

Susan G. Komen

Research Grants – Fiscal Year 2015

This research grant was approved for FY2015 Research Programs funding. This grant will be funded upon the execution of grant agreements between Komen and the grantee institutions.

Identification of phosphatases for the treatment of ER-negative breast cancer

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Lead Organization: UT M.D. Anderson Cancer Center

Grant Mechanism: SAB Grants

Grant ID: SAB1300006

Public Abstract:

Breast cancer is the leading cause of cancer-related death in women. For this reason, there is an urgent need to identify effective therapeutic treatments for breast cancer. Approximately 60-70% of breast cancers express ER and respond to current therapies. However, the remaining 30-40% of breast cancers do not express this receptor and do not respond effectively to these therapies. There is a critical need to develop new, more effective therapies for the treatment and prevention of these ER-negative breast cancers. The results from the research outlined in this study have the potential to significantly impact the diagnosis and therapeutic treatment of ER-negative breast cancer patients. We have identified a set of phosphatases significantly over-expressed in ER-negative breast cancer which may play a critical role in the progression of these tumors. In this study, we aim to identify those phosphatases that play a critical role in the development and progression of ER-negative breast cancer. This would provide the basis necessary for the development of targeted, effective treatments for patients with ER-negative breast cancer, thereby improving the therapeutic prognoses of these women in the future.

