Lin Research Lab

Dr. Lin’s laboratory efforts are focused on developing novel therapies to prolong remission and prevent relapse of acute leukemia. In many leukemias, a rare population of chemotherapy-resistant cancer stem cells is responsible for disease relapse following complete remission to induction chemotherapy. These cancer stem cells possess the properties of self-renewal and differentiation. Signals from the bone marrow microenvironment protect these cells and confer chemotherapy resistance. Our lab is committed to developing treatment strategies in order to target these cancer stem cells and the protective mechanisms of the bone marrow microenvironment in order to prevent leukemia recurrence.

Research Projects:
The main research projects currently conducted in Dr. Lin’s laboratory and in collaboration with other laboratories are:

1. Examining the role of stromally-mediated Hedgehog pathway signaling in the chemotherapy resistance of Acute Lymphocytic Leukemia
2. Understanding Hedgehog pathway signaling in the self-renewing cells of Acute Myeloid Leukemia
3. Developing *in vitro* models of acute leukemia and the bone marrow microenvironment.

Research Interest:
Novel post-remission strategies in acute leukemia

Collaborators:
1. Omar Aljitawi, MD, KUMC
2. George Vielhauer, PharmD, PhD, KUMC
3. William Matsui, MD, Johns Hopkins
4. Kathleen Sakamoto, MD, PhD, Stanford
5. Li Li, MD, Ochsner Clinic Foundation

Funding:

**Ongoing Research Support**
NIH National Cancer Institute K23-158146-01 08/18/12-07/31/16
Chemotherapy resistance in ALL: role of the bone marrow microenvironment

**Completed**
Louisiana Board of Regents Clinical and Translational Research, 07/01/09-12/31/11
Education and Commercialization Project Clinical Research Training Core

LSUHSC Executive Research Council Translational Research Initiative Award 01/01/09-12/31/09
Optimizing Cancer Stem Cell Targeted Therapy in Ph+ ALL

NIH National Heart, Lung and Blood Institute Institutional National Research Service Award T32 HL06634 08/01/07-05/31/08

ASCO Foundation Young Investigator Award 11/01/06-10/31/07
Acute Lymphocytic Leukemia Stem Cell Targeted Therapy
Publications:


Oral Presentations


**Abstracts**


**Book Chapters**


