Schedule at a Glance

Saturday, October 22, 2011

10:00 a.m.-11:30 a.m.   **Educational Sessions 1-2**

Precancer Detection with Imaging and Other Technologies
Chairperson: Robert J. Gillies, Room 257, p. 21

Prevention of Cancer in Patients and Survivors
Chairperson: Patricia A. Ganz, Room 259, p. 21

11:30 a.m.-1:00 p.m.   **Professional Advancement
                                    Session**

Chairperson: Powel Brown, Room 162 AB, p. 22

1:00 p.m.-2:30 p.m.   **Educational Sessions 3-4**

**Application of New Technology for Genome-Wide
DNA Methylation to Population Studies for
Etiology and Prevention**
Chairperson: Karl T. Kelsey, Room 257, p. 23

Use of Molecularly Targeted Cancer Prevention Agents
Chairperson: Jack Cuzick, Room 259, p. 23

2:45 p.m.-4:15 p.m.   **Educational Sessions 5-6**

Risk Communication and Use of Social Media
Chairperson: K. Vish Viswanath, Room 257, p. 24

Promoting Global Health Through Cancer Prevention
Chairperson: Surendra S. Shastri, Room 259, p. 24

6:00 p.m.-8:15 p.m.   **Opening Plenary Session**

**Celebrating the 10th Anniversary of the Frontiers in Cancer
Prevention Research Conference: Progress and Promise**
Room 258 A-C, p. 25

Welcome
Judy E. Garber, AACR President, Dana-Farber Cancer Institute,
Boston, MA

Opening Remarks
Powel Brown, University of Texas MD Anderson Cancer Center,
Houston, TX

Perspective on Then (2002) and Now (2011)
Waun Ki Hong, University of Texas MD Anderson Cancer Center,
Houston, TX

Distinguished Lecture
**The Age of Cancer: Can Our Understanding of the Molecular
Circuitry of Aging Illuminate the Path to Prevention?**
Ronald A. DePinho, University of Texas MD Anderson Cancer
Center, Houston, TX

Keynote Address
Translational Research on Nicotine Addiction Treatment
Caryn Lerman, Abramson Cancer Center of the University of
Pennsylvania, Philadelphia, PA

Special Lecture
**Cancer Prevention Over 30 Years: Challenges, Distractions,
but Progress**
Walter C. Willett, Harvard School of Public Health, Boston, MA

8:15 p.m.-9:45 p.m.   **Opening Reception**

200-Level Pre-function Space

Schedule at a Glance

Sunday, October 23, 2011

8:00 a.m.-10:00 a.m. **Plenary Session 1**

**New Technologies in Cancer Discovery and
Cancer Prevention**
Chairperson: William C. Hahn, Room 258 A-C, p. 26

10:15 a.m.-11:30 a.m. **Special Session 1**

Cancer Risk Assessment in the Post-Genomics Era
Chairperson: Judy E. Garber, Room 258 A-C, p. 27

11:30 a.m.-12:30 p.m. **Special Sessions 2-3**

Environmental Carcinogens
Chairperson: John D. Groopman, Room 257, p. 28

Follow-Up on the National Lung Screening Trial (NLST)
Chairperson: John K. Field, Room 259, p. 28

1:15 p.m.-3:00 p.m. **Concurrent Sessions 1-2**

**Prevention of Gastrointestinal Cancers: Colorectal,
Liver, and Pancreas**
Chairperson: Paul J. Limburg, Room 257, p. 29

Prevention of Gynecologic Cancers: Ovary, Uterus, and Cervix
Chairperson: Karen H. Lu, Room 259, p. 29

3:15 p.m.-5:15 p.m. **Plenary Session 2**

**Energy Balance and Cancer Prevention: From Bench to
Bedside to Community**
Chairperson: Stephen D. Hursting, Room 258 A-C, p. 30

5:15 p.m.-6:15 p.m. **AACR-Prevent Cancer
Foundation Award Lecture**

Lecturer to be announced, Room 258 A-C, p. 31

6:15 p.m.-7:45 p.m. **Behavioral Science in Cancer
Research Networking Event**

Room 162 AB, p.32

6:15 p.m.-8:45 p.m. **Poster Session A**
Exhibit Hall B-2, pp. 33-39

Biomarkers and Early Detection Research

Cell, Molecular, and Tumor Biology

Clinical Prevention Trials by Organ Site

Epidemiology/Lifestyle Factors (Familial and Genetic
Epidemiology; General Epidemiology and Biostatistics; Obesity,
Metabolism, and Cancer; Other Molecular Epidemiology; Other
Risk Factors; Other)

**Preclinical and Translational Prevention Studies by
Organ Site**

Schedule at a Glance

Monday, October 24, 2011

8:00 a.m.-10:00 a.m.   **Plenary Session 3**

Advances in Tobacco Prevention, Cessation, and Harm Reduction Strategies
Chairperson: Ellen R. Gritz, Room 258 A-C, p. 40

10:15 a.m.-12:00 p.m.   **Concurrent Sessions 3-4**

Aerodigestive Cancer Prevention: Lung, Head and Neck, and Esophagus
Chairperson: David P. Carbone, Room 257, p. 41

Prevention of Breast and Prostate Cancer: Basic Science to Clinical Intervention
Chairperson: Karen T. Liby, Room 259, p. 41

1:15 p.m.-3:15 p.m.   **Plenary Session 4**

Using Team Science to Make Advances in Cancer Prevention
Chairperson: Ian M. Thompson, Jr., Room 258 A-C, p. 42

3:15 p.m.-5:00 p.m.   **Concurrent Sessions 5-6**

Biomarkers of Precancer
Chairperson: Sudhir Srivastava, Room 257, p. 43

Results From Early-Phase Clinical Trials from the Chemoprevention Consortium
Chairperson: Leslie G. Ford, Room 259, p. 43

5:00 p.m.-7:30 p.m.   **Poster Session B**
Exhibit Hall B-2, pp. 44-49

Behavioral and Social Science

Carcinogenesis

Chemoprevention and Biological Therapies

Epidemiology/Lifestyle Factors (Behavioral Epidemiology; Cancer in Aging Populations; Cancer in Minority and Medically Underserved Populations; Diet and Cancer; Exercise and Prevention; Tobacco and Cancer)

7:30 p.m.-9:00 p.m.   **MEG Town Meeting and Reception**

Room 162 AB, p. 50

Schedule at a Glance

Tuesday, October 25, 2011

8:00 a.m.-10:00 a.m.   **Plenary Session 5**

**New Innovations for Integrating Mouse Models
in Prevention Research**
Chairperson: Cory Abate-Shen, Room 258 A-C, p. 51

10:15 a.m.-12:00 p.m. **Concurrent Sessions 7-8**

Novel Pathways/Targets for Cancer Prevention
Chairperson: Young-Joon Surh, Room 257, p. 52

Immunoprevention and Targeting Stress Pathways
Chairperson: Olivera J. Finn, Room 259, p. 52

Educational Session 1
Precancer Detection with Imaging and Other Technologies
Room 257

Chairperson: Robert J. Gillies, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL

This session will bring together experts in imaging cancer and precancerous lesions, as well as cancer biologists/geneticists working in precancers, to discuss how the earliest steps in cancer development can be identified, characterized, and quantified through optical and radiologic imaging. These data can then be applied in a translational manner to improve assessments of cancer risk and preventive response. These are critical foundations in clinical trial designs to test preventive strategies in a more efficient and effective manner.

Cell imaging at the nanoscale: Detecting nuclear chromatin alterations in field carcinogenesis [ED01-01]*
Vadim Backman, Northwestern University, Evanston, IL

Imaging 'omics in cancer detection [ED01-02]*
Robert J. Gillies

Bioengineering and clinical applications of circulating tumor cell chips
Shyamala Maheswaran, Massachusetts General Hospital, Charlestown, MA

Educational Session 2
Prevention of Cancer in Patients and Survivors
Room 259

Chairperson: Patricia A. Ganz, UCLA Jonsson Comprehensive Cancer Center, Los Angeles, CA

This educational session will provide an overview of current knowledge and the state of the research in three important areas relevant to cancer survivors: 1) risk and surveillance for recurrent and second malignancies in cancer survivors; 2) the role of diet and physical activity in determining risk for recurrent and second malignancies in cancer survivors; and 3) the role of cancer treatment in accelerating the aging process and enhancing risk for physical late effects as well as recurrent and second malignancies.

Prevention of cancer in patients and survivors: Epidemiology of survivorship, late effects burden, setting the stage [ED02-01]*
Patricia A. Ganz

Risk and surveillance for second malignant neoplasms and late recurrence [ED02-02]*
Kevin C. Oeffinger, Memorial Sloan-Kettering Cancer Center, New York, NY

Role of diet, energy balance, nutrition, and the risk for recurrence [ED02-03]*
John P. Pierce, Moores UCSD Cancer Center, San Diego, CA

Intersection of cancer, aging, and survivorship [ED02-04]*
Arti Hurria, City of Hope, Duarte, CA

Q&A

*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)

Professional Advancement Session

Saturday, October 22, 2011
11:30 a.m.-1:00 p.m.

Room 162 AB

Chairperson: Powel Brown, University of Texas MD Anderson Cancer Center, Houston, TX

This special session for early-career investigators will begin with short presentations from a panel of senior scientists. The panel session will be followed by roundtable discussions led by leaders in the cancer prevention field. A current list of the topics of discussion and the participating scientists can be picked up at the registration desk.

Box lunches will be provided. Participation in this session is restricted to predoctoral or medical students and postdoctoral students or physicians-in-training. Preregistration was encouraged; all others will be admitted on a space-available basis.

Educational Session 3
Application of New Technology for Genome-Wide DNA Methylation to Population Studies for Etiology and Prevention
Room 257

Chairperson: Karl T. Kelsey, Brown University, Providence, RI

There is widening recognition of the importance of DNA methylation in gene regulation and thus, importance in cancer risk and outcomes. This educational session will provide information on the potential application of genome-wide methylation assessment for determination of cancer subtypes, risk, and prognostic factors, and will present approaches to the technology and analysis of the large amount of resultant data.

Epigenome-wide association studies
John M. Greally, Albert Einstein College of Medicine, Bronx, NY

Issues in applications of genome-wide methylation data to epidemiology [ED03-02]*
Karl T. Kelsey

Analysis of DNA methylation arrays in population studies: Issues and opportunities [ED03-03]*
E. Andrés Houseman, Oregon State University, Corvallis, OR

Educational Session 4
Use of Molecularly Targeted Cancer Prevention Agents
Room 259

Chairperson: Jack Cuzick, Cancer Research UK, London, United Kingdom

Cardiologists have been very successful in controlling heart disease by identifying high-risk individuals and offering prophylactic treatment, e.g., with statins and antihypertensive drugs. This approach is in its infancy for cancer, but some important findings have been made. This session will review progress in breast cancer where the SERMs tamoxifen and raloxifene have been evaluated, as well as new trials on the aromatase inhibitors. Aspirin, other NSAIDs, and COX-2 inhibitors also appear to have a widespread preventive capacity, especially for colorectal and other gastrointestinal cancers, and work in this area will be reviewed.

Breast cancer chemoprevention [ED04-01]*
Jack Cuzick

Update on COX-2 inhibitors in cancer prevention [ED04-02]*
Ernest T. Hawk, University of Texas MD Anderson Cancer Center, Houston, TX

Aspirin chemoprevention for Barrett's and esophageal cancer: The AspECT trial [ED04-03]*
Janusz A. Jankowski, Leicester Royal Infirmary, Leicester, United Kingdom

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Educational Session 5
Risk Communication and Use of Social Media
Room 257

Chairperson: K. Vish Viswanath, Dana-Farber Cancer Institute, Boston, MA

This educational session will provide an overview of current knowledge and the state of the research relevant to the emerging role of new media, specifically social media, in cancer prevention in both cancer survivors and healthy individuals without a history of cancer. Specific media to be considered include Twitter, blogs, and Facebook, and other methods of electronic communication. The role of these new media in communication of accurate (or inaccurate) information regarding cancer risks, fostering enrollment in cancer prevention research, increasing or decreasing cancer-related health disparities, and implementing cancer risk reduction interventions will be considered. Opportunities for both clinicians and researchers to harness the power of new media, particularly social media, in the service of cancer prevention will be highlighted.

Social media and cancer communications: Promises and perils [ED05-01]*
K. Vish Viswanath

Building a tobacco-free world: Engaging youth and young adults [ED05-02]*
Donna Vallone, American Legacy Foundation, Washington, DC

Social media use, communication inequalities, and public health: Where we are and where we need to go [ED05-03]*
Emily Z. Kontos, Harvard University School of Public Health, Boston, MA

Harnessing the power of social media in cancer control communication [ED05-04]*
Wen-Ying Sylvia Chou, National Cancer Institute, Bethesda, MD

Educational Session 6
Promoting Global Health Through Cancer Prevention
Room 259

Chairperson: Surendra S. Shastri, Tata Memorial Centre, Mumbai, India

Over 56% of new cancer cases and 63% of cancer deaths occur in low- and middle-income countries (LMICs). In this educational session, cancer researchers from LMICs discuss cancer prevention, screening, and early detection programs in low-resource settings with examples from India and Brazil, describing the challenges faced and lessons learned.

Cancer prevention and early detection programs in resource-limited settings: Examples from India
Surendra S. Shastri

Breast cancer screening in low- and middle-income countries [ED06-02]*
Cheng-Har Yip, University of Malaya, Kuala Lumpur, Malaysia

Cancer prevention and screening programs in Brazil
Edmundo C. Mauad, Barretos Cancer Hospital, São Paulo, Brazil

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Opening Plenary Session

Celebrating the 10th Anniversary of the Frontiers in Cancer Prevention Research Conference: Progress and Promise

Room 258 A-C

Welcome

Judy E. Garber, AACR President, Dana-Farber Cancer Institute, Boston, MA

Opening Remarks

Powel Brown, University of Texas MD Anderson Cancer Center, Houston, TX

Perspective on Then (2002) and Now (2011)

Waun Ki Hong, University of Texas MD Anderson Cancer Center, Houston, TX

Distinguished Lecture
The Age of Cancer: Can Our Understanding of the Molecular Circuitry of Aging Illuminate the Path to Prevention?

Ronald A. DePinho, University of Texas MD Anderson Cancer Center, Houston, TX

Keynote Address
Translational Research on Nicotine Addiction Treatment

Caryn Lerman, Abramson Cancer Center of the University of Pennsylvania, Philadelphia, PA

Special Lecture
Cancer Prevention Over 30 Years: Challenges, Distractions, but Progress

Walter C. Willett, Harvard School of Public Health, Boston, MA

Opening Reception

200-Level Pre-function Space

New Technologies in Cancer Discovery and Cancer Prevention
Room 258 A-C

Chairperson: William C. Hahn, Dana-Farber Cancer Institute, Boston, MA

This session will focus on recent developments in genomics, proteomics, and nanotechnology in cancer. Over the past several years, an explosion in both technology and bioinformatics has fundamentally altered the pace and scale of investigation in cancer. These advances will provide the means to interrogate cancer samples both in discovery and in the analysis of cancer specimens in the clinic. Innovative new technologies will be reviewed and discussed.

Advances in functional cancer genomics [PL01-01]*
William C. Hahn

Building the Texas Cancer Diagnostics Pipeline one biomarker at a time [PL01-02]*
John T. McDevitt, Rice University, Houston, TX

Quantitative biology and biomarker discovery without immunoassays [PL01-03]*
Steven A. Carr, Broad Institute, Cambridge, MA

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Cancer Risk Assessment in the Post-Genomics Era
Room 258 A-C

Chairperson: Judy E. Garber, Dana-Farber Cancer Center, Boston, MA

There has been an explosion in our understanding of the human genome, and there have been numerous genome-wide association studies (GWAS) to determine common genetic variants that may increase risk of cancer. It is unclear if there is utility for these data in the clinic and in cancer prevention. This special session will explore the topic and inform researchers and clinicians on the relevance for genomics in cancer research and practice.

Using genomic technologies to improve cancer risk assessment [SS01-01]*
Kenneth Offit, Memorial Sloan-Kettering Cancer Center, New York, NY

Deep sequencing in the clinic: Implications for prevention
Stephen B. Gruber, University of Michigan, Ann Arbor, MI

Return of incidental findings and research results: Implications for prevention research
Robert C. Green, Brigham and Women's Hospital and Harvard Medical School, Boston, MA

Panel Discussion

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Special Session 2
Environmental Carcinogens
Room 257

Chairperson: John D. Groopman, Johns Hopkins University School of Public Health, Baltimore, MD

Introduction
John D. Groopman

Life stage susceptibility and low-dose response as important factors in carcinogen identification
Suzanne E. Fenton, National Institute of Environmental Health Sciences, Research Triangle Park, NC

Endocrine disruptor chemicals as possible agents in breast cancer promotion
Lawrence H. Kushi, Kaiser Permanente, Oakland, CA

Panel Discussion
Christine B. Ambrosone, Roswell Park Cancer Institute, Buffalo, NY
Suzanne E. Fenton
John D. Groopman
Lawrence H. Kushi
Elizabeth A. Platz, Johns Hopkins University School of Public Health, Baltimore, MD

Special Session 3
Follow-Up on the National Lung Screening Trial (NLST)
Room 259

Chairperson: John K. Field, University of Liverpool, Liverpool, United Kingdom

The National Lung Screening Trial (NLST) publication in the *New England Journal of Medicine* this year has provided evidence that CT screening reduces mortality from lung cancer by more than 20% and has focused international attention on the outstanding questions that need to be answered prior to the implementation of national screening programs. Currently, there are a number of CT screening trials being undertaken in Europe that should be completed prior to any decision for national screening within Europe. The IASLC CT Screening Task Force, which was composed of worldwide experts, has published a position statement at the recent World Conference on Lung Cancer. This session will update researchers and clinicians on the NLST and the current European CT screening trials and enable debate as to the remaining questions that require answers prior to implementation.

Follow-up on the National Lung Screening Trial: The next steps [SS03-01]*
John K. Field

The National Lung Screening Trial: Important implications for lung cancer screening and treatment
Christine D. Berg, National Cancer Institute, Bethesda, MD

The Italung study and state of randomized screening trials in Europe [SS03-03]*
Eugenio Paci, ISPO-Institute for Research and Prevention of Cancer, Florence, Italy

Panel Discussion
John K. Field
Christine D. Berg
Eugenio Paci
Kim Norris, Lung Cancer Foundation of America, New Ulm, MN

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Concurrent Session 1
Prevention of Gastrointestinal Cancers: Colorectal, Liver, and Pancreas
Room 257

Chairperson: Paul J. Limburg, Mayo Clinic College of Medicine, Rochester, MN

This session will present new data on the molecular identification and epidemiological characterization of genes involved in cancer susceptibility. Progress on translating these discoveries into effective therapies for prevention of pancreatic, liver, and colorectal cancer will also be discussed.

Genetic profiles of precancerous pancreatic lesions
Michael G. Goggins, Johns Hopkins Medical Institutes, Baltimore, MD

Glycoproteomic discovery of liver cancer biomarkers: Be careful how you use it [CN01-02]*
Timothy M. Block, Drexel Institute of Biotechnology and Virology Research, Doylestown, PA

Moving from molecular biology to clinical prevention in colorectal cancer [CN01-03]*
William M. Grady, Fred Hutchinson Cancer Research Center, Seattle, WA

Properties of adenomas in subjects treated with difluoromethylornithine and sulindac for reduction of colorectal adenomas [PR-01]**
Philip M. Carpenter, University of California, Irvine, Orange, CA

Concurrent Session 2
Prevention of Gynecologic Cancers: Ovary, Uterus, and Cervix
Room 259

Chairperson: Karen H. Lu, University of Texas MD Anderson Cancer Center, Houston, TX

This session will provide information on the state of the science in our knowledge of gynecological cancers related to basic biology, risk factors, and cancer therapeutics. It will provide clinicians and researchers with topical updates on advances in cancers of the ovary, uterus, and cervix.

Endometrial cancer: High-risk cohorts and strategies for prevention
Karen H. Lu

Ovarian cancer GWAS: Path from risk assessment to prevention? [CN02-02]*
Thomas A. Sellers, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL

Prevention of human papillomavirus-related malignancy in the post-vaccine era [CN02-03]*
Marc T. Goodman, Cancer Research Center of Hawaii, Honolulu, HI

The association between antioxidant intake and ovarian cancer risk: Results from a population-based case-control study in New Jersey [PR-02]**
Dina Gifkins, The Cancer Institute of New Jersey, New Brunswick, NJ

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**An extended abstract for this presentation is available in the Proffered Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)

Energy Balance and Cancer Prevention: From Bench to Bedside to Community
Room 258 A-C

Chairperson: Stephen D. Hursting, University of Texas at Austin, Austin, TX

There is a growing incidence of overweight and obese individuals in the United States and Western countries, which impacts cancer risk and prognosis. The talks and discussions in this session will inform biological mechanisms relating obesity to cancer etiology and progression, and will provide information on potential interventions to reduce obesity and the effects of obesity on cancer risk and prognosis among healthy and patient populations.

Energy balance and cancer prevention: Mechanistic insights from mutant mice [PL02-01]*
Stephen D. Hursting

Energy balance and cancer prevention: Lessons from clinical research [PL02-02]*
Pamela J. Goodwin, University of Toronto Mount Sinai Hospital, Toronto, ON, Canada

Energy balance and cancer prevention: Population sciences and community/environmental initiatives
Rachel Ballard-Barbash, National Cancer Institute, Bethesda, MD

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AACR-Prevent Cancer Foundation Award Lecture for Excellence in Cancer Prevention Research
Room 258 A-C

The AACR-Prevent Cancer Foundation Award for Excellence in Cancer Prevention Research is given annually to a scientist residing in any country in the world for his or her seminal contributions to the field of cancer prevention. Such investigations must have been conducted in basic, translational, clinical, epidemiological, or behavioral science in cancer prevention research. Further, these studies must have had not only a major impact on the field, but must also have stimulated new directions in this important area.

To learn about the 2011 AACR-Prevent Cancer Foundation Award recipient, a copy of the program page will be made available at the registration booth. You may also visit www.aacr.org/page25875.aspx for more information.

Behavioral Science in Cancer Research Networking Event

Room 162 AB

Members of the Behavioral Science in Cancer Research Working Group (BSCR) and those interested in the field are invited to attend this networking event. Attendees can learn about membership in the BSCR Working Group and network with colleagues.

Welcome
Michael E. Stefanek, Indiana University, Bloomington, IN

Remarks
Robert T. Croyle, National Cancer Institute, Bethesda, MD
William Klein, National Cancer Institute, Bethesda, MD

About BSCR:
The Behavioral Science in Cancer Research Working Group (BSCR) promotes the scholarly discussion of the role of behavioral science research and the importance of interdisciplinary collaborations in cancer control by bringing together scientists from behavioral science and all cancer research disciplines. Membership in BSCR is open to individuals from any scientific discipline who are interested in working together to increase knowledge about behavioral science as it relates to cancer.

Biomarkers and Early Detection Research

Biomarkers of Cancer Susceptibility

A1   Comprehensive analyses of DNA repair pathways, smoking, and bladder cancer risk in Los Angeles and Shanghai. Roman Corral, Yong-Bing Xiang, Jian-Min Yuan, Mariana C. Stern, Juan Pablo Lewinger, David Van Den Berg, Amit D. Joshi, Manuela Gago-Dominguez, Victoria K. Cortessis, David V. Conti, Malcolm Pike, Yu-Tang Gao.

A2, PR3   A prospective study of systemic markers of inflammation and risk of esophageal adenocarcinoma in a Barrett's esophagus cohort. Sheetal Hardikar, Lynn Onstad, Patricia Blount, Brian Reid, Thomas Vaughan.

A3   Premenopausal serum androgens and breast cancer risk: A nested case-control study. Anne Zeleniuch-Jacquotte, Karen L. Koenig, Yelena Afanasyeva, Rudolf Kaaks, Sabina Rinaldi, Stephanie Scarmo, Mengling Liu, Alan A. Arslan, Paolo Toniolo, Roy E. Shore.

A4   C-peptide, mammographic density, and risk of invasive breast cancer. Thomas P. Ahern, Susan E. Hankinson, Walter C. Willett, Michael N. Pollak, A. Heather Eliassen, Rulla M. Tamimi.

Biomarkers of Carcinogen Exposure

A6   Urinary levels of volatile organic carcinogens and toxicant biomarkers in relation to lung cancer development in both smokers and nonsmokers: The Shanghai Cohort Study. Jian-Min Yuan, Yu-Tang Gao, Steven G Carmella, Renwei Wang, Menglan Chen, Stephen S. Hecht.

A7   Use of the Janus Biobank in cancer prevention. Hilde Langseth, Randi Elin Gislefoss.

A8   Estrogen metabolism and mammographic density in postmenopausal women. Barbara J. Fuhrman, Louise A. Brinton, Ruth M. Pfeiffer, Barbara E. Teter, Cher Dallal, Celia Byrne, Paola C. Muti, Gretchen L. Gierach.

Biomarkers of Premalignant Lesions

A9   Phenotype matters in the prediction of cancer risk of oral premalignant lesions (OPL). Lewei Zhang, Martial Guillaud, Catherine Poh, Calum MacAulay, Miriam Rosin.

A10   A new in silico physical optical model (iPOM) for the study of cervical intraepithelial neoplasia. Dizem Arifler, Dirk van Niekerk, Michele Follen, Calum MacAulay, Martial Guillaud.

A11   Loss of LKB1 is an early event in high-grade serous carcinoma. Sophia H.L. George, Anca Milea, Mona Gauthier, Patricia A. Shaw.

A12   Validity of aberrant crypt foci using as a surrogate biomarker for colorectal cancer. Eiji Sakai, Hirokazu Takahashi, Atsushi Nakajima.

A13   AdipoR1 overexpression and AMPK signaling in histologically normal endometrium from obese women and in endometrial tumorigenesis. Adrienne S. McCampbell, Jennifer K. Burzawa, Qian Zhang, Caimiao Wei, Cheryl L. Walker, Karen H. Lu, Russell R. Broaddus.

A14   Finding biomarkers in the differential expression patterns between epithelial layers in cervical dysplasia. Gerald Li, Shevaun Hughes, Cathie Garnis, Calum MacAulay.

Cancer Surveillance and Screening

A15   Autofluorescence-guided detection of oropharyngeal neoplasms and precursor lesions. Jennifer L. Frustino, Vijayvel Jayaprakash, Maureen Sullivan, Mihai Merzianu, Nestor Rigual, Thom Loree, Mary E. Reid.

A16   Longitudinal evaluation of cancer-associated biomarkers before and after weight loss: Implications for cancer risk reduction. Faina Linkov, Dana H. Bovbjerg, Bret Goodpaster, Anna Lokshin, Diana Lenzner, Yan Lin, Ashley Felix, George Maxwell, James Delany.

A17   Regional failure after surgery of primary oral cancer is highly associated with poor survival. Yi-Ping Liu, Esther Chen, Kenneth W. Berean, Lewei Zhang, Catherine F. Poh.

A18   Detection rates of thyroid, breast, and prostate cancers by medical check-up programs for asymptomatic adults in Korea. Yoon-Ho Choi, Ok-Soon Jeong.

Imaging

A19   Label-free analysis of tissue polarity in live three-dimensional culture of breast epithelium by Raman imaging of lipid phase. Shuhua Yue, Juan Manuel Cárdenas-Mora, Lesley S. Chaboub, Sophie A. Lelièvre, Ji-Xin Cheng.

Intervention Studies

A20   Investigating the role of cell cycle proteins and CDK4/6 inhibitor PD0332991 in the redifferentiation of irreversible dysplasia. M. Carla Cabrera, Edgar S. Diaz-Cruz, Michael J. Pishvaian, Donald Muccio, Clinton Grubbs, Priscilla Furth.

Molecular Diagnostics

A22   Sensitive detection of mutant KRAS in colorectal tissue using the multiplex QuARTS™ assay. Rebecca Oldham-Haltom, Christine Leduc, Oliver Hunt, Mike Domanico, William Taylor, David Ahlquist, Graham Lidgard.

A23   Rare allele enrichment by DNA melting analysis. Luming Zhou, Carl Wittwer.

A24   Evaluation and validation of biomarkers for prostate cancer early diagnosis. Niradiz Reyes, Alfonso Bettin, Ceyla Causil, Ismael Reyes, Jan Geliebter.

Nanotechnology

A25   Informative cancer diagnostics based on microfluidics devices. Lidong Qin.

Novel Assay Technologies

A27   Comprehensive analysis of glycans on α1-acid glycoprotein from various cancer patients by MALDI-TOF-MS for assigning a prognostic predictor. Takayuki Asao, Toyo Nishimura, Takashi Hayashi, Hiroyuki Kuwano, Shin Yazawa.

Second Cancers

A28   DCIS disease-free survival in the population-based Wisconsin In Situ Cohort. Brian Sprague, Vicki McLaughlin, John Hampton, Polly Newcomb, Amy Trentham-Dietz.

Other

A29   The TMPRSS2:ERG gene fusion, ERG expression, and prostate cancer outcomes: A cohort study and meta-analysis. Rebecca E. Graff, Azra H. Ligon, Catherine Suppan, Richard Flavin, Howard D. Sesso, Jennifer R. Rider, Christopher Sweeney, Meir Stampfer, Michelangelo Fiorentino, Philip W. Kantoff, Martin Sanda, Andreas Pettersson, Edward Giovannucci, Eric L. Ding, Massimo Loda, Lorelei A. Mucci, Scott R. Bauer, Michael Pitt, Rosina T. Lis, Edward C. Stack, Neil E. Martin, Lauren Kunz, Kathryn Penney.

Cell, Molecular, and Tumor Biology

Angiogenesis and Invasion

A30   Investigation of imatinib mesylate effect on vestibular schwannoma tumor by using in vivo corneal angiogenesis model. Timucin Avsar, Ulas Yener, Emel Akgun, Askın Seker, Yasar Bayri, Turker Kilic.

A31   Effects of Pin1 inhibition on tumorigenicity of glioblastoma multiforme. Timucin Avsar, Kutay Deniz Atabay, Yıldız Taha Mehmet, Turker Kilic, Arzu Korkmaz Karabay.

Cancer Genetics/Gene Expression

A32   Genomic and epigenomic alterations in arsenic-related lung squamous cell carcinomas. Daiana D. Becker-Santos, Emily A. Vucic, Stephen Lam, Wan L. Lam, Victor D. Martinez.

A33   Modulation of gene expression by a cooked novel resistant starch in the colon of AOM-treated Fisher 344 rats. Yinsheng Zhao, Jovin Hasjim, Yongfeng Ai, Jay-lin Jane, Diane F. Birt.

Cell Growth Signaling Pathways

A35   A role for drug resistance in hepatocellular carcinoma: Upregulatation of CD133, activation of IGF-1R signaling, and IGF-1R nuclear translocation. Adam S. Bodzin, Zhengyu Wei, Reginald S. Hurtt, Cataldo Doria.

DNA Methylation/Epigenetics and Chromatin Regulation

A36   Identification of chromatin-based patterns across lung cancer grades. Brooke R. Druliner, Jonathan H. Dennis.

A37   Peripheral blood DNA methylation profiles are predictive of head and neck squamous cell carcinoma. Scott M. Langevin, Devin C. Koestler, Brock C. Christensen, John K. Wiencke, Heather H. Nelson, E. Andres Houseman, Carmen J. Marsit, Karl T. Kelsey.

A38   Thrombospondin 2 CpG methylation is a marker of clear cell ovarian carcinomas: Evaluation of a DNA methylation assay in archival tissue. Linda E. Kelemen, Martin Kobel, Angela Chan, Soreh Taghaddos, Irina Dinu.

A39   EGCG, a green tea polyphenol, can reverse methylation-related silencing of genes in human colon carcinomas. Jay Morris, Vondina R. Moseley, Katie Coleman, Michael Wargovich.

A40   Epigenetic modification of human colon cancer by the green tea polyphenol EGCG. Vondina R. Moseley, Jay Morris, Michael J. Wargovich.

Inflammation and Cancer Initiation and Promotion

A41   The ASK1/IKK signaling axis mediates crosstalk between inflammation and apoptosis. Mary C. Puckett, Erinn Goldman, Lisa Cockrell, Fadlo Khuri, Haian Fu.

A42   Autocrine-produced IL-6 and IL-8 are essential for the growth and maintenance of the transformed phenotype of basal-like breast cancer cells. Zachary C. Hartman, Anna Tsimelzon, Jamal Hill, Yun Zhang, Abhijit Mazumdar, Susan G. Hilsenbeck, Gordon Mills, Powel H. Brown.

A43   PPARδ promotes colonic inflammation and inflammation-associated tumorigenesis. Dingzhi Wang, Lixia Guo, Wei Ning, Raymond N. DuBois.

Oncogenes/Tumor Suppressor Genes

A44   Suppression of insulin-induced fatty acid synthase gene expression and colon cancer cell proliferation by members of the Krüppel-like family of transcription factors. Adam R. Brown, Rosalia C.M. Simmen, Frank A. Simmen.

Stem Cell Biology

A45   Targeting breast cancer stem cells using cancer preventive rexinoids. Jing Zhao, Yun Zhang, Jamal L. Hill, Abhijit Mazumdar, Powel H. Brown.

Other

A46   Glycolysis and oxidative phosphorylation in cervical cancer: Correlation with FDG PET/CT and its prognostic implication. Hyun Hoon Chung, Kidong Kim, Yong-Sang Song.

Clinical Prevention Trials by Organ Site

Breast Cancer

A47   Low-dose tamoxifen in the treatment of breast ductal intraepithelial neoplasia: Results of a monoinstitutional observational study on 985 patients. Aliana Guerrieri-Gonzaga, Matteo Lazzeroni, Giuseppe Viale, Andrea DeCensi, Bernardo Bonanni, Edoardo Botteri, Davide Serrano, Clara Varricchio, Nicole Rotmensz, Giorgia Bollani, Serena Mora, Chiara Montefrancesco, Alberto Luini.

A48   Pitfalls of using breast magnetic resonance imaging in an early-phase breast cancer chemoprevention trial of vitamin D among high-risk postmenopausal women. Laura L. Reimers, Dawn L. Hershman, Matthew Maurer, Kevin Kalinsky, Lois Brafman, Grace Kranwinkel, Katherine D. Crew.

Colon and Other Gastrointestinal Cancers

A50   Comparative effects of DFMO, sulindac, and DFMO and sulindac on human colon polyp cells determined using pathway analysis. Eugene Elmore, Vernon E. Steele, John Leslie Redpath.

A51   Set regulates β-catenin in gastric cancer. Hairong Shi.

Melanoma and Skin Cancer

A52   A phase III skin cancer chemoprevention study of DFMO in subjects with a history of nonmelanoma skin cancer (NMSC): Follow-up of NMSC events greater than 5 years post-study participation. Sarah M. Lamont, Kyungmann Kim, Thomas Havighurst, Eneida Mendonça, Gary S. Wood, Stephen Snow, Howard H. Bailey.

Prostate and Other Genitourinary Tract Cancers

A55   Polymorphic DNA repair genes XRCC1 and XRCC3 and the risk for cervical cancer. Fabricio Colacino Silva, Paulo D'Amora, Issamir Farias Saffar, João Paulo F.O. Kleine, Cristina Valleta Carvalho, Ana Maria Massad-Costa, Ismael D.C.G. Silva.

Trials in Progress: Clinical Intervention Trials

A56   Randomized, placebo-controlled, phase III trial of low-dose tamoxifen in women with intraepithelial neoplasia. Silvia Zanardi, Daniela Branchi, Antonio Ponti, Giorgio Cruciani, Cosimo D'Amico, Laura Cortesi, Fabio Falcini, Marcella Gulisano, Giovanni Giardina, Giuseppe Canavese, Massimo Calabrese, Andrea DeCensi, Matteo Puntoni, Sara Campora, Alessandra Argusti, Bernardo Bonanni, Aliana Guerrieri-Gonzaga, Harriet Johansson, Maria Grazia Pacquola, Giuseppe D'Aiuto.

A57   Randomized double-blind trial of a rational combination of anthocyanins and curcumin for colon cancer prevention in subjects with colorectal adenomas: MIRACOL study. Alessandra Argusti, Matteo Puntoni, Paolo Morazzoni, Andrea DeCensi, Gianni Coccia, Matteo Clavarezza, Cristiano Crosta, Emanuele Meroni, Giuseppe De Roberto, Daniela Branchi, Beatrice Gatteschi, Roberto Benelli.

A58   Green tea and silybin for breast cancer: A pilot presurgical study. Matteo Lazzeroni, Aliana Guerrieri Gonzaga, Andrea DeCensi, Bernardo Bonanni, Davide Serrano, Harriet Johansson, Sara Gandini, Fabio Bassi, Giancarlo Pruneri, Valentina Aristarco, Antonella Riva, Giovanna Petrangolini.

Epidemiology/Lifestyle Factors

Familial and Genetic Epidemiology

A59   Selenoprotein gene variants and risk of esophageal and gastric cancer in a Chinese population. Shih-Wen Lin, Neal D. Freedman, Philip R. Taylor, You-Lin Qiao, Christian C. Abnet, Paula Hyland, Nan Hu, Jin-Hu Fan, Kai Yu, Sanford M. Dawsey, Bill Wheeler, Ti Ding, Ze-Zheng Tang.

A60   Vitamin–D-related genetic variation, plasma vitamin D, and risk of lethal prostate cancer. Irene M. Shui, Meir J. Stampfer, Edward Giovannucci, Lorelei A. Mucci, Peter Kraft, Sara Lindstrom, Kathryn Penney, Katharina Nimptsch, Bruce W. Hollis, Rulla M. Tamimi, Elizabeth Platz.

A61   Prognostic relevance of genome-wide association studies-identified single nucleotide polymorphisms in primary breast cancer. Soley Bayraktar, Patricia A. Thompson, Suk Young Yoo, Kim-Anh Do, Aysegul A. Sahin, Banu Arun, Melissa L. Bondy, Abenaa M. Brewster.

A62   Tobacco exposure, risk for bladder cancer, and modification by NAT2 in different ethnic populations. Hozefa A. Divan, David Van Den Berg, Victoria K. Cortessis, Amit D. Joshi, Manuela Gago-Dominguez, Mariana C Stern, David V. Conti, Malcolm C. Pike, Yu-Tang Gao, Yong-Bing Xiang, Jian-Min Yuan.

A63   Genetic and environmental factors in cancer incidence: An updated analysis from the Nordic Twin Registry of Cancer. Lorelei Mucci, Jacob Hjelmborg, Jaakko Kaprio, Kamila Czene, Jennifer Harris, Hans-Olov Adami, Axel Skytthe.

A64   Effects of genetic polymorphisms of innate immunity genes on the noncardia gastric cancer risk. Jeongseon Kim, Young Ae Cho, Il-Ju Choi, Soo-Jeong Cho, Chan Gyoo Kim, Jong Yeul Lee, Young-Woo Kim.

A65   Does the lifetime number of ovulatory cycles predict the risk of breast cancer in BRCA1 and BRCA2 mutation carriers? Joanne Kotsopoulos, Ping Sun, Steven Narod.

A66   Apoptosis, cell cycle, DNA repair, immune, and metabolism pathway SNPs modify bladder cancer risk, recurrence, and survival. Angeline S. Andrew, Jiang Gui, Jason H. Moore, Margaret R. Karagas, Eben Pendleton, Alan R. Schned, Rebecca A. Mason, Asaf Wyszynski, Sam A. Tanyos, Karl T. Kelsey, Carmen J. Marsit, Michael S. Zens.

A67   The aromatase gene (CYP19A1) variants and circulating hepatocyte growth factor in postmenopausal women. <u>Jennifer H. Lin</u>, Shumin M. Zhang, Marc J. Gunter, JoAnn E. Manson, Kathryn M. Rexrode, Nancy R. Cook, Peter Kraft, Barbara B. Cochrane, Rowan T. Chlebowski, Gloria Y.F. Ho.

General Epidemiology and Biostatistics

A68   Insulin-like growth factor-1, insulin-like growth factor binding protein-3, and lobule type in the Nurses' Health Study II. <u>Megan S. Rice</u>, Rulla M. Tamimi, James L. Connolly, Laura C. Collins, Dejun Shen, Michael N. Pollak, Bernard Rosner, Susan E. Hankinson, Shelley S. Tworoger.

A69   The association between NSAID use and colorectal cancer mortality: Results from the Women's Health Initiative. <u>Anna E. Coghill</u>, Amanda I. Phipps, Jean Wactawski-Wende, Anthony A. Bavry, Dorothy Lane, Andrea LaCroix, Polly A. Newcomb.

A71   Risk factors for in situ breast cancer among postmenopausal women. <u>Cher M. Dallal</u>, Sarah J. Nyante, Gretchen L. Gierach, Mark E. Sherman, Yikyung Park, Allen R. Hollenbeck, Louise A. Brinton.

Obesity, Metabolism, and Cancer

A72   Patterns of cancer risk according to weight in early, middle, and older adult life. <u>Cari M. Kitahara</u>, Amy Berrington de Gonzalez, Neal D. Freedman, Yikyung Park, Philip S. Rosenberg, Patricia Hartge, Steven C. Moore.

A73   Body mass index, diet, and risk of non-Hodgkin lymphoma in the Nurses' Health Study and Health Professionals Follow-Up Study. <u>Kimberly A. Bertrand</u>, Edward Giovannucci, Shumin M. Zhang, Brenda M. Birmann.

A74   Glycated hemoglobin and cancer incidence and mortality in the Atherosclerosis in Communities (ARIC) Study, 1990-2006. <u>Corinne E. Joshu</u>, Selvin Elizabeth, Anna E. Prizment, Paul J. Dluzniewski, Andy Menke, Aaron R. Folsom, Josef Coresh, Hsin C. Yeh, Frederick L. Brancati, Elizabeth A. Platz.

A75   Calorie restriction and rapamycin, but not exercise, inhibit mammary tumor growth in a mouse model of postmenopausal obesity. <u>Leticia Nogueira</u>, Sarah M. Dunlap, Nikki A. Ford, Stephen D. Hursting.

A76   Diabetes and risk of bladder cancer among postmenopausal women in the Iowa Women's Health Study. <u>Anna E. Prizment</u>, Jian-Min Yuan, Kristin E. Anderson, Aaron R. Folsom.

A77   Weight gain and weight cycling and risk of endometrial cancer. <u>Victoria L. Stevens</u>, Eric J. Jacobs, Juzhong Sun, Marjorie M. McCullough, Alpa V. Patel, Mia M. Gaudet, Lauren R. Teras, Susan M. Gapstur.

A78   Body mass index and risk of incident gallbladder cancer: Results from two large U.S. prospective cohort studies. <u>Peter T. Campbell</u>, Christina C. Newton, Cari Kitahara, Alpa V. Patel, Yikyung Park, Patricia Hartge, Susan M. Gapstur.

A79   Body shape throughout life, long-term weight cycling, and risk of multiple myeloma in the Nurses' Health Study. <u>Brenda M. Birmann</u>, Catherine A. Suppan, Graham A. Colditz.

Other Molecular Epidemiology

A80, PR5 Biomarkers of inflammation predict colorectal cancer risk among women: Results from the Women's Health Initiative Observational Study (WHI-OS) cohort. <u>Adetunji T. Toriola</u>, Marc Gunter, David R. Maneval, Shirley A.A. Beresford, Cornelia M. Ulrich, David Ting-Yuan Cheng, Marian L. Neuhouser, Mark Wener, Yingye Zheng, Elissa C. Brown, Joshua W. Miller, Xiaoling Song, Lynn B. Bailey.

A81   Germline polymorphisms associated with survival in patients with non-small cell lung cancer. <u>Matthew B. Schabath</u>, Eric B. Haura, Zachary J. Thompson, David Fenstermacher, Kristen A. Jonathan, Gerold Bepler, Anna R. Giuliano.

A82   Can telomere length be modified in healthy people? <u>Jill R. Washechek-Aletto</u>, Corinne Engelman, Stephen N. Thibodeau, Gloria M. Petersen, Julie M. Cunningham, Lisa A. Boardman, Seung M. Opyrchal, Megan M. Devine, Kimberly B. Viker, Ruth A. Johnson, Halcyon G. Skinner, Songwon Seo, Ronald Gangnon, Kristin Litzelman.

A83   Host phenotype characteristics and MC1R in relation to early-onset basal cell carcinoma. Leah M. Ferrucci, Brenda Cartmel, Annette M. Molinaro, Patricia B. Gordon, David J. Leffell, Allen E. Bale, Susan T. Mayne.

A84   Reduced LINE-1 methylation in peripheral blood mononuclear cells is associated with risk of melanoma in families segregating CDKN2A germline mutations. P.L. Hyland, L.S. Burke, R.M. Pfeiffer, M.A. Tucker, A.M. Goldstein, X.R. Yang.

A85   Paternal age at birth is associated with leukocyte telomere length in the Nurses' Health Study. Jennifer Prescott, Jiali Han, Immaculata De Vivo.

A86   Interaction of nitrate and folate on the risk of breast cancer among postmenopausal women. Maki Inoue-Choi, Mary H. Ward, James R. Cerhan, Peter J. Weyer, Kristin Anderson, Kim Robien.

A87   The association between polymorphisms in hormone metabolism and growth factor genes and mammographic density in Norwegian postmenopausal women. Merete Ellingjord-Dale, Eunjung Lee, Ali Ozhand, Elisabeth Couto, Samera Qureshi, Solveig Hofvind, Lars Akslen, Giske Ursin.

A89   Concentrations of IGF-I and IGFBP3 and pancreatic cancer risk in the European Prospective Investigation into Cancer and Nutrition (EPIC). Sabine Rohrmann, Verena A. Grote, Becker Susen, Sabine Rinaldi, Bas Bueno-de-Mesquita, Rudolf Kaaks.

A90   Relationship of serum estrogens and estrogen metabolites with postmenopausal breast cancer risk. Roni T. Falk, Gretchen L. Gierach, Xia Xu, Joanne F. Dorgan, Timothy D. Veenstra, Louise A. Brinton.

Other Risk Factors

A92   Risk factors for ovarian cancer by tumor aggressiveness. Elizabeth M. Poole, Susan E. Hankinson, Shelley S. Tworoger.

A93   Daily aspirin use and cancer mortality in a large United States cohort. Eric J. Jacobs, Christina C. Newton, Michael J. Thun, Susan M. Gapstur.

A94   ABO blood group and risk of renal cell cancer. Hee-Kyung Joh, Eunyoung Cho, Toni K. Choueiri.

A95   The impact of fertility drug use, infertility, and lifetime ovulation on ovarian cancer risk. Michelle Kurta, Brenda Diergaarde.

A96   The influence of infectious mononucleosis on prostate specific antigen concentration as a marker of prostate involvement during infection. Siobhan Sutcliffe, Lori J. Sokoll, Patrick C. Walsh, Jonathan M. Zenilman, Steven B. Cersovsky, Remington L. Nevin, Ratna Pakpahan, Debra J. Elliott, Cole R. Stephen, Angelo M. De Marzo, Charlotte A. Gaydos, William B. Isaacs, William G. Nelson.

A97   Risk of biochemical recurrence after radical prostatectomy among men using 5α-reductase inhibitors and alpha blockers. Teemu J. Murtola, Teuvo L.J. Tammela.

Other

A98   The association between coronary artery calcification and colorectal adenomas. Moon Hee Yang, Juhee Cho, Yoon Ho Choi, Hee Jung Son, Jong Chul Rhee, Jidong Sung.

A99   Novel method to aid clinicians and users in choosing smartphone applications for cancer prevention and management. Ralph Passarella, Melissa McKittrick, Tyler Miller, Cheryl Anderson.

Preclinical and Translational Prevention Studies by Organ Site

Breast Cancer

A101   Metformin prevents mammary tumors in p53-null mammary gland mice. Abhijit Mazumdar, Jamal L. Hill, Yun Zhang, Frances S. Kittrell, Daniel Medina, Powel Brown.

A103   The sythetic triterpenoid CDDO-methyl ester targets tumor-associated macrophages to delay carcinogenesis in the PyMT model of estrogen receptor negative breast cancer. Kim M. Tran, Renee Risingsong, Darlene Royce, Charlotte R. Williams, Michael B. Sporn, Karen Liby.

A104   Leptin and leptin receptor genes in relation to premenopausal breast cancer incidence and grade in Caucasian women. Fangyi Gu, Peter Kraft, Megan Rice, Karin B. Michels.

Colon and Other Gastrointestinal Cancers

A105   Blood donation in relation to colorectal cancer risk in men. Xuehong Zhang, Jing Ma, Kana Wu, Andrew T. Chan, Charles S. Fuchs, Edward L. Giovannucci.

Lung Cancer

A106   Induction of synthetic lethality in mutant KRAS cells for lung cancer prevention and therapy. Shaoyi Huang, Xiaoyang Ren, Haizhen Wang, Xiangwei Wu.

Ovarian and Other Gynecological Cancers

A107   Ovarian cancer risk factors by tumor dominance, a surrogate for cell of origin. Kathryn L. Terry, Megan Murphy, Susan E. Hankinson, Christopher P. Crum, Daniel W. Cramer, Shelley S. Tworoger.

A108   Reproductive and hormonal factors in relation to risk of fatal versus non-fatal invasive epithelial ovarian cancer. Melissa A. Merritt, Elizabeth M. Poole, Shelley S. Tworoger, Mary De Pari, Daniel W. Cramer, Kathryn L. Terry.

A110   Loop electrosurgical excision procedure: A strategy for reducing the morbidity and mortality of cervical cancer in Nigeria. Olubunmi Olabisi Adetule.

Pancreatic Cancer

A111   Endogenous conversion of n-6 PUFAs to n-3 PUFAs prevents progression of K-Ras-activated pancreatic lesion development to pancreatic ductal carcinoma in Fat-1 transgenic mice. Altaf Mohammed, Naveena B. Janakiram, Misty Brewer, Ashley Duff, Stan Lightfoot, Richard S Brush, Robert E Anderson, Chinthalapally V. Rao.

A112   Postoperative prognostic predictors of pancreatic ductal adenocarcinoma: Clinical analysis and immunoprofile on tissue microarrays. Joo Kyung Park, Se Hoon Lee, Ji Kon Ryu, Yong-Tae Kim, Yong Bum Yoon, Min A. Kim.

Prostate and Other Genitourinary Tract Cancers

A114   Dietary magnesium and calcium intake and risk of prostate cancer in Caucasian and African American men. Stephanie Rico, Michele Forman, Carol Etzel, Sara S. Strom, Ashraful Hoque.

Other Organ Sites

A115   Natural history of HPV in cervical tumors: Identification of genotypes from formalin-fixed cervical tissues. Mulazim Hussain Bukhari, Kanwal Saba, Maidah Zainab, Ahmad Ghayyor, Ishtiaq Qadri.

Advances in Tobacco Prevention, Cessation, and Harm Reduction Strategies
Room 258 A-C

Chairperson: Ellen R. Gritz, University of Texas MD Anderson Cancer Center, Houston, TX

This session will cover hot topics and recent advances in tobacco research and policy, from youth primary prevention to the federal regulation and evaluation of tobacco products. Dr. Gritz will provide an overview of smoking cessation, focused on the oncology patient and survivor, highlighting research on the effects of smoking on oncology outcomes and the need for cessation resources in cancer centers. Dr. Prokhorov will describe novel technology-assisted tobacco prevention and cessation interventions for youth, including mobile technologies, video games, and internet curricula, and evaluation of their success in achieving long-term change. Dr. Hatsukami will describe new activities under the Family Smoking Prevention and Control Act, which empowers the FDA to regulate tobacco products. Standards that may significantly reduce the prevalence of tobacco use and resulting mortality and morbidity include regulating the attractiveness, addictiveness, and toxicity of tobacco products. Dr. Shields will close with an overview of scientific evidence needed to evaluate tobacco products purporting to reduce risk, to guide the setting of performance standards to reduce the toxicity and harm of such products.

Smoking cessation: An imperative for cancer patients and survivors [PL03-01]*
Ellen R. Gritz

Using technology for early cancer prevention among youth [PL03-02]*
Alexander V. Prokhorov, University of Texas MD Anderson Cancer Center, Houston, TX

Innovative policies to reduce tobacco use and harm [PL03-03]*
Dorothy K. Hatsukami, University of Minnesota, Minneapolis, MN

Conceptual frameworks for the comprehensive evaluation of tobacco products
Peter G. Shields, Georgetown Lombardi Comprehensive Cancer Center, Washington, DC

*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)

Concurrent Session 3
Aerodigestive Cancer Prevention: Lung, Head and Neck, and Esophagus
Room 257

Chairperson: David P. Carbone, Vanderbilt-Ingram Cancer Center, Nashville, TN

Upper aerodigestive cancers are unique among the common cancers in that large, high-risk populations are relatively easy to identify, but these risks remain high for decades after behavior modification such as smoking cessation. In spite of large clinical trials attempting to alter the risk of this population, little progress has been made. However, our molecular understanding of the drivers of preneoplasia is rapidly improving, and the biomarkers needed to identify them in a given patient are being defined. In this session, we will address the molecular biology underlying neoplastic development in upper aerodigestive tract cancers, and targeted therapeutics under development designed to alter the risk of oncogenesis in these sites.

Introduction
David P. Carbone

Rolling out personalized cancer prevention in the lung and head and neck [CN03-02]*
Scott M. Lippman, University of Texas MD Anderson Cancer Center, Houston, TX

Chemoprevention of lung cancer by metformin [CN03-03]*
Phillip A. Dennis, National Cancer Center, Bethesda, MD

The evolving landscape of human neoplasia
Brian J. Reid, Fred Hutchinson Cancer Research Center, Seattle, WA

A prospective study of systemic markers of inflammation and risk of esophageal adenocarcinoma in a Barrett's esophagus cohort [PR-03]**
Sheetal Hardikar, University of Washington, Seattle, WA

Concurrent Session 4
Prevention of Breast and Prostate Cancer: Basic Science to Clinical Intervention
Room 259

Chairperson: Karen T. Liby, Dartmouth Medical School, Hanover, NH

Despite years of dedicated research, the practical prevention of breast and prostate cancer has been disappointing. Antiestrogens and aromatase inhibitors can significantly reduce the risk of ER-positive breast cancer, but new drugs are needed to prevent the development of ER-negative breast cancer. Preclinical studies using novel compounds in relevant animal models will be presented. It is becoming increasingly clear that breast cancer is not one disease. Classification by tumor subtypes may not only improve treatment options, but also facilitate better understanding of risk factors. Similarly, underlying genetic background may reveal those who are most at risk and/or respond to a chemoprevention agent. Thus, the effects of heterogeneity at the host and tumor level will be discussed. Finally, an update on recent findings on the risk of prostate cancer and risk of recurrence after treatment will be provided.

New drugs for the chemoprevention of experimental breast cancer [CN04-01]*
Karen Liby

Tumor and genomic heterogeneity in breast cancer prevention [CN04-02]*
Christine B. Ambrosone, Roswell Park Cancer Institute, Buffalo, NY

Prevention of prostate cancer
Elizabeth A. Platz, Johns Hopkins University School of Public Health, Baltimore, MD

Physical activity and risk of breast cancer in the European Prospective Investigation into Cancer and Nutrition (EPIC): Results for different tumor subtypes [PR-04]**
Karen Steindorf, German Cancer Research Center (DKFZ), Heidelberg, Germany

*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)
**An extended abstract for this presentation is available in the Proffered Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)

Using Team Science to Make Advances in Cancer Prevention
Room 258 A-C

Chairperson: Ian M. Thompson, Jr., University of Texas Health Science Center, San Antonio, TX

Identifying unmet clinical questions involves a rigorous process that begins with discovery and leads to development, validation, and finally application in support of unmet clinical needs. These expectations can be expedited by establishing a process for prevention science development using a multidisciplinary and multi-institutional approach. The presentations in this session illustrate multidisciplinary teams that serve as a model for the conduct of translational research in cancer prevention.

Early Detection Research Network – Biomarker discovery and validation: A team approach [PL04-01]*
Ian M. Thompson, Jr.

Oral iloprost for the chemoprevention of lung cancer: A multicenter, SPORE-initiated trial [PL04-02]*
Robert L. Keith, University of Colorado, Denver, CO

Systems approach to cancer prevention
Gordon B. Mills, University of Texas MD Anderson Cancer Center, Houston, TX

*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)

Concurrent Session 5
Biomarkers of Precancer
Room 257

Chairperson: Sudhir Srivastava, National Cancer Institute, Rockville, MD

The potential of molecular biomarkers to significantly improve the detection of localized cancer provides an unprecedented opportunity to improve diagnosis, enhance treatment, and reduce mortality. Research on cancer biomarkers driven by high-throughput technologies has just begun to explore the utility of imaging, proteomics, and genomic analysis of tumors or other specimens. These technologies have the potential to identify small and early lesions that have not been readily accessible in clinical practice through more conventional detection methods. The challenge is how to identify more effective biomarkers or technologies that can provide an earlier indication of a disease with a higher positive predictive value than presently utilized methods. Fortunately, the past decade has witnessed a new revolution in biological science. In this revolution, investigators now have the opportunity to study thousands of different biological molecules in a single experiment or in a series of high-throughput studies. This rate of characterization allows for the rapid comparison of samples from many different patients with the hope of finding species that are directly related to the disease state. This has fueled expectations in the field, generating hopes for biomarker-based diagnostics in the near future. This concurrent session will describe some of the recent progress made in realizing molecular diagnostics for clinical use.

An overview of biomarker discovery and development [CN05-01]*
Sudhir Srivastava

Discovery and development of biomarkers in lung and mesothelioma
Harvey Ira Pass, New York University Langone Medical Center, New York, NY

New approach to developing and validating biomarkers for prostate cancer
Mark A. Rubin, Weill Cornell Medical College, New York, NY

Predictive and prognostic methylated gene markers for breast cancer [PL05-04]*
Saraswati V. Sukumar, Johns Hopkins University School of Medicine, Baltimore, MD

Biomarkers of inflammation predict colorectal cancer risk among women: Results from the Women's Health Initiative Observational Study (WHI-OS) cohort [PR-05]**
Adetunji T. Toriola, National Center for Tumor Diseases (NCT) and German Cancer Research Center (DKFZ), Heidelberg, Germany

Concurrent Session 6
Results from Early-Phase Clinical Trials from the Chemoprevention Consortium
Room 259

Chairperson: Leslie G. Ford, National Cancer Institute, Bethesda, MD

The development and testing of agents to reduce cancer incidence is a long and expensive process requiring tens of thousands of at-risk individuals followed for many years. In order to get early insights for the most promising agents, the National Cancer Institute funds a robust early-phase clinical trials program (the Chemoprevention Consortium) to investigate the ability of drugs and other agents to modulate biomarkers associated with the carcinogenic process. The ultimate goal is to identify the most promising agents for definitive phase III testing. This session will highlight some of the finding from recently completed studies.This will be followed by a provocative critique with an emphasis on lessons learned and next steps to make cancer chemoprevention a reality.

Phase IIA trial of sulindac in individuals at increased risk for melanoma [CN06-01]*
Clara Curiel-Lewandrowski, Arizona Cancer Center, Tucson, AZ

Phase IB randomized, double-blinded, placebo-controlled, dose escalation study of Polyphenon E in women with a history of hormone receptor-negative breast cancer [CN06-02]*
Katherine D. Crew, Columbia University Irving Comprehensive Cancer Center, New York, NY

Randomized double-blinded phase II trial of esomeprazole versus esomeprazole plus two doses of aspirin in Barrett's esophagus patients [CN06-03]*
Gary W. Falk, Hospital of the University of Pennsylvania, Philadelphia, PA

Critique and "What's the next step?"
Frank L. Meyskens, Jr., University of California Irvine, Orange, CA

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Behavioral and Social Science

Bioethics

B1   Deciding between ethic standards for cancer screening. Francois Eisinger.

Diet, Physical Activity, and Energy Balance

B2   Effects of individual and combined diet and exercise intervention in postmenopausal women on adiponectin and leptin. Clare Abbenhardt, John D. Potter, Caitlin E. Mason, Liren Xiao, George L. Blackburn, Carolyn Bain, Cornelia M. Ulrich, Anne McTiernan, Kristin L. Campbell, Catherine M. Alfano, Mark H. Wener, Catherine Duggan, Karen E. Foster-Schubert, Angela Kong.

B3   Intake of restaurant foods and soft drinks in relation to weight gain and obesity among young African American women. Deborah A. Boggs, Lynn Rosenberg, Patricia F. Coogan, Kepher H. Makambi, Lucile L. Adams-Campbell, Julie R. Palmer.

B4   Calorie restriction prevents the development of pancreatic cancer in Kras; Pdx-1Cre mice. Susan Lanza-Jacoby, Guang Yan, Glenn Radice, Evelyn Skoumbourdis, Jeffrey Baliff.

B5   Lifetime adiposity and risk of pancreatic cancer in the NIH-AARP diet and health. Rachael Z. Stolzenberg-Solomon, Catherine Schairer, Albert Hollenbeck, Debra T. Silverman.

B7   Comparison of diet diversity scores for fruit and vegetables and plasma carotenoids levels in the cross-sectional study of the European Prospective Investigation into Cancer and Nutrition (EPIC). Frederike L. Buchner, H. Bas Bueno-de-Mesquita, Ellen Kampman, Marga C. Ocke, Mazda Jenab, Hendriek C. Boshuizen, Martine M. Ros, Lambertus A.L.M. Kiemeney.

B8   Blood lipid concentrations and colorectal adenomatous polyps: A systematic review, meta-analysis, and meta-regression of endoscopy studies, 1986-2010. Michael N. Passarelli, Polly A. Newcomb, Fredric M. Wolf.

Diffusion and Dissemination

B9   Smartphone applications as a source of cancer information. Ambarish Pandey, Sasmit Sarangi, Jawahar Kopparam, Bhaskar Roy.

Genetic Testing and Counseling

B10   Factors predicting decisional conflict and p53 genetic testing intention among those at risk of Li-Fraumeni syndrome. Shelly R. Hovick, Rebecca Pentz, Michelle A. Jackson, Jasmina Bojadzieva, Louise C. Strong, Susan K. Peterson.

B11   Routine use of a screening questionnaire improves detection of individuals that may be at risk of hereditary cancer. Margot Koeneman, Arnold-Jan Kruse, Encarna Gomez-Garcia, Cynthia Gubbels, Simone Sep, Brigitte Slangen, Heleen van Beekhuizen, Toon Van Gorp, Roy Kruitwagen.

Health Disparities

B12   Associations between invasive breast cancer with and without a DCIS component and breast cancer risk factors in African American and European American women. Melanie Ruszczyk, Gary Zirpoli, Karen Pawlish, Patricia Masso-Welch, Christine B. Ambrosone, Elisa Bandera, Dana H. Bovbjerg, Lina Jandorf, Chi-Chen Hong, Helena Hwang, Gregory Ciupak, Warren Davis, Susan E. McCann.

B13   Widening socioeconomic disparities in cervical cancer mortality among women in 26 states: 1993-2007. Edgar P. Simard, Jiemin Ma, Rebecca Siegel, Ahmedin Jemal.

B14   Racial differences in colorectal cancer surveillance in South Carolina. Marvella E. Ford, Nestor F. Esnaola, Chris Finney, Katherine R. Sterba, Melanie S. Jefferson, Kent Armeson, Jane Zapka.

B15   Distribution of HPV genotypes in cervical intraepithelial lesions and cervical cancer in Tanzanian women. Adriana Vidal, Susan K. Murphy, Brenda Hernandez, Olola Oneko, Francine Overcash, Cathrine Hoyo.

B16   Ethnic differences in the psychometric properties of social networks and cancer knowledge. Jennifer M. Jabson, Shioban Torres, Deborah Bowen.

B17   Racial/ethnic variation in colon cancer surveillance among individuals with a family history of colon cancer. Rohit P. Ojha, Ewout Steyerberg, Sapna Syngal.

Prevention Behaviors

B18   Race and trust as predictors of willingness to recommend HPV vaccination. Hayley S. Thompson, Jennifer Erb-Downward, Alexis Stevenson, Bruce Rapkin.

B19   Mouth cancer awareness in Grampian region of Scotland, UK. Tatiana V. Macfarlane, Claudia Cunningham, Iain Bovaird, Rochelle Morgan, Ray Watkins.

B20   Access to dental service in an urban low-income community and its impact on oral cancer prevention. Keith Hau, Samson Ng, Yi-Ping Liu, Christopher Zed, Doreen Littlejohn, Catherine Poh.

Psychoneuroimmunology and Related Factors

B21, PR7 Stress management improves prevention relevant outcomes among women at risk for breast cancer. Bonnie A. McGregor, Denise L. Albano, Emily D. Dolan, Rachel M. Ceballos.

Quality of Life/Late Effects/Survivorship

B22   Fatigue among long-term survivors of breast cancer: A prospective cohort study with longitudinal follow-up. Wendy Y. Chen, Michelle D. Holmes, Susan E. Hankinson.

B23   Health care access and utilization of adolescent and young adult cancer survivors. Anne C. Kirchhoff, Courtney Rees Lyles, Mark N. Fluchel, Wendy Leisenring.

B24   Common and persistent adverse outcomes following prostate cancer treatment: Findings from the Michigan Prostate Cancer Survivor Study. May Darwish Yassine, Glenn Copeland, John T. Wei, Raymond Y. Demers.

B25   Cancer survival by stage among Koreans. Young Mog Shim, Myung-Hee Shin.

B26   Vaginal Health Assessment Study for breast cancer survivors. Elena I. Sutherland, Lei Feng, Lonzetta L. Newman, Elise Donaville Cook.

Screening and Early Detection

B27   Influence of fluorescence visualization on screening decisions in the general dental office. Denise M. Laronde, P. Michele Williams, Samson Ng, Catherine F. Poh, T. Greg Hislop, Lewei Zhang, Miriam P. Rosin.

B28   Married couples' reasons for failing to screen for skin cancer. Carolyn Heckman, Susan Darlow, Teja Munshi, Sharon Manne.

B29   Screening and communication with physicians for women with Lynch syndrome: Findings from a qualitative study. Allison M. Burton, Charlotte C. Sun, Molly S. Daniels, Stephanie Boyd-Rogers, Patrick M. Lynch, Karen H. Lu, Susan K. Peterson.

B31   Knowledge of cervical cancer screening among market women in sub-Saharan Africa: Nigerian experience. Yemisi Cecilia Gold.

B32   Interactive, automated phone outreach encourages health plan members to have recommended mammograms and leads to early breast cancer detection. Lisa Freeman, Janet Powers.

B33   Cancer survivors as messengers. François Eisinger, Jérôme Viguier, Xavier Pivot, Jean-Yves Blay, Yvan Coscas, Claire Roussel, Jean-François Morère.

Tobacco

B36   Respiratory symptoms after smoking cessation among college students. Karen S. Calabro, Alexander V. Prokhorov.

B37   Ethnic differences in smoking rate, nicotine dependence, and cessation-related variables among adult smokers in Hawaii. Thaddeus A. Herzog, Pallav Pokhrel, Crissy T. Kawamoto.

B38   Factors associated with little cigar and cigarillo use among college students. Kymberle L. Sterling, Carla J. Berg, Akilah N. Thomas.

B39   Daily assessments of reasons for cigarette smoking among light and heavy smokers. Susan Darlow, Marci Lobel.

Animal Models of Carcinogenesis and Chemoprevention

B40   Chemoprevention potential of grape seed extract in azoxymethane-induced colon tumorigenesis in the A/J mouse model. Molly Derry, Velmurugan Balaiya, Anil Jain, Mallikikarjuna Gu, Sangeeta Shrotriya, Rajesh Agarwal, Chapla Agarwal.

B41   A mouse model for inflammation-driven lung tumorigenesis. Tamene Melkamu, Xuemin Qian, Gerry O'Sullivan, Fekadu Kassie.

B42   Lack of chemopreventive effects of metformin in azoxymethane-induced rat colon carcinogenesis. Chinthalapally V. Rao, Naveena B. Janakiram, Altaf Mohammed, Venkateshwar Madka, Li Qian, Misty Brewer, Ashley Duff, Yuting Zhang, Vernon E. Steele.

B43   The vitamin D receptor and retinoid X receptor-alpha expression related to DNMT levels in a murine model of colitis. Rebecca Knackstedt, Vondina Moseley, Jay Morris, Michael Wargovich.

B45   Inhibitory effects of fermented Korean red ginseng on *Helicobacter pylori*-induced gastric inflammation and carcinogenesis. Eun-Hee Kim, Kyung-Sook Hong, Ki-Seok Choi, Chan Young Ock, Hua Hong, Young-Min Han, Nam-Soo Paek, Sung-Soo Kim, Ki Baik Hahm.

B46   Dietary acrylamide differentially modulates azoxymethane-induced F344 rat colon tumor formation and ectopic growth of human colon tumor cells in nude (nu/nu) mice. Jayadev Raju, Jennifer Roberts, Chandni Sondagar, Don Caldwell, Stephen Hayward, Rekha Mehta.

B48   Inhibition of recurrence of craniopharyngiomas with imatinib mesylate-loaded poly(lactide-co-glycolide) (PLGA) microspheres. Timucin Avsar, Emel Akgun, Oksan Karal Yılmaz, Manolya Kukut, Kemal Baysal, Yasar Bayir, Askın Seker, Turker Kilic.

B49   Prevention of colitis-associated colorectal cancer with 8-hydroxydeoxyguanosine. Young-Min Han, Chan Young Ock, Eun-Hee Kim, Hua Hong, Kyung-Sook Hong, Ki-Seok Choi, Ki Baik Hahm, Myung-Hee Chung.

B50   ANC in urine and tissues of untreated rats and those fed sodium nitrite. Muhammad M. Anwar, Lin Zhou, Sidney S. Mirvish.

Carcinogenesis

DNA Damage and Repair Mechanisms

B51   Genetic variation in nucleotide excision repair pathway genes, pesticide exposure, and prostate cancer risk. Kathryn Hughes Barry, Tongzhang Zheng, Michael C.R. Alavanja, Sonja I. Berndt, Stella Koutros, Gabriella Andreotti, Dale P. Sandler, Laurie A. Burdette, Meredith Yeager, Laura E. Beane Freeman, Jay H. Lubin, Xiaomei Ma.

B52   The role of p38 activation in nucleotide excision repair in human skin. Perry Christian, John D'Orazio.

B53   Chromatin remodeling as a new target for cancer chemoprevention. Guang Peng, Mei-Ren Pan, Shiaw-Yih Lin.

Environmental and Radiation Carcinogenesis

B54   Reproductive status at first diagnosis influences risk of radiation-induced second primary contralateral breast cancer in The WECARE Study. Jennifer D. Brooks, Duncan C. Thomas, Robert W. Haile, Susan A. Smith, Marinela Capanu, Jonine L. Bernstein, Roy E. Shore, John D. Boice, Marilyn Stovall, Anne S. Reiner, Leslie Bernstein, Esther M. John, Charles F. Lynch, Lene Mellemkjaer, Julia A. Knight.

B55   Dietary cadmium intake and risk of invasive breast cancer in the VITAL cohort. Scott V. Adams, Polly A. Newcomb, Emily White.

B56   Environmental carcinogens in the President's Cancer Panel report. Richard W. Clapp.

Infections and Carcinogenesis

B57   Long-term exposure of colonic epithelial cells to *Enterococcus faecalis*-infected macrophages causes cellular transformation. Xingmin Wang, Mark M. Huycke.

B58   *Enterococcus faecalis*-infected macrophages produce tumor necrosis factor-α and induce netrin-1 expression in colonic epithelial cells. Yonghong Yang, Xingmin Wang, Danny R. Moore, Mark M. Huycke.

Tumor Promotion and Progression

B59   Targeting metabolic enzymes in cancer prevention: Mechanistic insight into reciprocal regulation of isoforms of pyruvate kinase and isocitrate dehydrogenase in the early stage of cancer development. Delira F. Robbins, Holly VanRemmen, Arlan Richardson, David B. Wang, Stephan N. Witt, Ronald L. Klein, Yunfeng Zhao, Jennifer A. Wittwer, Fei Wang, Sarah Codarin, Xinggui Shen, Christopher G. Kevil, Magdalena L. Circu, Tak Yee Aw, Ting Ting Huang.

B60   Overexpression of VCAM-1 promotes tumor progression and drug resistance in breast cancer. Tzu-Lei Kuo, Ming-Feng Hou, Kuang-hung Cheng.

Chemoprevention and Biological Therapies

Anti-inflammatory Therapy

B61   Postpartum mammary gland involution drives DCIS progression through collagen and COX-2, identifying a target for intervention. Traci R. Lyons, Jenean O'Brien, Matthew Conklin, Patricia Keely, Virginia Borges, Pepper Schedin.

B62   Differential influence of vitamin D on the tumor-promoting eicosanoid PGE 2. Wenyi Qin, Julie Dahlman, Lessard Rebecca, Edward Sauter.

Combination Chemoprevention

B63   Synergistic combination between resveratrol and tanshinone I for effective prevention of pancreatic cancer. Yi Gong, Hamid M. Abdolmaleky, Linglin Li, Jin-Rong Zhou.

B64   A novel chemoprevention strategy using nanotechnology-based delivery of combinations of piroxicam, curcumin, and sulforaphane (PCS) on human pancreatic cancer cell lines. Sunil Prabhu, Dhruvitkumar Sutaria, Balgangadhar Karthik Grandhi.

Drug Design and Optimization

B65   The anticancer activities exhibited by nanospecies assembled by biomimetic molybdenum complex. Xiaoming Lu.

Mechanisms of Chemoprevention

B67   Curcumin induces stabilization of Nrf2 protein by decreasing the activity of Cullin3-Rbx1 E3 ubiquitin ligase. Jun-Wan Shin, Young-Joon Surh.

B68   Curcumin-induced expression of 15-hydroxyprostaglandin dehydrogenase in normal gastric mucosa RGM-1 cells: Possible involvement of AP-1. Young Wook Lee, Ji-Hye Jang, Jong-Min Park, Young-Joon Surh, Hye-Kyung Na.

B69   Cellular neutral lipid content is a novel biomarker of cancer preventive activity. Ivan P. Uray, Reid Bissonnette, Powel H. Brown.

B70   Inhibition of nuclear bile acid receptor FXR as a target in prevention of esophageal adenocarcinoma. Baoxiang Guan, Hao Li, Zhengduo Yang, Ashraful Hoque, Xiaochun Xu.

B72   Resolvin D1, derived from n-3 polyunsaturated fatty acid, stimulates efferocytosis and protects macrophages from oxidative stress-induced apoptosis. Ha-Na Lee, Joydeb Kumar Kundu, Jun-Wan Shin, Young-Nam Cha, Young-Joon Surh.

B73   A novel chemopreventive molecular mechanism of selenium: p53-mediated DNA repair. Young Rok Seo.

B74   EGCG inhibits cancer invasion by regulating tumor-stromal crosstalk in oral squamous cell carcinoma. Jung Yoon Bae, Sook Moon, Eun Kyoung Kim, Jin Kim.

B75   Resveratrol and its analogues as chemopreventive and anticancer agents in prostate cancer: Epigenetic mechanisms of action. Steven J. Dias, Kun Li, Swati Dhar, Marina Ivanovic, Agnes M. Rimando, Anait S. Levenson.

B76   Synthetic triterpenoids as candidate drugs for cancer prevention and treatment. Anna Rita Cantelmo, Ilaria Sogno, Rossella Calò, Elena Magnani, Giacomo Viggiani, Michael B. Sporn, Adriana Albini.

Natural Product-based Agents

B77 **Polyphenol-rich sweet potato greens extract inhibits proliferation and induces apoptosis in prostate cancer cells in vitro and in vivo.** <u>Sushma Reddy Gundala</u>, Prasanthi Karna, Ritu Aneja.

B78 **Evaluation of letrozole for the prevention and inhibition of tumor growth in human cervical cancer xenograft mouse models.** Judith A. Smith, Jing Hong Chen, Anjali Gaikwad, Lata Mathew, <u>Justin M. Julius</u>, John L. Dalrymple, Robert L. Coleman.

B79 **Evaluation of active hexose correlated compound (AHCC) for the prevention or delay of tumor growth in human cervical cancer xenograft model.** Judith A. Smith, Lata Mathew, Anjali Gaikwad, Mona Jaffari, <u>Justin M. Julius</u>, Michael Frumovitz, John L. Dalrymple.

B81 **Prostate 5LX® inhibits proliferation of prostate cancer cells through alteration of inflammatory pathways.** Peiying Yang, Carrie Cartwright, Jibin Ding, <u>Robert Newman</u>.

B82 **Two factors contribute to negative results of a phase-IIB chemoprevention trial of Bowman-Birk inhibitor concentrate on oral leukoplakia.** <u>Thomas H. Taylor</u>, Ann R. Kennedy, Marjorie Perloff, Frank L. Meyskens.

B83 **Isoflavones from phytoestrogens and cervical cancer risk: A nested case-control study.** <u>Woong Ju</u>, Seung Cheol Kim, Nam Hee Kim, Yun Hwan Kim.

New Molecular Targets/Mechanisms of Drug Action

B85 **Role of the TASK2 in regulating breast cancer cell proliferation.** Tao Yin, Jonathan Shepherd, Graham Poage, Zhengduo Yang, Lili Chu, Zachary Hartman, <u>Qiang Shen</u>.

Epidemiology/Lifestyle Factors

Behavioral Epidemiology

B86 **Indoor tanning use and incidence of skin cancer.** <u>Mingfeng Zhang</u>, Abrar A. Qureshi, Alan Geller, Lindsay Frazier, David Hunter, Jiali Han.

B87 **Analgesics use increases the risk of renal cell carcinoma (RCC): Results from a large up-to-date meta-analysis.** Toni K. Choueiri, Youjin Je, <u>Eunyoung Cho</u>.

Cancer in Aging Populations

B88 **Comorbidity and survival among black women and white women 35 to 64 years of age at diagnosis with invasive breast cancer.** <u>Yani Lu</u>, Huiyan Ma, Jane Sullivan-Halley, Kathleen E. Malone.

Cancer in Minority and Medically Underserved Populations

B89 **Multivariate modeling of biological, socioeconomic, and treatment level variables partially explains the differential breast cancer mortality between African Americans and white Americans in Michigan.** <u>Anand Pathak</u>, Ruta Sharangpani, Glenn Copeland, Eden V. Wells, Violanda Grigorescu.

B90 **Diabetes and the risk of colorectal adenomas: Black Women's Health Study.** Chiranjeev Dash, Julie R. Palmer, Lynn Rosenberg, Deborah A. Boggs, <u>Lucile L. Adams-Campbell</u>.

B91 **Self-reported prior lung disease as risk factors for non-small cell lung cancer in Mexican Americans.** <u>Michelle K. McHugh</u>, Matthew B. Schabath, Chung-Han Ho, Mei Liu, Anthony M. D'Amelio, Jr., Anthony J. Greisinger, George L. Delclos, Margaret R. Spitz, Carol J. Etzel.

B92 **The interaction of parity with genetic factors in relation to breast cancer incidence in African American women.** <u>Julie R. Palmer</u>, Edward A. Ruiz-Narvaez, L. Adrienne Cupples, Lynn Rosenberg.

B93 **Clinical characteristics, treatment, and outcome of childhood Burkitt's lymphoma in the Uganda Cancer Institute.** <u>Elisabete Weiderpass</u>, Jackson Orem.

B94 **Relationship of overweight and diabetes with prostate cancer stages in Mexican Americans: A population-based case-control study.** <u>David Santiago Lopez</u>, Lemma Garoma, Steve Clay Waring, Melissa Bondy, Michele Forman, Sara Strom.

Diet and Cancer

B95 **A dietary pattern that is associated with C-peptide and risk of colorectal cancer in women.** <u>Teresa Fung</u>, Frank Hu, Matthias Schulze, Michael Pollak, Tianying Wu, Charles Fuchs, Edward Giovannucci.

B96 Antioxidants and cancer of the endometrium: Results from a population-based case-control study in New Jersey. Dina Gifkins, Sara Olson, Kitaw Demissie, Shou-En Lu, Elisa Bandera.

B97 Soy and green tea intake protect against cervical cancer among Singapore Chinese. Lesley M. Butler, Anna H. Wu, Julia A. Montague, Woon-Puay Koh, Renwei Wang, Jian-Min Yuan, Mimi C. Yu.

B98, PR2 The association between antioxidant intake and ovarian cancer risk: Results from a population-based case-control study in New Jersey. Dina Gifkins, Sara Olson, Lisa Paddock, Melony King, Kitaw Demissie, Shou-En Lu, Elisa Bandera.

B99 Calcium and phosphorus intake and risk of prostate cancer: A 22-year follow-up study. Kathryn M. Wilson, Jing Ma, Edward Giovannucci.

B100 Index-based dietary patterns and risk of breast cancer in postmenopausal women in the NIH-AARP Diet and Health Study. Jennifer W. Wu, Jill Reedy, Yikyung Park.

B101 Garlic consumption and colorectal cancer risk in the CPS-II Nutrition Cohort. Marjorie L. McCullough, Eric J. Jacobs, Roma Shah, Peter T. Campbell, Susan M. Gapstur.

B102 Serum compounds involved in the one-carbon metabolism and urothelial cell carcinoma risk: A nested case-control study within EPIC. Martine M. Ros, H. Bas Bueno-de-Mesquita, Katja K.H. Aben, Ellen Kampman, Frederike L. Buchner, Eugene H.J.M. Jansen, Lambertus A. Kiemeney.

B103 Effect of over-the-counter vitamin D supplementation on circulating 25-hydroxyvitamin D concentration. Elizabeth Hibler, Chengcheng Hu, Peter Jurutka, M. Elena Martinez, Chad Wagoner, Elizabeth Jacobs.

B104 Risk of prostate cancer with intake of dietary and total calcium: A pooled analysis of 14 prospective cohort studies. Mara Meyer Epstein, Stephanie A. Smith-Warner.

B106 Coffee consumption and the risk of skin cancer. Fengju Song, Abrar Qureshi, Jiali Han.

B107 A pooled analysis of 14 prospective cohort studies on the association between red meat, poultry, fish, and egg intake and risk of prostate cancer. Kana Wu, Stephanie Smith-Warner, for the Pooling Project of Prospective Studies of Diet and Cancer investigators.

B108 Reexamination of total fluid intake and the risk of bladder cancer in the Health Professionals Follow-Up Study cohort. Jiachen Zhou, Scott Smith, Edward Giovannucci, Dominique Michaud.

B109 The protective effect of protein diets on experimentally induced hepatocellular carcinoma on Swiss albino mice. Aiyavu Chinnaiyan, Patrick Gomez.

B110 Polymorphisms in xenobiotic metabolizing genes, intakes of heterocyclic amines and red meat, and postmenopausal breast cancer. Hae-Jeung Lee, Kana Wu, David G. Cox, David Hunter, Susan E. Hankinson, Walter C. Willett, Rashmi Sinha, Eunyoung Cho.

B111 Effect of varied erythorbate levels in hot dogs on levels of apparent N-nitroso compounds, including N-nitroso compounds, nitrosothiols, and iron nitrosyls in relation to etiology of colon cancer. Henry Hotter, Lin Zhou, Sidney S. Mirvish.

Exercise and Prevention

B112 Physical activity, sedentary behavior, and leukocyte telomere length in women. Mengmeng Du, Jennifer Prescott, Peter Kraft, Jiali Han, Edward Giovannucci, Susan E. Hankinson, Immaculata De Vivo.

Tobacco and Cancer

B114 Active smoking and postmenopausal breast cancer in a large prospective cohort with long-term follow-up. Mia M. Gaudet, Susan M. Gapstur, Juzhong Sun, W. Ryan Diver, Lindsay M. Hannan, Michael J. Thun.

B115 A pooled analysis of smoking and alcohol drinking and risk of multiple myeloma in the International Multiple Myeloma Consortium. Gabriella Andreotti, Veronique Benhaim-Luzon, Paul Brennan, Silvia de Sanjose, Laura Costas Caudet, Adele Seniori Costantini, Perluigi Cocco, Nikolaus Becker, Lenka Foretova, Mark Maynadie, Alexandra Nieters, Brenda Birmann, Anthony Staines, Kevin Miliken, Dennis Weisenburger, Dalsu Baris, Dalsu Baris, Mark Purdue, Anneclaire DeRoos, John Spinelli, Wendy Cozen, Nicola Camp, Kirsten Moysich, Brain Chiu, Paolo Boffetta.

Molecular Epidemiology Working Group (MEG) Town Meeting and Reception
Room 162 AB

All conference attendees are invited and encouraged to attend the AACR Molecular Epidemiology Working Group's (MEG) Town Meeting with reception to follow. Dr. Deborah Winn, Ph.D., Deputy Director, Division of Cancer Control and Population Sciences, National Cancer Institute, National Institutes of Health, Rockville, MD, will be providing an update on the current funding situation for epidemiological studies in her talk entitled: "Update from the National Cancer Institute." Dr. Jonathan S. Wiest, Ph.D., Director, Center for Cancer Training, National Cancer Institute, National Institutes of Health, Bethesda, MD, will be providing an update on training opportunities in his talk entitled: "Training and Funding Opportunities through the NCI." A networking reception will follow the discussion period.

About the AACR's Molecular Epidemiology Working Group (MEG):
The MEG Working Group is composed of epidemiologists, molecular biologists and geneticists, biochemists, toxicologists, nutritionists, clinical and translational researchers, pathologists, biostatisticians, ethicists, and researchers from any other relevant scientific discipline who are interested in a multidisciplinary approach to the study of cancer and chronic disease etiology, thereby promoting the cure and prevention of cancer and the improvement of public health. The working group promotes the incorporation of molecular and biochemical concepts and techniques into well-designed epidemiologic studies by providing an ongoing forum for the scholarly discussion and development of sound approaches to the conduct and interpretation of molecular epidemiologic studies; by sponsoring scientific and educational programs and activities that will advance the field; and by fostering partnerships and collaborations among scientists in a variety of disciplines encompassed in and related to molecular epidemiology.

New Innovations for Integrating Mouse Models in Prevention Research
Room 258A-C

Chairperson: Cory Abate-Shen, Columbia University Irving Comprehensive Cancer Center, New York, NY

In recent years, there has been renewed interest in utilizing sophisticated mouse models to study prevention research. This reflects, in part, recent advances in the design of mouse models, including those that model heterogeneity and genetic influences, as well as those that are now well validated to their human disease counterparts. Other innovations include new emphases on co-clinical analyses in which studies in mice are well integrated with human clinical studies, as well as the application of new technologies in high-throughput genomic sequencing and bioinformatic approaches to interrogate data, which provide unique mechanistic insights. Each of the speakers will highlight an area of recent innovations in the effective utilization of mouse models and new technologies for prevention research.

Prosenescence therapy for cancer prevention
Pier Paolo Pandolfi, Harvard Medical School, Boston, MA

Interrogating mouse models to identify biomarkers for human cancer progression
Cory Abate-Shen

Modeling population genetic heterogeneity for cancer prevention and epidemiological investigations
David W. Threadgill, North Carolina State University, Raleigh, NC

Translating the cancer genome
Lynda Chin, University of Texas MD Anderson Cancer Center, Houston, TX

Concurrent Session 7
Novel Pathways/Targets for Cancer Prevention
Room 257

Chairperson: Young-Joon Surh, Seoul National University College of Pharmacy, Seoul, Republic of Korea

Intracellular signal transduction is a network under fine-tuned control. However, some signal transduction pathways are constitutively activated or do not work properly in response to ordinary physiological stimuli in some precancerous and cancerous cells. Recently, much attention has been focused on the prevention or treatment of cancer by targeting specific signaling molecules responsible for abnormal cell growth and proliferation. In the era of personalized medicine, such molecular target-based cancer chemoprevention will be achievable. This session is intended to introduce cutting-edge research on novel signal transduction pathways that can be potential targets for chemoprevention.

Modulation of proinflammatory and anti-inflammatory signaling for cancer chemoprevention [CN07-01]*
Young-Joon Surh

Molecularly targeted cancer prevention: From discovery to medicine [CN07-02]*
Zigang Dong, University of Minnesota Hormel Institute, Austin, MN

IL6 and Akt as targets for chemoprevention [CN07-03]*
Victoria L. Seewaldt, Duke University Medical Center, Durham, NC

PKCε-activated Stat3 and subsequent AR interaction are potential molecular targets for prevention of late-stage prostate cancer [PR-06]**
Ajit Verma, University of Wisconsin, Madison, WI

Concurrent Session 8
Immunoprevention and Targeting Stress Pathways
Room 259

Chairperson: Olivera J. Finn, University of Pittsburgh School of Medicine, Pittsburgh, PA

This session will explore various negative influences on the immune system that make it permissive to cancer growth, collectively referred to as "stress pathways." While there are many such pathways, some better understood than others, we have selected to highlight four: ER stress, oncogenic stress, psychological stress, and the stress of chronic inflammation. All of these influence how the immune system interacts with nascent tumor and all could be targets for therapy resulting in better cancer immunosurveillance. This is expected to lead to an overall reduction of cancer risk (primary prevention) or prevention of cancer recurrence (secondary prevention).

Insights on ER stress at the tumor-immune interface
Marizio Zanetti, University of California, San Diego, CA

Psychological stress and disease progression [CN08-02]*
Barbara L. Andersen, Ohio State University, Columbus, OH

Oncogenic stress regulates sensitivity of cells to elimination by natural killer cells and T cells [CN08-03]*
David H. Raulet, University of California, Berkeley, CA

Testing cancer vaccines in the setting of premalignant disease: State of immunity and determinants of response [CN08-04]*
Olivera J. Finn

Stress management improves prevention relevant outcomes among women at risk for breast cancer [PR-07]**
Bonnie A. McGregor, Fred Hutchinson Cancer Research Center, Seattle, WA

 *An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)
**An extended abstract for this presentation is available in the Proffered Abstracts section of the *Proceedings*. (The abstract number is listed in brackets.)