

## Special Issue

# AI-Empowered Lung Disease Classification and Detection: Advances and Challenges

### Message from the Guest Editor

Lung diseases, such as lung cancer, COVID-19, chronic obstructive pulmonary disease (COPD), and pneumonia, are among the leading causes of death worldwide. Early detection and accurate classification of lung diseases are crucial for timely and effective treatment. Artificial intelligence (AI) has shown great potential in the field of medical imaging and diagnostics, particularly in the detection and classification of lung diseases. However, there are still many challenges that need to be addressed to fully realize the potential of AI in this field. Hence, this Special Issue aims to provide a comprehensive overview of the current state of the art in AI-empowered lung disease classification and detection and to discuss the challenges and limitations in the field. By bringing together experts from various fields, including computer science, medical imaging, and medicine, we hope to foster new collaborations and accelerate the development of AI-based diagnostic tools for lung diseases.

---

### Guest Editor

Dr. Sherief Hashima

Computational learning theory team, RIKEN-Advanced Intelligence Center, Fukuoka 819-0395 Japan

---

### Deadline for manuscript submissions

closed (30 April 2024)



## Healthcare

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.7  
CiteScore 5.5  
Indexed in PubMed



[mdpi.com/si/159560](https://mdpi.com/si/159560)

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

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





# Healthcare

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.7  
CiteScore 5.5  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Healthcare* is an international, peerreviewed, open access, multidisciplinary journal. Original research articles, short communications, review articles, and symposium highlights are welcomed.

*Healthcare* hopes to influence global health and disease aspects, and hopes to gain high visibility and acceptance by the scientific and healthcare community and will dedicate itself to covering special and specific topics in special issues.

We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Lorraine S. Evangelista

Sue & Bill Gross School of Nursing, University of California, Irvine, CA  
92697, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), PubMed, PMC, and other databases.

#### Journal Rank:

JCR - Q2 (Health Policy and Services) / CiteScore - Q1 (Leadership and Management)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 22.4 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).