

Xinru Qiu

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Education

University of California, Riverside Ph.D., Genetics, Genomics, and Bioinformatics	2018-2023
University of Southern California Master of Science, Pharmaceutical Sciences	2013-2015
Jilin University Bachelor of Science, Pharmacy	2009-2013

Positions

University of California, Riverside Postdoctoral Researcher	07/2023-Present
University of California, Riverside Ph.D. Research Assistant	09/2018-06/2023
Illumina Bioinformatics Intern	06/2022-09/2022
Vantari Genetics Clinical Genomics Scientist	11/2015-09/2018

Teaching

- **UCR BMSC 202** - Advanced course on molecular mechanisms of diseases
- **UCR BIOL107A** - Molecular Biology
- **UCR BIOL020** - Dynamic Genome

Service

- **Journals review:** Advanced Science, Communications Biology, Frontiers in Genetics, and others
- **Conference review:** GEM workshop at ICLR 2024, AI4Science workshop at ICML 2024
- **Grant review:** UCR Minigrants for Undergraduate Research & Creative Activities

Technical Skills

- **Platforms:** Unix, Linux, Windows
- **Programming:** Python, R, Bash, SQL, Java, HTML, Git, Typescript
- **Machine Learning:** Pandas, NumPy, SciPy, Scikit-learn, and various ML algorithms

- **Bioinformatics Tools:** Bioconductor, BLAST, Bowtie, CellRanger, Seurat, SCANPY, AlphaFold2
- **Databases:** 1000 Genomes Browser, ClinVar, COSMIC, ENCODE, GEO, TCGA, UCSC Genome Browser

Publications

1. **Qiu, X.**, Nair, M.G., Jaroszewski, L. and Godzik, A., 2024. Deciphering Abnormal Platelet Subpopulations in COVID-19, Sepsis and Systemic Lupus Erythematosus through Machine Learning and Single-Cell Transcriptomics. *International Journal of Molecular Sciences*, 25(11), p.5941.
2. **Qiu, X.**, Li, H., Ver Steeg, G. and Godzik, A., 2024. Advances in AI for Protein Structure Prediction: Implications for Cancer Drug Discovery and Development. *Biomolecules*, 14(3), p.339.
3. Vizcarra, E.A., Ulu, A., Landrith, T.A., **Qiu, X.**, Godzik, A. and Wilson, E.H., 2023. Group 1 metabotropic glutamate receptor expression defines a T cell memory population during chronic Toxoplasma infection that enhances IFN-gamma and perforin production in the CNS. *Brain, Behavior, and Immunity*, 114, pp.131-143.
4. Takkouche, A., **Qiu, X.**, Sedova, M., Jaroszewski, L. and Godzik, A., 2023. Unusual structural and functional features of TpLRR/BspA-like LRR proteins. *Journal of Structural Biology*, 215(3), p.108011.
5. Bergersen, K.V., Pham, K., Li, J., Ulrich, M.T., Merrill, P., He, Y., Alaama, S., **Qiu, X.**, Harahap-Carrillo, I.S., Ichii, K. and Frost, S., 2023. Health disparities in COVID-19: Immune and vascular changes are linked to disease severity and persist in a high-risk population in Riverside County, California. *BMC Public Health*, 23(1), p.1584.
6. Li, J., Ruggiero-Ruff, R.E., He, Y., **Qiu, X.**, Lainez, N., Villa, P., Godzik, A., Coss, D. and Nair, M.G., 2023. Sexual dimorphism in obesity is governed by RELM α regulation of adipose macrophages and eosinophils. *Elife*, 12, p.e86001.
7. Bonenfant, J., Li, J., Nasouf, L., Miller, J., Lowe, T., Jaroszewski, L., **Qiu, X.**, Thapamagar, S., Mittal, A., Godzik, A. and Klein, W., 2022. Resistin concentration in early sepsis and all-cause mortality at a safety-net hospital in riverside county. *Journal of Inflammation Research*, pp.3925-3940.
8. Alisoltani, A., **Qiu, X.**, Jaroszewski, L., Sedova, M., Iyer, M. and Godzik, A., 2023. Gender differences in smoking-induced changes in the tumor immune microenvironment. *Archives of Biochemistry and Biophysics*, 739, p.109579.
9. **Qiu, X.**, Li, J., Bonenfant, J., Jaroszewski, L., Mittal, A., Klein, W., Godzik, A. and Nair, M.G., 2021. Dynamic changes in human single-cell transcriptional signatures during fatal sepsis. *Journal of leukocyte biology*, 110(6), pp.1253-1268.
10. Zhou, W.L., Li, L.L., **Qiu, X.R.**, An, Q. and Li, M.H., 2017. Effects of combining insulin-like growth factor 1 and platelet-derived growth factor on osteogenesis around dental implants. *Chin J Dent Res*, 20(2), pp.105-109.

11. Li, M.H., Wang, Y.S., Zhou, H.L., Li, Y.J., **Qiu, X.R.**, Wang, X.Y. and Zhao, Y.Y., 2013. Inhibitory effects of mistletoe alkali on salivary adenoid cystic carcinoma cells. *Chemical Research in Chinese Universities*, 29(2), pp.275-279.
12. Li, M.H., Zhou, H.L., Wang, W. and **Qiu, X.R.**, 2010. Inhibition of salidroside on salivary gland adenoid cystic carcinoma. *Chemical Research in Chinese Universities*, 26(6), pp.969-973.