore 5.3**  
**Indexed in PubMed**



[mdpi.com/si/244592](https://mdpi.com/si/244592)

*Bioengineering*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[bioengineering@mdpi.com](mailto:bioengineering@mdpi.com)

[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)





## Bioengineering

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.7  
CiteScore 5.3  
Indexed in PubMed



[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)



## 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, CAPIus / 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.