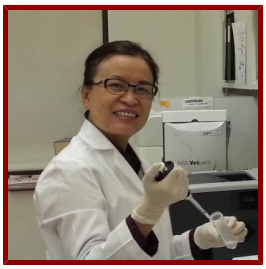
Stanford



Y. Lucy Liu, MD, PhD

Senior Research Scientist, Pediatrics - Hematology/Oncology

Bio

BIO

Dr. Liu received her medical and clinical pharmacology training at two of the most prestigious medical institutions in China—West China School of Medicine (Sichuan University) and Peking Union Medical College (PUMC). She possesses extensive research experience in human molecular genetics, tumor biology, and experimental therapeutics.

Dr. Liu is internationally recognized for her expertise in two rare pediatric hematologic disorders: juvenile myelomonocytic leukemia (JMML) and Diamond-Blackfan anemia (DBA). She has authored more than 30 peer-reviewed publications in leading scientific journals, including Nature Genetics, Blood, Leukemia, and the Journal of Clinical Investigation (JCI). At her previous institutions, Dr. Liu served as a Principle Investigator (PI) and co-investigator on several NIH-funded research projects. In 2019, Dr. Liu joined the Department of Pediatrics at the Stanford University School of Medicine as a Senior Research Scientist. She recently developed a novel mouse model for DBA, which has proven to be a valuable tool for evaluating potential therapeutic strategies. Her current research focuses on elucidating the molecular pathogenesis of DBA and developing innovative treatment approaches for DBA. Since joining Stanford, Dr. Liu has published multiple manuscripts highlighting her ongoing research contributions.

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 (Sichuan University), Chengdu, China , Medicine

LINKS

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

Professional

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

PUBLICATIONS

- **Inflammatory Pathways and the Bone Marrow Microenvironment in Inherited Bone Marrow Failure Syndromes.** *Stem cells (Dayton, Ohio)*
  Neoman, N., Kim, H. N., Viduya, J., Goyal, A., Liu, Y. L., Sakamoto, K. M.
  2025
- **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.
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  Swartzrock, L., Liu, Y., Hoang, H., Ho, K., Neoman, N., Krampf, M. R., Sakamoto, K. M., Czechowicz, A. D.
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- **Novel Mouse Model That Recapitulates the Hematologic Phenotype of Diamond Blackfan Anemia**
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- **Animal models of Diamond-Blackfan anemia: updates and challenges.** *Haematologica*
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- **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
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- **The genomic landscape of juvenile myelomonocytic leukemia** *NATURE GENETICS*
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- **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.
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- **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
- **Novel humanized loss-of-function NF1 mouse model of juvenile myelomonocytic leukemia.** *Blood advances*
  Sinha, R., Patil, R. V., Romano, R., Sharma, D., Lee, E., Perriman, R., Takeda, S., Lesch, B. J., Yao, Z., Liu, Y. L., Cromer, M. K., Porteus, M. H., Bertaina, et al

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- **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.
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- **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
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- **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.
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- **POTENTIAL BIOMARKERS OF ACUTE GVHD IN ALPHA/BETA T-CELL/B-CELL DEPLETED HSCT PEDIATRIC RECIPIENTS** *WILEY.*
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  AMER SOC HEMATOLOGY.2021

- **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**
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- **Metabolic history impacts mammary tumor epithelial hierarchy and early drug response in mice.** *Endocrine-related cancer*
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