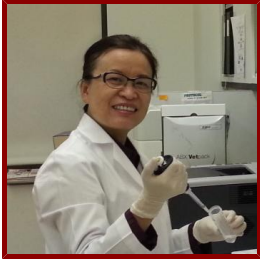


# Stanford

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## Y. Lucy Liu, MD, PhD

Senior Research Scientist, Pediatrics - Hematology/Oncology

### Bio

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#### BIO

Dr. Liu had extensive trainings in human molecular genetics, tumor biology, and experimental therapeutics. She is a world-renowned expert in research on a rare childhood leukemia, juvenile myelomonocytic leukemia (JMML). She has published more than 30 peer-reviewed manuscripts, including in *Nature Genetics*, *Blood*, *Leukemia*, and the *Journal of Clinical Investigation (JCI)*. Dr. Liu was also a co-investigator on several NIH grants at her previous institutions. In 2019, Dr. Liu joined the Department of Pediatrics as a Senior Research Scientist. She recently developed a mouse model for Diamond-Blackfan anemia (DBA), which is a useful tool for testing novel treatments for DBA. She is currently focusing on developing new therapies and unraveling the pathogenesis of DBA. Dr. Liu has published multiple manuscripts about her research work since she joined Stanford School of Medicine.

#### CURRENT ROLE AT STANFORD

Senior Research Scientist

#### EDUCATION AND CERTIFICATIONS

- PhD, Peking Union Medical College (PUMC) Beijing, China , Medical Oncology (Clinical Pharmacology)
- MD, West China School of Medicine, Chengdu, China , Medicine

#### LINKS

- MyBibliography: <https://www.ncbi.nlm.nih.gov/myncbi/yunying.liu.1/bibliography/public/>

### Professional

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#### PROFESSIONAL INTERESTS

Diamond-Blackfan anemia (DBA), Ribosomopathies, Leukemia transformation in MDS/MPN, Developmental hematopoiesis, JMML, Leukemia, and PTEN

#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Active Member, American Society of Hematology (2003 - present)
- Life Member, Chinese American Hematologist and Oncologist Network (CAHON) (2007 - present)
- Active Member, Society for Clinical and Translational Science (2009 - present)
- Executive Committee Member, Chinese American Biopharmaceutical Society (CABS) (2019 - 2023)

## Publications

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### PUBLICATIONS

- **A Novel Mouse Model to Study the Effects of New Therapies for Diamond Blackfan Anemia.** *Blood advances*  
Liu, Y. L., Neoman, N., Sakamoto, K. M.  
2025
- **Novel Mouse Model That Recapitulates the Hematologic Phenotype of Diamond Blackfan Anemia**  
Liu, Y., Wang, N., Neoman, N., Wong, C., Glader, B., Doty, R. T., Wilkes, M. C., Abkowitz, J. L., Sakamoto, K. M.  
AMER SOC HEMATOLOGY.2023
- **Animal models of Diamond-Blackfan anemia: updates and challenges.** *Haematologica*  
Liu, Y. L., Shibuya, A., Glader, B., Wilkes, M. C., Barna, M., Sakamoto, K. M.  
2022
- **Sustained fetal hematopoiesis causes juvenile death from leukemia: evidence from a dual-age-specific mouse model.** *Blood advances*  
Vara, N., Liu, Y., Yan, Y., Lensing, S. Y., Colorado, N., Robinson, D., Zhang, J., Zhang, X., Peterson, E. A., Baltz, N. J., Zhou, D., Bertaina, A., Johann, et al  
2020; 4 (15): 3728–40
- **PTEN is indispensable for cells to respond to MAPK inhibitors in myeloid leukemia.** *Cellular signalling*  
Zhang, J., Xiang, Z., Malaviarachchi, P. A., Yan, Y., Baltz, N. J., Emanuel, P. D., Liu, Y. L.  
2018; 50: 72-79
- **Timing of the loss of Pten protein determines disease severity in a mouse model of myeloid malignancy.** *Blood*  
Liu, Y. L., Yan, Y., Webster, C., Shao, L., Lensing, S. Y., Ni, H., Feng, W., Colorado, N., Pathak, R., Xiang, Z., Hauer-Jensen, M., Li, S., Zhou, et al  
2016; 127 (15): 1912-22
- **The genomic landscape of juvenile myelomonocytic leukemia** *NATURE GENETICS*  
Stieglitz, E., Taylor-Weiner, A. N., Chang, T. Y., Gelston, L. C., Wang, Y., Mazor, T., Esquivel, E., Yu, A., Seepo, S., Olsen, S. R., Rosenberg, M., Archambeault, S. L., Abusin, et al  
2015; 47 (11): 1326-?
- **Deficiency of CREB and over expression of miR-183 in juvenile myelomonocytic leukemia.** *Leukemia*  
Liu, Y. L., Lensing, S. Y., Yan, Y., Cooper, T. M., Loh, M. L., Emanuel, P. D.  
2013; 27 (7): 1585-8
- **PTEN deficiency is a common defect in juvenile myelomonocytic leukemia.** *Leukemia research*  
Liu, Y. L., Castleberry, R. P., Emanuel, P. D.  
2009; 33 (5): 671-7
- **Rapid determination of clonality by detection of two closely-linked X chromosome exonic polymorphisms using allele-specific PCR.** *The Journal of clinical investigation*  
Liu, Y., Phelan, J., Go, R. C., Prchal, J. F., Prchal, J. T.  
1997; 99 (8): 1984-90
- **Activation of Nemo-like Kinase in Diamond Blackfan Anemia suppresses early erythropoiesis by preventing mitochondrial biogenesis.** *The Journal of biological chemistry*  
Wilkes, M. C., Shibuya, A., Liu, Y. L., Mark, K., Mercado, J., Saxena, M., Sathianathen, R. S., Kim, H. N., Glader, B., Kenny, P., Sakamoto, K. M.  
2024: 107542
- **Epigenetic Profiling of PTPN11 Mutant JMML Hematopoietic Stem and Progenitor Cells Reveals an Aberrant Histone Landscape.** *Cancers*  
Sinha, R., Dvorak, M., Ganesan, A., Kalesinskas, L., Niemeyer, C. M., Flotho, C., Sakamoto, K. M., Lacayo, N., Patil, R. V., Perriman, R., Cepika, A. M., Liu, Y. L., Kuo, et al  
2023; 15 (21)
- **Novel Humanized Loss-of-Function NF1 Mouse Model of Juvenile Myelomonocytic Leukemia**  
Sinha, R., Patil, R., Romano, R., Lee, E., Yao, Z., Liu, Y., Porteus, M. H., Bertaina, A.  
AMER SOC HEMATOLOGY.2022: 9765-9766

- **Role of Cytokine Secretion Signatures of Donor-derived T Cells and Recipient Serum Cytokine Profiles as Predictive Biomarkers of Acute Graft-Versus-Host Disease in alpha beta T-cell/CD19 B-cell Depleted Hematopoietic Stem Cell Transplant Pediatric Recipients**  
Montiel-Esparza, R., Barbarito, G., Patil, R., Shyr, D., Saini, G., Parkman, R., Liu, Y., Bertaina, A.  
WILEY.2022
- **POTENTIAL BIOMARKERS OF ACUTE GVHD IN ALPHA/BETA T-CELL/B-CELL DEPLETED HSCT PEDIATRIC RECIPIENTS** WILEY.  
Montiel-Esparza, R., Barbarito, G., Patil, R., Shyr, D., Saini, G., Parkman, R., Liu, Y., Bertaina, A.  
2022
- **Combinatorial Cytokine Secretion Signature of Donor-Derived T Cells Infused with the Graft: A New Potential Biomarker of Acute Graft-Versus-Host Disease in ss t-Cell/CD19 B-Cell Depleted Hematopoietic Stem Cell Transplant Recipients**  
Montiel-Esparza, R., Barbarito, G., Peck, S., Bazzano, M., Patil, R., Shyr, D. C., Saini, G., Parkman, R., Liu, Y., Bertaina, A.  
AMER SOC HEMATOLOGY.2021
- **Aberrant Histone Landscape in Juvenile Myelomonocytic Leukemia**  
Sinha, R., Dvorak, M., Niemeyer, C. M., Sakamoto, K. M., Patil, R., Jutz, P., Liu, Y., Kuo, A., Bertaina, A.  
AMER SOC HEMATOLOGY.2021
- **M1 and M2 macrophages differentially regulate hematopoietic stem cell self-renewal and ex vivo expansion.** *Blood advances*  
Luo, Y., Shao, L., Chang, J., Feng, W., Liu, Y. L., Cottler-Fox, M. H., Emanuel, P. D., Hauer-Jensen, M., Bernstein, I. D., Liu, L., Chen, X., Zhou, J., Murray, et al  
2018; 2 (8): 859-870
- **Metabolic history impacts mammary tumor epithelial hierarchy and early drug response in mice.** *Endocrine-related cancer*  
Montales, M. T., Melnyk, S. B., Liu, S. J., Simmen, F. A., Liu, Y. L., Simmen, R. C.  
2016; 23 (9): 677-90
- **Phase II/III trial of a pre-transplant farnesyl transferase inhibitor in juvenile myelomonocytic leukemia: a report from the Children's Oncology Group.** *Pediatric blood & cancer*  
Stieglitz, E., Ward, A. F., Gerbing, R. B., Alonzo, T. A., Arceci, R. J., Liu, Y. L., Emanuel, P. D., Widemann, B. C., Cheng, J. W., Jayaprakash, N., Balis, F. M., Castleberry, R. P., Bunin, et al  
2015; 62 (4): 629-36
- **Subclonal mutations in SETBP1 confer a poor prognosis in juvenile myelomonocytic leukemia.** *Blood*  
Stieglitz, E., Troup, C. B., Gelston, L. C., Haliburton, J., Chow, E. D., Yu, K. B., Akutagawa, J., Taylor-Weiner, A. N., Liu, Y. L., Wang, Y. D., Beckman, K., Emanuel, P. D., Braun, et al  
2015; 125 (3): 516-24
- **Mutations in GATA2 are rare in juvenile myelomonocytic leukemia.** *Blood*  
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