Bolin Liu, MD Professor – Oncology

Education

Beijing Medical University, Beijing China	MD	1987	Medicine
Institute of Hematology, Chinese Academy of Medical Sciences and Peking Union of Medical Colleges, Tianjin, China	MS	1994	Molecular Biology
The University of Texas MD Anderson Cancer Center, Houston, TX	Postdoctoral Fellow	2002	Cancer Biology



Dr. Bolin Liu obtained his doctorate from Beijing Medical University in 1987 and Master of Science from Chinese Academy of Medical Science in 1994. From 1998-2002, he received extensive postdoctoral training in cancer biology at MD Anderson Cancer Center. In late 2002, Dr. Liu joined the University of Oklahoma Health Sciences Center as a research assistant professor. In 2006, he was recruited to the department of pathology, School of Medicine, University of Colorado Anschutz Medical Campus, where he became an independent investigator in 2007 and was promoted to associate professor in 2015.

Since November 2018, Dr. Liu has been a professor at LSU Health

New Orleans. Dr. Liu's laboratory focuses on studying the molecular mechanism of drug resistance and tumor metastasis in breast cancer and non-small cell lung cancer (NSCLC).

Ongoing and recently completed projects

R01 CA266269-01A1 12/23/2022-11/30/2027 - NIH/NCI

HER3-PHF8 signaling axis in triple negative breast cancer progression

The goal of this project is to dissect the molecular basis of HER3 signaling-mediated upregulation of PHF8 in triple negative breast cancer (TNBC) and subsequent tumor progression and metastasis, and to determine the therapeutic potential of inactivation of HER3 or PHF8 in combination with chemotherapy against TNBC. Role: PI

LSU-2022-CCRI-4 11/01/2022-10/31/2023 - LSU Collaborative Cancer Research Initiative (CCRI) Reposition of the fungicide ciclopirox for triple negative breast cancer therapy. The goal of this project is to determine the antitumor activity of ciclopirox olamine (CPX) in combination with AZD6738 (an ATR inhibitor, currently under clinical trials for treatment of solid tumors including BC) or metformin against TNBC in vitro and in vivo. Role: PI

R01 CA201011 09/01/2016-08/31/2022 - NIH/NCI

ErbB3-miRNA axis in tumor metastasis of erbB2-positive breast cancer. The goal of this project is to define miR-203 and miR-542-3p as the key mediators of erbB3 signaling to enhance metastatic potential of erbB2+ breast cancer by upregulating the EMT markers; and identify novel strategy/agents inhibiting erbB3 to prevent or attenuate erbB2+ breast cancer metastasis. Role: PI

Translational Research Award 04/22/2020-04/22/2023

METAvivor Research and Support, Inc. IGF-2 in Herceptin refractory HER2-positive breast cancer. The goal of this project is to define the serum levels of IGF-2 that associate with poor response to Herceptin treatments and to determine if an IGF-2 neutralization antibody and an HDAC inhibitor will significantly re-sensitize the resistant breast cancer cells to Herceptin. Role: PI

R01 CA187733 07/01/2015-06/30/2020 - NIH/NCI

Androgen receptors and intersecting pathways critical to breast cancer subtypes. The goal of this project is to determine how AR interacts with other pathways in the three main subtypes of breast cancer, particularly in those that exhibit de novo or acquired resistance to current therapies. Role: Co-Investigator

25A3253 - Mainline Bioscience LLC 12/18/2015-12/31/2018

Development of peptide CXCR4-antagonist for cancer treatment. The goal of this project is to identify the peptide antagonists of CXCR4 with therapeutic potential against triple negative breast cancer (TNBC) and non-small cell lung cancer (NSCLC). Role: PI