Stanford

Dr. Qiwen Deng

Postdoctoral Scholar, Pathology

Bio

BIO

My research aims to understand how immune–stromal interactions shape tissue injury, repair, and fibrosis across chronic diseases. I combine multiplexed spatial proteomics (CODEX), single-cell and spatial transcriptomics, and molecular pathology approaches to dissect the organization and function of complex tissue microenvironments. By mapping spatially resolved cellular neighborhoods in human biopsies, I seek to uncover conserved and disease-specific patterns that can guide biomarker discovery and therapeutic development.

Working within a laboratory focused on the mechanisms and therapeutic targeting of fibrotic diseases, I investigate chronic kidney disease alongside other models of organ fibrosis. With a background spanning molecular biology, therapeutic development, and spatial biology, I aim to advance studies that connect detailed tissue analysis with potential clinical applications. I welcome opportunities for collaborative research in chronic kidney disease and other fibrosis-related conditions.

INSTITUTE AFFILIATIONS

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

HONORS AND AWARDS

- SDRC Pilot and Feasibility Program Award, Stanford Diabetes Research Center (2024)
- Stanford Bio-X Travel Award, Stanford Bio-X (2024)
- Stanford Bio-X Travel Award, Stanford Bio-X (2023)
- Molecular Cartography Award, Resolve Biosciences and Stanford PAN (2021)
- Postgraduate Scholarship Award, Peking University (2018)
- Outstanding Graduates of South China Agricultural University, South China Agricultural University (2013)
- Undergraduate Government Scholarship Award, South China Agricultural University (2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Volunteer Reviewer, Nature Portfolio, MDPI (2023 - present)
- Guest Editor, Biology Editorial Office (2023 - present)
- Member, International Society for Stem Cell Research (ISSCR) (2022 - present)
- Member, American Society of Nephrology (ASN) (2022 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Peking University (2019)

- Ph.D., Peking University , Molecular cell biology (2019)
- B.S., South China Agricultural University , Molecular Biology (2013)

STANFORD ADVISORS

- Gerlinde Wernig, Postdoctoral Faculty Sponsor

PATENTS

- Gerlinde Wernig, Cristabelle De Souza, Qiwen Deng. "United States Patent S23-015 PCT/US2024/018953 Regulation of fat storage and metabolism in humans by engaging innate immunity via ap1/cd47 axis", Leland Stanford Junior University, Sep 26, 2024
- Gerlinde Wernig, Tristan Lerbs, Li Cui, Qiwen Deng, Cristabelle De Souza. "United States Patent US2021064691 Antifibrotic And Antitumor Activity of CD63 Blockade", THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY, Dec 21, 2021

LINKS

- My LinkedIn: https://www.linkedin.com/in/qiwen-deng-ph-d-776025215/

Publications

PUBLICATIONS

- **Multiomics Reveal c-Jun and SLC4A4 as Key Drivers of Kidney Fibrosis in Diabetic Nephropathy**
  Deng Qiwen, Liu Yu, Charu, V., Wernig, G.
  AMER SOC NEPHROLOGY.2024
- **The calcium signaling enzyme CD38 - a paradigm for membrane topology defining distinct protein functions.** *Cell calcium*
  Lee, H. C., Deng, Q. W., Zhao, Y. J.
  2022; 101: 102514
- **GALA peptide improves the potency of nanobody-drug conjugates by lipid-induced helix formation.** *Chemical communications (Cambridge, England)*
  Chen, Y. J., Deng, Q. W., Wang, L., Guo, X. C., Yang, J. Y., Li, T., Xu, Z., Lee, H. C., Zhao, Y. J.
  2021; 57 (12): 1434-1437
- **The transferrin receptor CD71 regulates type II CD38, revealing tight topological compartmentalization of intracellular cyclic ADP-ribose production** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Deng, Q., Zhang, J., Li, T., He, W., Fang, L., Lee, H., Zhao, Y.
  2019; 294 (42): 15293–303
- **CD38 produces nicotinic acid adenosine dinucleotide phosphate in the lysosome** *JOURNAL OF BIOLOGICAL CHEMISTRY*
  Fang, C., Li, T., Li, Y., Xu, G., Deng, Q., Chen, Y., Hou, Y., Lee, H., Zhao, Y.
  2018; 293 (21): 8151-8160
- **Development of Stabilized Peptide-Based PROTACs against Estrogen Receptor α.** *ACS chemical biology*
  Jiang, Y., Deng, Q., Zhao, H., Xie, M., Chen, L., Yin, F., Qin, X., Zheng, W., Zhao, Y., Li, Z.
  2018; 13 (3): 628-635
- **Immuno-targeting the multifunctional CD38 using nanobody** *SCIENTIFIC REPORTS*
  Li, T., Qi, S., Unger, M., Hou, Y., Deng, Q., Liu, J., Lam, C. M. C., Wang, X., Xin, D., Zhang, P., Koch-Nolte, F., Hao, Q., Zhang, et al
  2016; 6: 27055