

**Broad Agency Announcement (BAA) Biospecimen Use**

(Data as of 3/13/13)

<b>ID#</b>	<b>Title</b>	<b>PIs</b>	<b>Status</b>	<b>Study dates</b>	<b>Case controls</b>	<b>Blood usage</b>
BA1	Ancestry association analyses of WHI traits	Seldin	Funded	01/15/07-01/14/09	Ppts: General population Fracture - Hip:950 Controls:22852  *Hip fractures in Whites; Controls = 950 hip fx controls, 400 low/400 high BMD in Blacks; all Blacks 14,618; all Hispanics 6,484	Seldin Lab: Draw Requirements=Any WHI: Dna 2ug: 92 Snps; 1536 AIMS in Black BMD; 768 AIMS in White hip fractures; 96 AIMS in Blacks and Hispanics
BA2	High-dimensional genotype in relation to breast cancer and WHI clinical trial interventions	Prentice	Analysis	01/15/07-12/14/09	Ppts: OS Breast Cancer:2242 Controls:2242	Perlegen: Draw Requirements=Any WHI: Dna 2ug: SNPs 10K
BA3	Genome-wide association study to identify genetic components of hip fracture	Jackson	Analysis	01/15/07-07/27/09	Ppts: General population Fracture - Hip:2250 Controls:2250  *Stage I: 750 non-minority os cases/controls, Stage II: 1108 (350 OS+758 CT) cases/controls	TGen: Draw Requirements=Any WHI: Dna 2.5ug: GWAS; Stage I: 317,000 haplotype tagging SNPs; Stage II: GWAS (per Aaron Aragaki 3/21/12) Illumina 610
BA4	Proteomics and the health effects of postmenopausal hormone therapy	Prentice	Analysis	01/15/07-01/14/09	Ppts: OS Breast Cancer:800 CHD:800 Stroke:800 Controls:2400  *Exclude 490 breast cancer cases from BA05-Li	Hanash: Draw Requirements=Baseline: Edta .01ml: Proteomics
BA5	Identification and validation of circulating biomarkers for the early detection of breast cancer in pre-clinical specimens	Li	Analysis	01/15/07-01/14/09	Ppts: OS Breast Cancer:930 Controls:930  *cases 6-19 months after baseline or Y3 blood draw	Hanash: Draw Requirements=B or AV3: Edta .35ml: Proteomics; Use 3 platforms; antibody array on 200 case/control pairs
BA6	Interaction effects of genes in the inflammatory pathway and dietary, supplement, and	Xu	Funded	01/15/07-01/15/09	Ppts: OS Breast Cancer:719 Colorectal Cancer:600 Cancer of Lung:564 Controls:2120	WFU Nicklas: Draw Requirements=Baseline: Citrate .3ml: CRP; TNF-A WFU Zheng: Draw Requirements=Any WHI: Dna 3ug: Immun-Inflm Array; 9,000 SNPs in about 1,000 genes

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	medication exposures on general cancer risk				*500 each in Whites, up to 500 in Blacks	
BA7	Endogenous estradiol and the effects of estrogen therapy on major outcomes of WHI	Cummings	Funded	01/15/07-01/14/10	Ppts: HT CHD:753 Stroke:534 VTE:422 Fracture - Spine Only:204 Fracture - Not Hip or Spine:830 Controls:873  *Prob Dement/Mild Cog Impair (310); Cohort (563 = original 351+212 added June 2010)	Hormone Lab: Draw Requirements=Baseline: Serum .65ml: Estradiol, free; SHBG; Estradiol, bioavailable; Estradiol (E2)  Hormone Lab: Draw Requirements=Baseline: Serum .65ml: Estradiol, free; SHBG; Estradiol, bioavailable; Estradiol (E2)
BA8	Predictive value of nutrient biomarkers for CHD death	Lichtenstein	Analysis	01/15/07-04/14/09	Ppts: OS CHD:1224 Controls:1224  *add 2% cases/controls, include all CHD deaths	Tufts: Draw Requirements=Baseline: Citrate .525ml: DK; Vit K  Tufts: Draw Requirements=Baseline: Citrate .225ml: FA Myristoleic Acid FA 14:1; FA 7-Hexadecenoic Acid 16:1n-9; FA Linoleic Acid FA 18:2N-6; FA Arachidic Acid FA 20:0; FA Tetracosanoic Acid FA 24:0; FA Myristic Acid FA 14:0; FA Vaccenic Acid FA 18:1n-7; FA Gamma Linolenic Acid; FA Eicosatrienoioc Acid; Saturated Fatty Acids; FA Stearic Acid FA 18:0; FA Arachidonic Acid; Polyunsaturated Fatty acids; FA Pentanoic Acid; FA Palmitic Acid FA 16:0; FA Oleic Acid FA 18:1n-9; FA All 18:2 trans; FA Eicosadienoic Acid; FA Lauric Acid FA 12:0; FA Eicosanoic Acid; FA Docosapentanoic Acid; FA Docosahexanoic Acid; FA Alpha Linolenic Acid; FA Adrenic Acid; Monounsaturated Fatty Acids; FA Behenic Acid FA 22:0; FA Tetracosenoic Acid; FA Palmitoleic Acid; FA Elaidic Acid FA 18:1T; FA Eicosapentanoic Acid
BA9	Biochemical antecedents of fracture in minority women	Cauley	Analysis	01/15/07-01/14/11	Ppts: OS Fracture (general):1132 Controls:1132  *Exclude spine fx	Hormone Lab: Draw Requirements=Baseline: Edta .25ml: PTH  Hormone Lab: Draw Requirements=Baseline: Serum 1.15ml: VitD Binding; Estradiol (E2); SHBG; Estradiol, bioavailable; Estradiol, free; Testosterone, bioavail; Vit D 25-OH; Testosterone; Testosterone, free  Synarc: Draw Requirements=Baseline: Serum .25ml: PINP; CTx  U Minn Med Ctr: Draw Requirements=Baseline: Serum .22ml: Cystatin-C  Vermont: Draw Requirements=Baseline: Serum .3ml: TNF-R1; TNF-R2; IL-6SR; IL-10
BA10	Adipokines and risk of obesity-related disease	Gloria Ho, Ph.D., M.P.H, Albert Einstein College of Medicine	Funded	01/15/07-01/14/09	Ppts: OS Breast Cancer:900 Colorectal Cancer:500 Endometrial Cancer:300 Stroke:970	Vermont: Draw Requirements=Baseline: Citrate .25ml: Leptin; Adiponectin; Resistin; HGF; on AS126 samples  Vermont: Draw Requirements=Baseline: Citrate .4ml: Leptin; CRP; IL-6; TNF-A; PAI-1; Adiponectin; Resistin; HGF; on AS129 samples

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					Controls:1870 *Same as AS126-Stroke and AS129-Ins-Glu	
BA11	Physical activity, obesity, inflammation and CHD in a multi-ethnic cohort of women	Lee	Funded	01/15/07-01/14/09	Ppts: OS CHD:601 Controls:1332  *Baseline+Y3:all Black, Hispanic, Asian, White up to 600 in cases; 300 of each ethnicity for controls	Harvard-Rifai: Draw Requirements=B+AV3: Edta .85ml: TNF-R2; CRP; IL-1B; Adiponectin; Resistin; Glucose; LDLC; Leptin; Cholesterol; HDLC; IL-6; Trig; TNF-R1
BA12	Hormone therapy, estrogen metabolism and risk of breast cancer or hip fracture in the WHI hormone trial	Kuller	Funded	01/15/07-01/14/09	Ppts: HT Breast Cancer:900 Fracture - Hip:370 Controls:1800  *Breast Cancer controls from W10-Breast Cancer core study	Immuna: Draw Requirements=B+AV1: Serum .25ml: Estrone, 2-OH; Estrone, 16a-OH; B+Y1 for 1500 in HT active treatment arms, B only for 1570 in HT placebo arms:
BA13	Markers of B-cell stimulation as potential predictors of Non-Hodgkins lymphoma	DeRoos	Funded	01/15/09-06/14/11	Ppts: OS Lymphoma, Non Hodgkins:487 Controls:487	UW-Virology: Draw Requirements=Any WHI: Dna 1ug: EBV DNA Load; EBV Load 2  UCLA-Martinez: Draw Requirements=Baseline: Serum .26ml: sCD44; CXCL13; sCD27; sCD23; sCD30  UCLA-Martinez: Draw Requirements=Baseline: Serum .11ml: interferon, gamma; IL-2; Interleukin-8; IL-1B; EBV-EAD IGg; EBV EBNA-1; IL-4; IL-13; EBV VCA IGg; GM-CSF; IL-5; TNF-A; Interleukin-7; IL-10; IL-12p70; IL-6
BA14	Inflammation and thrombosis gene pathways and cardiovascular disease	Reiner	Funded	01/15/09-07/14/11	Ppts: General population CHD:3594 Stroke:2887 VTE:632 Controls:4361  *HT with OS to fill out controls	SwitchGear: Draw Requirements=Any WHI: Dna .5ug: single-gene analyses of promoter & 3-UTR sequence variants  TGen: Draw Requirements=Any WHI: Dna 2ug: CARE SNPs
BA15	Discovery and confirmation of cancer specific serum protein markers for ovarian cancer early detection	Anc: McIntosh Whi:	Funded	01/15/09-09/30/11	Ppts: OS Ovarian Cancer:225 Controls:225  *Dx within 36 mo of blood draw	FH-McIntosh: Draw Requirements=B+AV3: Edta .15ml: Proteomics
BA16	Identifying biomarkers for	Hingorani	Funded	01/15/09-07/14/11	Ppts: OS	FH-Hingorani: Draw Requirements=B or AV3: Edta .055ml: scFV

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	pancreatic cancer				Pancreatic Cancer:280 Controls:280	FH-Hingorani: Draw Requirements=B+AV3: Edta .25ml: Anti Microarray; Antibody arrays; start with 2 pools of 20 for pos/neg selection of phage scFv sub-library
BA17	Proteomics based discovery of blood based biomarkers and risk factors for lung cancer among women smokers and never smokers	Hanash	Funded	01/15/09-01/14/11	Ppts: OS  Cancer of Lung:320 Controls:320  *30 pools of 10; 30 pools of 16	Hanash: Draw Requirements=Baseline: Edta .25ml: Proteomics; Individual samples for phase 2  Hanash: Draw Requirements=Baseline: Edta .3ml: Proteomics; Mass spec-25 case/115 control pools of 2-5 samples each for early detection phase 1
BA18	Followup studies of genetically determined risk factors	Jackson	Funded	01/15/09-11/30/11	Ppts: General population  Fracture - Hip:400 Controls:7900  *2000 highest BMD + 2000 lowest BMD among non-Hispanic, non-Black for SNPs, subset of 400 for biomarkers; Mod for Stage #: 1500; Mod for Exome chip: 2000 (in addition to 4000 previously included)	TGen: Draw Requirements=Any WHI: Dna 2ug: SNPs 1536; SNPs 12K  TGen: Draw Requirements=Any WHI: Dna 1ug:  TGen: Draw Requirements=Any WHI: Dna 1ug: SNPs 384 Fr  OSU: Draw Requirements=Baseline: Serum .65ml: OPG; sRANKL; PTH  OSU - Pinzone: Draw Requirements=Baseline: Serum .15ml: DKK1  Vermont: Draw Requirements=Baseline: Serum .25ml: TNF-R1; TNF-R2
BA19	Omega-3 fatty acid biomarkers and cognitive decline in WHIMS	Harris	Funded	01/15/09-09/30/11	Ppts: HT  Controls:7371  *WHIMs ppts (1382 MRI, 1215 WHISCA, 4774 other)	OmegaQuant: Draw Requirements=B+AV1: Rbc 1ml: QC samples  USD- Sanford: Draw Requirements=B+AV1: Rbc .08ml: Fatty Acid Profile  USD- Sanford: Draw Requirements=B+AV1: Rbc .25ml: Fatty Acid Profile
BA20	Evaluation of specific markers of rheumatoid arthritis, Inflammation, thrombogenesis and risk of cardiovascular disease and total mortality	Moreland	Funded	01/15/09-07/14/11	Ppts: General population  Controls:9988  *9,988 self-reported RA	Pitts-Trucco: Draw Requirements=Any WHI: Dna 4ug: HLA-DR; (2,993 ppts)  LipoScience: Draw Requirements=Baseline: Edta .2ml: NMR Lipids; (600 subsample)  Robinson Lab: Draw Requirements=Baseline: Edta .1ml: Granulocyte Colony-Stim Fctr; Fibrinogen A 616-635; Vimentin-CIT; Apolipo E277-296; Fibrinogen A-CIT; Fibrinogen A 556-575; Filaggrin 48-65; APOE; Cytokine 17PLEX; MCP-1; GM-CSF; Interleukin-7; Interleukin-8; Histones2B; Vimentin 58-77; BIGlycan 247-266; HSP60; IL-10; IL-13; IL-6; interferon, gamma; Clusterin 231; APOE CIT; ENO1A cyclic; Fibrinogen; H2B/a 62-81; H2A/a 1-20; IL-12p70; IL-4; ACPA panel; IL-5; Macrophage Inflammatory Prt1 B; TNF-A; Fibrinogen A 211-230; Apo A1; ApoA1 CIT; IL-1B; IL-17; IL-2; CCP; Fibrinogen A 41-60; (2,993 ppt subsample)  Vermont: Draw Requirements=Baseline: Edta .5ml: D-dimers; ICAM-1; Fibrinogen; VCAM-1; CRP; (600 subsample)

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						<p>Holers-Colorado: Draw Requirements=Baseline: Serum .15ml: Rheumatoid Factor pos/neg; ANA pos/neg; Rheumatoid Factor; Anti-CCP pos/neg; Anti-CCP; (All ppts)</p> <p>Holers-Colorado: Draw Requirements=Baseline: Serum .2ml: Rheumatoid Factor pos/neg; Rheumatoid Factor; Anti-CCP pos/neg; Anti-CCP; (147 ppt subsample)</p>
BA21	Understanding the role of sex hormones in colorectal cancer	Gunter	Funded	01/15/09-01/14/11	<p>Ppts: CT</p> <p>Colorectal Cancer:400</p> <p>Controls:800</p> <p>*excluding those in active HT arms</p>	<p>Hormone Lab: Draw Requirements=Baseline: Serum 1.25ml: Insulin; Estradiol, free; Estradiol, bioavailable; Estrone (E1); CRP; Estradiol (E2); IGF Free; Progesterone; SHBG</p>
BA22	Predictive modeling for CVD in a multiethnic cohort in women	Cook	Funded	01/15/09-01/14/11	<p>Ppts: OS</p> <p>CHD:933</p> <p>Stroke:812</p> <p>Death - other cause:289</p> <p>Controls:2000</p> <p>*includes all CHD and strokes from 3 minority groups</p>	<p>Harvard-Rifai: Draw Requirements=Baseline: Edta .3ml: CRP; Lp(a); Cholesterol; HDLC; Lp-LPA2 activity; Apo B; ProBNP; Apo A1; LP-PLA2; tPA</p> <p>Harvard-Rifai: Draw Requirements=Baseline: Rbc .1ml: Hemoglobin A1c from RBC; Est 300 Diabetics: HbA1c</p>