Stanford

Tong Wang

- Resident in Pathology
- Candidate For Affiliation, Pathology Clinical

Bio

BIO

Tong Wang, MD, PhD, is a physician-scientist in clinical pathology with interests in nucleic acid chemical biology, epigenetics, deep learning, and clinically useful tests.

CLINICAL FOCUS

- Residency
- Clinical Pathology

PROFESSIONAL EDUCATION

- MD, Perelman School of Medicine (2023)
- PhD, Perelman School of Medicine , Biochemistry and Molecular Biophysics (2021)
- BS, University of Wisconsin-Madison , Honors in Chemistry (2015)

INTERNET LINKS

- Website: https://www.twangmdphd.com/

Publications

PUBLICATIONS

- **Sensitive, direct detection of non-coding off-target base editor unwinding and editing in primary cells.** *bioRxiv : the preprint server for biology*
  Wang, T., Jessa, S., Marinov, G. K., Klemm, S., Kundaje, A., Greenleaf, W. J.
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- **Application of Diagnostic Stewardship to Fungal Polymerase Chain Reaction: Low Yield of Follow-up Testing on Plasma and Bronchoalveolar Lavage After a Negative Result.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Wang, T., Park, B., Anderson, G., Shaller, B., Budvytiene, I., Banaei, N.
  2024
- **Direct enzymatic sequencing of 5-methylcytosine at single-base resolution.** *Nature chemical biology*
  Wang, T., Fowler, J. M., Liu, L., Loo, C. E., Luo, M., Schutsky, E. K., Berríos, K. N., DeNizio, J. E., Dvorak, A., Downey, N., Montermoso, S., Pingul, B. Y., Nasrallah, et al
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- **Enzymatic approaches for profiling cytosine methylation and hydroxymethylation** *MOLECULAR METABOLISM*
  Wang, T., Loo, C. E., Kohli, R. M.
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- **Discovery of an Unnatural DNA Modification Derived from a Natural Secondary Metabolite** *CELL CHEMICAL BIOLOGY*
  Wang, T., Kohli, R. M.
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- **Bisulfite-Free Sequencing of 5-Hydroxymethylcytosine with APOBEC-Coupled Epigenetic Sequencing (ACE-Seq)** *DNA MODIFICATIONS*
  Wang, T., Luo, M., Berrios, K. N., Schutsky, E. K., Wu, H., Kohli, R. M.
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- **Serologic investigation and management of an antibody screen negative para-Bombay phenotype during pregnancy.** *Transfusion medicine (Oxford, England)*
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- **Particulate matter in water: an overlooked source of preanalytical error producing erroneous chemistry test results.** *Clinical chemistry and laboratory medicine*
  Wang, T., Pizarro-Falcon, S., Quiros, A., Bowen, R. A.
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- **HHV-8+ diffuse large B-cell lymphoma with EBV coinfection occurring posttransplant.** *Blood*
  Wang, T., Silva, O.
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- **Joint single-cell profiling resolves 5mC and 5hmC and reveals their distinct gene regulatory effects.** *Nature biotechnology*
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- **Revealing Drivers for Carboxy-S-adenosyl-l-methionine Use by Neomorphic Variants of a DNA Methyltransferase.** *ACS chemical biology*
  Loo, C. E., Hix, M. A., Wang, T., Cisneros, G. A., Kohli, R. M.
  2023

- **The Base-Editing Enzyme APOBEC3A Catalyzes Cytosine Deamination in RNA with Low Proficiency and High Selectivity** *ACS CHEMICAL BIOLOGY*
  Barka, A., Berrios, K. N., Bailer, P., Schutsky, E. K., Wang, T., Kohli, R. M.
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- **Mutant IDH Inhibits IFN gamma-TET2 Signaling to Promote Immunoevasion and Tumor Maintenance in Cholangiocarcinoma** *CANCER DISCOVERY*
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- **Controllable genome editing with split-engineered base editors** *NATURE CHEMICAL BIOLOGY*
  Berrios, K. N., Evitt, N. H., DeWeerd, R. A., Ren, D., Luo, M., Barka, A., Wang, T., Bartman, C. R., Lan, Y., Green, A. M., Shi, J., Kohli, R. M.
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- **Functionally distinct roles for TET-oxidized 5-methylcytosine bases in somatic reprogramming to pluripotency** *MOLECULAR CELL*
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- **Nucleobase Modifiers Identify TET Enzymes as Bifunctional DNA Dioxygenases Capable of Direct N-Demethylation** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*
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- **Recognition of Class II MHC Peptide Ligands That Contain beta-Amino Acids** *JOURNAL OF IMMUNOLOGY*
  Cheloha, R. W., Woodham, A. W., Bousbaine, D., Wang, T., Liu, S., Sidney, J., Sette, A., Gellman, S. H., Ploegh, H. L.
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- **Consequences of Periodic alpha-to-beta(3) Residue Replacement for Immunological Recognition of Peptide Epitopes** *ACS CHEMICAL BIOLOGY*

Cheloha, R. W., Sullivan, J. A., Wang, T., Sand, J. M., Sidney, J., Sette, A., Cook, M. E., Suresh, M., Gellman, S. H.
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