

# Rongxin Zhang

## Ph.D. Candidate in Bioinformatics

Nanjing 210096, China • <https://rongxinzhang.top> • [rongxinzhang@outlook.com](mailto:rongxinzhang@outlook.com)

### EDUCATION

**Southeast University**, *Ph.D. candidate* Sept. 2018 - present  
State Key Laboratory of Bioelectronics  
Department of Bioinformatics and System Biology  
School of Biological Science and Medical Engineering, Nanjing, China  
**Nanjing Medical University**, *Bachelor of Science* Sept. 2014 - June 2018  
Department of Bioinformatics  
School of Biomedical Engineering and Informatics, Nanjing, China

### SKILLS

Programming: R, Python, PHP, et al. Software and website developing.  
Proficiency in sequencing data analysis, such as RNA-seq, ChIP-seq, DNase-seq et al.  
Data mining and statistical analysis and their application to medical or bioinformatics research.  
Knowledge of biology and medicine.  
Have good communication and teamwork skills.

### AWARDS AND DISTINCTIONS

Outstanding Graduates of Nanjing Medical University  
The Contest of LAN QIAO CUP (JAVA Programming Language Competition) [Third Prize]  
China College Students Computer Design Competition (Software Development) [Second Prize]  
Triple-A Students of Nanjing Medical University  
Innovation Cup of Computer Design Competition [Second Prize]  
Excellent Academic Poster (The 9th Jiangsu Provincial Bioinformatics Academic Conference)

### RESEARCH EXPERIENCE

Designed and built two Bioinformatics databases, iCAN and Mir2Drug. (**Database Developing**)  
Participated in a study to assess the risk of development of type 2 diabetes in the Chinese urban population by using machine learning approaches. (**Machine Learning Applied in Medicine**)  
Identified Glioblastoma samples from scRNA-seq data. (**Undergraduate Graduation Project**)  
Analyzed the potential role of G-quadruplexes in the SARS-CoV-2 genome, the human 3D genome, and the human transcriptome. (**Epigenetic Project**)

### PUBLICATIONS

#### [Google scholar](#)

- [1] **Zhang, R.**, Liu, Y., Zhang, X., Xiao, K., Hou, Y., Liu, H., & Sun, X. (2021). Detecting and Profiling Endogenous RNA G-Quadruplexes in the Human Transcriptome. *International journal of molecular sciences*, 22(15), 8012. <https://doi.org/10.3390/ijms22158012>
- [2] 李浩, **张荣鑫**, 侯越 & 孙啸. (2021). 基因组G-四链体与疾病的关系. *生命的化学* (06), 1244-1251. [doi:10.13488/j.smhx.20200597](https://doi.org/10.13488/j.smhx.20200597)
- [3] **Zhang, R.**, Xiao, K., Gu, Y., Liu, H., & Sun, X. (2020). Whole Genome Identification of Potential G-Quadruplexes and Analysis of the G-Quadruplex Binding Domain for SARS-CoV-2. *Frontiers in genetics*, 11, 587829. <https://doi.org/10.3389/fgene.2020.587829>
- [4] Hou, Y., **Zhang, R.**, & Sun, X. (2019). Enhancer LncRNAs Influence Chromatin Interactions in Different Ways. *Frontiers in genetics*, 10, 936. <https://doi.org/10.3389/fgene.2019.00936>
- [5] Hou, Y., Li, F., **Zhang, R.**, Li, S., Liu, H., Qin, Z. S., & Sun, X. (2019). Integrative characterization of G-Quadruplexes in the three-dimensional chromatin structure. *Epigenetics*, 14(9), 894-911. <https://doi.org/10.1080/15592294.2019.1621140>
- [6] Xiong, X. L., **Zhang, R. X. (co-first author)**, Bi, Y., Zhou, W. H., Yu, Y., & Zhu, D. L. (2019). Machine Learning Models in Type 2 Diabetes Risk Prediction: Results from a Cross-sectional Retrospective Study in Chinese Adults. *Current medical science*, 39(4), 582-588. <https://doi.org/10.1007/s11596-019-2077-4>
- [7] Zuo, J., Li, J., **Zhang, R.**, Xu, L., Chen, H., Jia, X., Su, Z., Zhao, L., Huang, X., & Xie, W. (2017). Institute collection and analysis of Nanobodies (iCAN): a comprehensive database and analysis platform for nanobodies. *BMC genomics*, 18(1), 797. <https://doi.org/10.1186/s12864-017-4204-6>
- [8] Wang, X., Jiang, H., Wu, W., **Zhang, R.**, Wu, L., Chen, H., Li, P., Nie, Y., Shao, J., Li, Y., Lin, X., Lv, S., Wang, Q., & Hu, J. (2017). An Integrating Approach for Genome-Wide Screening of MicroRNA Polymorphisms Mediated Drug Response Alterations. *International journal of genomics*, 2017, 1674827. <https://doi.org/10.1155/2017/1674827>