Call for Paper for 2020 IEEE BIBM Workshop

Zhongming Zhao, Hao Lin, Aimin Li

The International Workshop on RNA Informatics (IWRI 2020) is the eleventh in a series of workshops that aim at providing an international forum to discuss the most recent developments in the field regarding application of informatics on noncoding RNAs, RNA modifications including methylation, and other related work. This workshop will feature the theme of "RNA informatics" and "RNA modifications". The scope of this workshop is to use machine learning, deep learning, knowledge graph, and other genome technology and informatics methods to contribute to the understanding of the structure, function, evolution, comparative genomics, and regulation of noncoding RNAs and RNA modifications. Research areas include, but are not limited to:

- Machine learning, deep learning and knowledge graph in RNA research
- Computational approaches for RNA processing and RNA structures
- Computational approaches for RNA interactions with DNA, RNA and proteins
- Prediction and analysis of RNA distribution in subcellular localization
- Computational methods and tools in m^6A, m^5C and other RNA modifications
- Network construction and analysis of intercellular and intergenerational RNA signalling
- Quantitative analysis of structure-function relationships in RNA complexes
- Computational methods in RNA transcriptomic analyses and technologies
- Transcriptional regulation by noncoding RNAs
- Development of software and pipelines for RNA biology, diagnosis and therapeutics
- Identification of RNA biomarkers in complex disease
- Clinical statistical studies and discoveries involving noncoding RNAs
- Regulation analysis of RNA and their modifications on chromatin
- Systems analysis on RNA modifications in development, diseases and therapeutics
- Construction and analysis of RNA-related regulation networks
- Tissue-specificity and developmental studies of RNA regulation
- Comparative genomics and molecular evolution in RNA research
- RNA related database and tool development
- RNA related informatics such as DNA modification (6mA and 4mC) prediction

We invite you to submit papers with unpublished, original research describing recent advances on the areas related to this workshop. All papers will undergo peer review by the conference program committee. All papers accepted will be included in the Workshop Proceedings published by the IEEE Computer Society Press and will be available at the workshops. Authors of selected papers will be invited to extend their papers for submission to a special issue in *International Journal of Computational Biology and Drug Design*.

Important dates

Paper submission deadline:	Sep 20, 2020
Paper acceptance notification:	Oct 30, 2020

Camera-ready manuscript due:	Nov 18, 2020
Workshop dates:	Dec 16, 2020

Program chairs or co-chairs:

Prof. Zhongming Zhao, Professor, School of Biomedical Informatics, University of Texas, and Vanderbilt University, USA. Email: zhongming.zhao@uth.tmc.edu

Prof. Hao Lin, Professor, School of Life Science and Technology, University of Electronic Science and Technology of China, China. Email: hlin@uestc.edu.cn

Dr. Aimin Li, Assistant Professor, School of Computer Science and Engineering, Xi'an University of Technology, China. Email: liaiminmail@gmail.com

Program committee members

Dr. Danail Bonchev, Virginia Commonwealth University, USA

Dr. Wei Chen, Innovative Institute of Chinese Medicine and Pharmacy, Chengdu University of Traditional Chinese Medicine, China

Dr. Yulin Dai, University of Texas Health Science Center at Houston, USA

Dr. Yufei Huang, University of Texas at San Antonio, USA

Dr. Peilin Jia, University of Texas, USA

Dr. Gwang Lee, Ajou University, Korea

Dr. Yajun Liu, School of Computer Science and Engineering, Xi'an University of Technology, China

Dr. Qin Ma, The Ohio State University, USA

Dr. Balachandran Manavalan, Ajou University, Korea

Dr. Saurav Mallik, Harvard University, USA

Dr. Ramkrishna Mitra, Thomas Jefferson University, USA

Dr. Lukas Simon, Institute of Computational Biology, Helmholtz Zentrum München, Germany

Dr. Xiaofeng Song, Nanjing University of Aeronautics and Astronautics, China

Dr. Xiguo Yuan, School of Computer Science and Technology, Xidian University, China

Dr. Quan Zou, Institute of Fundamental and Frontier Sciences, University of Electronic Science and Technology, China

Dr. Haodong Xu, University of Texas, USA

Dr. Gabriel R. Fries, McGovern Medical School, University of Texas, USA

Dr. Jiangning Song, Department of Biochemistry and Molecular Biology, Monash University, Australia

Contact emails:

LiAiminMail@gmail.com
hlin@uestc.edu.cn
Zhongming.Zhao@uth.tmc.edu