THE INDIANA CENTER FOR BREAST CANCER RESEARCH: PROGRESS REPORT

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The mission of IUPUI breast cancer center is to address prevention, early detection, and treatment of breast cancer through translational projects, supportive cores, and synergistic programs. This poster details our efforts improve resources for breast cancer research and efforts to develop multi-PI investigator proposals. The Signature Center Initiative has developed two web resources: the Breast Cancer Prognostics Database (BCDB) to study prognostic implications of genes of interest in publically available breast cancer databases and PROGmiR, a microRNA database. The BCDB can be used to study overall, recurrence free and metastasis free survival in large patient series. PROGmiR allows investigators to study the prognostic importance of microRNAs. PROGmiR has recently been published and has been accessed by investigators from several countries. The signature center has also devoted considerable efforts in developing tumor tissue resource. Tissue Bank includes a total sample of N = 500 cases with 30% non-Caucasian cases from Wishard Memorial Hospital. Currently 237 cases have been assembled into a Tissue Microarray with clinical and follow up data. The breast cancer center has funded three pilot projects. Drs. Clark Wells, S. Badve, and G. Sandusky are collaborating on the project: "Histologic Analysis of the Protein Levels of Amot130, AmotL1 and YAP in Normal, Hyperplastic and Invasive Breast Cancer Tissues". This project is investigating localized protein expression in paraffin-embedded tissues to associate expression levels with disease subtype and patient outcome. Dr. David Gilley and his group are collaborating on the project: "Luminal mammary progenitors are a unique site of telomere dysfunction". This project is investigating the relationship between telomere dysfunction and breast cancer tumorigenesis. In the third project, Dr. Theresa Guise will be investigating the mechanisms of cancer-associated cachexia. Several multi-PI proposals are under preparation and one proposal with Drs. Nakshatri and Kathy Miller as PIs is currently under review.