Liujie (Jeff) Wang

wangl18@livemail.uthscsa.edu
7703 Floyd Curl Drive, San Antonio, Texas, 78229
(310) 948-3357

EDUCATION:

MD/PhD 2019-2027 (anticipated)
UT Health San Antonio, Medical Scientist Training Program

MS, Biochemistry 2016-2017
University of California Los Angeles
Master's Thesis: Interaction Between Spire and Rab GTPases and its Effect on the Developing Drosophila Oocyte
Advisor: Dr. Margot Quinlan

BS, Biochemistry 2013-2017 University of California Los Angeles

RESEARCH EXEPERIENCE:

Ph.D. Research June 2021-
Lab of Dr. Patrick Sung, Department of Biochemistry and Structural Biology, UT Health San Antonio
- Biochemical characterization of the functional role of the MCM8-9 helicase complex in HR mediated DNA repair
- Mechanistic dissection of the PolA-Primase complex in DNA repair

Summer Rotation June 2020-July 2020
Lab of Dr. Patrick Sung, Department of Biochemistry and Structural Biology, UT Health San Antonio
- Conducted protein interaction studies with CST and Bloom helicase proteins
- Purified the CTC1 subunit of CST complex

Summer Rotation June 2019-July 2019
Lab of Dr. Tim Huang, Department of Molecular Medicine, UT Health San Antonio
- Tested the effects of metformin on circulating prostate cancer cells, LnCaP and PC3

Staff Research Associate July 2017-May 2019
Lab of Dr. Sriram Kosuri, Department of Chemistry and Biochemistry, UCLA
- Built and optimized a luciferase-base cell reporter assay for olfactory receptor activation
- Built a 100-mouse olfactory receptor library for high-throughput agonist screening
- Tested novel Beta 2-Adrenergic Receptor mutations to validate an uncharacterized structural motif
- Generated a DMS library for p53 gene exons to uncover splicing defect variants using the MFASS (Multiplexed Functional Assay of Splicing using Sort-Seq) platform
- Worked on generating human exon variants in their full gene contexts for validation of the MFASS platform

Undergraduate Researcher Summer 2014-Spring 2017
Lab of Dr. Margot Quinlan, Department of Chemistry and Biochemistry, UCLA
- Worked on mapping the binding site of human Endofin to human Formin2
- Generated Endofin truncation constructs. Tested constructs for inhibition of actin polymerization by Human Formin2 using a fluorescence-based assay

- Purifying the C-terminal half of Drosophila Spire to characterize the binding interaction with Rab GTPases
- Deleted loop region from the modified FYVE domain in the C-terminus of Spire to achieve solubility.

Troubleshot affinity purification of Spire deletion loop construct

- Worked on fruitfly crosses to generate a line expressing Spire devoid of its Spir-box domain
- Performed GST-Rab pulldown assays to probe for direct/indirect interaction with Drosophila Spire

HONORS/AWARDS

UCLA Departmental Scholars Program Fall 2016-Spring 2017

- Concurrent Master's Program during my senior year of undergraduate studies in the department of Chemistry and Biochemistry at UCLA

Whitcome Summer Research Fellowship Summer 2015

- 10 week funded full time research fellowship in the lab of Dr. Margot Quinlan

Undergraduate Research Fellowship Program Winter 2015-Spring 2015

- 2 quarters of funded research fellowship in the lab of Dr. Margot Quinlan during the academic year UCLA Academic Dean's List Winter 2014-Fall 2015, Spring 2016-Winter 2017

PUBLICATIONS

- **Wang, L**. (2017). Interaction Between Spire and Rab GTPases and its Effect on the Developing Drosophila Oocyte. UCLA. ProQuest ID: Wang_ucla_0031N_16237. Merritt ID: ark:/13030/m5033nbw. Retrieved from https://escholarship.org/uc/item/5hv5d87j

- Cheung, R., Insigne, K.D., Yao, D., Burghard, C.P., **Wang, J**., Hsiao, Y.E, Jones, E.M, Goodman, D.B., Xiao, X., Kosuri, S. (2019). A Multiplexed Assay for Exon Recognition Reveals That an Unappreciated Fraction of Rare Genetic Variants Cause Large-Effect Splicing Disruptions. Molecular Cell, 73(1), 183-194. PMCID: PMC6599603

- Jones, E.M., Jajoo, R., Cancilla, D., Lubock, N.B., **Wang, J**., Satyadi, M., Cheung, R., March, C., Bloom, J.S., Matsunami, H., Kosuri, S. (2019). A Scalable Multiplexed Assay for Decoding GPCR-Ligand Interactions with RNA Sequencing. Cell Systems, 8(3), 254-260. PMCID: PMC6907015

- Jones, E.M., Lubock, N.B., Venkatakrishnan, A.J., **Wang, J**., Tseng, A.M., Paggi, J.M., Latorraca, N.R., Cancilla, D., Satyadi, M., Davis., J.E., Babu, M.M., Dror, R.O., Kosuri, S. (2020). Structural and functional characterization of G protein-coupled receptors with deep mutational scanning. eLife. PMCID: PMC7707821

PRESENTATIONS

STX-MSTP Spring Retreat 2022

- Poster Presentation: *Functional characterization of the MCM8-9 helicase complex in HR repair*

UT Health San Antonio LSOM Research Week 2021

- Poster and Oral Presentation: *Exploring the Effects of Metformin on Circulating PC3 Prostate Cancer Cells*

STX-MSTP Spring Retreat 2021

- Virtual Oral Presentation: *Exploring the Effects of Metformin on Circulating PC3 Prostate Cancer Cells*

ACS-SCURC Oral Presentation April 2017

- Presented research on the interaction between Spire and Rab GTPases conducted in the lab of Dr. Margot Quinlan
- Oral Presentation Winner: Biochemistry Section

UCLA Poster Day May 2015

- Poster presentation of my research from the Quinlan lab during the annual UCLA research week