6th Annual Scientific Symposium
A CME/CNE – Certified Conference

BRCA1, BRCA2 and Beyond: An Update on Hereditary Cancer

Keynote Speaker and Basser Global Prize Awardee:
Professor Ashok Venkitaraman, MBBS, PhD

Tuesday, May 22, 2018
Wednesday, May 23, 2018
Smilow Center for Translational Research
Auditorium/Commons
(enter through Perelman Center for Advanced Medicine)

Penn 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

Ashok Venkitaraman, MBBS, PhD
University of Cambridge

Efforts to identify new opportunities for early, non-invasive interventions for BRCA carriers is a high priority in the field. Professor Venkitaraman is the Ursula Zoellner Professor of Cancer Research and Director of the Medical Research Council Cancer Unit at the University of Cambridge. Professor Venkitaraman’s laboratory has been instrumental in showing how mutations in BRCA2 incite genomic instability, accelerating cancer development. His current research focuses on deeper understanding of how cancer is initiated in patients with BRCA2 mutations and has recently uncovered how certain chemicals in the environment or within an individual can trigger genome instability. His team is exploiting this discovery to devise future approaches for cancer prevention and treatment.

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. She serves as Executive Director of the Basser Center for BRCA at the Abramson Cancer Center and Director of the Mariann and Robert MacDonald Cancer Risk Evaluation Program. Her work focuses on the genetic evaluation and medical management of individuals with inherited risk factors for cancer. Dr. Domchek is particularly interested in developing new cancer therapies, such as PARP inhibitors, for patients with genetic risk factors. 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 250 articles appearing in scholarly journals including the New England Journal of Medicine, the Journal of the American Medical Association and the Journal of Clinical Oncology. Dr. Domchek also serves on a number of editorial review boards, including the Journal of Clinical Oncology, as well as on the Scientific Advisory Board for the Breast Cancer Research Foundation.
SYMPOSIUM CO-ORGANIZERS
Ronald Drapkin, MD, PhD
Associate Professor of Pathology in Obstetrics & Gynecology
Director, Ovarian Cancer Research Center
Director of Gynecologic Cancer Research, Basser Center for BRCA

Dana Farengo-Clark, MS, MS, LCGC
Senior Genetic Counselor
Mariann & Robert MacDonald Cancer Risk Evaluation Center
Basser Center for BRCA

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

Robin Herzog, MSN, CRNP
Nurse Practitioner
Department of Hematology Oncology
Abramson Cancer Center
University of Pennsylvania

Katherine Nathanson, MD
Professor of Medicine
Deputy Director, Abramson Cancer Center
Director of Genetics, Basser Center for BRCA

PENN MEDICINE FACULTY
C. Neill Epperson, MD
Professor of Obstetrics and Gynecology
Professor of Psychiatry
Director, Penn Center for Women’s Behavioral Wellness

Jessica Long, MS, LCGC
Genetic Counselor
Mariann & Robert MacDonald Cancer Risk Evaluation Center
Basser Center for BRCA

Danielle McKenna, MS, LCGC
Genetic Counselor
Mariann & Robert MacDonald Cancer Risk Evaluation Center
Basser Center for BRCA

Mark Morgan, MD
Professor of Gynecologic Oncology
Chief, Division of Gynecologic Oncology

Arjun Raj, PhD
Associate Professor
Department of Bioengineering

Fiona Simpkins, MD
Assistant Professor
Department of Medicine Obstetrics and Gynecology

GUEST SPEAKERS
Georgia Chenevix-Trench, PhD, FAA, FAHMS
Senior Scientist
Head, Department of Genetics and Computational Biology
QIMR Berghofer Medical Research Institute
Queensland, Australia
GUEST SPEAKERS CONTINUED

Kathleen Cho, MD
Peter A. Ward Professor of Pathology
Vice-Chair for Academic Affairs
Department of Pathology
University of Michigan Medical School

Fergus Couch, PhD
Zbigniew and Anna M. Scheller Professor of Medical Research
Chair, Division of Experimental Pathology
Department of Laboratory Medicine and Pathology
Mayo Clinic

Tony Huang, PhD
Associate Professor
Department of Biochemistry and Molecular Pharmacology
NYU School of Medicine

Allison Kurian, MD, MSc
Associate Professor of Medicine (Oncology) and of Health Research and Policy
Stanford University Medical Center

Lisa Madlensky, PhD, CGC
Professor, Division of Medical Genetics
Program Director & Genetic Counselor, Family Cancer Genetics Program
Moores Cancer Center
University of California

Ursula Matulonis, MD
Professor of Medicine, Harvard Medical School
Director, Gynecologic Oncology
Dana Farber Cancer Institute

Elaine Ostrander, PhD
Chief & Distinguished Investigator
Cancer Genetics & Comparative Genomics Branch
National Human Genome Research Institute
National Institutes of Health

Jeffery Parvin, MD, PhD
Louis Levy Professor for Cancer
Associate Dean of Graduate Studies, Co-Director of the Biomedical Sciences Program
Department of Biomedical Informatics
The Ohio State University

Richard Pomerantz, PhD
Assistant Professor, Medical Genetics & Molecular Biochemistry
Assistant Professor, Fels Institute for Cancer Research & Molecular Biology
Lewis Katz School of Medicine at Temple University

Yves Pommier, MD, PhD
Chief, Developmental Therapeutics Branch
Head, Molecular Pharmacology Group
Center for Cancer Research
National Cancer Institute

Mark Robson, MD
Chief, Breast Medicine Service
Clinic Director, Clinical Genetics Service
Memorial Sloan Kettering Cancer Center

Gerburg Wulf, MD, PhD
Associate Professor of Medicine, Harvard Medical School
Beth Israel Deaconess Medical Center
Dana Farber/Harvard Cancer Center
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:45-8:30</td>
<td>Registration</td>
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<tr>
<td>8:30-8:40</td>
<td>Welcome</td>
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<tr>
<td><strong>Morning Session</strong></td>
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<tr>
<td>8:40-9:05</td>
<td>Rare cell biology and response to targeted therapy in cancer</td>
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<td>Arjun Raj, PhD</td>
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<td>9:05-9:30</td>
<td>Optimizing PARP inhibitors for ovarian cancer... the lab to the clinic</td>
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<td>Fiona Simpkins, MD</td>
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<td>9:30-9:55</td>
<td>Beyond single agent PARP inhibitors: PARP inhibitor combination strategies</td>
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<td>Ursula Matulonis, MD</td>
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<td>9:55-10:25</td>
<td>BREAK</td>
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<td>10:25-10:50</td>
<td>Mouse models of “ovarian” cancer: progress, problems, and potential platforms for testing prevention strategies</td>
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<td>Kathleen Cho, MD</td>
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<td>10:50-11:15</td>
<td>Tumor metabolism in BRCA-related breast cancer – implications for treatment</td>
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<td>Gerburg Wulf, MD, PhD</td>
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<td>11:15-11:40</td>
<td>New functions and inhibitors of polymerase theta</td>
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<td>Richard Pomerantz, PhD</td>
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<td>11:40-1:30</td>
<td>LUNCH</td>
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Afternoon Session

1:30-1:55  Understanding how replication stress influences replication origin firing efficiency by genome–wide analyses
          Tony Huang, PhD

1:55-2:20  PARP inhibitors and precision medicine
          Yves Pommier, MD, PhD

2:20-2:45  How DNA damage activates immune responses to cancer
          Roger Greenberg, MD, PhD

2:45-3:00  BREAK

3:00-4:30  Global Prize Presentation and Keynote
          How mutations affecting the BRCA2 gene cause cancer susceptibility
          Professor Ashok Venkitaraman

4:30-6:00  Poster Reception

5:30-6:30  Breakthroughs and Discoveries Panel moderated by Susan Domchek and featuring Ashok Venkitaraman, Ursula Matulonis and Georgia Chenevix-Trench.

This lay session is open to the public and will begin promptly at 5:30.
7:45-8:30  Registration
8:30-8:40  Welcome

Morning Session
8:40-9:05  A multiplexed homology-directed DNA repair assay to assess the effects of variants in BRCA1
            Jeffrey Parvin, MD, PhD
9:05-9:30  Role of BRCA2 in susceptibility to prostate cancer
            Elaine Ostrander, PhD
9:30-9:55  Contributions of non-BRCA predisposition genes to hereditary cancer
            Fergus Couch, PhD
9:55-10:25 BREAK
10:25-10:50 Genetic risk assessment and risk reduction of women’s cancers: Progress and challenges
            Allison Kurian, MD, MSc
10:50-11:15 Clinical application of polygenic risk scores: ready or not, here it comes
            Mark Robson, MD
11:15-11:40 Beyond GWAS: moving from SNP to gene and biological function
            Georgia Chenevix-Trench, PhD
11:40-12:05 Cancer genetic counseling in transgender patients: unique considerations
            Danielle McKenna, LCGC
12:05-1:30  LUNCH
Afternoon Session

1:30-1:55  Risk factors for executive function difficulties after RRSO
           C. Neill Epperson, MD

1:55-2:20  Ovarian cancer prevention and treatment for women with homologous recombination defects
           Mark Morgan, MD

2:20-2:45  Cancer genetic testing at the end of life: challenges, opportunities, and legacies
           Lisa Madlensky, PhD, CGC

2:55-4:00  Panel Discussion: Cancer Genetics Case Review
           Moderated by Susan Domchek, MD and featuring Allison Kurian, Mark Robson and Basser Genetic Counselor Jessica Long

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 DESIGNATION OF CREDIT
In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the health care team. In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council of Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the health care team. Total physician and nurse credits 10.25.

PHYSICIANS Penn Medicine designates this live activity for a maximum of 13 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

NURSES The program will award 13 contact hours.

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.

DISCLOSURES
Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the ACCME Standards for Commercial Support. 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 University 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 27, 2018.

SPECIAL REQUESTS
If special requests for food or other logistics are required, contact basserinfo@uphs.upenn.edu by April 27, 2018.

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).

REGISTER ONLINE

For more information, contact Basserinfo@uphs.upenn.edu or call 215.662.4348
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 Sunday, April 22, 2018 to take advantage of the group rate.

For more information, contact Basserinfol@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/

PUBLIC TRANSPORTATION
The SEPTA University City train station is within walking distance of the medical campus. For more information, visit www.septa.org.

For more information, contact Basserinfol@uphs.upenn.edu or call 215.662.4348
The Basser Center for BRCA is the first comprehensive center for the research, treatment and prevention of BRCA-related cancers. Devoted to advancing care for people affected by BRCA mutations, the Basser Center’s unique model provides funding for collaborative research, education and outreach programs around the world.

WE TAKE CANCER PERSONALLY.