5TH ANNUAL SCIENTIFIC SYMPOSIUM

BRCA1, BRCA2 and Beyond: An Update on Hereditary Cancer

Keynote Speaker and Basser Global Prize Awardee: Steven Narod, MD, FRCPC, FRSC

THURSDAY, MAY 4, 2017
FRIDAY, MAY 5, 2017
Smilow Center for Translational Research Auditorium/Commons
(enter through Perelman Center for Advanced Medicine)
Program Overview

This symposium is designed to educate researchers, scientists, and health care providers in cancer genetics by presenting cutting-edge data from renowned BRCA1/2 researchers. This symposium will provide new information on the basic biology of known cancer susceptibility genes. In addition, progress in cancer screening and prevention as well as ongoing work in targeted therapy for BRCA1/2 mutation carriers will be discussed through a series of lectures and panel discussions. Attendees will have the opportunity to network with colleagues working in the field.

PROGRAM OBJECTIVES

At the completion of this symposium, attendees should be able to:

• Discuss new research on the basic biology of BRCA1 and BRCA2 and other homologous repair deficiency genes.
• Describe the current clinical management strategies for individuals with genetic risk of breast, ovarian and pancreatic cancer.
• Review new approaches to screening and prevention of hereditary breast and ovarian cancer.
• Discuss new advances in cancer treatment for BRCA1/2 mutation carriers.

WHO SHOULD ATTEND

Healthcare providers including medical oncology, surgical oncology, gynecology oncology, ob-gyn, genetic counselors, primary care physicians and nurses/nurse practitioners who are interested in the genetics of BRCA1/2 related cancers.
KEYNOTE SPEAKER AND BASSER GLOBAL PRIZE Awardee

Steven Narod, MD, FRCPC, FRSC
Women’s College Research Institute, University of Toronto

Women with mutations in BRCA1 and BRCA2 have a high risk of breast or ovarian cancer. The most effective preventive strategy at this time is surgical removal of the breasts and/or ovaries. Over the past 20 years, Dr. Steven Narod’s research has led to numerous discoveries. He was part of the team that discovered the BRCA1 and BRCA2 mutations and he has contributed to the identification of genetic mutations in a number of ethnic populations, including people of French-Canadian, Bahamian and Ashkenazi Jewish descent. His database of over 15,000 women with mutations from 30 countries supports numerous international collaborations. Currently, Dr. Narod’s studies focus on chemoprevention, the early stages of breast cancer, and breast cancer in young women.

SYMPOSIUM CHAIR

Susan M. Domchek, MD
Executive Director, Basser Center for BRCA
Director, Mariann and Robert MacDonald Cancer Risk Evaluation Center

Susan Domchek is the Basser Professor in Oncology at the Perelman School of Medicine of the University of Pennsylvania in Philadelphia. She also serves as Executive Director of the Basser Center for BRCA at the Abramson Cancer Center at the University of Pennsylvania, and Director of the Mariann and Robert MacDonald Cancer Risk Evaluation Center at the Abramson Cancer Center, which focuses on genetic evaluation and medical management of patients and individuals with BRCA1/2 mutations and other inherited risk factors for cancer. She is a Senior Fellow at the Leonard Davis Institute of Health Economics.

An elected member of the American Society of Clinical Investigation, Dr. Domchek is also a member of the American Society of Clinical Oncology. A significant contributor to the oncology literature, she has authored/co-authored more than 200 articles appearing in scholarly journals, and serves on a number of editorial review boards, including the Journal of Clinical Oncology.
SYMPOSIUM CO-ORGANIZERS

Ronald Drapkin, MD, PhD  
Associate Professor of Obstetrics & Gynecology  
Director, Ovarian Cancer Research Center  
Director of Gynecologic Cancer Research, Basser Center for BRCA

Roger Greenberg, MD, PhD  
Associate Professor of Cancer Biology  
Investigator, Abramson Family Cancer Research Institute  
Director of Basic Science, Basser Center for BRCA

Katherine Nathanson, MD  
Professor of Medicine, Translational Medicine and Human Genetics  
Associate Director for Population Sciences, Abramson Cancer Center  
Chief Oncogenomics Physician, Abramson Cancer Center  
Director of Genetics, Basser Center for BRCA

PENN MEDICINE FACULTY

Angela R. Bradbury, MD  
Assistant Professor of Medicine  
Hospital of the University of Pennsylvania

Dana Farengo Clark, MS, LCGC  
Senior Licensed Certified Genetic Counselor  
Mariann & Robert MacDonald Cancer Risk Evaluation Center  
Basser Center for BRCA  
Hospital of the University of Pennsylvania

David Mankoff, MD, PhD  
Gerd Muehllehner Professor of Radiology  
Vice-Chair for Research, Department of Radiology  
Hospital of the University of Pennsylvania

Andy J. Minn, MD, PhD  
Assistant Professor of Radiation Oncology  
Hospital of the University of Pennsylvania

Jacquelyn Powers, MS, LCGC  
Licensed Certified Genetic Counselor  
Mariann & Robert MacDonald Cancer Risk Evaluation Center  
Basser Center for BRCA  
Hospital of the University of Pennsylvania

Robert H. Vonderheide, MD, DPhil  
Hanna Wise Professor in Cancer Research  
Department of Medicine  
Hospital of the University of Pennsylvania

GUEST SPEAKERS

Lewis C. Cantley, PhD  
Meyer Director of the Sandra and Edward Meyer Cancer Center  
Professor of Cancer Biology in Medicine  
Weill Cornell Medical College/Ronald P. Stanton Clinical Cancer Program at NewYork-Presbyterian

Mary B. Daly, MD, PhD, FACP  
Chair, Clinical Genetics  
Professor, Department of Clinical Genetics  
Director of the Risk Assessment Program  
Fox Chase Cancer Center
GUEST SPEAKERS CONTINUED

Judy E. Garber, MD, MPH
Director, Center for Cancer Genetics and Prevention
Dana-Farber Cancer Institute
Director, Cancer Risk and Prevention Clinic,
Brigham and Women’s Hospital
Professor of Medicine
Harvard Medical School

Geoff Lindeman, MBBS, PhD
Joint Division Head
The Walter and Eliza Hall Institute of Medical Research
Royal Melbourne Hospital

Karen H. Lu, MD
Professor
Chair, Department of Gynecologic Oncology and
Reproductive Medicine, Division of Surgery
The University of Texas MD Anderson Cancer Center

Kenneth P. Olive, PhD
Assistant Professor of Medicine and Pathology
Columbia University

Shailja Pathania, PhD
Assistant Professor
Center for Personalized Cancer Therapy
University of Massachusetts Boston

Sharon E. Plon, MD, PhD
Co-Director, Cancer Genetics and Genomics Program
Professor, Department of Pediatrics, Section of
Hematology-Oncology and Department of Molecular
and Human Genetics
Director, Baylor Cancer Genetics Clinics and
Neurofibromatosis Clinic
Baylor College of Medicine

Mark E. Robson, MD
Clinic Director, Clinical Genetics Service
Memorial Sloan Kettering Cancer Center

Marjanka K. Schmidt, PhD
Associate Professor, Division of Molecular Pathology
Division of Psychosocial Research and Epidemiology
The Netherlands Cancer Institute

Ie-Ming Shih, MD, PhD
Richard W. TeLinde Distinguished Professor of
Gynecologic Pathology
Co-Director, Breast and Ovarian Cancer Program,
Sidney Kimmel Comprehensive Cancer Center
Johns Hopkins University School of Medicine

Eliezer M. Van Allen, MD
Assistant Professor of Medicine,
Harvard Medical School
Department of Medical Oncology,
Dana-Farber Cancer Institute
Department of Medicine,
Brigham and Women’s Hospital
Associate Member, Broad Institute

Martin Widschwendter, MD, FRCOG
Professor in Women’s Cancer
Institute for Women’s Health
University College London

Richard D. Wood, PhD
Professor, Department of Epigenetics &
Molecular Carcinogenesis
The University of Texas M.D. Anderson Cancer Center
7:45-8:45 Registration
8:45-9:00 Welcome

Morning Session

Imaging Strategies and \textit{BRCA1} and \textit{BRCA2} Outside of Breast and Ovarian Cancer

9:00-9:25 Imaging HRD: PARP inhibitor PET to guide treatment of breast and ovarian cancer
\textit{David Mankoff, MD, PhD}

9:25-9:50 Breast cancer mutations reported in pediatric cancer genome studies: causative or coincidence?
\textit{Sharon E. Plon, MD, PhD}

9:50-10:15 Integrative genomics and DNA repair defects in advanced prostate cancer
\textit{Eliezer M. Van Allen, MD}

10:15-10:45 BREAK

New Strategies Targeting DNA Damage

10:45-11:10 Cell non-autonomous factors and reprogramming of the epigenome in \textit{BRCA1/2} mutation carriers
\textit{Martin Widschwendter, MD, FRCOG}

11:10-11:35 DNA polymerase \(\theta\) (POLQ) and the cellular defense against DNA damage
\textit{Richard D. Wood, PhD}

11:35-12:00 Breast cancer drives virus mimicry in the tumor micro-environment to promote progression and therapy resistance
\textit{Andy J. Minn, MD, PhD}

12:00-1:30 Lunch
Afternoon Session

Clinical Translational Research in BRCA1/2

1:30-1:55  Evaluating sporadic genetic aberrations in murine models of BRCA1 deleted breast cancers
Lewis C. Cantley, PhD

1:55-2:20  Immunobiology of germline BRCA1/2 mutation associated cancers
Robert Vonderheide, MD, DPhil

2:20-2:45  OutRANKing BRCA1 in mutation carriers
Geoff Lindeman, MBBS, PhD

2:45-3:15  BREAK

3:15-4:30  Global Prize Presentation and Keynote
Breast cancer genetics and health care policy
Steven Narod, MD, FRCPC, FRSC

4:30-5:30  Poster Reception
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7:30-8:30  Registration
8:30-8:45  Welcome

Morning Session
Emerging Topics in Cancer Genetics

8:45-9:10  Replication stress is a tumor promoting factor in \textit{BRCA}1 and \textit{BRCA}2 mutation driven cancer
Shailja Pathania, PhD

9:10-9:35  Selective cisplatin sensitivity of \textit{BRCA}2-mutant pancreatic cancer is dependent on mitotic functions
Kenneth P. Olive, PhD

9:35-10:00  PARP inhibitors and pancreatic cancer
Susan Domchek, MD

10:00-10:20  BREAK

10:20-10:45  Novel strategies for ovarian cancer prevention in high risk women
Karen H. Lu, MD

10:45-11:10  Detection of ovarian cancer using PapGene test
Ie-Ming Shih, MD, PhD

11:10-11:35  The CHE(c)K 2 do for clinical genetics and breast cancer outcome
Marjanka K. Schmidt, PhD

11:35-12:00  Progress in the epidemiology of Li Fraumeni Syndrome
Judy E. Garber, MD, MPH

12:00-1:15  Lunch
Afternoon Session
Genetics in the Clinic-From Tumors to Families

1:15-1:40  Secondary germline analysis during tumor mutation profiling: a new paradigm
Mark E. Robson, MD

1:40-2:05  It’s not you, it’s your tumor: navigating the journey from somatic tumor testing to the genetics clinic
Dana Farengo Clark, MS, LCGC

2:05-2:30  Innovative delivery models for dissemination of genetic services
Angela Bradbury, MD

2:30-2:55  Family communication in BRCA families
Mary B. Daly, MD, PhD, FACP

2:55-4:00  Panel discussion: cancer genetics case review
Moderated by Susan Domchek, MD
Mary B. Daly, MD, PhD, FACP
Judy E. Garber, MD, MPH
Jacquelyn Powers, MS, LCGC
Mark E. Robson, MD

4:00-4:15  Wrap up and Evaluations
Registration Information

This conference is FREE but we strongly recommend registration, as space is limited.

ACCREDITATION AND CREDIT INFORMATION

Genetic Counselors: This event has been submitted to the National Society of Genetic Counselors (NSGC) for approval of Category 1 CEUs. The American Board of Genetic Counseling (ABGC) accepts CEUs approved by NSGC for purposes of recertification. Approval for the requested CEUs and Contact Hours is currently pending.

Nurses: Program application has been submitted for contact hours. The Hospital of the University of Pennsylvania, Department of Nursing Education, Innovation, and Professional Development is an approved provider of nursing continuing education by the PA State Nurses Association, an accredited approved by the American Nurses Credentialing Center’s Commission on Accreditation.

DISCLOSURES

Faculty disclosure information will be made available at the conference. Faculty members are also expected to disclose to participants any discussion of off-label and/or investigational use of pharmaceutical products or devices within their presentations.

CANCELLATION POLICY

The Perelman School of Medicine at the University of Pennsylvania reserves the right to cancel or postpone any activity due to unforeseen circumstances. In the event of cancellation or postponement, the University will not be responsible for related costs or expenses to participants, including cancellation fees assessed by hotels, airlines, or travel agencies.

SERVICES FOR THE DISABLED

If special arrangements are required for an individual with a disability to attend this meeting, please contact basserinfo@uphs.upenn.edu by April 7, 2017.

SPECIAL REQUESTS

If special requests for food or other logistics are required, contact basserinfo@uphs.upenn.edu by April 7, 2017.

NONDISCRIMINATION STATEMENT

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to: Executive Director, Office of Affirmative Action and Equal Opportunity Programs, 3600 Chestnut Street, Sansom Place East, Suite 228, Philadelphia, PA 19104-6106 or 215.898.6993 (Voice) or 215.898.7803 (TDD).
Visiting Information

PENN MEDICINE CAMPUS MAP

HOTEL

A block of rooms has been reserved at the Sheraton Philadelphia University City Hotel at a special group rate of $194 per night.

Rooms must be reserved by Thursday, March 30, 2017 to take advantage of the group rate.

RESERVE YOUR ROOM

For more information, contact Basserinfo@uphs.upenn.edu or call 215.662.4348
Visiting Information

PARKING
Parking will not be available on the medical campus, but public self-pay parking lots available in the University City vicinity can be found at:

- **Drexel University Parking Lot – 34th and Market Streets**
- **University of Pennsylvania Parking Lot – 34th and Chestnut Streets**
- **University of Pennsylvania Parking Lot - 38th and Walnut Streets**

For more information, visit [http://cms.business-services.upenn.edu/parking/](http://cms.business-services.upenn.edu/parking/)

PUBLIC TRANSPORTATION
The SEPTA University City train station is within walking distance of the medical campus. For more information, visit [www.septa.org](http://www.septa.org).

For more information, contact Basserinfo@uphs.upenn.edu or call 215.662.4348
The Basser Center for BRCA is the first and only comprehensive center solely devoted to funding research across the globe, educating providers and patients, and advancing care for individuals with BRCA gene mutations.

WE TAKE CANCER PERSONALLY.

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