



While CancerCure members are continuing to fund the Endowed Chair for Cancer Prevention and Control through their annual gifts, the Endowed Chair principal fund is earning interest that is available to support current research at CU Cancer Center. In October 2015, Dr. Cathy Bradley, the new Associate Director of Population Sciences Research, presented CancerCure with two new seed grant proposals. With seed money from CancerCure, these researchers will be able to leverage early results into larger grant funding from the National Cancer Institute (NCI), multiplying the impact of this initial support. *These are early examples of how your support of the Endowed Chair in Prevention and Control will fund world-class research at the University of Colorado Cancer Center for years to come.*

Identification of human colon tissue biomarkers for cancer control and prevention



Principal Investigator: Elizabeth Ryan, PhD
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The primary goal of this proposal is to establish feasibility of collecting colon tissue during a scheduled screening or surveillance colonoscopy, as well as pre-colonoscopy stool samples from 20 participants residing in Northern Colorado. From these samples, we will evaluate colon tissue and stool metabolites using a high throughput technique called metabolomics, which has promise for population-based analyses of biomarkers for cancer risk. In our proposed study, we will examine differences in metabolites between healthy, polyp-free tissue and benign or precancerous polyps. Findings from this study will enhance our chances for federal funding success because we will have demonstrated a feasible approach to collect relevant colon tissues for analysis.

Addressing the role of lymphangiogenesis and obesity in breast cancer metastasis



Co-Principal Investigators:
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The presence of tumor cells in lymph nodes, termed lymph node metastasis and referred to clinically as lymph node positivity, is the most powerful predictor of breast cancer patient prognosis. However, little is understood about how cells travel to the lymph node. Dr. Lyons' lab has shown that women with postpartum breast cancer have increased lymph node positivity, which is caused by an increase in the number of lymph vessels present in the breast tissue. This proposal, based on the hypothesis that obese rodents may also have an increased number of lymph vessels in the mammary tissue, will utilize rodent models developed in the MacLean lab to determine whether an increase in lymph vessels in obese rodents drives lymph node and distant metastasis, which could explain the clinical observation that obese women with breast cancer have increased lymph node positivity and metastasis.

“By supporting this Endowed Chair, CancerCure is creating a financial resource that will contribute to the long-term success of the CU Cancer Center. This is an investment in cancer research that will pay huge dividends and support research now and far into the future.”
- Dr. Dan Theodorescu, Director, University of Colorado Cancer Center