



**Poster Session A**  
**Monday, September 29, 2014**  
**12:00 p.m.-2:00 p.m.**  
**Armstrong Ballroom**

**Biomarkers and Early Detection Research: Bioinformatics and Omics**

**A01 Genome-wide changes in expression of small RNAs in human testis cancer tissue.** Trine Rounge, Cancer Registry of Norway, Oslo, Norway.

**A02 Integrative analysis identifies differential miRNA expression in HPV-positive head and neck squamous cell carcinoma including mir-9 overexpression and corresponding downregulation of the target YAP1.** Claudia Heymach, University of Texas MD Anderson Cancer Center, Houston, TX, United States.

**Biomarkers and Early Detection Research: Biomarkers of Cancer Susceptibility**

**A03 ER $\beta$  expression and breast cancer risk prediction for women with atypias.** Tina Hieken, Mayo Clinic, Rochester, MN, United States.

**A04 Menopausal vasomotor symptoms and incident breast cancer risk in the Study of Women's Health Across the Nation.** Vicki Hart, University of Massachusetts Amherst, Amherst, MA, United States.

**A05 Menopausal vasomotor symptoms and mammographic density in the Study of Women's Health Across the Nation.** Vicki Hart, University of Massachusetts Amherst, Amherst, MA, United States.

**A06 Elucidating the associations of inflammation with cancer risk and mortality using an inflammatory score: Results from a prospective cohort study.** Adetunji Toriola, Washington University School of Medicine, St. Louis, MO, United States.

**A07 Methylation of *RARB* in pre-diagnosis benign tissue and risk of disease progression in men subsequently diagnosed with prostate cancer.** Benjamin Rybicki, Henry Ford Hospital, Detroit, United States.

**A08 Lipid biomarkers and cancer risk: Long term observational follow-up of cancer in the Women's Health Study.** Paulette Chandler, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, United States.

**A09 The relationship between DNA methylation in one-carbon metabolism genes and colorectal adenoma risk.** Vikki Ho, University of Montreal Hospital Research Centre, Montreal, Quebec, Canada.

**Biomarkers and Early Detection Research: Biomarkers of Carcinogen Exposure**

**A10 Exposure to heterocyclic aromatic amines, genetic susceptibility and bulky DNA adduct levels in blood leukocytes.** Vikki Ho, University of Montreal Hospital Research Centre, Montreal, Quebec, Canada.

### **Biomarkers and Early Detection Research: Biomarkers of Premalignant Lesions**

**A11 Airway gene expression indicates an increase in oxidative phosphorylation in the field of injury of individuals with premalignant lesions.** Sarah Mazzilli, Boston University, Boston, MA, United States.

**A12 Identification of novel candidate serum metabolite biomarkers for distinguishing between gastro-esophageal reflux disease, Barrett's esophagus, and high-grade dysplasia/esophageal adenocarcinoma.** Matthew Buas, Fred Hutchinson Cancer Research Center, Seattle, WA, United States.

### **Biomarkers and Early Detection Research: Imaging**

**A13 Quantitative pathology toolbox: Improvement in prediction of progression risk for oral premalignant lesions using both interactive and automated image analysis.** Calum MacAulay, BC Cancer Agency, Vancouver, Canada.

### **Biomarkers and Early Detection Research: Molecular Diagnostics**

**A14 Role of miRNAs as biomarker for the anti-tumoral activity of the plant derived polyphenol Curcumin.** Beatrice Bachmeier, Inst. of Laboratory Medicine, Ludwig-Maximilians-University, Munich, Germany.

### **Biomarkers and Early Detection Research: Other**

**A15 Immunohistochemical patterns of the breast developmental gene, ELF5, reveals differential expression in high grade hormone receptor negative clinical breast cancer.** Teresa Rose-Hellekant, University of Minnesota Medical School, Duluth, MN, United States.

### **Clinical Prevention Trials (by Organ Site): Breast Cancer**

**A16 Molecular tracking of of metformin chemoprevention in a 300 person ALLIANCE randomized placebo controlled trial in women at high risk for triple-negative breast cancer.** Victoria Seewaldt, Duke, Durham, North Carolina, United States.

### **Clinical Prevention Trials (by Organ Site): Breast Cancer**

**A17 Relationship between microbiota, Vitamin D and colorectal cancer: towards new possible cancer prevention strategies.** Davide Serrano, European Institute of Oncology, Milan, Italy.

**A18 Personalized prevention of colorectal cancer trial.** Xiangzhu Zhu, Division of Epidemiology, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN, United States.

### **Clinical Prevention Trials (by Organ Site): Head and Neck Cancers**

**A19 Enhanced curcumin bioavailability through localized microgranular formulation in healthy and cancer treatment cohorts.** Brian Latimer, LSUHSC, Shreveport, United States.

### **Clinical Prevention Trials (by Organ Site): Prostate and Other Genitourinary Tract Cancers**

**A20 A phase II randomized, presurgical placebo-controlled trial of polyphenon E in bladder cancer patients to evaluate bladder tissue levels of EGCG and biomarkers of growth and apoptosis.** Jason Gee, Lahey Hospital and Medical Center, Burlington, MA, United States.

### **Metformin Prevention and Treatment Trials**

**A21 A Phase IIa trial of Metformin for colorectal cancer risk reduction among patients with a history of colorectal adenomas and elevated body mass index.** Jason Zell, University of California Irvine, Irvine, CA, United States.

**A22 Differential effects of metformin on breast cancer proliferation according to markers of insulin resistance and tumor subtype in a randomized presurgical trial.** Andrea DeCensi, E.O. Ospedali Galliera, Genoa, GE, Italy.

**A23 Cancer outcomes in the diabetes prevention program outcomes study.** Brandy Heckman-Stoddard, National Cancer Institute, Rockville, MD, United States.

**A24 Integration of tumor metabolomics, cancer genome sequencing and dynamic functional imaging to assess the metabolic effects of metformin in breast cancer.** A. Harris, University of Oxford, Oxford, United Kingdom.

### **Epidemiology/Lifestyle Factors: Behavioral Epidemiology**

**A25 Television watching, other sedentary behaviors and colorectal cancer survival in men.** Yin Cao, Harvard University, Boston, MA, United States.

**A26 Relative influence of home and school environments on specific dietary behaviors among postpartum, high-risk teens.** Megan Clarke, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States.

### **Epidemiology/Lifestyle Factors: Cancer in Aging Populations**

**A27 Association between diabetes pharmacotherapies and bladder cancer: A Medicare epidemiologic study.** Jeremy Smith, The Dartmouth Institute for Health Policy, Lebanon, NH, United States.

### **Epidemiology/Lifestyle Factors: Cancer in Minority and Medically Underserved Populations**

**A28 Incidence trends of lung cancer among Chinese Americans in California, 1990-2010.** Shih-Wen Lin, Genentech, South San Francisco, CA, United States.

**A29 Racial disparities in prostate cancer: Estimating the role of diet, lifestyle, and genetic factors among African-American and Caucasian-American men.** Sam Peisch, Channing Division of Network Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts, United States.

**A30 Breast cancer Family-based Intervention Trial.** Katherine Infante, Columbia University Medical Center, New York, NY, United States.

### **Epidemiology/Lifestyle Factors: Diet and Cancer**

**A31 Correlations between diet, gut microbiota and epithelial methylation pattern with CRC risk.** Volker Mai, University of Florida, Gainesville, FL, United States.

**A32 Dairy intake in relation to disease-specific and total mortality after prostate cancer diagnosis.** Meng Yang, Department of Nutrition, Harvard School of Public Health, Boston, MA, United States.

**A33 Pizza and pasta consumption levels in relation to lycopene and other antioxidant nutrients status among a low-income population in Southeast USA.** Yuan Zhou, Meharry Medical College, Nashville, Tennessee, United States.

**A34 Association of nut consumption and lung cancer risk in a large population-based case-control study.** Tram Lam, National Cancer Institute, Rockville, Maryland, United States.

**A35 Association between calcium and beta-carotene intake and risk of prostate cancer in Seoul Male Cohort Study.** Myung-Hee Shin, Sungkyunkwan University School of Medicine, Suwon, Rep. of Korea.

#### **Epidemiology/Lifestyle Factors: Exercise and Prevention**

**A36 Recreational physical activity and the risk of pancreatic cancer in the California Teachers Study.** Kayo Togawa, Beckman Research Institute of City of Hope, Duarte, California, United States.

**A37 Feasibility of repeat physical activity measurement among colorectal cancer patients by accelerometry and associations with plasma 25(OH)D levels.** Stephanie Totic, National Center for Tumor Diseases (NCT) and German Cancer Research Center (DKFZ), Heidelberg, Germany.

#### **Epidemiology/Lifestyle Factors: Familial and Genetic Epidemiology**

**A38 Role of MC1R variants in childhood and adolescent melanoma.** Sara Raimondi, European Institute of Oncology, Milan, Italy.

**A39 Meta-analysis on Vitamin D Receptor polymorphisms and colorectal cancer risk.** Sara Gandini, European Institute of Oncology, Milan, Italy.

**A40 Multiple locations on 8q24 and 6p21-22 and rare variants associated with gastric cancer susceptibility in a Korean population.** Jeongseon Kim, National Cancer Center, Goyang, Rep. of Korea.

**A41 Known susceptibility SNPs for sporadic prostate cancer play a similar role in hereditary prostate cancer.** Lambertus Kiemeneij, Radboudumc, Nijmegen, Netherlands.

#### **Epidemiology/Lifestyle Factors: General Epidemiology and Biostatistics**

**A42 Adolescent inflammation and body mass index in relation to colorectal cancer risk.** Elizabeth Kantor, Harvard School of Public Health, Boston, MA, United States.

**A43 Population attributable risk of postmenopausal breast cancer according to known and modifiable breast cancer risk factors.** Rulla Tamimi, Brigham and Women's Hospital, Boston, MA, United States.

#### **Epidemiology/Lifestyle Factors: Obesity, Metabolism, and Cancer**

**A44 Association between BMI at treatment initiation and cancer survival across multiple SWOG trials.** Heather Greenlee, Columbia University, New York, NY, United States.

**A45 The association between type 2 diabetes mellitus and incidence of renal cell carcinoma (RCC) and fatal RCC in two prospective cohorts.** Rebecca Graff, Harvard School of Public Health, Boston, MA, United States.

**A46 Body mass index, waist circumference, and the risk of colorectal adenomas: Black women's health study.** Chiranjeev Dash, Georgetown Lombardi Comprehensive Cancer Center, Washington, DC, United States.

### **Epidemiology/Lifestyle Factors: Tobacco and Cancer**

**A47 Meta-analysis of MTHFR polymorphisms in lung cancer: Population health and mutations in the world.** Hsiao-Ling Chen, Department of Nursing, College of Medicine, National Taiwan University, Taipei, Taiwan.

### **Epidemiology/Lifestyle Factors: Other Molecular Epidemiology**

**A48 Serum biomarkers of habitual coffee consumption may provide insight into the mechanism underlying the association between coffee consumption and colorectal cancer.** Kristin Guertin, Division of Cancer Epidemiology & Genetics, National Cancer Institute, Rockville, MD, United States.

**A49 Meta-analysis of vitamin D-binding protein and cancer risk.** Sara Gandini, European Institute of Oncology, Milan, Italy.

### **Epidemiology/Lifestyle Factors: Other Risk Factors**

**A50 Impact of indoor tanning and *MC1R* genotype on basal cell carcinoma risk in young people.** Susan Mayne, Yale School of Public Health, New Haven, CT, United States.

**A51 Mammographic breast density and breast cancer risk: Interactions of percent density, absolute dense and non-dense areas with breast cancer risk factors.** Lusine Yaghjian, University of Florida, Gainesville, FL, United States.

**A52 Oral contraceptive use and risk of colorectal polyps in a colonoscopy based study in western Washington state.** Sheetal Hardikar, Fred Hutchinson Cancer Research Center, Seattle, WA, United States.

### **Preclinical and Translational Prevention Studies (by Organ Site): Breast Cancer**

**A53 Benefits of midlife calorie restriction on mammary tumor development in moderately high fat fed mice.** Michael Grossmann, Hormel Institute, University of Minnesota, Austin, MN, United States.

### **Preclinical and Translational Prevention Studies (by Organ Site): Colon and Other Gastrointestinal Cancers**

**A54 Possible targets of metformin in colorectal cancer.** Amikar Sehdev, University of Chicago, Chicago, IL, United States.

### **Preclinical and Translational Prevention Studies (by Organ Site): Lung Cancer**

**A55 Mapping the airways: The fate of bronchial epithelium in long term heavy smokers.** Kathryn Matney, University of Colorado AMC, Aurora, CO, United States.

### **Preclinical and Translational Prevention Studies (by Organ Site): Pediatric Malignancies**

**A56 Metformin targets Rho GTPases to inhibit neuroblastoma cell growth; implications in the treatment of neuroblastoma.** Ambrish Kumar, University of South Carolina School of Medicine, Columbia, SC, United States.

**A57 ETV6-RUNX1 in urban newborns and young children: Association with Polycyclic Aromatic Hydrocarbon (PAH) DNA adducts in cord blood.** Manuela Orjuela, Columbia University, New York, New York, United States.

**Preclinical and Translational Prevention Studies (by Organ Site): Prostate and Other Genitourinary Tract Cancers**

**A58 Aspirin, NSAIDs and risk of prostate cancer: Results from the REDUCE study.** Adriana C Vidal, Duke University, Durham, United States.

**A59 Dietary Tomato and Lycopene Inhibition of Prostate Carcinogenesis in the TRAMP Model is  $\beta,\beta$ -Carotene 9,10-oxygenase (BCO2)-Dependent.** Jennifer Thomas-Ahner, The Ohio State University, Columbus, Ohio, United States.



**Poster Session B**  
**Tuesday, September 30, 2014**  
**6:00 p.m.-8:00 p.m.**  
**Armstrong Ballroom**

**Behavioral and Social Science: Alcohol**

**B01 The role of social support in alcohol consumption and alcohol dependence.** Lauren Cole, LSU Health Sciences Center School of Public Health, New Orleans, LA, United States.

**B02 Head and neck and esophageal cancers after liver transplant: Results from a multicenter cohort study. Italy, 1997-2010.** Diego Serraino, IRCCS CRO, Aviano, Italy.

**Behavioral and Social Science: Decision Making**

**B03 Knowledge, attitudes, and uptake of breast cancer chemoprevention in a multi-ethnic cohort of high-risk women.** Meghna Trivedi, Columbia University Medical Center, New York, NY, United States.

**Behavioral and Social Science: Diet, Physical Activity, and Energy Balance**

**B04 Dysregulation of cholesterol homeostasis through loss of CYP27A1 in prostate cancer; Implications for early detection and prevention of over-treatment.** Mahmoud Alfaqih, Duke University, Durham, North Carolina, United States.

**B05 Randomized pilot study of Project BALANCE: a weight gain prevention intervention for breast cancer patients receiving neoadjuvant chemotherapy.** Karen Basen-Engquist, The University of Texas MD Anderson Cancer Center, Houston, TX, United States.

**B06 Dietary intake in the relation between acculturation and obesity among healthy, Mexican-descent women.** Margarita Santiago-Torres, Fred Hutchinson Cancer Research Center, Seattle, WA, United States.

**Behavioral and Social Science: Diffusion and Dissemination**

**B07 Meta-analysis of EGFR and smoking in lung cancer for population health in the global context.** Joyce Kusuma, Azusa Pacific University, Azusa, CA, United States.

**Behavioral and Social Science: Prevention Behaviors**

**B08 Meta-analyses of methionine-related polymorphisms and colorectal cancer risk for population health.** Carolyn Du, APU, Azusa, California, United States.

**Behavioral and Social Science: Quality of Life/Late Effects/Survivorship**

**B09 Association between cardiorespiratory fitness and quality of life in breast cancer survivors.** Christina Dieli-Conwright, University of Southern California, Los Angeles, United States.

**B10 Fasting blood glucose and bone mineral density in Latina breast cancer survivors.** Lindsey Avery, University of Southern California, Los Angeles, United States.

### **Behavioral and Social Science: Recruitment/Retention/Adherence Research**

**B11 An efficient resource to accelerate research into the cause and prevention of breast cancer: The Army of Women.** Leah Eshraghi, Dr. Susan Love Research Foundation, Santa Monica, CA, United States.

### **Behavioral and Social Science: Screening and Early Detection**

**B12 To screen or not to screen: Examining components of the Extended Parallel Process Model in a tailored-risk communication intervention to promote colorectal cancer screening.** Wendy Birmingham, Brigham Young University, Provo, Utah, United States.

**B13 Knowledge, attitude and practice of cervical cancer preventive strategies among market women in Ibadan, Nigeria.** Olohire Ezomo, Federal Polytechnic Medical Center, Ekiti, Nigeria.

**B14 Effectiveness of patient navigation for follow-up for abnormal pap tests in Appalachian Kentucky.** Mark Dignan, University of Kentucky, Lexington, KY, United States.

### **Behavioral and Social Science: Tobacco**

**B15 Second-hand smoke (SHS) and smoking cessation in non-tobacco related cancers.** Lawson Eng, Princess Margaret Cancer Centre, Toronto, ON, Canada.

### **Carcinogenesis: Animal Models of Carcinogenesis and Chemoprevention**

**B16 High fat diet promotes mammary tumorigenesis in p53-null mammary glands.** Richard Schwartz, Michigan State University, East Lansing, MI, United States.

**B17 The dynamics of gene expression changes observed in a murine model of oral carcinogenesis is associated with specific patterns of pathway activation and drug sensitivity profiles.** Jean-Philippe Foy, Cancer Research Center of Lyon, UMR INSERM 1052-CNRS 5286, Centre Léon Bérard, Lyon, France.

**B18 Thrombospondin-1 regulates carcinogenesis in an in vivo model of colorectal cancer.** Nancy Emenaker, National Cancer Institute, Bethesda, MD, United States.

### **Carcinogenesis: Clonal Evolution**

**B19 Malfunction and mutation of airway stem/progenitor cells in preneoplastic bronchial dysplasia.** Wilbur H. Franklin, Denver Veterans Affairs Medical Center, Denver, CO, United States.

### **Carcinogenesis: Oxidative Stress and Carcinogenesis**

**B20 The cholesterol metabolite, 27-hydroxycholesterol induces hyperplasia in an androgen receptor-dependent manner in normal prostate RWPE-1 cells.** Shaneabbas Raza, University of North Dakota, Grand Forks, ND, United States.

**B21 The effect of mutant Kras associated changes in redox signaling in pancreatic neoplasia.** Michelle Schultz, University of Illinois Chicago College of Medicine, Chicago, IL, United States.

### **Carcinogenesis: Tumor Promotion and Progression**

**B22 The role of e-cigarette exposure on pulmonary epithelial cell transformation.** Stacy Park, UCLA, Los Angeles, CA, United States.



**B23 A high-fat diet, but not obesity, promotes tumorigenesis in two mouse models of k-ras-driven lung cancer.** Jeffrey Norris, Johns Hopkins University, School of Medicine, Baltimore, MD, United States.

**B24 Genomic progression of Barrett's to adenocarcinoma.** Marcin Duleba, The Jackson Laboratory, Farmington, CT, United States.

**Cell, Molecular, and Tumor Biology: Cancer Genetics/Gene Expression**

**B25 Association of down-regulation of miR-193b and up-regulation of miR-196a with prognosis in gastric cancer.** Wenjie Sun, Tulane University, New Orleans, LA, United States.

**B26 Genomic profiles of young onset colorectal cancer tumors are different from older onset CRC.** Laura Rozek, University of Michigan School of Public Health, Ann Arbor, MI, United States.

**Cell, Molecular, and Tumor Biology: Cell Growth Signaling Pathways**

**B27 RIP1 maintains DNA integrity and cell proliferation by regulating PGC-1 $\alpha$ -mediated mitochondrial oxidative phosphorylation and glycolysis.** Wenshu Chen, Lovelace Respiratory Research Institute, Albuquerque, NM, United States.

**Cell, Molecular, and Tumor Biology: DNA Methylation/Epigenetics, and Chromatin Regulation**

**B28 DNA Methylation-based as prediction of therapeutic outcome in serum of patients with breast cancer.** Joaquina Martinez-Galan, Hospital Universitario Virgen de las Nieves, Granada, Spain.

**B29 Maintenance of a lean phenotype is associated with increased ER $\beta$  expression and ER $\beta$  gene intron methylation in murine MMTVneu luminal mammary cancer.** Emily Rossi, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States.

**B30 Different methylation profile of panel of gene between breast cancer patients and control subjects as potential biomarkers for screening breast cancer.** Joaquina Martinez-Galan, Hospital Universitario Virgen de las Nieves, Granada, , Spain.

**B31 Calorie restriction normalizes global microRNA expression by preventing the loss of Dicer expression during mammary tumorigenesis.** Kaylyn Devlin, University of Texas at Austin, Austin, TX, United States.

**Cell, Molecular, and Tumor Biology: Gene Regulation and Transcriptional Control**

**B32 Control of nucleotide metabolism by mutant p53 contributes to its gain-of-function activities.** Luis Martinez, University of Mississippi Medical Center, Jackson, MS, United States.

**B33 Regulation and function of Nrf2-associated long noncoding RNA.** Gavin Johnson, Texas A&M Health Science Center, Houston, TX, United States.

**Cell, Molecular, and Tumor Biology: Inflammation and Cancer Initiation and Promotion**

**B34 CD56+ immune cell infiltration is decreased in benign breast lobules with fibrocystic changes.** Rushin Brahmabhatt, Mayo Clinic, Rochester, MN, United States.

**B35 Cellular competition and metaplastic drive underlie precursors of highly aggressive bladder cancer.** Yue Hong, The Jackson Laboratory for Genomic Medicine, Farmington, CT, United States.

### **Cell, Molecular, and Tumor Biology: Microenvironment**

**B36 Pyruvate kinase M2 regulates adipocyte differentiation and the expression of enzymes involved in glucose metabolism.** Tetsuo Kimura, Weill Cornell Medical College, New York, NY, United States.

**B37 Extracellular acid gradient is an energy source in cancer: Acid gradient across plasma membrane in cancer cells can drive robust synthesis of phosphate-bonds. Implication as novel therapeutic target.** Gautam Dhar, University of California, Los Angeles, CA, United States.

**B38 Regulation of exosome production and cargo by the RNA-binding proteins HuR and TTP in colon cancer cells.** Ranjan Preet, University of Kansas Medical Center, Kansas City, KS, United States.

### **Chemoprevention and Biological Therapies: Anti-inflammatory Therapy**

**B39 Aspirin modifies immune cell infiltration of the colonic mucosa in Lynch syndrome: a possible mechanism for cancer prevention.** Benjamin Hartog, Institute of Genetic Medicine, Newcastle University, Newcastle-Upon-Tyne, United Kingdom.

**B40 Low dose aspirin that reduces mortality from lung adenocarcinoma inhibits both platelet COX-1 and the biosynthesis of PGE2.** Pierre Massion, Vanderbilt University, Nashville, United States.

### **Chemoprevention and Biological Therapies: Biological Agents**

**B41 Intermittent dosing regimens maintain efficacy of several cancer preventing drugs.** Vernon Steele, National Cancer Institute, Bethesda, MD, United States.

### **Chemoprevention and Biological Therapies: Combination Chemoprevention**

**B42 Nelfinavir potentiates the anti-cancer efficacy of curcumin by subverting endoplasmic reticulum stress toward apoptosis: A promising chemoprevention approach.** Debasis Mondal, Tulane University Medical Center, New Orleans, LA, United States.

**B43 Targeting multiple cell cycle regulatory points for the prevention of triple negative breast cancer.** Powel H. Brown, The University of Texas MD Anderson Cancer Center, Houston, TX, United States.

**B44 Phyto-chemoprevention of breast cancer: A nutrigenomic study.** Somya Shanmuganathan, Sultan Qaboos University, Muscat, Oman.

### **Chemoprevention and Biological Therapies: Foods and their Bioactive Components**

**B45 A pilot trial of dietary fish and  $\omega$ -3 fatty acid supplements in women at high risk for breast cancer.** Lisa Yee, The Ohio State University, Columbus, OH, United States.

### **Chemoprevention and Biological Therapies: Mechanisms of Chemoprevention**

**B46 The influence of exemestane on breast density in postmenopausal women: A cohort study nested within the NCIC CTG MAP.3 chemoprevention trial.** Harriet Richardson, Queen's University, Kingston, Ontario, Canada.

**B47 Curcumin C3<sup>®</sup> prevents ultraviolet B radiation-induced epidermal damage in JB6 cells and mouse skin via a Fibroblast growth factor-2-dependent manner.** Alok Khandelwal, LSU-Health Shreveport, Shreveport, Louisiana, United States.

**B48 Targeting the mTOR pathway for the prevention of ER-negative breast cancer.** Abhijit Mazumdar, MD Anderson Cancer Center, Houston, TX, United States.

**Chemoprevention and Biological Therapies: Mechanisms of Drug Resistance**

**B49 Circadian/melatonin disruption by dim light at night drive chemotherapy resistance in breast cancer.** Steven Hill, Tulane University School of Medicine, New Orleans, LA, United States.

**Chemoprevention and Biological Therapies: Natural Product-based Agents**

**B50 Differential influence of vitamin D on the tumor promoting eicosanoid PGE2 in women at increased breast cancer risk.** Edward Sauter, University of Texas Health Science Center, Tyler, TX.

**Chemoprevention and Biological Therapies: New Molecular Targets/Mechanisms of Drug Action**

**B51 Thioredoxin reductases 1: A key member in metabolism newly identified as prognostic and targetable in non-small cell lung cancer (NSCLC).** Yongchang Zhang, Departement of medical oncology, lung cancer and gastrointestinal unit, Hunan Cancer Hospital, Changsha, China.

**B52 STAT3 inhibitor HJC0152 prevents ER-negative breast cancer via regulating metabolism.** Lili Wang, The University of Texas MD Anderson Cancer Center, Houston, TX, United States.

**Chemoprevention and Biological Therapies: Other**

**B53 Predicting efficacy of chemopreventive agents in animal tumor assays by statistical modeling.** Barbara Dunn, National Cancer Institute, Bethesda, MD, United States.

**B54 Current intervention strategies in the NCI PREVENT Cancer Preclinical Drug Development Program.** Robert Shoemaker, National Cancer Institute, Bethesda, MD, United States.

**B55 Chemoprevention of pancreatic cancer by targeting Kras mutations for apoptosis.** Oksana Zagrodna, MD Anderson Cancer Center, Houston, TX, United States.