Xu Quan (许泉)

Personal information

Shanghai Center for Systems Biomedicine
Shanghai Jiao Tong University
RM C107 SCSB BLDG,
No.800, Dong Chuan Rd. Shanghai, 200240
People's R China.

Cell: +86-159-2176-6307
Email: **xuquan@sjtu.edu.cn**

Education

Shanghai Jiao Tong University, Shanghai, China. Sep. 2013 – May. 2016
Master of Science, Biology, Bioinformatics direction.

Hunan Normal University, Changsha, China. Sep. 2008 – Jun. 2012
Bachelor of Science, Biotechnology.

Academic Work Experience

1, Master level's major work completed the research subject *CRISPR inversion of CTCF sites alters genome topology and enhancer/promoter function*, and this research result was published in *Cell* (Co-first author) August 13th 2015, and subsequently this study was introduced by *Cell* and *Nature* respectively with special review paper.

2, Know the basic principles and data analysis methods of high-throughput sequencing used in molecular biology laboratory, such as ChIP-seq, RNA-seq, 4C-seq and 5C-seq. Through self-study, I have learnt the Linux operating system, python programming language, R statistical language, and audit basic statistics courses (probability theory, mathematical statistics, stochastic process, multivariate statistics, linear statistics, time series analysis, matrix theory, etc.).

3, On October 16th 2015, as the speaker to attend the *2015 Epigenetics Retreat in Hangzhou*, the report title is *CRISPR Inversion of CTCF Sites Alters Genome Topology and Enhancer/Promoter Function*.

4, Be awarded 2015 annual master's National Scholarship in Shanghai Jiao Tong University.

Current Research Interests

1, Discovering bioinformatics tools for the analysis of high-throughput sequencing data.

2, Identification of rules for the interaction between transcription factors and transcription factor binding sites.

3, Appling the machine learning and the new statistical methods to biology research.

4, Computing cluster maintenance management.

Publications

1, Guo, Y.[9], **Xu, Q.[9]**, Canzio, D., Shou, J., Li, J., Gorkin, D. U., ... & Wu, Q. (2015). CRISPR Inversion of CTCF Sites Alters Genome Topology and Enhancer/Promoter Function. ***Cell***, 162(4), 900-910. **(9 Co-first author)**

2, Jia, Z., Guo, Y., Tang, Y., **Xu, Q.**, Li, B., & Wu, Q. (2014). Regulation of the Protocadherin Celsr3 Gene and Its Role in Globus Pallidus Development and Connectivity. ***Molecular and cellular biology***, 34(20), 3895-3910.

3, Li, J., Shou, J., Guo, Y., Tang, Y., Wu, Y., Jia, Z., Zhai, Y., Cheng, Z., **Xu, Q.**, & Wu, Q. (2015). Efficient inversions and duplications of mammalian regulatory DNA elements and gene clusters by CRISPR/Cas9. ***Journal of molecular cell biology***, 2015 7: 284-298.