

Stanford

Jinglong Wang

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Bio

BIO

Dr. Wang was trained at the Jacques Monod Institute and École Normale Supérieure in Paris, France under the mentorship of Dr. Terence Strick, and obtained his Ph.D. degree from the University of Paris in 2019. He dissected the molecular machinery of human and bacterial NHEJ, and interrogated the mechanism of SpCas9 tolerance to non-specific substrate using single-molecule nanomanipulation tools.

Jinglong's research in the Frock Lab focuses on DSB-related chromosome topological changes and genomic interactions.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

PROGRAM AFFILIATIONS

- SPARK at Stanford

STANFORD ADVISORS

- Richard Frock, Postdoctoral Faculty Sponsor

PATENTS

- Terence Strick, Charlie Grosse, Dorota Kostrz, Jinglong Wang, Marc Nadal. "France Patent 1762848 Molecule d'ADN Double- Brin pour la Detection et la Caracterisation des Interactions Moleculaires", CNRS, Dec 21, 2018

Publications

PUBLICATIONS

- **DNA-PKcs suppresses illegitimate chromosome rearrangements.** *Nucleic acids research*

Wang, J., Sadeghi, C. A., Frock, R. L.
2024

- **Shifted PAMs generate DNA overhangs and enhance SpCas9 post-catalytic complex dissociation.** *Nature structural & molecular biology*

Wang, J., Le Gall, J., Frock, R. L., Strick, T. R.
2023

- **Increased AID Results in Mutations at the CRLF2 Locus Implicated in Latin American ALL Health Disparities.** *Research square*

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2023

- **DNA End Joining: G0-ing to the Core.** *Biomolecules*

Frock, R. L., Sadeghi, C., Meng, J., Wang, J. L.
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- **Dynamics of Ku and bacterial non-homologous end-joining characterized using single DNA molecule analysis.** *Nucleic acids research*

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2021

● **Mechanism of efficient double-strand break repair by a long non-coding RNA.** *Nucleic acids research*

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● **A Modular DNA Scaffold to Study Protein-Protein Interactions at Single-Molecule Resolution**

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● **A modular DNA scaffold to study protein-protein interactions at single-molecule resolution.** *Nature nanotechnology*

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● **Dissection of DNA double-strand-break repair using novel single-molecule forceps.** *Nature structural & molecular biology*

Wang, J. L., Duboc, C., Wu, Q., Ochi, T., Liang, S., Tsutakawa, S. E., Lees-Miller, S. P., Nadal, M., Tainer, J. A., Blundell, T. L., Strick, T. R.
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● **The histone H3.3K36M mutation reprograms the epigenome of chondroblastomas.** *Science (New York, N.Y.)*

Fang, D., Gan, H., Lee, J. H., Han, J., Wang, Z., Riester, S. M., Jin, L., Chen, J., Zhou, H., Wang, J., Zhang, H., Yang, N., Bradley, et al
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