

About the Gala

Bears Care is a proud supporter of Cook County Health, NorthShore Foundation, Northwestern Medicine, Rush University Medical Center, and University of Chicago Medicine in advancing the fight against breast and ovarian cancer. The ongoing success of the annual Bears Care Gala enables continued investment in our partners' critical work in 2024, outlined below. This includes innovative research and clinical trials encompassing prevention and early identification in at-risk populations, the development and testing of novel therapies, and a focus on addressing disparities in cancer care for women of color.

- ★ Utilizing cancer genetics assistants to bring cancer risk assessment into the general medical clinic setting for under-resourced patients, identifying those who are at risk for breast and ovarian cancer and providing high-risk patients with real-time appointments with a cancer genetics counselor to receive further education around risk and genetic testing options, regardless of their ability to pay
- ★ Facilitating both lab and mouse model research to assess the positive effect of vitamin D and progesterin in preventing ovarian cancer with origins in the fallopian tube; advancing mouse models to assess the impact of vitamin D supplementation on typically vitamin D deficient high body mass index subjects, examining the synergism between vitamin D and progesterin to determine the optimal dose for efficacy as well as reduction of individual drug toxicities, to be carried forward in human clinical trials
- ★ Performing flow cytometry for several inflammatory cell markers on isolated fallopian tubes in both short and long term trials with progesterin and vitamin D to help better understand how the inflammatory tumor micro-environment evolves as fallopian tube cancer develops
- ★ Helping to provide free high-quality mammography to uninsured and underserved women of color from Chicago's most economically challenged neighborhoods
- ★ Enhancing EMPACTChicago, a web-based program launched to promote health equity by providing culturally appropriate guidance to connect and enroll minority patients into clinical trials for gynecologic cancers throughout Chicago, expanding multilingual services to include languages prevalent in the city's population so patient navigators will be able to better answer questions and guide patients to appropriate clinical trials based on their individual circumstances and cancer types
- ★ Utilizing glycoengineering to manipulate a protein in anti-tumor biotherapeutics to increase anti-tumor efficacy in a triple negative breast cancer mouse model and analyzing the impact on tumor growth and survival curve in-vivo
- ★ Seeking to validate an identified molecular gene signature that can predict MCL1 (regulatory protein that inhibits apoptosis/programmed cell death allowing cancers to grow unchecked) inhibitor sensitivity in triple negative breast cancer cell lines to determine the mechanisms involved and ultimately identify patients with tumors found most likely to respond to MCL1 inhibitors in current clinical trials
- ★ Combining approved pathogen vaccines with interleukin-15 to stimulate immune system response that will result in increased infiltration of inflammatory cytotoxic immune cells within triple negative breast cancer tumor, increasing the effectiveness of immunotherapies
- ★ Advancing the state of gynecologic cancer research and treatment by educating future leaders in the field via gynecologic oncology fellowship program
- ★ Using single-cell RNA sequencing of tissue specimens from Black and Hispanic women to better understand the cell types that make up the normal female reproductive tract and to address the relative paucity of comprehensive molecular data in minoritized women with goal of gaining insight into any physiological differences that may lead to racial disparities in gynecologic diseases
- ★ Assessing the activity of FDA-approved drugs on activating the cytotoxic immune landscape in ovarian cancer tumors using a constructed 3D organotypic model of the ovarian cancer tumor microenvironment and characterizing and evaluating the activation, exhaustion, and cancer cell-killing capacity of the immune cells