

**SPORE in Breast Cancer: Career Development**

Principal Investigator (years)	Department	Title	Grants	Publications
Melinda E. Sanders, MD (2003-4)	Pathology	Analysis of Gene and Protein Expression Profiles of DCIS and Invasive Breast Cancer Can Identify Invasion-Associated Genes	Susan G. Komen Foundation Award PI: Melinda Sanders 'Analysis of proteomic pattern in breast cancer and associated tumor stroma' AACR/AVON Scholarship PI: Eduardo Dias (M. Sanders, co-mentor)	Cornett DS, Mobley JA, Dias EC, Anderson M, Arteaga CL, <b>Sanders ME</b> , Caprioli RM. A novel histology-directed strategy for MALDI-MS tissue profiling that improves throughput and cellular specificity in human breast cancer. <i>Mol. Cell. Proteomics</i> 5:1975-1983, 2006
Ingrid A. Mayer, MD, MSCI (2003-4)	Medicine (Medical Oncology)	Identification of Novel Tumor Antigens in Breast Cancer	K23 CA127469 PI: Ingrid Mayer 'Targeted Therapies in Breast Cancer' BCRF-AACR Grant for Translational Breast Cancer Research PI: Ingrid Mayer Combined Endocrine and ErbB Inhibition in ER+/HER2+ Breast Cancer	
H. Alex Brown, PhD (2005-6)	Pharmacology	Lipidomic Profiling of Breast Cancer		Zheng Y, Garcia A, Shi M, <b>Brown HA</b> , Foster DL, Arbiser JL. Honokiol suppresses phospholipase D survival signals in human cancer cells. Submitted  Callender HL, Horn MA, DeCamp DL, Sternweis PC, <b>Brown HA</b> . Modeling species-specific diacylglycerol dynamics in the RAW 264.7 macrophage. Submitted

Jonathan Xu, PhD (2005)	Cancer Biology	Proteomic Discovery of Novel Signaling Networks Promoting Mammary Carcinoma Growth and Invasion by Fibroblasts with Loss of the TGF $\beta$ Type II Receptor	R21CA128695-01 PI: Jonathan Xu  'Identification of breast tumor secretome changes throughout tumor progression'	Lu X, <b>Xu BJ</b> , Gorska AE, Shyr Y, Schwartz SA, Cheng N, Levy S, Caprioli RM, Moses HL. Microarray and MALDI-TOF Analysis of Mammary Tumors Arising from Transgenic Mice. <i>J. Proteome Res.</i> 4:2088-98, 2005
Marylyn Ritchie, PhD (2005-6)	Molecular Physiology & Biophysics	Approaches for Genome-Wide Association in Sporadic Breast Cancer	R01 HL090574-01 PI: Marylyn Ritchie  'Computational Approaches for Genes and the Environment'	Dudek SM, Motsinger AA, Velez DR, Williams SM, <b>Ritchie MD</b> . Data Simulation Software for Whole-Genome Association Studies and Other Studies in Human Genetics. <i>Pacific Symp. Biocomputing Proc.</i> 11:499-510, 2006  Bush WS, Thornton-Wells TA, <b>Ritchie MD</b> . Association Rule Discovery Has the Ability to Model Complex Genetic Effects. <i>Proceedings of the 2007 IEEE Symp Computational Intelligence and Data Mining.</i> pp 624-629, 2007  Bush WS, Dudek SM, <b>Ritchie MD</b> . Parallel Multifactor Dimensionality Reduction: A tool for the large scale analysis of gene-gene interactions. <i>Bioinformatics</i> 22:2173-2174, 2006
Emily Wang, PhD (2006)	Cancer Biology	TGF $\beta$ and ErbB2 signaling in mammary tumorigenesis	K99 CA125892 PI: Emily Wang  'Crosstalk between TGF $\beta$ and ErbB2 Signaling in Mammary Tumorigenesis'	<b>Wang SE</b> , Shin I, Wu FY, Friedman D, Arteaga CL. ErbB2/HER2 signaling to Rac1/Pak1 is temporally and spatially modulated by TGF $\beta$ . <i>Cancer Res.</i> 66:9591-9600, 2006  <b>Wang SE</b> , Narasanna A, Whitell CW, Wu FY, Friedman DB, Arteaga CL. Convergence of p53 and TGF $\beta$ signaling on activating expression of the tumor suppressor gene <i>maspin</i> in mammary epithelial cells. <i>J. Biol. Chem.</i> 282:5661-5669, 2007
David Cortez, PhD	Biochemistry	The DNA damage	R21 CA132010	

(2006)		response in breast cancer	PI: David Cortez 'Regulation of Genome Stability by ATM'	
Li Yang, PhD (2007)	Cancer Biology	TGF $\beta$ signaling, myeloid immune suppressor cells, and breast cancer metastases		