Dear Friends of LCBF,

Thank you for your commitment and support! Because of your generosity, we continue to fund innovative research projects that further progress in the field of early detection of ovarian cancer. We couldn't continue to make an impact without you, so we wanted to share information about the most recent, nationally competitive, early detection grant LCBF has funded:

Because of You

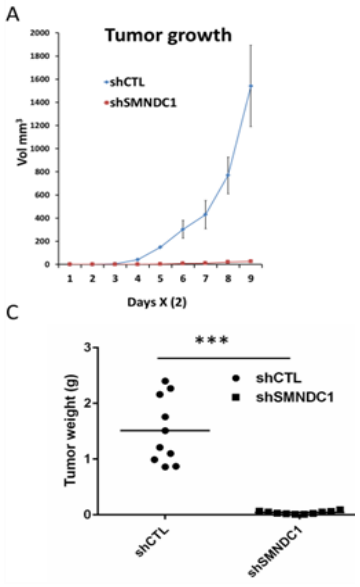
Because of you, we are making a difference through research, awareness, and support. We want you to know the impact your gift has on our mission and the greater community. Thank you for making our important work possible!

SMNDC1: A Potential Biomarker in Ovarian Cancer

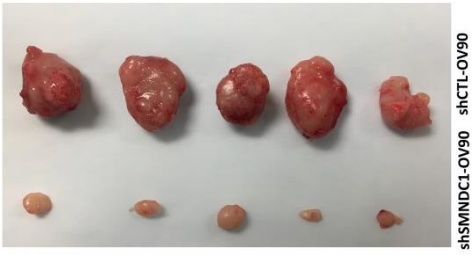
Principal Investigator: Dr. Prabir Chakraborty
Host Laboratory: Stephenson Cancer Center, Oklahoma City, OK

In 2017, an estimated 22,980 women in the United States will be diagnosed with epithelial ovarian cancer (EOC) and approximately 14,270 will die from the disease. The majority of ovarian cancer patients respond to initial therapy with surgery and chemotherapy. However, approximately 70% of advanced stage patients will develop recurrent cancer and eventually succumb to recurrent disease typically characterized by multiple drug resistance. Hence, new therapeutic strategies are urgently needed to combat EOC.

The genes and pathways involved in cancer progression can provide new targets for early diagnosis and improved treatment design. Identifying and defining such molecular targets is one step in this direction, and Dr. Chakraborty proposed that the spliceosome component Survival Motor Neuron Domain Containing 1 (SMNDC1) potentiates a highly druggable target in ovarian cancer therapy. Laura Crandall Brown Foundation grant funding helped his team establish their hypothesis that, indeed, genetically targeting SMNDC1 can reverse ovarian tumor growth (see pictures below). This research, for the first time, seeks to establish the role of SMNDC1 in ovarian cancer progression and drug resistance and also determine the cellular and molecular events affected by SMNDC1 in ovarian cancer. Successful completion of these studies will provide the framework for clinical evaluation of SMNDC1 to improve patient outcomes. Detecting abnormalities or changes in this gene's expression could also be helpful in recognizing early signs of ovarian cancer, which would further development of an early detection mechanism.



We are so grateful for the generous support of our donors and volunteers. You can learn more about our growing impact in the community at www.ThinkofLaura.org.



Sincerely,

Mary Anne King

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Executive Director