



Daniel Dan Liu

- MD Student, expected graduation Spring 2026
- Ph.D. Student in Stem Cell Biology and Regenerative Medicine, admitted Autumn 2020
- MSTP Student
- Ph.D. Minor, Computer Science

Bio

BIO

Daniel received his bachelor's degree in Molecular Biology from Princeton University in 2018, where he conducted research under Dr. Yibin Kang on cancer metastasis and cancer stem cell biology. He then came to Stanford for his MD-PhD training, where he joined the laboratory of Dr. Irv Weissman. His graduate research concerned the prospective isolation of neural stem cells from primary human brain tissue, in development and across lifespan.

Daniel is currently a resident in Anatomic and Neuropathology at Stanford Medicine.

EDUCATION AND CERTIFICATIONS

- Bachelor of Arts, Princeton University (2018)
- PhD, Stanford University , Stem Cell Biology & Regenerative Medicine (2026)
- PhD Minor, Stanford University , Computer Science (2026)
- MD, Stanford University (2026)
- Certificate, Princeton University , Applications of Computing (2018)
- Certificate, Princeton University , Global Health & Health Policy (2018)
- Certificate, Princeton University , Quantitative & Computational Biology (2018)
- AB, Princeton University , Molecular Biology (2018)

Publications

PUBLICATIONS

- **Purification and characterization of human neural stem and progenitor cells.** *Cell*
Liu, D. D., He, J. Q., Sinha, R., Eastman, A. E., Toland, A. M., Morri, M., Neff, N. F., Vogel, H., Uchida, N., Weissman, I. L.
2023; 186 (6): 1179
- **Xenophagocytosis blockade enhances interspecies chimerism.** *Cell*
Wang, S., Niizuma, K., Liu, D. D., Suchy, F. P., Chang, A. H., Tabatabaee, S., Sato, H., Yanagida, A., Masaki, H., Hidajat, N., Homma, S., Miyauchi, M., Bhadury, et al
2026
- **Scalable single-cell total RNA sequencing unifies coding and noncoding transcriptomics.** *Nature biotechnology*
Isakova, A., Liu, D. D., Cvijović, I., Sinha, R., Eastman, A. E., Saul, S., Detweiler, A. M., Neff, N., Einav, S., Weissman, I. L., Quake, S. R.
2026
- **Germline stem cell isolation, lineage tracing, and aging in a protochordate.** *bioRxiv : the preprint server for biology*

- Levy, T., Anselmi, C., Ishizuka, K. J., Gordon, T., Voskoboynik, Y., McGeever, E., Detweiler, A. M., Levin, L., Palmeri, K. J., Liu, D. D., Sinha, R., Ohene-Gambill, B. F., Raveh, et al
2025
- **Modeling glioma intratumoral heterogeneity with primary human neural stem and progenitor cells.** *Stem cell reports*
Liu, D. D., Gao, D., Womack-Gambrel, N. L., Eastman, A. E., Ohene-Gambill, B. F., Weissman, I. L.
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 - **Human skeletal development and regeneration are shaped by functional diversity of stem cells across skeletal sites.** *Cell stem cell*
Ambrosi, T. H., Taheri, S., Chen, K., Sinha, R., Wang, Y., Hunt, E. J., Goodnough, L. H., Murphy, M. P., Steininger, H. M., Hoover, M. Y., Felix, F., Weldon, K. C., Koepke, et al
2025
 - **Dual Fresh/Fixed Tissue Workflow for Novel Cell Type Validation in Human Brains Donated for Rapid Research Autopsy**
Reilly, E., Eastman, A., Womack, N., Belk, J., Liu, D., Raj, S., Jaiswal, S., Weissman, I., Hooper, J.
ELSEVIER SCIENCE INC.2025
 - **Interstitial macrophages are a focus of viral takeover and inflammation in COVID-19 initiation in human lung.** *The Journal of experimental medicine*
Wu, T. T., Travaglini, K. J., Rustagi, A., Xu, D., Zhang, Y., Andronov, L., Jang, S., Gillich, A., Dehghannasiri, R., Martinez-Colon, G. J., Beck, A., Liu, D. D., Wilk, et al
2024; 221 (6)
 - **Lineage-tracing hematopoietic stem cell origins in vivo to efficiently make human HLF+ HOXA+ hematopoietic progenitors from pluripotent stem cells.** *Developmental cell*
Fowler, J. L., Zheng, S. L., Nguyen, A., Chen, A., Xiong, X., Chai, T., Chen, J. Y., Karigane, D., Banuelos, A. M., Niizuma, K., Kayamori, K., Nishimura, T., Cromer, et al
2024
 - **Prospective isolation of neural stem and progenitor cells from the developing human brain.** *STAR protocols*
Liu, D. D., He, J. Q., Uchida, N., Weissman, I. L., Sinha, R.
2023; 4 (4): 102674
 - **LCOR mediates interferon-independent tumor immunogenicity and responsiveness to immune-checkpoint blockade in triple-negative breast cancer.** *Nature cancer*
Perez-Nunez, I., Rozalen, C., Palomeque, J. A., Sangrador, I., Dalmau, M., Comerma, L., Hernandez-Prat, A., Casadevall, D., Menendez, S., Liu, D. D., Shen, M., Berenguer, J., Ruiz, et al
2022
 - **Mesenchymal stromal cells for the treatment of Alzheimer's disease: Strategies and limitations.** *Frontiers in molecular neuroscience*
Regmi, S., Liu, D. D., Shen, M., Kevadiya, B. D., Ganguly, A., Primavera, R., Chetty, S., Yarani, R., Thakor, A. S.
2022; 15: 1011225
 - **A Clinical PET Imaging Tracer ([18F]DASA-23) to Monitor Pyruvate Kinase M2 Induced Glycolytic Reprogramming in Glioblastoma.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
Beinat, C., Patel, C. B., Haywood, T., Murty, S., Naya, L., Castillo, J. B., Reyes, S. T., Phillips, M., Buccino, P., Shen, B., Park, J. H., Koran, M. E., Alam, et al
2021
 - **Trends in the characteristics of human functional genomic data on the gene expression omnibus, 2001-2017.** *Laboratory investigation; a journal of technical methods and pathology*
Liu, D. D., Zhang, L.
2019; 99 (1): 118-127
 - **Mesenchymal Stromal Cell Homing: Mechanisms and Strategies for Improvement.** *iScience*
Ullah, M. n., Liu, D. D., Thakor, A. S.
2019; 15: 421-38
 - **Hysteresis control of epithelial-mesenchymal transition dynamics conveys a distinct program with enhanced metastatic ability** *NATURE COMMUNICATIONS*
Celia-Terrassa, T., Bastian, C., Liu, D., Ell, B., Aiello, N. M., Wei, Y., Zamalloa, J., Blanco, A. M., Hang, X., Kunisky, D., Li, W., Williams, E. D., Rabitz, et al

2018; 9: 5005

- **Ets2 anchors the prometastatic function of mutant p53 in osteosarcoma.** *Genes & development*

Liu, D. D., Kang, Y.

2017; 31 (18): 1823-1824

- **Identification of Nidogen 1 as a lung metastasis protein through secretome analysis.** *Genes & development*

Alečković, M., Wei, Y., LeRoy, G., Sidoli, S., Liu, D. D., Garcia, B. A., Kang, Y.

2017; 31 (14): 1439-1455

- **Normal and cancerous mammary stem cells evade interferon-induced constraint through the miR-199a-LCOR axis** *NATURE CELL BIOLOGY*

Celia-Terrassa, T., Liu, D. D., Choudhury, A., Hang, X., Wei, Y., Zamalloa, J., Alfaro-Aco, R., Chakrabarti, R., Jiang, Y., Koh, B., Smith, H. A., DeCoste, C., Li, et al

2017; 19 (6): 711-+