Tuesday, November 27, 2007

12:30 PM-2:30 PM Educational Workshop 1: Biomarkers/Genetics
Marquis Level, M103-105

Chairperson: Rick A. Kittles, University of Chicago, Chicago, IL

Several biomarkers have historically provided diagnostic and prognostic value to clinicians. The identification of novel and highly sensitive biomarkers is tantamount to improved management of cancer patients. Investigators are developing research strategies to facilitate discovery of important biomarkers that might help us better understand differences in cancer incidence and mortality rates across populations. During this educational session, researchers will discuss cutting edge scientific approaches being used to discover genetic and protein biomarkers that have implications in diseases disproportionately affecting underserved populations.

The implications of population structure on cancer genetic studies in recently admixed populations
Rick A. Kittles

Whole genome admixture mapping
Matthew Freedman, Dana Farber Cancer Institute, Boston, MA

The use of multiple biomarkers to detect prostate cancer in African American men
Walter Rayford, University of Tennessee at Memphis, Memphis, TN

Summary and Panel Discussion

12:30 PM-2:30 PM Educational Workshop 2: Research Methods in Cancer Disparities
Marquis Level, M301-304

Chairperson: Otis W. Brawley, American Cancer Society, Atlanta, GA

In order to understand and ultimately eliminate cancer health disparities, it is necessary to move from studies representing individual disciplines toward a more transdisciplinary research paradigm. This new approach should address the complex interactions of biological, social, cultural, environmental, and behavioral factors that contribute to health disparities. Multilevel approaches that include individual-level factors as well as neighborhood or community-level factors can provide a more holistic view of the causes, and ultimately elimination, of cancer health disparities. This session will provide insights into a multilevel, transdisciplinary paradigm that can be used to improve the study of cancer health disparities, and ultimately inform population-based studies, interventions, clinical practice, and policy.

Measuring health disparities: Individual and neighborhood effects
Chloe Bird, RAND Corporation, Santa Monica, CA

Defining the problem: Comparisons of populations
Otis W. Brawley

How to use genomic markers in disparities studies*
Jill S. Barnholtz-Sloan, Case Comprehensive Cancer Center, Cleveland, OH

Title to be announced
James Dignam, University of Chicago, Chicago, IL

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
**Educational Workshop 3: Cancer Health Care Communications**
Marquis Level, M301-304

**Chairperson:** Steven R. Patierno, George Washington University Medical School, Washington, DC

This Educational Workshop is focused on the inequities/disparities in cancer health care communications. Communications Disparities are defined as differences among social classes in the generation, manipulation, and distribution of information at the group level and differences in access to and ability to take advantage of information at the individual level. Discussions will address (i) implications of limited access to information technologies to public health and in the development of strategies to enhance access among the underserved to cancer related health information, and (ii) ethnic tailoring in cancer communications, and (iii) effects of news and entertainment on cancer knowledge, attitudes, and behavior relating to design of effective messages about cancer risk and prevention.

Beyond access: Communication inequality and its implications for health disparities
**K. Vish Viswanath**, Dana-Farber Cancer Institute, Boston, MA

Unintended effects of emphasizing disparities in cancer communication
**Matthew Kreuter**, Saint Louis University, St. Louis, MO

Ethnic tailoring in cancer communications
**Kenneth Resnicow**, University of Michigan, Ann Arbor, MI

Native American cancer communication: What works and what doesn’t
**Linda Burhansstipanov**, Native American Cancer Initiatives, Inc., Pine Grove, CO

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**Educational Workshop 4: Systems Biology**
Marquis Level, M103-105

**Chairperson:** Frederic M. Waldman, UCSF Comprehensive Cancer Center and Cancer Research Institute, San Francisco, CA

Systems biology is an emerging field aimed at understanding systems that are composed of molecular components and cellular networks. Systems biology provides a systematic and integrative approach to understanding cancer. The use of genomics, proteomics, bioinformatics, statistics, and molecular and cell biology in a systematic approach is a powerful tool for addressing and understanding basic cancer biology, thus addressing health disparities in different ethnic groups. This workshop will examine systems biology approaches in cancer; how this approach will improve diagnostics; and current research in using systems biology to elucidate molecular mechanisms in breast cancer.

Systems biology approaches
**Frederic M. Waldman**

Applying the concepts of systems biology to improve and make broadly accessible *in vitro* diagnostics
**James R. Heath**, California Institute of Technology, Pasadena, CA

Computational systems biology approaches to elucidating functional mechanisms underpinning molecular profiles of cancers
**Yves A. Lussier**, University of Chicago, Chicago, IL

The cancer Biomedical Informatics Grid™ (caBIG™)—enabling integrative cancer research
**Leslie K. Derr**, National Cancer Institute, Center for Biomedical Informatics

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.*
to non-Hispanic whites, significant disparities still remain in terms of disease stage, age at diagnosis, and other factors. Other cancers less common in non-Hispanic whites are also seen in each of these groups. Importantly, although racial/ethnic groups are broadly categorized into a few groups (i.e., Hispanics, Asians, American Indians/Alaska Natives), it is evident that the pattern of disease also differs within these groups. This session will present the patterns of cancer for predominant racial/ethnic groups and will focus on unique patterns of cancer health disparities within these groups.

Stage/grade escalation of breast and prostate cancer in African Americans
Steven R. Patierno, George Washington University Medical School, Washington, DC

Regional variations in cancer incidence in American Indians and Alaska natives
David Espey, Centers for Disease Control and Prevention, Albuquerque, NM

Cancer in U.S. Hispanic populations: Patterns, trends, and clinical issues*
Holly L. Howe, North America Association of Central Cancer Registries, Springfield, IL

Hormone receptor status/stage and breast cancer patterns in Asian Americans*
Anna H.T. Wu, University of Southern California Keck School of Medicine, Los Angeles, CA

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
10:30 AM-12:30 PM

Plenary Session 2: Cancer Prevention, Control, and Early Detection
Marquis Level, Imperial Ballroom

Chairperson: Lucile L. Adams-Campbell, Howard University Cancer Center, Washington, DC

The prevention of disease has long been based on the assumption that a disease is caused by a factor that can be controlled. Interventions on factors, particularly lifestyle factors, have resulted in the reduction of cancer occurrence and/or recurrence. This session will focus on the role that lifestyle factors, including nutrition, diet, and physical activity, as examples of potential causes of cancer, have on cancer prevention and control. Also highlighted will be a focus on cancer disparities in prevention and control from a systemic perspective.

Obesity and colon polyps in the Black Women’s Health Study: An opportunity for prevention*  
Lucile L. Adams-Campbell

A population health approach to thinking about and addressing disparities related to breast cancer prevention and risk*  
Richard B. Warnecke, University of Illinois, Chicago, IL

Diet and breast cancer in the Black Women’s Health Study  
Tanya D. Agurs-Collins, National Cancer Institute, Washington, DC

The role of obesity and energy balance in cancer prevention  
Kathryn H. Schmitz, University of Pennsylvania, Philadelphia, PA

2:00 PM-4:30 PM

Concurrent Session 1: Gene-Environment Interactions in Cancer Disparities
Marquis Level, M301-304

Chairperson: Timothy R. Rebbeck, University of Pennsylvania School of Medicine, Philadelphia, PA

Cancer disparities are likely to involve the complex interaction of many factors including exposures such as diet and medication use. There is growing evidence for genetic modulation of these exposures in cancer etiology and outcomes, but the role of these gene-environment interactions in cancer disparities is not well understood. In addition, studies usually evaluate environmental exposures measured on the individual level. A complete understanding of gene-environment interactions in cancer disparities may also require expanded definitions of “the environment” to include social environment, physical environment, and behavioral factors measured at multiple levels. Thus, a more careful and comprehensive consideration of interactions that lead to cancer health disparities may be required in order to understand this complex phenomenon. This session will highlight approaches to better understand the complex, multifactorial causes of cancer disparities that involve both genetic and environmental factors.

Ethnic variation in drug response  
Richard Weinshilboum, Mayo Foundation, Rochester, MN

Nutrigenomics and health disparities  
Katherine Tucker, Tufts University, Boston, MA

Multilevel analysis of gene-environment interactions in cancer disparities  
Timothy R. Rebbeck

Genetic and behavioral risk factors for prostate cancer in African Americans**  
Wenndy Hernandez, University of Chicago, Chicago, IL

Gene expression profiling reveals tumor immunobiological differences in prostate cancer between African-American and European-American men**  
Tiffany A. Wallace, National Cancer Institute, Bethesda, MD

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.  
**An extended abstract for this presentation is available in the Proffered Abstract section of the Proceedings.
Significant progress has been made toward reducing cancer mortality rates; however, certain populations suffer disproportionately. Although non-genetic factors may be associated with these differences, biology is likely to play some role. Our understanding of the basic processes governing the neoplastic process has increased substantially over the last decade. We now have the opportunity to apply this information toward understanding how these processes might be associated with disparate incidence and mortality rates across different populations. In this session, we will highlight a series of important biological discoveries that have increased our understanding of the molecular etiology of cancers that have disproportionate incidence rates among different populations. We hope to improve our knowledge of these tumor types and ultimately exploit this information to better diagnose and treat these tumor types, which will help to eliminate disparities.

Population differences in disease incidence and outcome for multiple myeloma

John D. Carpten

Acute promyelocytic leukemia in Latinopopulations*

Dan Douer, University of Southern California Keck School of Medicine, Los Angeles, CA

Disparities in gastric cancer treatment from an Asian perspective

Atsushi Ohtsu, National Cancer Center Hospital E, Kashiwa, Japan

Recurrent gene fusions in prostate cancer: ETV1 class of fusions*

Saravana Mohan Dhanasekaran, University of Michigan, Ann Arbor, MI

Gene expression analysis of African-American and European-American breast tumors**

Damali N. Martin, National Cancer Institute, Bethesda, MD

Early onset breast cancer genomics and tumor biology in Alabama women**

Tyesha L. Farmer, University of Alabama at Birmingham, Birmingham, AL

Smoking as a modulator of cancer biomarkers: Variation among ethnic groups*

Beverly D. Lyn-Cook

Genetics and smoking cessation: Improving outcomes among those at risk

Robert A. Schnoll, University of Pennsylvania, Philadelphia, PA

Naltrexone and smoking cessation in an ethnically diverse cohort*

Andrea King, University of Chicago, Chicago, IL

Eliminating tobacco-related health disparities: Research progress and challenges*

Pebbles Fagan, National Cancer Institute, Bethesda, MD

Smoking prevalence of Asian Americans: Does living in an ethnic enclave matter?***

Diane S. Lauderdale, University of Chicago, Chicago, IL

Health professionals’ advice to quit smoking: Do race and gender of smokers matter?**

Yan Wang, University of Maryland School of Medicine, Baltimore, MD

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.

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Thursday, November 29, 2007

7:00 AM-8:00 AM  Breakfast Forum: Current and Future Funding Opportunities for Cancer Health Disparities Research
International Level, Ballroom 4-10

Moderator: Sanya A. Springfield, National Cancer Institute, Bethesda, MD

In our continuing battle against cancer health disparities, it is likely that our advances will remain incremental, but NIH’s commitment to reduce these disparities remains unwavering and our hope high. The basis for this optimism is our ever-growing number of funding opportunities designed to explore the complex factors that contribute to cancer disparities. This forum will include presentations from several key NIH programs outlining the current and future funding opportunities for students, researchers, and clinicians who wish to pursue cancer health disparities research.

Panelists:
Sheelia A. McClure, National Center for Research Resources, Bethesda, MD
Sanya A. Springfield
Shobha Srinivasan, National Cancer Institute, Rockville, MD
Francisco Sy, National Institutes of Health, Bethesda, MD

8:00 AM-10:00 AM  Plenary Session 3: Biological Mechanisms of Disparities
Marquis Level, Imperial Ballroom

Chairperson: Olufunmilayo I. Olopade, University of Chicago Medical Center, Chicago, IL

Of all racial/ethnic groups in the United States, African Americans have the highest mortality rate of breast cancer diagnosed in women under 50 years of age, and this partly accounts for the disparities in outcomes. To eliminate disparities in outcomes, we must get to the roots of the problem by identifying the diversity of gene mutations and altered protein pathways that promote aggressive behavior of breast cancer and poor response to treatment in some patients. Such knowledge will lead to the development of more effective and less harmful ways to prevent, screen, diagnose and treat cancer. Using the example of breast cancer, this session brings together scientists from different disciplines to engage the audience in exploring plausible biological mechanisms that explain health disparities.

Perspective on the descriptive epidemiology of breast cancer as a reflection of biological heterogeneity and racial disparity*
William F. Anderson, National Cancer Institute, Rockville, MD

Epigenetic mechanisms and molecular classification of breast cancer
Olufunmilayo I. Olopade

Genetic determinants of tumor metastases
Kent W. Hunter, National Cancer Institute, Bethesda, MD

Clinical outcomes and minority patients
Lisa A. Newman, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
**An extended abstract for this presentation is available in the Proffered Abstract section of the Proceedings.
10:00 AM-10:30 AM Coffee Break
Marquis Level, Imperial Ballroom Foyer

10:30 AM-12:30 PM Plenary Session 4: Interventions to Reduce Disparities: Community Program Outcomes and Potential Impact of Advancing Technologies
Marquis Level, Imperial Ballroom

Chairperson: Electra D. Paskett, The Ohio State University Comprehensive Cancer Center, Columbus, OH

Cancer health disparities have been documented in terms of cancer incidence and mortality for any minority and underserved populations. This session will explore problems in and strategies for bringing emerging technologies for cancer prevention and early detection to various minority and underserved populations. The impact of involving the community to deliver innovative interventions will also be discussed.

Cervical cancer in underserved rural communities

Electra D. Paskett

Access to health care: Is it enough to reduce disparities in cancer prevention?*
Karen M. Emmons, Dana-Farber Cancer Institute, Boston, MA

Liver cancer control interventions for Asian Americans: A first community-based program project to reduce cancer health disparities*
Moon S. Chen, Jr., University of California, Davis Cancer Center, Sacramento, CA

Virtual colonoscopy by teleradiology in an underserved Native American population*
Peter Lance, Arizona Cancer Center, Tucson, AZ

12:30 PM-2:00 PM Lunch Forum: Legislative Action Network for Cancer Health Disparities
International Level, Ballroom 4-10

Moderator: Nicole Lurie, RAND Corporation, Arlington, CA

This forum will focus on the role of policy in cancer health disparities. It will initiate discussion that will lead to legislative action to study and implement interventions that will eliminate these disparities. The panel will include scientific representatives and policy experts. Lunch will be provided.

Panelists to be announced.

2:00 PM-4:30 PM Concurrent Session 4: Carcinogenesis and DNA Repair Pathways
Marquis Level, M103-105

Chairperson: Eddie Reed, Centers for Disease Control, Atlanta, GA

It has been known for decades that alterations in DNA repair may be associated with increased cancer risk. The classic example of this observation is the clinical syndrome of xeroderma pigmentosum. As more is understood about DNA repair, the multiple molecular pathways involved, and subtle perturbations in those pathways that may exist, the possibilities have grown in terms of how these pathways might be exploited for human benefit. Concurrently, it is becoming apparent that certain genetic changes in these pathways may track with social designations of race and/or ethnicity. Understanding these relationships more precisely may lead to a better understanding of observed ethnic differences in risk for a range of select malignancies. This session will focus on a small number of genetic differences in DNA repair that have been observed in human populations. Presenters will explore possibilities that these genetic differences may contribute to observed disparities in the development of cancer.

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
Prognostic value of p53 in colorectal cancer varies with tumor location and patient race/ethnicity
Upender Manne, University of Alabama at Birmingham, Birmingham, AL

Prediction models of cancer risk in African Americans and whites
Jennifer J. Hu, University of Miami School of Medicine, Miami, FL

ERCC1, nucleotide excision repair, and cancer risk
Eddie Reed

DNA repair phenotypes and cancer risk
Peter G. Shields, Georgetown University Medical Center, Washington, DC

Evaluating markers of microsatellite instability in an ethnically diverse patient cohort**
Brooke E. Sylvester, University of Chicago, Chicago, IL

Characterization of mouse models for the human p53 codon 72 polymorphism**
Karla S. Fuller, UT M. D. Anderson Cancer Center, Science Park, Smithville, TX

2:00 PM-4:30 PM Concurrent Session 5: Translational Models of Bio-behavioral Stress
Marquis Level, M301-304

Chairperson: Sarah Gehlert, University of Chicago, Chicago, IL

The immune system can be influenced by host and environmental factors causing tumor growth. This session will focus on understanding how multiple level factors interact and contribute to tumor growth using animal and human models. This approach may be particularly important in understanding existing cancer disparities.

A multi-informative, multi-level approach to understanding the role of stress in breast cancer disparities*
Sarah Gehlert

A mouse model of breast cancer reveals social environment-tumor interactions*
Suzanne Conzen, University of Chicago, Chicago, IL

Biobehavioral influences on tumor growth and immunity in ovarian cancer*
Susan K. Lutgendorf, University of Iowa, Iowa City, IA

Profiling stress genes regulated by the oncoprotein LEDGFp75 in prostate cancer cells using real time PCR arrays**
Carlos A. Casiano, Loma Linda University School of Medicine, Loma Linda, CA

Genetic variation influencing glucocorticoid-mediated induction of the SGK gene in different populations**
Anna Di Rienzo, University of Chicago, Chicago, IL

2:00 PM-4:30 PM Concurrent Session 6: Using Genetics to Optimize Cancer Care
Marquis Level, Imperial Ballroom

Chairperson: Cheryl L. Willman, University of New Mexico Health Sciences Center, Albuquerque, NM

The past 20 years have witnessed a dramatic increase in our understanding of multi-step carcinogenesis and the central role of genetic alterations to the diagnosis, prognosis, and treatment of cancer. Despite the drawbacks of genetic testing, including high expense and inability to detect all mutations, several professional groups have endorsed genetic counseling and testing for high-risk individuals based on the potential benefits of risk-reducing prophylactic surgery and intensive surveillance. For example, a growing body of evidence documents the benefits of preventive measures with minimal risk to women with identifiable BRCA1 and BRCA2 mutations. Recent advances in genetics of cancer predisposition among diverse populations will be discussed.

BRCA1 and BRCA2 mutation testing in minority populations enrolled in the breast cancer family registry
Esther M. John, Northern California Cancer Center, Fremont, CA

Hereditary breast cancer in an underserved population: Hispanic BRCA mutations*
Jeffrey N. Weitzel, City of Hope National Medical Center and Beckman Research, Duarte, CA

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
**An extended abstract for this presentation is available in the Proffered Abstract section of the Proceedings.
Tailoring prevention strategies in breast cancer: Genes, race, and health care delivery
Katrina Armstrong, University of Pennsylvania, Philadelphia, PA

Microsatellite instability in diverse populations
Norahane M. Lindor, Mayo Clinic, Rochester, MN

Prognostic importance of p53 codon 72 polymorphism differs with race in microsatellite stable colorectal adenocarcinoma**
Venkat R. Katkoori, University of Alabama at Birmingham, Birmingham, AL

Estrogen receptor (ER)α, BRCA1, and FANC F promoter methylation occur in distinct subsets of sporadic breast cancers**
Jinhua Xu, University of Chicago, Chicago, IL

**An extended abstract for this presentation is available in the Proffered Abstract section of the Proceedings.

Friday, November 30, 2007

8:00 AM-10:00 AM Plenary Session 5: Disparities in Cancer Survivorship: From Diagnosis to Intervention
Marquis Level, Imperial Ballroom

Chairperson: Mary J. Scroggins, In My Sister’s Care, Washington, DC

Disparities in cancer incidence, morbidity, and mortality have been documented for various racial/ethnic groups and other medically underserved populations. The panel is a conversation of sorts between survivors and scientists, presenting information on issues and health outcomes specific to cancer health disparities. It will superimpose human faces on the data and statistics and relate real-life experiences. The panel will also provide a forum to discuss problems and consider solutions from the perspectives of both cancer survivors and scientists.

Opening Remarks and Introduction
Mary Scroggins, In My Sister’s Care, Washington, DC

Issues faced by survivors: Beyond the statistics
Jeanne Mandelblatt, Georgetown University, Washington, DC

Not done living
Bettye L. Green, Saint Joseph Regional Medical Center, South Bend, IN

Health-related outcomes in cancer survivors
Smita Bhatia, City of Hope National Medical, Duarte, CA

Keeping the faith: Surviving cancer in Appalachia
Delrta Gilliland, Southern Ohio Medical Center and Fight Cancer, Save Lives Coalition, Lucasville, OH

Question and Answer Session
It is now generally accepted that even after adjusting for stage of disease, the clinical outcome after systemic therapy of certain common epithelial cancers like prostate, breast, and lung vary in different ethnic groups. While access to high quality health care plays a role in these disparate outcomes, it has become clear in recent times that there may be inherent biologic differences in these tumors that may play fundamental roles in unequal therapeutic outcomes. This session will examine the science behind disparate outcomes to systemic therapy of cancer in different populations. Presentations will cover somatic cancer mutations as well as germ-line mutations across different populations. Somatic mutations play a role in tumor aggressiveness as well as sensitivity or resistance to therapeutic agents. Allelic variations in genes that code for proteins involved in the transport and metabolism of anticancer drugs as well as variations in drug targets are involved in drug efficacy as well as toxicity. These factors will be explored. In particular, treatment benefit in cancer is a balance between drug efficacy and toxicity. Finally, sociological issues relating to barriers in providing cancer care as well as barriers to enrollment in clinical trials will be discussed.

Somatic cancer mutations across populations*
**Levi A. Garraway**, Dana-Farber Cancer Institute, Boston, MA

Race, ethnicity, and response to anticancer agents
**Alex A. Adjei**

Racial and ethnic disparities in cancer treatment*
**Dawn L. Hershman**, Columbia University, New York, NY

Racial variations in pharmacogenetics that impact treatment outcomes*
**William D. Figg**, National Cancer Institute, Bethesda, MD

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.