



JAIMS: Call for Papers Special Issue

“Artificial Intelligence (AI) for Microbiome”



Guest Editors

Xingpeng Jiang

School of Computer, Central China Normal University, China

E-mail: xpjiang@ccnu.edu.cn

Kang Ning

College of Life Science and Technology, Huazhong University of Science and Technology, China

Email: ningkang@hust.edu.cn

Cuncong Zhong

Department of Electrical Engineering Computer Science, University of Kansas, United States

Email: cczhong@ku.edu

Dan Xie

School of Information Sciences, Hubei University of Chinese Medicine, China

Email: dinaxie@hbtcu.edu.cn

Aims and Scope

The microbiome of environment and human consists of a community of micro-organisms in enormous quantity, such as bacteria, fungi and viruses. Dealing with the microbiome big data is a challenge for scientists. In recent years, artificial intelligence has achieved great success in many fields including medical and biological applications. It is of great significance to develop relevant artificial intelligence methods for analyzing, integrating and interpreting microbiome data.

In this special issue, we seek papers on the development of artificial intelligence techniques for analyzing microbiome data, including those on the impact of microbes, genomes, metagenomes, metabolism, proteome et al., related to public health and environment. Research and methodological studies will be considered. High-quality narrative and systematic reviews will also be considered.

[Journal of Artificial Intelligence for Medical Sciences \(JAIME\)](#)



JAIMS: Call for Papers Special Issue “Artificial Intelligence (AI) for Microbiome”

Main topics and quality control

- The potential topics of this special issue include, but are not limited to:
- Artificial intelligence approach for microbiome data
- AI & Machine learning method for analyzing metagenomics and 16S RNA data
- Multi-omics data integration and mining in microbiome
- Statistical and mathematical modeling of microbiome data
- Dynamic model and time series analysis of microbiome data
- Deep learning methods for microbiome data
- Data visualization and integration of microbiome data
- Machine learning methods for microbiome data analysis.

Important Dates

- **Submission of papers:** **1 July 2021**
- Notification of review results: 30 August 2021
- Submission of revised papers: 15 October 2021
- Notification of final review results: 31 October 2021

Submit your paper

All papers must be submitted via the Editorial Manager online submission and peer review system. Instructions will be provided on screen and you will be stepwise guided through the process of uploading all the relevant article details and files associated with your submission. All manuscripts must be in the English language.

To access the online submission site for the journal, please visit <https://www.editorialmanager.com/jaims/default.aspx>. Note that if this is the first time that you submit to the Journal of Artificial Intelligence for Medical Sciences, you need to register as a user of the system first.

NOTE : Before submitting your paper, please make sure to review the journal's [Author Guidelines](#) first.



JAIMS: Call for Papers Special Issue “Artificial Intelligence (AI) for Microbiome”



Introduction of the guest editors

Xingpeng Jiang, Professor in microbiome data mining

Xingpeng Jiang is currently a professor in the School of Computer Science, Central China Normal University, Wuhan, Hubei, China. He received the PhD degree from the National Laboratory of Pattern Recognition, Institute of Automation of the Chinese Academy of Sciences, in 2009. His current research interests include mathematics, machine learning, and nonlinear visualization methods in metagenomic data analysis. He is currently a member of the IEEE, program committee member of the IEEE BIBM, and the editorial board member of the International Journal of Artificial Intelligence and Medical Sciences and the associate editor of International Journal of Data Mining and Bioinformatics.

Kang Ning, Professor in microbial bioinformatics

Kang Ning is the PI of Microbial Bioinformatics Group, Director of Department of Bioinformatics and Systems Biology, School of Life Science and Technology, Huazhong University of Science and Technology. Kang has more than 20 years of experiences in bioinformatics for omics big-data integration, microbiome analyses and single-cell analyses. His current research interests include AI method for multi-omics especially metagenomics data mining, as well as their applications. He is also interested in synthetic biology and high-performance-computation. Kang is the leading or corresponding author of over 100 papers and reviews on leading journals including Gut, Genome Biology, Nucleic Acids Research, Briefings in Bioinformatics and Bioinformatics, which have more than 2,000 citations. He has been the committee members of several national bioinformatics and biology big-data committees in China. He serves as an editorial board member of the journal Genomics Proteomics and Bioinformatics, and Scientific Reports, and served as reviewers for several international funding agencies including UK-BBSRC and UK-NERC. For details, please refer to his official website at: <http://www.microbioinformatics.org/>.

Cuncong Zhong, Assistant Professor in bioinformatics and metagenomics

Cuncong Zhong is currently an assistant professor in the Department of Electrical Engineering Computer Science, University of Kansas. He received the PhD degree from the University of Central Florida in 2013. He received postdoctoral training at the J. Craig Venter Institute between 2013 and 2016. His current research interests include genomics, metagenomics, genetics, and noncoding RNA. He is currently a review editor of Frontiers in Genetics.

[Journal of Artificial Intelligence for Medical Sciences \(JAIMS\)](#)



JAIMS: Call for Papers Special Issue “Artificial Intelligence (AI) for Microbiome”



Dan Xie, Professor in medical data mining

Dan Xie is currently a professor in the College of Information Engineering, Hubei University of Chinese Medicine Wuhan, Hubei, China. She received the PhD degree from the National Key Laboratory of Software Engineering, Wuhan University, in 2008. Her current research interests include medical software development, machine learning and natural language processing in medical artificial intelligence. She is currently a member of the IEEE, and the editorial board member of the International Journal of Artificial Intelligence and Medical Sciences.