

Appendix B:

NCI-Supported Research Projects Relevant to Breast Cancer That Were Active in 2003

FY 2003 Biology Projects (Tables B1-B6)	B-1
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FY2003 Biology Projects

Table B-1

NCI Projects Supported in 2003 Addressing the PRG Priority: What are the genetic and biological bases of mammary gland development throughout the life of the organism?

Principal Investigator	Title	RFA or PA	Project ID
Aaronson, Stuart A	Cellular Senescence in Aging and Cancer		CA085214
Akhmedkhanov, Arslan A	Pregnancy Hormonal Profile/Biomarker Breast Cancer Risk	PAR00-025	CA095923
Anderson, Steven M	Induction of Mammary Cancer by Signaling Molecules		CA085736
Barcellos-Hoff, Mary-Helen H	Gordon Research Conference on Mammary Gland Biology		CA090303
Behbod, Fariba	Stem Cells in Normal Mammary Development and Cancer		CA101560
Boettiger, David E	Genetic Analysis of RNA Tumor Viruses		CA016502
Boudreau, Nancy J	HOX Genes, Extracellular Matrix Remodeling/Angiogenesis		CA085249
Brose, Marcia S	BRCA1 Deletion in Murine Cells and Mammary Tissue		CA090431
Carraway, Kermit L	Function of Sialomucin Complex/MUC4 in Mammary Tumors		CA052498
Carthon, Bradley	Minority Predoctoral Fellowship Program		CA084293
Chandler, Dawn S	A Novel Ring Finger Protein Implicated in Neoplasia		CA090036
Chodosh, Lewis A.	Hunk and Punc Function in Mammary Epithelial Biology		CA083849
Conzen, Suzanne D	Survival Signaling in Breast Cancer		CA090459
Cooper, Geoffrey	Infectious DNA for Endogenous RNA Tumor Virus Genes		CA018689
Cunha, Gerald R	Stromal Epithelial Interactions in Breast Cancer		CA091967

Principal Investigator	Title	RFA or PA	Project ID
Cutler, Mary L	Role of RAS Effectors in Mammary Differentiation	PA99-162	CA090908
Debnath, Jayanta	Oncogenes and Luminal Apoptosis Within Mammary Acini		CA098419
Dewille, James W	C/EBP Delta Controls Mammary Epithelial Cell G Growth Arrest		CA057607
Edwards, Dean P.	Progesterone Receptor Binding to Specific DNA Sequences		CA046938
Erickson, Harold P	Extracellular Matrix and Cell Attachment Proteins		CA047056
Gendler, Sandra J	Functional Study of a Carcinoma Associated Mucin, MUC1		CA064389
Glazer, Robert I	Akt Protooncogene in Breast Cancer		CA081565
Golemis, Erica A	HEI-C and Morphogenesis and Signaling		CA080991
Haber, Daniel A.	Functional Characterization of BRCA1		CA084066
Hartman, Anne-Renee	Genetic Alterations in Breast Cells From BRCA1 Carriers		CA098246
Haslam, Sandra Z	Role of Stroma in Mammary Gland Cell Proliferation	PA99-162	CA040104
Hinds, Philip W.	Proliferative Effects of CDK4 and CDK6 Dysregulation		CA096527
Hyder, Salman M	Progesterone Regulation of VEGF in Breast Cancer Cells	PA99-162	CA086916
Ip, Margot M	TNF Modulation of Mammary Proliferation		CA077656
Iruela-Arispe, Luisa	Suppression of Vascular Growth		CA077420
Jansen, Michelle S	Estrogen Receptor-beta Signal Transduction Pathway		CA092984
Jeng, Meei-Huey	Functions of Estrogen Receptor Coactivators in Breast Tissue		CA082565
Jones, Frank E	Influence of ErbB4 Activity on Metastatic Breast Cancer	PA99-162	CA096717
Jones, Frank E	ErbB4 Signaling in the Normal and Neoplastic Breast	PA99-162	CA095783
Keely, Patricia J	R-Ras and Integrin Signaling in Breast Cell Phenotype		CA076537
Kleinberg, David L	Mammary Carcinogenesis: Growth Hormone and IGF-I	PA99-162	CA064709
Klevit, Rachel E	Structural and Functional Characterization of BRCA1		CA079953
Knowles, Barbara	Techniques For Modeling Human Cancer In Mice		CA082874
Krop, Ian E	Characterization of Hin1 Putative Tumor Suppressor		CA094787
Kumar, Rakesh	Role of Metastatic Tumor Antigen-1 in Mammary Gland		CA098823
Kumar, Rakesh F	PAK1 in Mammary Gland Development and Carcinogenesis	PA99-162	CA090970
Kushner, Peter J	Gene Activation by Antiestrogens Used in Cancer Therapy		CA080210
Lee, Adrian V	IRS1 and 2 Signaling in Mammary Development and Cancer	PA99-162	CA094118
Lee, David C	ErbB Regulation of Breast Development and Tumorigenesis		CA061896
Li, Rong	BRCA1 Function in Gene Regulation and Tumor Suppression		CA093506
Lin, Shiaw-Yin	CHK2--Roles in Checkpoint and Breast Tumor Suppression		CA093043
Lisanti, Michael P	Cav-1 in JAK/STAT Signaling, Lactation, & Breast Cancer		CA098779
Littlepage, Laurie E	MMPs & Genomic Instability in Mammary Tumor Development		CA103534
Luo, Kunxin K	SnoN and TGF-beta Signaling		CA087940

Principal Investigator	Title	RFA or PA	Project ID
Lydon, John P	Progesterone Receptor and Breast Cancer		CA077530
Maheswaran, Shyamala	Mullerian Inhibiting Substance-mediated Inhibition of Breast Cell Growth		CA089138
Mc Keown-Longo, Paula J	Fibronectin Polymerization--Effects of Cell Signaling		CA069612
McKeon, Frank D	Murine p73 in Tumorigenesis		CA075340
Michel, Loren	Analysis of Loss of Function of MAD2 in Mammals		CA085731
Mira-Y-Lopez, Rafael	Aberrant Retinoid Signaling in Breast Cancer		CA054273
Mor, Gil G	Fas/FasL System in Normal Mammary Gland Development	PA99-162	CA092435
Moses, Harold L	TGF-beta in Mammary Development and Tumorigenesis		CA102162
Oshima, Robert G	ETS Transcription Factors in Development and Cancer		CA074547
Parvin, Jeffrey D	BRCA1 Function		CA090281
Perez, Aymee	Regulation of SMC/rMUC4 Transcription by Cell Signaling		CA084178
Pinzone, Joseph J	Beta Protein 1 and Nuclear Hormone Signaling in Breast Cancer		CA101875
Pollard, Jeffrey W	CSF-1, Macrophages, & Mammary Gland Development and Cancer	PA99-162	CA094173
Polyak, Kornelia	Hin-1, a Novel Putative Breast Tumor Suppressor Gene	PA99-162	CA094074
Reddy, E P	Myb Gene Family and Breast Cancer		CA079086
Reddy, Kaladhar B	Mitogen Activated Protein Kinases and Breast Cancer		CA083964
Rosen, Jeffrey M.	Hormonal Regulation of Breast Cancer	PA99-162	CA016303
Rubin, Jeffrey S.	Biological Activity and Structural Analysis of Secreted Frizzled-Related Proteins and Dickkopfs; Regulation of Wnt Signaling		BC010251
Russo, Irma H	Breast Cancer Therapy by Differentiation Gene Activation		CA094098
Salisbury, Jeffrey L	Centrosome Amplification in Human Breast Cancer		CA072836
Schaller, Michael D	FAK and Breast Cancer		CA090901
Schmidt, Emmett V	Genes Regulated by c-MYC		CA063117
Serra, Rosa A.	TGF-beta in Stromal Epithelial Interactions in Mammary Gland	PA99-162	CA091974
Shi, Yuenian E	N-3 Polyunsaturated Fatty Acid (PUFA) & Binding Protein MRG on Mammary Tumors		CA093542
Shively, John E	Role of Bgp in Breast Epithelial Cell Polarization		CA084202
Silberstein, Gary B	Role of PAX2 in Mammary Development and Cancer		CA091996
Silver, Daniel P	Roles of BRCA1 and BRCA2 in Breast Carcinogenesis		CA082572
Smith, Gilbert Howlett	Biology of Mammary Gland Development and Tumorigenesis		BC010021
Stern, David F	Transformation by the neu Oncogene Product and by EGF		CA045708
Sterneck, G. Esta	Cell Growth Control In Vivo by C/EBPbeta and C/EBPdelta		BC010307
Strange, Robert	Akt 1 and Mammary Cell Survival During the Estrus Cycle		CA085669
Trentham-Dietz, Amy	Breast Cancer In Situ: Recurrence and Quality of Life	PA98-027	CA067264
Vonderhaar, Barbara K.	Prolactin Interactions in Mammary Gland Development and Tumorigenesis		BC008226

Principal Investigator	Title	RFA or PA	Project ID
Wagner, Kay-Uwe	Tumor Susceptibility Gene 101 Deficiency and Neoplasia	PA99-162	CA093797
Wakefield, Lalage M.	Epithelial Homeostasis and Tumorigenesis in TGFbeta-compromised Mouse Models		BC005785
Weinberg, Robert A	Mechanisms of Breast Development and Carcinogenesis		CA080111
Welsh, Joellen E	Vitamin D-mediated Apoptosis in Mammary Cells		CA069700
Welsh, Joellen E	Bio-activation of Vitamin D in the Mammary Gland	PAR02-176	CA103018
Werb, Zena	Role of Metalloproteinases in Mammary Gland Remodeling		CA057621
Wysolmerski, John J	The Effect of PTHrP During Lactation	PA99-162	CA094175
Yamamoto, Keith R	Gene Regulation by Steroid Receptor Proteins		CA020535
Yee, Lisa D	Fatty Acids and Ppars in Breast Cancer Prevention		CA086020
Zhang, Hui	Proteolysis and Mammalian GI/S Cell Cycle Transition		CA072878
Zhu, Yijun	Coactivators in Breast Development and Tumorigenesis	PA99-162	CA088898
Zutter, Mary M.	Altered Alpha2 Integrin Expression in Breast Cancer		CA070275

Table B-2

NCI Projects Supported in 2003 Addressing the PRG Priorities:

Bio-B: What are the genetic and epigenetic bases of pathologic lesions that occur during the progression of breast cancer from the earliest hyperplasias to invasive disease?

Gen-B/Gen-D: Identify somatic mutations and epigenetic alterations that are due to exogenous factors or to chance. As these are detected, it will be important to know which ones are rate limiting. Once rate-limiting changes are identified, specific pathways altered by these genetic events can provide clues for possible targets for: 1. Identifying very small lesions (diagnosis). 2. Treatment (by reversing the altered phenotype). 3. Identifying tumor cells (to individualize therapy based on tumor genotype). 4. Prevention (by systemic treatment of women before critical changes occur).

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Aaronson, Stuart A	Cellular Senescence in Aging and Cancer		CA085214	X	
Aaronson, Stuart A	Cloning and Analysis of Wnt Receptors in Breast Cancer		CA071672	X	
Adamson, Eileen D	EGR-1 Roles and Mechanisms		CA067888	X	
Adriance, Melissa	Minority Predoctoral Fellowship Program		CA090205	X	X
Aiyar, Sarah E	Regulation of Estrogen Receptor by BRCA1 and COBRA1		CA099359	X	
Albala, Joanna S	A Role of RAD51B in DNA Repair and Breast Carcinogenesis		CA08 10 19	X	X
Albertson, Donna	Genomic Analysis of Estrogen Receptor-negative Breast Cancer	CA03-005	CA 10 1359	X	X
Albertson, Donna G	Amplicon Profiling by Array Comparative Genomic Hybridization	PAR99-102	CA094407		X
Albertson, Donna G	High Resolution Genomic Analysis of Amplicon Structure		CA09042 1	X	X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Aldaz, C Marcelo	Characterization of WXOX, the Cancer Gene Spanning FRAX6D		CA 102444		X
Aldaz, C Marcelo	Gene Expression Signature of Early Breast Cancer	CA98-027	CA084978		X
Alexander, Caroline M	The Role of Syndecan-1 in Mouse Mammary Neoplasia		CA090877	X	
Ambs, Stefan	Identification of Allele Variant Genes That Are Risk Factors for Human Breast Cancer		BC0 10439	X	
Ambs, Stefan	The Molecular Profile of Inflammatory Breast Cancer		RC0 10500		X
Anderson, Robin L	Genes Important in Breast Cancer Metastasis	PA99-162	CA09029 1		X
Anderson, Steven M	Induction of Mammary Cancer by Signaling Molecules		CA085736	X	
Appella, Ettore	Tumor Suppressor Protein, p53		BC005599	X	
Arnold, Andrew	Cyclin D1-PRAD1 in Mammary Neoplasia		CA055909	X	
Artandi, Steven E	Telomere Dysfunction, Genomic Instability and Cancer		CA082176	X	X
Artavanis-Tsakonas, Spyridon	Notch Signaling in Mammary Development and Tumorigenesis		CA098402	X	
Arteaga, Carlos L	TGF-betas and TGF-beta Receptors in Human Breast Cells		CA062212	X	
Avraham, Hava K.	Studies of a Novel BRCA1 Tricomplex in Breast Cancer		CA096805	X	
Bachelder, Robin E	Novel Function for VEGF in Breast Carcinoma Survival		CA093855	X	
Baer, Richard J	BRCA1 Function in Breast Cancer		CA088545	X	
Bale, Allen E	Breast Cancer Genes in Mexican Populations	PA01-021	CA089791		X
Band, Vimla	Research Training in Oncology		CA009429	X	
Band, Vimla	The Role of a Novel Gap in Epithelial Oncogenesis		CA081076		X
Banerji, Sunandita S	Regulation of TGF-beta RII in Breast Cancer Cells		CA079840	X	
Barcellos-Hoff, Mary-Helen H	Gordon Research Conference on Mammary Gland Biology		CA090303	X	X
Baylin, Stephen B	Methylation of the Calcitonin Gene in Human Tumors		CA0433X8	X	X
Behbod, Fariba	Stem Cells in Normal Mammary Development and Cancer		CA101560	X	X
Beitz, Alvin J	In Vivo Analysis of Tumor Peptide Secretion	PAR01-106	CA086330		X
Benz, Christopher C	Therapeutic Modulation of Breast Cancer Oncogenes		CA036773	X	
Berg, Patricia E	A Novel HOX Gene Target in Breast Cancer	PAR01-045	CA091149		X
Bernstein, Jonine L	Breast Cancer, Radiation Exposure, and the Atm Gene	CA98-018	CA083178		X
Berzofsky, Jay A.	Antigen-specific T-cell Activation, application to Vaccines for Cancer and AIDS		SC004020	X	
Bhujwalla, Zaver M.	Hostile Environments Promote Invasion and Metastasis		CA082337		X
Bishop, Douglas K	Genetic Dissection of BRCA1's Recombination Function		CA095777	X	
Bissell, Mina J	Definition of Microenvironment in Breast Cancer	CA93-37	CA064786	X	X
Blackwell, Kimberly L	Antiestrogenic Effects on Tumor Angiogenesis		CA087838	X	
Boerner, Julie	Targeting EGFR and c- SRC Synergy in Breast Cancer		CA093028	X	X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Bolton, Judy L	Carcinogenic Metabolites Formed From Antiestrogens		CA079870	X	
Bondy, Melissa L	Determinants of Breast Cancer Survival		CA089608		X
Boudreau, Nancy J	HOX Genes, Extracellular Matrix Remodeling/ Angiogenesis		CA085249	X	
Bourguignon, Lilly Y	CD44 Variant (CD44V) and Cytoskeleton Proteins in Breast Cancer Progression	PA93-83	CA066163	X	
Bouton, Amy H	Mechanisms of Breast Cancer Cell Growth & Tumorigenicity		CA096846	X	
Boyer, Thomas G	Modulation of Estrogen Receptor Function by BRCA1		CA098301	X	
Brattain, Michael G.	Autocrine TGF-beta and Breast Cancer Cell Growth		CA072001	X	X
Brennan, Murray F	Surgical Oncology Research Training Grant		CA009501	X	
Brinton, Louise	Study of Breast, Ovarian and Endometrial Cancer in Polish Women		CP010126- Sub-01033		X
Brock, Graham J	Identification of M5 CpG Alterations in Breast Carcinomas	PAR99-102	CA086305		X
Brodie, Angela M	Aromatase and Breast Cancer		CA062483	X	
Bromberg, Jacqueline F	Role of STAT3 in Breast Cancer Tumorigenesis		CA087637	X	
Brooks, Samuel C	Tumor Suppressor like Activity of Estrogen Receptor		CA089526	X	
Brose, Marcia S	BRCAX Deletion in Murine Cells and Mammary Tissue		CA090431	X	X
Brown, Anthony M	WNT Signaling in Mammary Development and Cancer		CA047207	X	
Brown, Erika	Mechanistic Studies of BRCA2-RAD51-mediated DNA Repair		CA096944	X	
Brown, Kevin D	Epigenetic Silencing of Atm in Breast Cancer	PA01-010	CA102220	X	X
Brown, Patrick O	A Cancer Taxonomy Based on Gene Expression Patterns	CA98-027	CA085129		X
Brueggemeier, Robert W.	2003 Hormonal Carcinogenesis Gordon Research Conference		CA101813	X	
Brueggemeier, Robert W.	Estrogen Biotransformations and Breast Cancer Etiology		CA073698		X
Brugge, Joan S	Cell Death Regulation in Lumen Formation and Oncogenesis		CA105134	X	
Buetow, Kenneth H.	Molecular Genetic Epidemiology of leading U.S. Cancers		CP010140		X
Bulun, Serdar E	Breast Cancer-Proximal Stroma Interaction and Aromatase		CA067167	X	
Callahan, Robert	Mammary Tumorigenesis in Inbred and Feral Mice		BC005148	X	
Cance, William G.	Focal Adhesion Kinase--Tumor Biology and Therapeutics	PA92-81	CA065910	X	
Cardiff, Robert D	Biology of Neoplastic Transformation in Breast Cancer	PA99-162	CA089140		X
Cardiff, Robert D	Preclinical Models of Breast Cancer		CA104880	X	
Carrasco, Nancy	The Mammary Gland Sodium/Iodide Symporter (mgNIS)		CA098390	X	X
Carraway, Kermit L	Function of Sialomucin Complex/MUC4 in Mammary Tumors		CA052498	X	
Cavalieri, Ercole L	Molecular Origin of Cancer--Catechol Estrogen-3, 4- Quinones		CA049210	X	
Cavalieri, Ercole L	Molecular Origin of Cancer--Catechol/Semiquinone/ Quinone		CA049917	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Chambers, Timothy C	Stress-Activated Protein Kinases and Chemotherapy		CA075577	X	
Chandler, Dawn S	A Novel Ring Finger Protein Implicated in Neoplasia		CA090036	X	X
Chang, Eric C	Regulation of Genetic Stability by the INT6 Family		CA090464	X	
Chaudhuri, Gautam	Estradiol, Nitric Oxide and Cyclin D1 in Breast Cancer		CA078357	X	
Chen, Guan	Inhibition of RAS Mitogenic Signaling by the p38 Pathway		CA091576	X	
Chen, Junjie	Analysis of BRCA1 Function in DNA Repair		CA089239	X	
Chen, Shiuan	Aromatase and Breast Cancer		CA044735	X	
Chen, Wen Y	Human Prolactin Antagonist as a Chemopreventive Agent	PAR02-176	CA105479	X	
Chen, Xinbin	Mechanism of p73-dependent Tumor Suppression		CA081237	X	
Cheng, Jin Q	AKT1 Oncogene in Carcinogenesis		CA089242	X	
Chodosh, Lewis A	In Vivo Ras-induced Senescence and Tumorigenesis		CA098371	X	
Chodosh, Lewis A.	Mammary Development and Breast Cancer Susceptibility		CA092190	X	
Chodosh, Lewis A.	Temporal Analysis of Mammary Carcinogenesis	PAR99-102	CA094393		X
Christov, Konstantin T	p27KIP1 Deficiency, Potential Promoter of Carcinogenesis	PAR00-025	CA095712		X
Churchill, Gary A.	Experimental Design & Analysis for Expression Microarray	PAR99-100	CA088327		X
Claffey, Kevin P	VEGF mRNA Stabilization Mechanisms in Tumor Angiogenesis		CA064436	X	
Clarke, Robert	Molecular Analysis of Human Breast Cancer	PAR02-010	CA096483		X
Clelland, Catherine L	Breast Cancer Diagnosis: Blood-Cell Multigene Signatures	PA01-010	CA102552		X
Clevenger, Charles V.	Function of the Prolactin Receptor Complex in Breast Cancer		CA069294	X	
Clevenger, Charles V.	Multimeric Signaling Complexes in Prolactin Receptor Transduction		CA092265	X	
Clevenger, Charles V.	Regulation of STAT Function in Breast Cancer		CA102682	X	
Clinton, Gail M	Novel HER2 Secreted Protein that Binds to P185 HER2		CA082503	X	
Clinton, Gail M	Truncated HER2/neu Protein in Breast Cancer		CA083970		X
Coffey, Robert J	Mouse Cancer Models via TGF-beta RII Loss	CA98-013	CA084239	X	
Collins, Colin	Development of End Sequence Profiling: Structural & Functional Oncogenomics	PAR01-106	CA103068	X	X
Condeelis, John S	Novel Imaging Methods for Gene Discovery in Cancer	PAR99-100	CA089829		X
Conway-Dorsey, Kathleen T	Molecular Epidemiology of Smoking & Breast Cancer		CA092554		X
Conzen, Suzanne D	Glucocorticoid Mediated Signaling in Breast Cancer		CA089208	X	
Conzen, Suzanne D	Survival Signaling in Breast Cancer		CA090459	X	
Couch, Fergus J	Characterization of the Chromosome 17q23 Amplicon		CA087898	X	X
Croce, Carlo M.	8p22 Alterations, in Prostate, Breast and Esophageal Cancer		CA083698		X
Cunha, Gerald R	Stromal Epithelial Interactions in Breast Cancer		CA091967	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Cuttitta, Frank	Identification of Peptide Growth Factors That Regulate Human Tumor Proliferation		SC000173	X	
Dai, Jiale	SYK Signaling and Breast Cancer Invasion		CA100278	X	
Dalla-Favera, Riccardo	Cell, Molecular and Developmental Biology of Cancer		CA009503	X	
Dalla-Favera, Riccardo	Molecular Pathogenesis of Breast Cancer		CA097403	X	X
Dang, Chi V	c-MYC--Transcription and Apoptosis		CA051497	X	
De Clerck, Yves A.	Metalloproteinase Inhibitors in Tumor Progression		CA042919	X	
De Lange, Titia	Telomere Length Control by TRF1 and TRF2		CA076027	X	
De Luca, Luigi M.	Retinoids in Differentiation and Neoplasia		BC004798	X	
De Pinho, Ronald A	Telomerase in Development, Senescence and Neoplasia		CA084628	X	X
Debnath, Jayanta	Oncogenes and Luminal Apoptosis Within Mammary Acini		CA098419	X	
Demichele, Angela	Age, Cell Cycle Markers and Breast Cancer Outcomes		CA081009		X
Der, Channing J	Biological Activity of RAS Oncogenes		CA042978	X	
Der, Channing J	Cancer Cell Biology Training Program		CA071341	X	
Der, Channing J	RHO Family Proteins and Malignant Transformation		CA063071	X	
Derynck, Rik M	Mechanisms of TGF-beta Receptor and SMAD Signaling		CA063101	X	
Deuel, Thomas F	Pleiotrophin-- An Angiogenic Switch in Tumor Progression		CA084400	X	
Deuel, Thomas F	Role of Pleiotrophin in Breast Cancer		CA066029	X	
Diatchenko, Luda	Profiling of Signal Transduction Pathways in Cancer	PAR01-105	CA101271		X
Dickson, Robert B	Matriptase: Activation and Function in Breast Cancer		CA096851	X	
Dillon, Deborah	Nutrients Effect on Genotype in Breast Cancer		CA079774		X
Dimri, Goberdhan P	Role of Bmi-1 in Telomerase Regulation and Breast Cancer		CA094150	X	
Disis, Mary L.	Multi-antigen Vaccines for Breast Cancer	CA03-005	CA101190	X	
Edwards, Dean P.	Progesterone Receptor Binding to Specific DNA Sequences		CA046938	X	
El-Bayoumy, Karam E.	Nitroaromatics and Breast Cancer		CA035519	X	X
El-Deiry, Wafik S.	Unique BRCA1 Transcriptional Response Leading to Repair		CA094975	X	
Ethier, Stephen P.	Altered Signaling in Transformed Breast Epithelial Cells		CA070354		X
Ethier, Stephen P.	Breast Cancer Oncogenes on the 8p11 Amplicon.		CA100724	X	X
Farnham, Peggy J	Transcriptional Regulation of Growth-related Genes		CA045240	X	
Feig, Larry A	Genetic Analysis of RAS and G-protein Function		CA047391	X	
Felton, James S	Carcinogenic Significance of Heterocyclic Amines		CA055861	X	
Ferguson, Kathryn M	Structural Basis for ErbB Receptor Activation		CA092246	X	X
Filippova, Galina N	Structure and Function of CTCF: Mouse Model Studies		CA068360	X	
Fornace, Albert J.	Molecular Biology of Cellular Injury		BC007184		X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Fotedar, Arun	DNA Damage, Retinoblastoma and Cell Survival		CA092321	X	
Franzoso, Guido	GADD45-beta in JNK Signaling, Apoptosis, and Cancer		CA098583	X	
Fresco, Jacques R.	Fluorescent Tish Probes for Cancer Revelant Sequences	PAR99-100	CA088547		X
Freudenheim, Jo L	Methylation and Oxidation in Breast Cancer Epidemiology		CA092040		X
Frey, Alan B	Mechanism of T-cell Anergy Induced by Breast Cancer		CA083687	X	
Frost, Andra R	Prevention of Breast Cancer by Targeting Myofibroblasts	PAR02-176	CA105950	X	
Fuqua, Suzanne A	A Hypersensitive Estrogen Receptor-alpha Mutant in Breast Cancer Progression		CA072038	X	
Furmanski, Philip	Determinants of Treatment Response in Cancers		CA096809	X	
Futscher, Bernard W.	Genomic Methylation--Mechanism to Alter Tumor Phenotypes		CA065662		X
Gao, Qingshen	Characterization of a Novel BRCA2 Binding Protein, B2BP1		CA095221	X	
Gazdar, Adi F	Markers for Risk Assessment/Early Detection of Lung and	CA98-028	CA084971		X
Gendler, Sandra J	Functional Study of a Carcinoma Associated Mucin, MUC1		CA064389	X	
Ghosh, Gourisankar	Structure/Function Studies of Nuclear Factor Kb		CA071871	X	
Giaccia, Amato J.	Hypoxia and Gene Repression		CA088480	X	
Glaubenskleee, Carolyn S	Partnership to Increase Hispanic Cancer Research and Education in Colorado.	CA02-006	CA091489	X	
Glazer, Robert I	Akt Protooncogene in Breast Cancer		CA081565	X	
Goldson, Tove M	Minority Predoctoral Fellowship Program		CA094817	X	
Golemis, Erica A	HEI-C and Morphogenesis and Signaling		CA080991	X	
Gonias, Steven L	Urokinase Receptor-initiated Cell Signaling		CA094900	X	
Gonzalez, Frank J.	Xenobiotic-Metabolizing Enzymes		BC005562	X	
Gould, Michael N	Secreted Proteins as Breast Cancer Prevention Markers	CA03-005	CA101201		X
Gould, Michael N	WKy Rat Genetic Model for Breast Cancer Susceptibility		CA077494	X	
Graham, Michael M.	Molecular Imaging of Responses to Cancer Therapy	CA01-010	CA09X709		X
Green, Jeffrey E.	Transgenic Models for Prostate and Breast Cancers		BC005740	X	X
Gunther, Edward J	BRCA1 Function Using an Inducible Transgene		CA079682	X	
Gupta, Ramesh C	Breast Cancer Etiology		CA090892	X	X
Haber, Daniel A.	Functional Characterization of BRCA1		CA084066	X	
Hahn, William C	New Models of Human Cancer		CA094223	X	
Hamburger, Anne W	ErbB Receptor Control of Breast Cancer Growth		CA076047	X	
Hardy, Robert W	Novel Regulation of Cell Proliferation		CA081236		X
Hart, Gerald W	Glycosylation and Cancer		CA042486	X	
Hartman, Anne-Renee	Genetic Alterations in Breast Cells From BRCA1 Carriers		CA098246	X	X
Harvell, Dijuana M	Modulation of Estrogen-Regulated Genes by Progesterone Receptor Isoforms		CAX03511	X	X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Haslam, Sandra Z	Role of Stroma in Mammary Gland Cell Proliferation	PA99-162	CA040X04	X	
Hasty, Edward P	Investigation of XRCC5 Mutant Mice		CA076317	X	
Hazan, Rachel B	Mechanisms of N-Cadherin Mediated Breast Cancer Metastasis		CA090872		X
Hein, David W	Pharmacogenetics of Drug and Carcinogen Metabolism	PA95-084	CA034627		X
Hilakivi-Clarke, Leena A	Pregnancy Estrogens, Diet, and Breast Cancer Risk		CA089950	X	X
Hill, Steven M	Neuroendocrine Influences on Mammary Cancer		CA054152	X	
Hinds, Philip W.	Proliferative Effects of CDK4 and CDK6 Dysregulation		CA096527	X	
Hla, Timothy T	Mechanisms of COX2 Induced Tumorigenesis		CA095181	X	
Hollingsworth, Michael A	Studies on the Post Translational Processing of MUC1		CA057362	X	
Holt, Jeffrey T	Mechanisms of Carcinogenesis in BRCA2 Mutant Cells		CA085269	X	X
Horwitz, Kathryn B	Progesterone Receptors in Breast Cancer		CA026869	X	
Hsieh, Jen-Chih	The Biochemical Mechanism of WNT Signaling		CA095407	X	
Huang, Tim H	Novel Tool for Analysis of Promoter Hypermethylation	PAR99-100	CA094441		X
Huang, Tim H.	DNA Hypermethylation in Breast Cancer		CA069065		X
Humayun, M Zafri	Mechanisms of Inducible Error Prone DNA Replication		CA073026	X	
Hung, Mien-Chie	E1A Gene Therapy in Breast Cancer	PA93-078	CA058880		X
Hung, Mien-Chie	Growth Factor Receptor Signaling in Breast Cancer		CA099031	X	
Hyder, Salman M	Progestin Regulation of VEGF in Breast Cancer Cells	PA99-162	CA0869X6	X	
Ip, Margot M	TNF Modulation of Mammary Proliferation		CA077656	X	
Issa, Jean-Pierre J	Neoplasia and Methylated CpG Islands Amplification	PAR99-100	CA089837		X
Iyengar, Srinivas R	Signaling Pathways Interactions and Mammary Tumor		CA081050	X	
Jacobsen, Britta	Role of Progesterone Receptor Ratio in Breast Cancer		CA090073		X
Janknecht, Ralf G	Dysregulation of the Transcription Factor ER81		CA085257	X	
Jansen, Michelle S	Estrogen Receptor-beta Signal Transduction Pathway		CA092984	X	
Jefcoate, Colin R	Polycyclic Hydrocarbons and CYP1B1 in Breast Cancer		CA087609	X	
Jeng, Meei-Huey	Functions of Estrogen Receptor Coactivators in Breast Tissue		CA082565	X	X
Jensen, Roy A.	MMTV-BRCA1 Models		CA080067	X	
Jerry, Joseph D	Profiling Modifications of p53 by Mass Spectrometry	PAR00-079	CA094312	X	
Johnson, Randall S	Transcriptional Response to Hypoxia in Transformed Cells		CA082515	X	
Jones, Frank E	ErbB4 Signaling in the Normal and Neoplastic Breast	PA99-162	CA095783	X	
Jones, Frank E	Influence of ErbB4 Activity on Metastatic Breast Cancer	PA99-162	CA096717	X	
Jove, Richard	Molecular Signatures of STAT Regulated Genes in Cancer		CA055652	X	
Kacinski, Barry M	CSF1 and CSF1R and Breast and Ovarian Carcinoma	CA92-180	CA047292	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Kannan, Perry	Regulation of AP 2 and HER2/neu Gene Promoters		CA084278	X	
Keely, Patricia J	R-Ras and Integrin Signaling in Breast Cell Phenotype		CA076537	X	
Kelly, Kathleen	Erk-Dependent Growth and Differentiation Pathways		SC009358	X	
Keri, Ruth A	Regulation of ErbB2 Induced Mammary Gland Cancer		CA090398	X	X
Kern, Francis G.	Genetic Mechanisms of Breast Tumor Progression	PA96-034	CA050376	X	
Keyomarsi, Khandan	Proteolytic Processing of Cyclin E in Breast Cancer		CA087548		X
Khan, Sohaib A.	Estrogen Receptor Variants and Breast Cancer		CA072039	X	
Kitajewski, Jan K	WNT and Frizzled Signaling in Mammary Oncogenesis		CA075353	X	
Kiyokawa, Hiroaki	Role of G Cyclin-dependent Kinases in Immortalization and Oncogenesis		CA100204	X	
Klagsbrun, Michael	Characterization of neuropilin, a Novel VEGF Receptor		CA037392	X	
Kleer, Celina G	Role of LIBC in Inflammatory Breast Cancer Phenotype		CA090876	X	
Kleinberg, David L	Mammary Carcinogenesis: Growth Hormone and IGF-I	PA99-162	CA064709	X	
Klevit, Rachel E	Structural and Functional Characterization of BRCA1		CA079953	X	
Knowles, Barbara	Techniques For Modeling Human Cancer In Mice		CA082874	X	
Koblinski, Jennifer	Role of Osteonectin in Breast Cancer Bone Metastasis		CA091572	X	
Kohn, Elise C.	Signal Transduction Therapy--Basic Science		SC009163	X	
Koller, Beverly H.	Role of BRCA1 in Normal Cell Growth and Tumorigenesis		CA082423	X	
Krop, Ian E	Characterization of Hin1 Putative Tumor Suppressor		CA094787	X	X
Kufe, Donald W.	Oncogenic Signaling by DF3/MUC1 in Human Breast Cancer		CA097098	X	
Kumar, Rakesh	Role of Metastatic Tumor Antigen-1 in Mammary Gland		CA098823	X	
Kumar, Rakesh F	PAKX in Mammary Gland Development and Carcinogenesis	PA99-162	CA090970	X	
Kumar, Rakesh F	Targeting Urokinase Pathway for Breast Cancer Therapy		CA088923	X	
Kushner, Peter J	Gene Activation by Antiestrogens Used in Cancer Therapy		CA080210	X	
Labaer, Joshua	Functional Proteomics of Breast Cancer	PAR01-106	CA099191		X
Landgraf, Ralf	Role and Mechanism of HER2 Self-Association in Cancer		CA098881	X	
Lavin, Martin F	Missense Mutant ATM and Radiation-Induced Tumorigenesis		CA096731		X
Le Beau, Michelle M.	Molecular Analysis of Chromosomal Fragile Sites		CA041644		X
Leahy, Daniel J.	Structural Studies of Growth Factor Receptor Function		CA090466	X	
Lee, Adrian V	IRS1 and 2 Signaling in Mammary Development and Cancer	PA99-162	CA094118	X	
Lee, David C	ErbB Regulation of Breast Development and Tumorigenesis		CA061896	X	
Lee, Eva Y	Oncogenes and Loss of ER in a New p53 Breast Tumor Model		CA049649	X	
Lee, Jiing-Dwan	Cellular Activation Mechanisms Induced by Mitogens		CA079871		X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Lee, Maxwell P.	Genetics and Epigenetics of Cancer		CP010154		X
Lee, Mong-Hong	Regulation of Cyclin-Dependent Kinase Inhibitor p27		CA089266	X	
Lee, Sam W	Cyclin G in p53-mediated Pathways and Breast Cancer		CA085681		X
Lee, Wen-Hwa	BRCA1 and Transcriptional Control in DNA Damage Response		CA094170	X	
Lee, Wen-Hwa	DNA Repair and Tumor Suppressor Genes		CA081020	X	
Lee, Wes	Stem Cell-derived Immunotherapy		CA080025	X	
Lemmon, Mark A	Mechanisms of ErbB2/HER2/neu Activation		CA096768	X	
Levine, Beth C	Analysis of Beclin 1 in Autophagy and Tumor Suppression		CA084254	X	
Li, Honghua	A Genetic Approach to Genome-Scale Analysis of Cancers	PAR01-104	CA096309		X
Li, Jonathan J	Genomic Instability and Etiology of Estrogen Oncogenesis		CA102849	X	
Li, Rong	BRCA1 Function in Gene Regulation and Tumor Suppression		CA093506	X	
Liao, Dezhong J	c-Myc Growth Factor and Breast Cancer	PA99-162	CA100864	X	
Liber, Howard L	Ionizing Radiation Mutagenesis		CA049696	X	
Lin, Jiayuh	Regulation of STAT3 by p53 in Cancer Cells		CA096714	X	
Lin, Shiaw-Yin	CHK2--Roles in Checkpoint and Breast Tumor Suppression		CA093043	X	X
Lipkowitz, Stanley	Molecular Control of Growth, Differentiation, and Death in Epithelial Cancer Cells		SC007263	X	
Lisanti, Michael P	Cav-1 in JAK/STAT Signaling, Lactation, & Breast Cancer		CA098779	X	
Littlepage, Laurie E	MMPs & Genomic Instability in Mammary Tumor Development		CAX03534	X	
Liu, Jingwen	Regulation of Breast Cancer Cell Growth by Oncostatin M		CA083648		X
Liu, Xuan	Regulation of p53 by TAFII250		CA075180	X	
Liu, Zheng-gang	Molecular Mechanism of TNF Signaling and Apoptosis		SC0X0376	X	
Lopez-Berestein, Gabriel G	PRCC/MDACC: Partners for Excellence in Cancer Research	CA02-005	CA096300	X	
Lopez-Enriquez, Reynold	PRCC/MDACC:Partners for Excellence in Cancer Research	CA02-005	CA096297	X	
Louis, David N.	Molecular Immunology and Tumor Biology		CA009216	X	
Lu-Chang, A-Lien L	Repair of Oxidatively Damaged Guanines in Human		CA078391	X	
Lucito, Robert D	Application of Genomic Microarrays to Breast Cancer		CA093634	X	X
Luo, Jia	Ethanol, ErbB Receptors and Breast Cancer		CA090385	X	
Luo, Kunxin K	SnoN and TGF-beta Signaling		CA087940	X	
Lydon, John P	Progesterone Receptor and Breast Cancer		CA077530	X	
Lyerly, Herbert Kim	Translational Research in Surgical Oncology		CA093245	X	
Magnuson, Nancy S	Contribution of Pim-1 Kinase to Cell Survival		CA104470	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Maheswaran, Shyamala	Mullerian Inhibiting Substance-mediated Inhibition of Breast Cell Growth		CA089138	X	
Malkas, Linda H	Development and Evaluation of a Novel Cancer Biomarker		CA083199		X
Malkhosyan, Sergei R	Comparative Hybridization of AP-PCR Arrays	PAR99-100	CA083241		X
Markaverich, Barry M	Cell Growth Inhibitor and Estrogen Action		CA035480	X	
Marks, Jeffrey R.	Expression Based Markers for Breast Cancer Detection	CA98-028	CA084955	X	X
Marnett, Lawrence J	Chemistry and Biology of Malondialdehyde DNA Adducts		CA087819	X	
Martin, Stuart S	Actin-regulated Apoptosis in Mammary Tumorigenesis		CA096555	X	
Matrisian, Lynn M.	The Metalloproteinase Matrilysin in Breast Cancer		CA084360	X	
Mc Cubrey, James A	Ras/Raf & PI3K/Akt-induced Breast Cancer Drug Resistance		CA098195	X	
Mc Macken, Roger L	Training in Areas Fundamental to Cancer Research		CA009110	X	
McKeon, Frank D	Murine p73 in Tumorigenesis		CA075340	X	
Medina, Daniel M.	Biology of Mouse Mammary Preneoplasias		CA011944	X	X
Medina, Daniel M.	Mechanisms of the Hormonal Prevention of Breast Cancer	PA93-083	CA064255	X	
Medina, Daniel M.	p53 and Mouse Mammary Tumorigenesis		CA084320	X	X
Mercurio, Arthur M.	Integrin Function and Signaling in Carcinoma Progression		CA080789	X	
Meric, Funda	Role of Nuclear Tyrosine Kinase in Breast Cancer		CA091834	X	X
Merino-Neumann, Maria J.	Gene Expression Profiling of Microdissected Normal, Invasive and In Situ Carcinoma of Breast through the use of Nucleic Acid Array.		SC009361	X	X
Michel, Loren	Analysis of Loss of Function of MAD2 in Mammals		CA085731	X	X
Mikovits, Judy A	Development of Inhibitors of the DNA Methylation Process		CA090013		X
Miller, Fred R	Proteomics of Progression in MCF-10 Xenograft Model	PA99-162	CA090503	X	X
Mills, Gordon B.	MMAC1/PTEN Tumor Suppressor and Breast Cancer		CA082716		X
Minna, John D.	Characterization of Human 3p Recessive Oncogenes		CA071618	X	
Mira-Y-Lopez, Rafael	Aberrant Retinoid Signaling in Breast Cancer		CA054273	X	
Miskimins, W Keith	Translational Control of p27 in Breast Cancer Cells		CA084325	X	
Miyamoto, Shigeki	Mechanism of Constitutive NF-kappa B Activity		CA081065	X	
Mo, Yin-Yuan	Ubc9 as a Novel Target for Cancer Therapy		CA102630	X	
Momand, Jamil A	Response of p53 Promoter to Hydrogen Peroxide		CA101757	X	
Montano, Monica M	A Novel Growth Regulatory Factor in Breast Cells		CA092440	X	
Monteiro, Alvaro N	Functional Analysis of BRCA1 Mutants		CA092309	X	
Mor, Gil G	Fas/FasL System in Normal Mammary Gland Development	PA99-162	CA092435	X	
Moser, Amy R	A Novel Genetic Modifier of Mammary Tumor Susceptibility		CA093757	X	
Moses, Harold L	TGF-beta in Mammary Development and Tumorigenesis		CA102162	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Moses, Harold L	TGF-beta Suppression and Promotion of Mammary Carcinomas		CA085492	X	
Mueller, Barbara M	Protease Activated Receptor in Tumor Biology		CA085405	X	
Mulder, Kathleen M	Mechanisms of TGF-beta Production in Human Cancer Cells		CA090765	X	
Mulder, Kathleen M	Role of TGF-beta in Microtubule Dynamics		CA092889	X	
Murphy, Brian J	Hypoxic Stress Mechanisms in Radiation and Chemotherapy		CA057692	X	
Muthuswamy, Senthil K	Early Events of Carcinoma Induced by ErbB Receptors		CA098830	X	
Narayan, Satya	Tumor Suppressor APC and Breast Carcinogenesis		CA100247	X	
Nathanson, Katherine L	Identifying Modifying Genes in BRCA1 Mutation Carriers		CA084030	X	X
Neuhausen, Susan L	Genetic Epidemiology of Breast Cancer: BRCA1 and BRCA2		CA074415		X
Nicholson, Bruce J.	Mechanisms of Control of Cell Growth by Gap Junctions		CA048049	X	
Norton, Larry	Program Project in Models of Breast Cancer		CA094060	X	
Oesterreich, Steffi	Estrogen Receptor Co-Repressor Function of SAFB in Breast Cancer		CA097213	X	
Olopade, Olufunmilayo I	Genetics of Breast Cancer in Blacks		CA089085		X
Oppenheim, Joost J.	Consequences of Chemokine-Receptor Interactions with Chemokines and Chemokine Mimics		BC009369	X	
Oshima, Robert G	ETS Transcription Factors in Development and Cancer		CA074547	X	
Oshima, Robert G	ETS2-dependent Stromal Restriction of Breast Cancer		CA098778	X	
Ouchi, Toru	Model of Tumor Suppression by BRCA1		CA090631	X	
Pagano, Michele	F Box Proteins and Deregulated Proteolysis in Cancer		CA076584	X	X
Parl, Fritz F	Mammary Estrogen Metabolism and Breast Cancer Risk		CA083752	X	X
Parsons, Ramon E.	PTEN Tumor Suppressor and Signal Transduction		CA082783	X	X
Parsons, Sarah J	c-Src and EGF Receptor in Breast Cancer Development		CA071449	X	
Patel, Dinshaw J	Molecular Events in Mammary and Testicular Tumor Carcinogenesis		CA046533	X	X
Perez, Aymee	Regulation of SMC/rMUC4 Transcription by Cell Signaling		CA084178	X	
Perou, Charles M	Molecular Characterization of Breast Basal-Like Tumors	CA03-005	CAX0X227	X	
Pestell, Richard G	Caveolin-1 and Cyclin D1 in Mammary Tumorigenesis		CA093596	X	
Peterson, Blake R	Cancer Therapeutics that Anchor Proteins to Membranes		CA083831	X	
Petty, Elizabeth M	Characterization of a New 17q Breast/Ovarian Cancer Gene		CA072877	X	
Pfeifer, Gerd P.	RASSFX Tumor Suppressor Gene		CA088873		X
Pierce, J Michael	GLCNAC TV Regulation of Cell Surface Structure/Function	PAR01-046	CA064462	X	
Pillai, Shiv S	The Role of PKK in NFkappa B Activation		CA102793	X	
Pinzone, Joseph J	Beta Protein 1 and Nuclear Hormone Signaling in Breast Cancer		CA101875	X	X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Pitha-Rowe, Paula M	Molecular Targets for Cancer Detection and Treatment		CA009071	X	X
Pitha-Rowe, Paula M	Molecular Targets for Cancer Detection and Treatment		CA009071	X	
Pollack, Jonathan R	Role of Gene Amplification in Breast Cancer		CA097139		X
Pollard, Jeffrey W	CSF-1, Macrophages, & Mammary Gland Development and Cancer	PA99-162	CA094173	X	
Pollard, Jeffrey W	Progesterone, Cell Cycle and Cancer		CA089617	X	
Polyak, Kornelia	Hin-1, a Novel Putative Breast Tumor Suppressor Gene	PA99-162	CA094074	X	
Porter, Peggy L	Molecular Alterations in Lobular/Ductal Breast Cancer		CA095717		X
Powell, Simon N	DNA Repair--Role of the p53 Tumor Suppressor Protein		CA058985	X	
Pratt, William B	Steroid Receptor Transformation		CA028010	X	
Price, Brendan D	Radiation Activation of the ATM and p53 Proteins		CA064585	X	
Qin, Jun	Biochemical Analysis of the BRCAX Protein Complex		CA084199	X	
Ramsauer, Victoria	SMC/MUC4-ErbB2 Complex: Implications on Neoplasia		CA102248	X	
Ranheim, Erik A	Dissection of the Anti-Tumor Immune Response		CA090450	X	
Rauscher, Frank J	Role of the BRCA1 Associated Protein BAP1 in DNA Repair		CA092088	X	
Ray, Ratna B	Functional Role of MBP1		CA052799	X	
Raychaudhuri, Pradip	Role of Cullin 4A in Tumor Development.		CA088863	X	
Raz, Avraham	Role of Tumor Cell Surface Lectin in Metastasis		CA046120	X	
Reddy, Kaladhar B	Mitogen Activated Protein Kinases and Breast Cancer		CA083964	X	
Reed, John C	Co-Chaperone BAG1		CA067329		X
Reed, Steven I	Cyclin E in Growth Control and Tumorigenesis		CA078343		
Ried, Thomas	Identification of Chromosomal Aberrations in Human Epithelial Cancers and Hematological Malignancies and their Respective Murine Model Systems (Comparative Cancer Cytogenetics)		SC010298		X
Roberts, Anita B.	Signal Transduction Pathways of Transforming Growth Factor-beta		BC005051	X	
Roberts, David D.	Cellular Interactions with Thrombospondin		SC009172	X	
Roberts, David D.	Role of Glycoconjugates in Tumor Cell Adhesion		SC009174	X	
Roller, Peter P.	Polypeptide Inhibitors of Cell Cycle Proliferation		BC007354	X	
Roninson, Igor B	Accelerated Senescence in Tumor Cells		CA089636		X
Roninson, Igor B	Function-based Selection of Target Genes in Tumor Cells	PAR01-106	CA095996		X
Rosen, Eliot M	BRCA1 Modulates Estrogen Receptor Response in Breast Cancer		CA082599	X	
Ross, Susan R	Genetics of Susceptibility to MMTV-induced Mammary Tumors		CA045954	X	
Ross, Susan R	Non-acute Retroviruses and Determinants of Oncogenicity		CA077760	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Rubin, Jeffrey S.	Biological Activity and Structural Analysis of Secreted Frizzled-Related Proteins and Dickkopfs; Regulation of Wnt Signaling		BC010251	X	
Ruppert, J M	Role of GSKF in Epithelial Dysplasia		CA065686	X	
Russo, Irma H	Breast Cancer Therapy by Differentiation Gene Activation		CA094098	X	
Russo, Jose	Genomic Basis of Reproductive History on Breast Cancer		CA093599	X	X
Sacks, David B	Calmodulin and Estrogen Receptor Function		CA093645	X	
Salisbury, Jeffrey L	Centrosome Amplification in Human Breast Cancer		CA072836	X	
Salomon, David S.	The Role of Cripto in the Pathogenesis of Breast and Colon Cancer		BC009003	X	
Santen, Richard J	Role of the Cell Cycle in Hypersensitivity to Estradiol		CA084456	X	
Sartor, Carolyn L	Role of HER4 as Differentiation Factor in Breast Cancer		CA083753	X	
Schaller, Michael D	FAK and Breast Cancer		CA090901	X	
Schedin, Pepper J	Endocrine Status of Mg Stroma Alters Breast Cancer Invasion		CA085944	X	
Schmidt, Emmett V	Functions of Cyclin D1 in Breast Cancer		CA069069	X	X
Schmidt, Emmett V	Genes Regulated by c-MYC		CA063117	X	
Schmidt-Ullrich, Rupert K	Genetic Modulation of Cellular Radiation Responses		CA072955	X	
Schnitzer, Jan E	Targeting Caveolae in Breast Tumors		CA083989	X	
Schuler, Linda A.	Mammary Prolactin Production and Breast Cancer		CA078312	X	
Scian, Mariano	Role of Tumor Suppressor p53 in Breast Cancer		CA097520	X	X
Scully, Ralph	Analysis of BRCA1 Recombination Functions		CA095175	X	
Scully, Ralph	Functional Analysis of BRCA1		CA079576	X	X
Seiden, Michael	Identification of Paclitaxel Resistance Genes		CA089150		X
Semmes, Oliver J.	Early Detection of Cancer by Affinity Mass Spectrometry	CA98-028	CA085067		X
Serrero, Ginette	PC Cell Derived Growth Factor in Human Breast Cancer	PA99-162	CA085367	X	
Settleman, Jeffrey E	Regulation and Function of the p190 Rho GAPs		CA062142	X	
Shapiro, David J	Estrogen Receptor Activation of p38 Kinase and Apoptosis		CA090374	X	
Shaw, Leslie M	Insulin Receptor Substrate Function in Breast Cancer		CA090583	X	
Shi, Yuenian E	N-3 Polyunsaturated Fatty Acid (PUFA) & Binding Protein MRG on Mammary Tumors		CA093542	X	
Shiekhhattar, Ramin	Linking Breast Cancer to Chromatin Remodeling		CA090758	X	
Shields, Peter G	Molecular Epidemiology of Secondary Lung Cancer		CA092705		X
Shimizu, Yoji	Cancer Biology Training Grant		CA009138	X	
Shively, John E	Role of Bgp in Breast Epithelial Cell Polarization		CA084202	X	
Sicinski, Piotr	Specific Roles for D-Cyclins in Oncogenesis		CA083688	X	
Silberstein, Gary B	Role of PAX2 in Mammary Development and Cancer		CA091996	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Silva, Corinne M	The Role of the Signal Transducers in Tumorigenesis		CA085462		X
Silver, Daniel P	Roles of BRCA1 and BRCA2 in Breast Carcinogenesis		CA082572	X	
Skinner, Kristin	DNA Methylation Patterns as Biomarker for Breast Cancer		CA092363	X	X
Smith, Catharine Lynn	Chromatin-specific Repression of Transcription by cAMP Signaling and Histone Deacetylase Inhibitors		BC010289	X	
Smith, Catharine Lynn	Interaction of Progesterone Receptor with Chromatin		BC010279	X	
Smith, Gilbert Howlett	Biology of Mammary Gland Development and Tumorigenesis		BC010021	X	
Snyderwine, Elizabeth G.	Mechanisms of Mammary Gland Carcinogenesis of Heterocyclicamines		BC010037	X	
Sonenshein, Gail E	NF-kB/REL and the Pathogenesis of Breast Cancer		CA082742	X	
Speicher, David W	Novel Comprehensive Proteome Analyses of Metastasis	PAR99-102	CA092725		X
Spiegel, Sarah	Sphingosine Kinase and Cancer	CA93-04	CA061774	X	
Stallcup, William B	NG2 Proteoglycan in Tumor Vascularization and Progression		CA095287	X	
Stavnezer, Edward	Origin, Structure and Biological Activity of SKVs		CA043600	X	
Steeg, Patricia S.	Molecular Alterations in Premalignant and In Situ Breast Lesions		SC009377	X	X
Stern, David F	Signaling by neuregulins and ErbB4 in Breast Cancer	PA99-162	CA080065	X	
Stern, David F	Transformation by the neu Oncogene Product and by EGF		CA045708	X	
Sterneck, G. Esta	Cell Growth Control In Vivo by C/EBPbeta and C/EBPdelta		BC010307	X	
Stone, Michael P	Adduct-induced Frameshift Mutagenesis		CA055678		X
Strange, Robert	Akt 1 and Mammary Cell Survival During the Estrus Cycle		CA085669	X	
Strongin, Alex Y	Cell Receptors Define the Fate of MMP2 in Cancer		CA077470	X	
Struewing, Jeffery	Genetic, Epidemiologic, and Biochemical Studies of DNA Damage Repair		CP010X57		X
Struewing, Jeffery	High-density Marker Studies Near Founder BRCA1/2 Mutations		RC010472		X
Struewing, Jeffery	X-linked Genes in Breast and Ovarian Cancer Etiology		RC010471	X	
Sun, Luzhe Z	Targeting Transforming Growth Factor-beta for Cancer Treatment		CA075253	X	
Sun, Luzhe Z	TGF-beta Receptor and Tumor Progression		CA079683	X	
Sun, Peiqing	p53-Independent Role of MDM2, TGF-beta Resistance and Cancer		CA091922	X	
Swisshelm, Karen L	Retinoic Acid Receptor Beta and Breast Cancer		CA082455	X	
Symons, Marc H	Role of Synaptojanin 2 in Malignant Transformation		CA087567	X	
Talmage, David A.	Mechanism of Anti-oncogenic Action of Retinoids		CA079737	X	
Tang, Careen K	Coexpression of EGFRvIII/ErbB2 in Human Breast Cancer		CA088871	X	
Tekmal, Rajeshwar R	INT5/Aromatase Effect of Breast Estrogen in Neoplasia		CA0750X8	X	X

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Thiagalingam, Sam	The Role of hBUB1-p53 Pathway in Genomic Stability.		CA101773		X
Thompson, Marilyn	Nuclear Export of BRCA1 in Mammary Epithelial Cells		CA089494	X	
Thor, Ann D.	E2 Modulation of Tumorigenesis in ErbB2 Transgenic Mice		CA082848	X	
Thorgeirsson, Unnur P.	Biological Effects of Tissue Inhibitor of Metalloproteinases-1 (TIMP-1)		BC005744	X	
Thorgeirsson, Unnur P.	Biology of Vascular Endothelial Growth Factors in the Mammary Gland		BC005742	X	
Tonetti, Debra A	PKC as a Marker in Tamoxifen Resistant Brest Cancer	PA01-010	CA097045	X	X
Trock, Bruce J.	Detecting Breast Cancer Protein Signatures in Body Fluid	CA98-028	CA085082		X
Tuttle, Stephen W	Role of Pentose Cycle on PDT Response		CA091053	X	
Vadlamudi, Ratna K	PELP1, a Novel Regulator of Estrogen Receptor		CA095681	X	
Van Den Berg, Carla L	IGF I Survival Effects on p53 Induced Apoptosis		CA089288	X	
Varki, Ajit P	Oligosaccharides of Normal and Malignant Cells		CA038701	X	
Vogel, Wolfgang F	DDR1 Controls Tumor Homing in Breast to Bone Metastasis		CAX02916	X	
Vonderhaar, Barbara K.	Prolactin Interactions in Mammary Gland Development and Tumorigenesis		BC008226	X	
Wadekar, Subhagya A	Posttranslational Modification in Nuclear Receptors		CA103271	X	X
Wagner, Kay-Uwe	Tumor Susceptibility Gene 101 Deficiency and Neoplasia	PA99-162	CA093797	X	
Wakefield, Lalage M.	Epithelial Homeostasis and Tumorigenesis in TGFbeta-compromised Mouse Models		BC005785	X	
Wang, Zhao-Yi	Rb Associated Protein 46 and Breast Cancer Progression		CA084328	X	
Waterman, Marian L	Activities of Beta Catenin and LEF/TCF Complexes		CA083982	X	
Weber, Barbara L	Human and Murine Models of BRCA1 Tumorigenesis		CA076417	X	
Weigel, Nancy L	Regulation of Human Steroid Receptors by Phosphorylation		CA057539	X	
Weinberg, Robert A	Mechanisms of Breast Development and Carcinogenesis		CA080111	X	
Weinberg, Robert A	Molecular Mechanisms of Metastasis in a Mammary Tumor Model	PA01-020	CA096689		X
Weiss, Stephen J	Function of the Membrane Type Matrix Metalloproteinase		CA071699	X	
Welsh, Catherine F	RHO GTPase and Cell Cycle Regulation in Breast Cancer		CA087668	X	X
Welsh, Joellen E	Bio-activation of Vitamin D in the Mammary Gland	PAR02-176	CA103018	X	
Welsh, Joellen E	Vitamin D-mediated Apoptosis in Mammary Cells		CA069700	X	
Whittemore, Alice S	Statistical Methods for Genetic Epidemiology	PA98-078	CA094069		X
Wigler, Michael H	Genomics of Human Cancer		CA078544		X
Wimalasena, Jay	Apoptosis & Cell Cycle in Breast & Ovarian Cancer Cells		CA084048	X	
Wulf, Gerburg	Role of the Prolyl isomerase Pin1 in Oncogenesis		CA093655		X
Wykle, Robert L	Ether-linked Lipids and Signaling in Breast Tumor Cells		CA085833	X	
Xiao, Jim Z	Function of MDM2, Rb and Its Role in Breast Cancer		CA079804	X	

Principal Investigator	Title	RFA or PA	Project ID	Bio-B	Gen-B/ Gen-D
Xu, Xiang-Xi M	Ovarian Cancer		CA079716		X
Yamamoto, Fumiichiro	Epigenetic Alterations in Homeotic Genes		CA087069	X	X
Yang, Elizabeth	Cell Cycle Function of the Bcl-2 Family		CA078443	X	
Yang, Jing	Molecular Mechanisms of Breast Tumor Metastasis		CA101507		X
Yang, Lily	IAPs as Novel Targets for Cancer Therapy		CA095643	X	
Yanochko, Gina M	Regulation of Autocrine IGF-I Signaling by Connexin 43		CA099418	X	
Yarden, Yosef	ErbB2-ErbB3 Heterodimeric Receptor of Carcinomas		CA072981	X	
Yeatman, Timothy J	Screening for Breast Cancer Using Molecular Signatures		CA098522		X
Yee, Amy S.	Mechanisms of Transcriptional Repressor HBP1 in Cancer		CA094187	X	
Yee, Douglas	Targeting the IGF System in Breast Cancer		CA074285	X	
Yee, Lisa D	Fatty Acids and Ppars in Breast Cancer Prevention		CA086020	X	X
Yin, Yuxin	Regulation and Function of Eck in Apoptosis		CA093677	X	
Zambetti, Gerard P	p53 Gain-of-Function Mutant in Tumorigenesis		CA063230	X	X
Zhan, Qimin	The BRCA1-GADD45 Pathway and Genomic Stability		CA093640	X	
Zhang, Zhong-Yin	Protein Tyrosine Phosphatases--Mechanism of Catalysis		CA069202	X	
Zhou, Ming-Ming	Structure/Function of the MAPK Phosphatase—PAC1		CA080938	X	
Zhu, Yijun	Coactivators in Breast Development and Tumorigenesis	PA99-162	CA088898	X	
Zutter, Mary M.	ALPHA2 BETA1 Integrin: Cell Cycle Progression/ Migration		CA083690	X	
Zutter, Mary M.	Altered Alpha2 Integrin Expression in Breast Cancer		CA070275	X	

Table B-3

NCI Projects Supported in 2003 Addressing the PRG Priority: What are the molecular, genetic, and cellular bases of the biological processes involved in metastasis; can we develop appropriate diagnostic markers based on these studies?

Principal Investigator	Title	RFA or PA	Project ID
Adriance, Melissa	Minority Predoctoral Fellowship Program		CA090205
Anderson, Robin L	Genes Important in Breast Cancer Metastasis	PA99-162	CA090291
Bachelder, Robin E	Novel Function for VEGF in Breast Carcinoma Survival		CA093855
Bakin, Andrei	Mechanisms of TGF-beta-mediated Fibroblastic Transition		CA095263
Barcellos-Hoff, Mary-Helen H	Gordon Research Conference on Mammary Gland Biology		CA090303
Ben-Eliyahu, Shamgar	Mechanisms and Prevention of Surgery-Induced Metastasis	PA93-009	CA073056
Bernard, Ora	The Involvement of Lim Kinase in Metastases	PA01-020	CA098229
Bhujwalla, Zaver M.	Hostile Environments Promote Invasion and Metastasis		CA082337
Bhujwalla, Zaver M.	Imaging Lymphatic Clearance in Tumor Metastasis		CA090471

Principal Investigator	Title	RFA or PA	Project ID
Bissell, Mina J	Definition of Microenvironment in Breast Cancer	CA93-037	CA064786
Blackwell, Kimberly L	Anti-estrogenic Effects on Tumor Angiogenesis		CA087838
Boerner, Julie	Targeting EGFR and c-SRC Synergy in Breast Cancer		CA093028
Bourguignon, Lilly Y	CD44 Variant (CD44V) and Cytoskeleton Proteins in Breast Cancer Progression	PA93-083	CA066163
Cance, William G.	Focal Adhesion Kinase--Tumor Biology and Therapeutics	PA92-081	CA065910
Carrasco, Nancy	The Mammary Gland Sodium/Iodide Symporter (mgNIS)		CA098390
Carraway, Kermit L	Function of Sialomucin Complex/MUC4 in Mammary Tumors		CA052498
Claffey, Kevin P	VEGF mRNA Stabilization Mechanisms in Tumor Angiogenesis		CA064436
Clevenger, Charles V.	Function of the Prolactin Receptor Complex in Breast Cancer		CA069294
Clohisy, Denis R	Bone Cancer and Skeletal Pain		CA090434
Condeelis, John	Motility and Invasion		CA100324
Condeelis, John S	Novel Imaging Methods for Gene Discovery in Cancer	PAR99-100	CA089829
Cravatt, Benjamin F	Chemical Approaches for Activity Based Proteomics		CA087660
Cunha, Gerald R	Stromal Epithelial Interactions in Breast Cancer		CA091967
Dai, Jiale	SYK Signaling and Breast Cancer Invasion		CA100278
Dallas, Sarah L	Bone Matrix Bound Growth Factors Breast Cancer		CA075387
Dallas, Sarah L	Bone Matrix-bound Growth Factors and Breast Cancer		CA074262
Der, Channing J	Cancer Cell Biology Training Program		CA071341
Der, Channing J	Biological Activity of RAS Oncogenes		CA042978
Deuel, Thomas F	Role of Pleiotrophin in Breast Cancer		CA066029
Deuel, Thomas F	Pleiotrophin-- An Angiogenic Switch in Tumor Progression		CA084400
Dickson, Robert B	Matriptase: Activation and Function in Breast Cancer		CA096851
Donahue, Henry J	Intracellular Communication in Breast Cancer Metastasis to Bone		CA090991
Dvorak, Harold F	Permeable Properties of Tumor and Wound Blood Vessels		CA050453
Dvorak, Harold F	Spatial and Temporal Regulation of Angiogenesis		CA092644
Felding-Habermann, Brunhilde	Integrin Activation in Breast Cancer Metastasis		CA095458
Fridman, Rafael A.	Surface Binding and Activation of MMP9 in Tumor Cells		CA082298
Fridman, Rafael A.	Regulation of Matrix Metalloproteinase Activation		CA061986
Frost, Andra R	Prevention of Breast Cancer by Targeting Myofibroblasts	PAR02-176	CA105950
Gatenby, Robert A	Interdisciplinary Study of Acid-mediated Tumor Invasion	PA98-077	CA093650
Gendler, Sandra J	Functional Study of a Carcinoma Associated Mucin, MUC1		CA064389
Goldson, Tove M	Minority Predoctoral Fellowship Program		CA094817
Golemis, Erica A	HEI-C and Morphogenesis and Signaling		CA080991
Guise, Theresa A	Breast Cancer Osteolysis--Regulation of PTHrP by TGF-beta		CA069158

Principal Investigator	Title	RFA or PA	Project ID
Hazan, Rachel B	Mechanisms of N-Cadherin Mediated Breast Cancer Metastasis		CA090872
Heffelfinger, Sue C	Mammary Tumor Chemoprevention by Angiogenic Inhibitors	PAR98-096	CA082996
Hollingsworth, Michael A	Studies on the Post Translational Processing of MUC1		CA057362
Hunter, Kent W.	Genetic Modifiers of Initiation and Progression of Mammary Cancer		CP010146
Hursting, Stephen D.	Effect of Obesity on Mammary Tumorigenesis and Metastasis		RC010535
Hyder, Salman M	Progesterin Regulation of VEGF in Breast Cancer Cells	PA99-162	CA086916
Iruela-Arispe, Luisa	Inhibition of the Angiogenic Response		CA065624
Janknecht, Ralf G	Dysregulation of the Transcription Factor ER81		CA085257
Johnson, Randall S	Transcriptional Response to Hypoxia in Transformed Cells		CA082515
Jones, Frank E	Influence of ErbB4 Activity on Metastatic Breast Cancer	PA99-162	CA096717
Kelly, Kathleen	Erk-Dependent Growth and Differentiation Pathways		SC009358
Kleer, Celina G	Role of LIBC in Inflammatory Breast Cancer Phenotype		CA090876
Koblinski, Jennifer	Role of Osteonectin in Breast Cancer Bone Metastasis		CA091572
Kumar, Rakesh F	Heregulin and Breast Cancer Progression		CA080066
Levin, Eugene G	Negative Control of Migration by 24 KD FGF-2		CA081209
Li, Rongbao	Pyk2 & Therapeutic Strategies: Cancer-induced Osteolysis	CA03-013	CA102998
Liao, Dezhong J	c-Myc Growth Factor and Breast Cancer	PA99-162	CA100864
Louis, David N.	Molecular Immunology and Tumor Biology		CA009216
Macleod, Carol L	The L-Arginine/Nitric Oxide Pathway in Mammary Tumor Progression		CA081376
Manni, Andrea	Polyamines and Breast Cancer Biology		CA098237
Martin, Stuart S	Actin-regulated Apoptosis in Mammary Tumorigenesis		CA096555
Matrisian, Lynn M	Developing the Coral Implant Model of Bone Metastasis	CA03-013	CA103079
Menea, Cheikh	Molecular Mechanism of Tumor-Osteoclast Interactions		CA100095
Mercurio, Arthur M.	Integrin Function and Signaling in Carcinoma Progression		CA080789
Mercurio, Arthur M.	Mechanisms of Breast Carcinoma Survival	PA99-162	CA089209
Michel, Loren	Analysis of Loss of Function of MAD2 in Mammals		CA085731
Mueller, Barbara M	Protease Activated Receptor in Tumor Biology		CA085405
Mundy, Gregory R	Tumors Effects on the Skeleton		CA040035
Norton, Larry	Program Project in Models of Breast Cancer		CA094060
Pestell, Richard G	Caveolin-1 and Cyclin D1 in Mammary Tumorigenesis		CA093596
Pollard, Jeffrey W	CSF-1, Macrophages, & Mammary Gland Development and Cancer	PA99-162	CA094173
Price, John T	Molecular Modulators of Breast-Bone Metastasis		CA103076
Quaranta, Vito	Integrins in Cancer Invasion	PA93-083	CA047858
Rameshwar, Pranela	Breast Cancer/Bone Marrow Stromal Interactions		CA089868

Principal Investigator	Title	RFA or PA	Project ID
Raz, Avraham	Role of Tumor Cell Surface Lectin in Metastasis		CA046120
Reddy, Kaladhar B	Mitogen Activated Protein Kinases and Breast Cancer		CA083964
Reynolds, Albert B	p120 and Cell-Cell Adhesion		CA055724
Roberts, David D.	Cellular Interactions with Thrombospondin		SC009172
Sanderson, Ralph D.	Heparanase in Osteolytic Bone Metastasis	CA03-013	CA103054
Schedin, Pepper J	Endocrine Status of Mg Stroma Alters Breast Cancer Invasion		CA085944
Schlaepfer, David D	Role of Focal Adhesion Kinase in Tumorigenesis		CA102310
Schmidt, Emmett V	Functions of Cyclin D1 in Breast Cancer		CA069069
Schnitzer, Jan E	Targeting Caveolae in Breast Tumors		CA083989
Scian, Mariano	Role of Tumor Suppressor p53 in Breast Cancer		CA097520
Seewaldt, Victoria L	Extracellular Matrix Mediated Apoptosis in p53(-) HMECs	PA99-162	CA088799
Segall, Jeffery E	ErbB1 and ErbB2 in Tumor Motility and Metastasis		CA077522
Sheng, Shijie	A Role of Maspin in Prostate Cancer		CA084176
Stallcup, William B	NG2 Proteoglycan in Tumor Vascularization and Progression		CA095287
Steeg, Patricia S.	Molecular Analysis of Breast Cancer Metastasis to the Brain		RC010538
Steeg, Patricia S.	Molecular Biology of the Metastatic Phenotype		SC000892
Strickler, Howard D	Insulin and IGF in Female Colon, Breast, Uterine Cancer		CA093881
Swain, Sandra M.	Inflammatory Breast Cancer		SC010097
Symons, Marc H	Role of Synaptojanin 2 in Malignant Transformation		CA087567
Taplin, Stephen H	Breast Cancer Surveillance in a Defined Population	CA98-025	CA063731
Thorgeirsson, Unnur P.	Biology of Vascular Endothelial Growth Factors in the Mammary Gland		BC005742
Thorgeirsson, Unnur P.	Biological Effects of Tissue Inhibitor of Metalloproteinases-1 (TIMP-1)		BC005744
Tilghman, Syreeta L	Minority Predoctoral Fellowship Program		CA083172
Toker, Alex	Role of PLC-gamma and NFAT Signaling Pathway in Carcinoma		CA096710
Toole, Bryan P	Tumor Cell Stromal Interactions in Cancer		CA079866
Varki, Ajit P	Oligosaccharides of Normal and Malignant Cells		CA038701
Vogel, Wolfgang F	DDR1 Controls Tumor Homing in Breast to Bone Metastasis		CA102916
Watson, Dennis K	Role of an Epithelial ETS Factor in Breast Cancer		CA102297
Weilbaecher, Katherine	Role of Beta 3 Integrin in Skeletal Metastasis	PA01-020	CA097250
Weinberg, Robert A	Molecular Mechanisms of Metastasis in a Mammary Tumor Model	PA01-020	CA096689
Yang, Jing	Molecular Mechanisms of Breast Tumor Metastasis		CA101507
Zhan, Xi	The Role of Actin Polymerization in Tumor Metastasis		CA091984
Zhang, Ming	The Role of Maspin in Tumor Metastasis & Angiogenesis		CA079736

Table B-4

NCI Projects Supported in 2003 Addressing the PRG Priority: Identify and clone the remaining major predisposing genes.

Principal Investigator	Title	RFA or PA	Project ID
Ambs, Stefan	Identification of Allele Variant Genes That Are Risk Factors for Human Breast Cancer		BC010439
Anderson, Steven M	Induction of Mammary Cancer by Signaling Molecules		CA085736
Andrulis, Irene L.	Ontario Family Registry for Study of Breast Cancer Risk	CA95-003	CA069467
Behbod, Fariba	Stem Cells in Normal Mammary Development and Cancer		CA101560
Blot, William J.	Southern Community Cohort Study		CA092447
Brose, Marcia S	BRCA1 Deletion in Murine Cells and Mammary Tissue		CA090431
Buys, Sandra S	Cooperative Family Registry for Breast Cancer Studies	CA95-003	CA069446
Callahan, Robert	Mammary Tumorigenesis in Inbred and Feral Mice		BC005148
Chandler, Dawn S	A Novel Ring Finger Protein Implicated in Neoplasia		CA090036
Daly, Mary B	Cooperative Family Registry for Breast Cancer Study	CA95-003	CA069631
Flowers, Lisa C	Genomic and Proteomic Study of Cancer Disparities in Ethnic Populations	CA02-006	CA091393
Gerrero, Michelle	Analysis of Breast/Melanoma Multiple Primary Cancers		CA100178
Gould, Michael N	WKy Rat Genetic Model for Breast Cancer Susceptibility		CA077494
Henderson, Brian E	Genetic Susceptibility to Cancer in Multiethnic Cohorts		CA063464
Hopper, John L	The Australian Breast Cancer Family Registry	CA95-003	CA069638
Hsieh, Chung-Cheng	Stem Cells and Perinatal Factors for Breast Cancer Risk		CA090902
Jorgensen, Timothy J	DNA Repair Gene Polymorphisms and Breast Cancer Risk		CA097817
Keri, Ruth A	Regulation of ErbB2 Induced Mammary Gland Cancer		CA090398
Kimbro, Kevin S	Genomic and Proteomic Study of Cancer Disparities in Ethnic Populations	CA02-006	CA091366
Kohn, Elise C.	Signal Transduction Therapy--Basic Science		SC009163
Larionov, Vladimir	Organization and Function of Chromosomal Regions that are Required for Stability of the Human Genome		BC010413
Lash, Timothy L	Smoking & Genetic Interaction in Breast Cancer Etiology		CA087724
Lee, Maxwell P.	Genetics and Epigenetics of Cancer		CP010154
Lin, Shiao-Yin	CHK2--Roles in Checkpoint and Breast Tumor Suppression		CA093043
Markaverich, Barry M	Cell Growth Inhibitor and Estrogen Action		CA035480
Martin, Stuart S	Actin-regulated Apoptosis in Mammary Tumorigenesis		CA096555
McCombie, W Richard	Sequencing Tumor Suppressor Loci		CA081152
Nathanson, Katherine L	Identifying Modifying Genes in BRCA1 Mutation Carriers		CA084030
Petty, Elizabeth M	Characterization of a New 17q Breast/Ovarian Cancer Gene		CA072877
Pollard, Jeffrey W	Progesterone, Cell Cycle and Cancer		CA089617
Pommier, Yves	DNA Topoisomerases as Targets of Action for Anticancer Drugs		BC006161

Principal Investigator	Title	RFA or PA	Project ID
Ross, Susan R	Genetics of Susceptibility to MMTV-induced Mammary Tumors		CA045954
Russo, Jose	Genomic Basis of Reproductive History on Breast Cancer		CA093599
Schmidt, Emmett V	Genes Regulated by c-MYC		CA063117
Scully, Ralph	Functional Analysis of BRCA1		CA079576
Sellers, Thomas A	Epidemiologic and Genetic Studies of Breast Cancer		CA082267
Senie, Ruby T	Metropolitan New York Registry of Breast Cancer Families	CA95-003	CA069398
Serrero, Ginette	PC Cell Derived Growth Factor in Human Breast Cancer	PA99-162	CA085367
Talmage, David A.	Mechanism of Anti-oncogenic Action of Retinoids		CA079737
Tonetti, Debra A	PKC as a Marker in Tamoxifen Resistant Breast Cancer	PA01-010	CA097045
West, Dee W.	Northern California Cooperative Family Registry	CA95-003	CA069417
Whittemore, Alice S	Statistical Methods for Genetic Epidemiology	PA98-078	CA094069
Wigler, Michael H	Genomics of Human Cancer		CA078544

Table B-5

NCI Projects Supported in 2003 Addressing the PRG Priority: Use experimental model systems to determine the effects of mutant genes on the mammary gland, ovary, and endometrium.

Principal Investigator	Title	RFA or PA	Project ID
Aldaz, C Marcelo	Characterization of WOX, the Cancer Gene Spanning FRA16D		CA102444
Anderson, Steven M	Induction of Mammary Cancer by Signaling Molecules		CA085736
Arnold, Andrew	Cyclin D1-PRAD1 in Mammary Neoplasia		CA055909
Artavanis-Tsakonas, Spyridon	Notch Signaling in Mammary Development and Tumorigenesis		CA098402
Arteaga, Carlos L	TGF-betas and TGF-beta Receptors in Human Breast Cells		CA062212
Banerjee, Sipra	An Environmentally Relevant DNA Polymerase Beta Variant		CA083768
Baylin, Stephen B	Methylation of the Calcitonin Gene in Human Tumors		CA043318
Brose, Marcia S	BRCA1 Deletion in Murine Cells and Mammary Tissue		CA090431
Butel, Janet S	Suppressor Genes and Breast Cancer	PA92-027	CA025215
Chen, Wen Y	Human Prolactin Antagonist as a Chemopreventive Agent	PAR02-176	CA105479
Chodosh, Lewis A	In Vivo Ras-induced Senescence and Tumorigenesis		CA098371
Chodosh, Lewis A.	Temporal Analysis of Mammary Carcinogenesis	PAR99-102	CA094393
Chodosh, Lewis A.	Hunk and Punc Function in Mammary Epithelial Biology		CA083849
Chodosh, Lewis A.	Mechanisms of Progression in c-Myc-induced Breast Cancer		CA093719
Croce, Carlo M.	8p22 Alterations, in Prostate, Breast and Esophageal Cancer		CA083698
Dewille, James W	C/EBP Delta Controls Mammary Epithelial Cell G Growth Arrest		CA057607
Dickson, Robert B	Matriptase: Activation and Function in Breast Cancer		CA096851

Principal Investigator	Title	RFA or PA	Project ID
Donehower, Lawrence A	Oncogenic Function of a p53-Induced Phosphatase		CA100420
Ellies, Lesley	Adhesion Molecules in Nitric Oxide-modulated Tumorigenesis		CA088035
Fotedar, Arun	DNA Damage, Retinoblastoma and Cell Survival		CA092321
Gendler, Sandra J	Functional Study of a Carcinoma Associated Mucin, MUC1		CA064389
Glazer, Robert I	Akt Protooncogene in Breast Cancer		CA081565
Gould, Michael	Use of ER-negative Transgenic Rat Mammary Model Over Expressing neu as a Chemoprevention Model		CN035118
Green, Jeffrey E.	Transgenic Models for Prostate and Breast Cancers		BC005740
Haber, Daniel A.	Functional Characterization of BRCA1		CA084066
Harvell, Dijuana M	Modulation of Estrogen-Regulated Genes by Progesterone Receptor Isoforms		CA103511
Hasty, Edward P	Investigation of XRCC5 Mutant Mice		CA076317
Hinds, Philip W.	Proliferative Effects of CDK4 and CDK6 Dysregulation		CA096527
Hla, Timothy T	Mechanisms of COX2 Induced Tumorigenesis		CA095181
Hunter, Kent W.	Genetic Modifiers of Initiation and Progression of Mammary Cancer		CP010146
Jefcoate, Colin R	Polycyclic Hydrocarbons and CYP1B1 in Breast Cancer		CA087609
Jensen, Roy A.	MMTV-BRCA1 Models		CA080067
Johnson, Randall S	Transcriptional Response to Hypoxia in Transformed Cells		CA082515
Jones, Frank E	Influence of ErbB4 Activity on Metastatic Breast Cancer	PA99-162	CA096717
Jones, Frank E	ErbB4 Signaling in the Normal and Neoplastic Breast	PA99-162	CA095783
Knowles, Barbara	Techniques For Modeling Human Cancer In Mice		CA082874
Kumar, Rakesh	Role of Metastatic Tumor Antigen-1 in Mammary Gland		CA098823
Kushner, Peter J	Gene Activation by Antiestrogens Used in Cancer Therapy		CA080210
Larionov, Vladimir	Organization and Function of Chromosomal Regions that are Required for Stability of the Human Genome		BC010413
Lavin, Martin F	Missense Mutant ATM and Radiation-Induced Tumorigenesis		CA096731
Lee, David C	ErbB Regulation of Breast Development and Tumorigenesis		CA061896
Lee, Eva Y	Mouse Cancer Models by Regulated Inactivation of Tumor Suppressors	CA98-013	CA084241
Lee, Sam W	Cyclin G in p53-mediated Pathways and Breast Cancer		CA085681
Lee, William M	Transgenic Mice as Models for Antivasular Therapy	PAR02-051	CA099519
Lisanti, Michael P	Cav-1 in JAK/STAT Signaling, Lactation, & Breast Cancer		CA098779
Magnuson, Nancy S	Contribution of Pim-1 Kinase to Cell Survival		CA104470
Matrisian, Lynn M.	The Metalloproteinase Matrilysin in Breast Cancer		CA084360
McKeon, Frank D	Murine p73 in Tumorigenesis		CA075340
Medina, Daniel M.	Mouse Models of Human Breast Cancer	CA98-013	CA084243
Mercurio, Arthur M.	Integrin Function and Signaling in Carcinoma Progression		CA080789
Michel, Loren	Analysis of Loss of Function of MAD2 in Mammals		CA085731

Principal Investigator	Title	RFA or PA	Project ID
Minna, John D.	Characterization of Human 3p Recessive Oncogenes		CA071618
Mor, Gil G	Fas/FasL System in Normal Mammary Gland Development	PA99-162	CA092435
Moses, Harold L	TGF-beta in Mammary Development and Tumorigenesis		CA102162
Neel, Benjamin G.	Signal Transduction by Non-Transmembrane Protein Tyrosine Phosphatases		CA049152
O'Brien, Thomas G.	The Mutant Mouse Production and Characterized Resource	PAR98-092	CA082903
Oshima, Robert G	ETS2-dependent Stromal Restriction of Breast Cancer		CA098778
Parsons, Ramon E.	PTEN Tumor Suppressor and Signal Transduction		CA082783
Pestell, Richard G	Regulation of Cyclin D1 Expression		CA070896
Pestell, Richard G	Initiation and Maintenance in Mammary Tumorigenesis		CA075503
Pfeifer, Gerd P.	RASSF1 Tumor Suppressor Gene		CA088873
Pierce, J Michael	GLCNAC TV Regulation of Cell Surface Structure/Function	PAR01-046	CA064462
Raychaudhuri, Pradip	Role of Cullin 4A in Tumor Development.		CA088863
Reddy, E P	Myb Gene Family and Breast Cancer		CA079086
Reddy, Kaladhar B	Mitogen Activated Protein Kinases and Breast Cancer		CA083964
Reed, John C	Co-Chaperone BAG1		CA067329
Ried, Thomas	Identification of Chromosomal Aberrations in Human Epithelial Cancers and Hematological Malignancies and their Respective Murine Model Systems (Comparative Cancer Cytogenetics)		SC010298
Rosen, Jeffrey M.	Hormonal Regulation of Breast Cancer	PA99-162	CA016303
Schmidt, Emmett V	Functions of Cyclin D1 in Breast Cancer		CA069069
Sharan, Shyam K.	Functional Analysis of Breast Cancer Susceptibility Genes in Mice		BC010387
Sicinski, Piotr	Specific Roles for D-Cyclins in Oncogenesis		CA083688
Silberstein, Gary B	Role of PAX2 in Mammary Development and Cancer		CA091996
Skoultchi, Arthur I	In Vivo Analysis of Mouse H1 Histone Function		CA079057
Spink, David C	Carcinogenicity of B-Ring Unsaturated Estrogens		CA081243
Stallcup, William B	NG2 Proteoglycan in Tumor Vascularization and Progression		CA095287
Stavnezer, Edward	Origin, Structure and Biological Activity of SKVs		CA043600
Stern, David F	Signaling by neuregulins and ErbB4 in Breast Cancer	PA99-162	CA080065
Tekmal, Rajeshwar R	INT5/Aromatase Effect of Breast Estrogen in Neoplasia		CA075018
Wagner, Kay-Uwe	Tumor Susceptibility Gene 101 Deficiency and Neoplasia	PA99-162	CA093797
Watson, Dennis K	Role of an Epithelial ETS Factor in Breast Cancer		CA102297
Weilbaecher, Katherine	Role of Beta 3 Integrin in Skeletal Metastasis	PA01-020	CA097250
Weinberg, Robert A	Mechanisms of Breast Development and Carcinogenesis		CA080111
Yarden, Yosef	ErbB2-ErbB3 Heterodimeric Receptor of Carcinomas		CA072981
Zhu, Yijun	Coactivators in Breast Development and Tumorigenesis	PA99-162	CA088898

Table B-6

Additional Breast Cancer Biology Projects

Principal Investigator	Title	RFA or PA	Project ID
Alwine, James C	Regulation of Cellular Functions by DNA Tumor Viruses		CA028379
Belfi, Charles	GRP78 and Hypersensitivity to DNA Cross Linking Agents		CA079087
Benson, Donna J.	Piedmont Alliance for Cancer Research and Education	CA02-006	CA091415
Biaglow, John E	Redox Control of Radiation Response		CA044982
Brent, Gregory A.	Regulation of the Sodium/Iodide Symporter in Breast		CA089364
Byers, Tim E	Partnership to Increase Hispanic Cancer Research for Colorado	CA02-006	CA091398
Chinnadurai, Govindaswamy	Apoptosis Regulation by Viral and Cellular Proteins		CA033616
Coltman, Charles A	Breast Cancer Symposium		CA083702
Constantinou, Andreas I	Mechanism(s) of Antitumor Action of Tamoxifen and Soy	AT00-004	CA096517
Disis, Mary L.	HER2 Vaccination for the Treatment of Cancer	PA99-046	CA085374
Fenton, Bruce M	Tumor Oxygenation, Vascularization, and Radioresponse		CA052586
Fulton, Amy M.	Interleukin 10 and Breast Cancer Therapy		CA078394
Gabrilovich, Dmitry I	Correction of Dendritic Cells Defects in Cancer		CA084488
Glass, Andrew G	Cooperative Breast Cancer Tissue Resource	CA03-503	CA062938
Goldman, Robert D	Interactions Between Intermediate Filaments and Nucleus		CA031760
Hager, Gordon L.	Function of Steroid Receptors in Subcellular Compartments		BC010027
Hager, Gordon L.	Cell Motility Within a Cell Mass		BC010280
Hager, Gordon L.	Transport of Glucocorticoid Receptor		BC010299
Hager, Gordon L.	In Vivo Imaging Analysis of Steroid/Nuclear Receptor Function		BC010308
Hait, William N.	Regulation of Multidrug Resistance Phenotype		CA066077
Halperin, Jose A	Inhibition of Translation Initiation in Cancer Therapy		CA078411
Hayward, S D	EBV Genome Expression--Localization of Specific Function		CA030356
Horwitz, Susan B	Diverse Natural Products that Stabilize Microtubules		CA083185
Jackson, Sharon A	Piedmont Alliance for Cancer Research and Education	CA02-006	CA091434
Javier, Ronald T	Mechanisms of the Adenovirus E4-ORF1 Oncoprotein	PA92-27	CA058541
Johnson, Alfred C.	Regulation of EGFR Gene Activity		BC008000
Jordan, V.	Training Program in Signal Transduction and Cancer		CA070085
Kornfeld, Stuart A	Structure, Biosynthesis and Function of Glycoproteins		CA008759
Mackey, Michael A	Large Scale Digital Cell Analysis System	PA00-117	CA094801
Marassi, Francesca M	Structure of Mammary Tumor MAT8 and the FXYD Proteins	PA99-004	CA082864
McGuire, John J	Folylpolylglutamate Synthetase in Cancer Chemotherapy		CA043500

Principal Investigator	Title	RFA or PA	Project ID
Milikowski, Clara	Cooperative Breast Cancer Tissue Resource (CBCTR)	CA03-503	CA062772
Moskaluk, Christopher A	Tissue Procurement and Processing for Molecular Analysis	CA01-009	CA091654
Needham, David	Thermally Sensitive Drug Delivery System for Tumors		CA087630
Rovnyak, David	NMR Technology for Structural Genomics of Breast Cancer		CA089940
Russo, Jose	Fox Chase Cancer Center Breast Cancer Tissue Resources	CA03-503	CA062779
Safa, Ahmad R	Drug Resistance Due to Loss of Beta2-Microglobulin		CA080734
Seewaldt, Victoria L	p53 Loss in HMECs: A Model of Breast Cancer Prevention		CA098441
Spratt, Thomas E	Mechanisms of Fidelity and Mutagenesis		CA075074
Tattersall, Peter J	Molecular Basis of Parvoviral Target Cell Specificity		CA029303
Wang, Sheng	Prohibitin in Mediating Suppression of Breast Cancer	PAR02-176	CA102940
Zehnbauer, Barbara A	St. Louis Breast Cancer Tissue Registry	CA03-503	CA062773