

Rongxin Zhang

Ph.D. candidate · BIOINFORMATICS

Profile

Hometown	Nantong City, Jiangsu Province, China
Laboratory	State Key Laboratory of Bioelectronics, School of Biological Science and Medical Engineering, Southeast University
Birth	1995.10.24
Gender	Male
Working Mail	rongxinzhang@outlook.com
Personal Website	https://rongxinzhang.top

Education

Ph.D. Candidate of Engineering (Supervisor: Prof. Xiao Sun)	2018-now
Department of Bioinformatics and System Biology State Key Laboratory of Bioelectronics School of Biological Science and Medical Engineering Southeast University	
Bachelor of Science (Supervisor: Prof. Qianghu Wang)	2014-2018
Department of Bioinformatics School of Biomedical Engineering and Informatics School of Basic Medical Sciences Nanjing Medical University	

Skills

Programming; R, Python, PHP *et al.*
Software and website developing
Working in Linux environment
Proficiency in using common bioinformatics software or databases
Data mining and statistical analysis
Sequencing data analysis; RNA-seq, ChIP-seq, DNase-seq *et al.*
Have a background in biology and medicine

Research Interests

Human Epigenetics & Disease (Cancer)
Non-canonical Nucleic Acid Secondary Structures, especially G-quadruplexes
Bioinformatics Software & Database Development
Machine Learning Tasks in Bioinformatics or Medical Informatics
Sequencing Data Analysis

Research Experience

Designed and built two Bioinformatics databases, iCAN and Mir2Drug.
Participated in a study to assess the risk of development of type 2 diabetes in the Chinese urban population by using machine learning approaches.
Identified Glioblastoma Multiforme samples from scRNA sequencing data.
Analyzed the potential role of G-quadruplexes in the SARS-CoV-2 genome, the human 3D genome, and the human transcriptome.

Awards

Excellent Academic Poster (The 9th Jiangsu Provincial Bioinformatics Academic Conference)

2019

Outstanding Graduates of Nanjing Medical University		2018
The Contest of LAN QIAO CUP (JAVA Programming Language Competition)	Third Prize	2017
China College Students Computer Design Competition (Software Development and Application)	Second Prize	2017
Innovation Cup of Computer Design Competition	Second Prize	2016
Triple-A Students of Nanjing Medical University		2015

Publications

基因组 G-四链体与疾病的关系(The association between genomic G-quadruplex and disease) Chinese Review [Accepted]		2020
Hao Li, Rongxin Zhang , Xiao Sun	生命的化学(Chemistry of Life)	
Whole genome identification of potential G-quadruplexes and analysis of the G-quadruplex binding domain for SARS-CoV-2 (PDF)		2020
Rongxin Zhang , Ke Xiao, Yu Gu, Hongde Liu, Xiao Sun	<i>Frontiers in genetics</i>	
Enhancer lncRNAs influence chromatin interactions in different ways (PDF)		2019
Hou Yue, Rongxin Zhang , Xiao Sun	<i>Frontiers in genetics</i>	
Integrative characterization of G-Quadruplexes in the three-dimensional chromatin structure (PDF)		2019
Hou Yue, Fuyu Li, Rongxin Zhang , Sheng Li, Hongde Liu, Zhaohui S. Qin, Xiao Sun	<i>Epigenetics</i>	
Machine Learning Models in Type 2 Diabetes Risk Prediction: Results from a Cross-sectional Retrospective Study in Chinese Adults (PDF)		2019
Xiong Xiaolu, Rongxin Zhang (Co-first author) , Yan Bi, Weihong Zhou, Yun Yu, Dalong Zhu	<i>Current medical science</i>	
Institute collection and analysis of Nanobodies (iCAN): a comprehensive database and analysis platform for nanobodies (PDF)		2017
Zuo Jing, Jian Li, Rongxin Zhang et al.	<i>BMC genomics</i>	
An Integrating Approach for Genome-Wide Screening of MicroRNA Polymorphisms Mediated Drug Response Alterations (PDF)		2017
Wang Xian Yue, Hong Jiang, Wei Wu, Rongxin Zhang et al.	<i>International journal of genomics</i>	