

Abramson Cancer Center



Penn Medicine

# BASSER RESEARCH CENTER *for* BRCA

3<sup>RD</sup> ANNUAL SCIENTIFIC SYMPOSIUM

## Recent Advances in Breast and Ovarian Cancer Genetics

**Keynote Speaker and Basser Global Prize Awardee:  
Mary-Claire King, PhD**

**Monday May 11, 2015**

Smilow Center for Translational Research  
Auditorium/Commons

(enter through Perelman Center for Advanced Medicine)

**Tuesday May 12, 2015**

Biomedical Research Building

**The Basser Research  
Center for BRCA** focuses  
exclusively on *BRCA1* and *BRCA2*  
research. Our mission is to deliver  
cutting edge research in basic  
and clinical sciences to advance  
the care of individuals who  
carry BRCA mutations.

**REGISTER ONLINE**

For more information, contact [Basserinfo@uphs.upenn.edu](mailto:Basserinfo@uphs.upenn.edu) or call **215.662.4348**.



# Program Overview

This symposium is designed to educate health care providers in cancer genetics by presenting cutting-edge data from renowned BRCA1/2 researchers. This symposium will provide information on new strategies in genetic testing, cancer screening and prevention and ongoing work in targeted therapy for BRCA1/2 mutation carriers through a series of lectures and panel discussions and give attendees 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* as well as new sequencing strategies which may aid in developing targeted treatment.**
- **Discuss the current understanding of variants of uncertain significance.**
- **Describe the current clinical management strategies for individuals with genetic risk of breast, ovarian and pancreatic cancer.**
- **Identify ethical and social implication of genetic testing specifically with regard to communication to children.**
- **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

### Mary-Claire King, PhD

*University of Washington in Seattle*

Mary-Claire King, PhD, is American Cancer Society Research Professor of Genetics and Medicine (Medical Genetics) at the University of Washington in Seattle. Dr. King was elected to serve as 2012 President of the American Society of Human Genetics (ASHG), after having been a member of the ASHG Board of Directors. She has also served on the Editorial Board of ASHG's scientific journal, *The American Journal of Human Genetics (AJHG)*.

In 1990, Mary-Claire King demonstrated that a single gene on chromosome 17q21 (which she named *BRCA1*) was responsible for breast and ovarian cancer in many families. Her discovery of *BRCA1* revolutionized the study of numerous other common inherited diseases. The approach that King developed to identify *BRCA1* has since proven valuable in the study of many other genetic diseases and conditions.

Her research focuses on identifying and characterizing critical genes—and their interaction with environmental influences—that play a role in the development of conditions such as breast and ovarian cancer, schizophrenia, and hearing loss.

She has held numerous advisory positions including those at the National Commission on Breast Cancer of the Presidents Cancer Panel and the NIH office of Research on Women's Health.



## SYMPOSIUM CHAIR

### Susan M. Domchek, MD

*Executive Director, Basser Research Center for BRCA*

*Director, Mariann and Robert MacDonald Women's Cancer Risk Evaluation Center*

Susan Domchek is Professor of Medicine and 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 Research Center for BRCA at the Abramson Cancer Center at the University of Pennsylvania, and Director of the Mariann and Robert MacDonald Women's 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 150 articles appearing in scholarly journals, and serves on a number of editorial review boards, including the Journal of Clinical Oncology.

## SYMPOSIUM CO-ORGANIZERS

### **Roger Greenberg, MD, PhD**

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

### **Katherine Nathanson, MD**

Associate Professor, Dept. of Medicine,  
Translational Medicine and Human Genetics  
and Co-Leader, Cancer Control Program  
Abramson Cancer Center  
Director of Genetics, Basser Research Center for BRCA

### **Ronald Drapkin, MD, PhD**

Associate Professor of Obstetrics & Gynecology  
Director, Ovarian Cancer Research Center  
Director of Gynecological Research,  
Basser Research Center for BRCA

## PENN MEDICINE FACULTY

### **Katherine Nathanson, MD**

Associate Professor, Dept. of Medicine,  
Translational Medicine and Human Genetics  
and Co-Leader, Cancer Control Program  
Abramson Cancer Center  
Director of Genetics, Basser Research Center for BRCA

### **Jill Stopfer, MS, CGC**

Senior Genetic Counselor  
Mariann and Robert MacDonald Women's  
Cancer Risk Evaluation Center and  
Basser Research Center for BRCA  
Abramson Cancer Center

### **Robert Vonderheide, MD, DPhil**

Hanna Wise Professor in Cancer Research  
Department of Medicine, Hematology Oncology  
Abramson Cancer Center

### **Lin Zhang, MD**

Research Associate Professor  
Department of Obstetrics and Gynecology  
Perelman School of Medicine

## GUEST SPEAKERS

### **Antonis Antoniou, PhD**

Senior Cancer Research Fellow  
Department of Public Health and Primary Care  
University of Cambridge  
Cancer Research, UK

### **Junjie Chen, PhD**

Professor and Chair  
Department of Experimental Radiation Oncology  
Division of Radiation Oncology  
The University of Texas MD Anderson Cancer Center

### **Robert L. Coleman, MD, FACOG, FACS**

Professor, Department of Gynecologic Oncology  
and Reproductive Medicine  
Vice Chair, Clinical Research  
Ann Rife Cox Chair in Gynecology  
University of Texas MD Anderson Cancer Center

### **Katherine D. Crew, MD, MS**

Assistant Professor of Medicine and Epidemiology  
Division of Hematology/Oncology  
Director, Clinical Breast Cancer Prevention Program  
Columbia University Medical Center

### **Alan D. D'Andrea, MD**

The Fuller-American Cancer Society Professor  
Harvard Medical School  
Department of Radiation Oncology  
Dana-Farber Cancer Institute

### **William D. Foulkes, MBBS, PhD, MRCP, FRCPC**

Professor, Departments of Medicine  
Human Genetics and Oncology  
McGill University

### **Sonia Franco, MD, PhD**

Assistant Professor, Radiation Oncology  
Johns Hopkins University School of Medicine

### **Neil Johnson, PhD**

Assistant Professor, Developmental Therapeutics  
Fox Chase Cancer Center

### **Jos Jonkers, PhD**

Professor of Molecular Experimental  
Oncogenetics and Cancer Therapeutics  
Division Head-Molecular Pathology  
The Netherlands Cancer Institute

### **Mark Robson, MD**

Clinic Director, Clinical Genetics Service  
Memorial Sloan Kettering Cancer Center

### **Agnel Sfeir, PhD**

Assistant Professor, Department of Cell Biology  
Skirball Institute of Biomolecular Medicine New York  
University School of Medicine

### **Geoffrey Shapiro, MD, PhD**

Associate Professor of Medicine  
Director, Early Drug Development Center  
Dana-Farber Cancer Institute

### **David Solit, MD**

Geoffrey Beene Chair  
Director, Marie-Josée and Henry R. Kravis  
Center for Molecular Oncology  
Memorial Sloan Kettering Cancer Center

# Basser Research Center for BRCA

## 3<sup>RD</sup> ANNUAL SCIENTIFIC SYMPOSIUM AGENDA

**MONDAY MAY 11, 2015**

### **Smilow Center for Translational Research (SCTR)**

*Rubenstein Auditorium and Commons area*

8:00-8:30 Registration

8:30-8:45 Welcome/Introductions

### **Morning Session: Mechanisms of Sensitivity and Resistance for BRCA1/2 Therapeutics**

8:45-9:15 Mouse Models of BRCA Mutant Cancer  
Jos Jonkers, PhD

9:15-9:45 Mammalian Polymerase Theta Promotes Alternative-NHEJ and Suppresses Recombination  
Agnel Sfeir, PhD

9:45-10:15 DNA Repair Therapies for Ovarian Cancer  
Alan D'Andrea, MD

10:15-10:45 Break

10:45-11:15 Balance of *BRCA1* and 53BP1 in DNA Repair  
Junjie Chen, PhD

11:15-11:45 Analyses of the Genetic Interaction Between PARP2 and the *BRCA1/BRCA2* Tumor Suppressors: Towards Selective PARP Inhibitors  
Sonia Franco, MD, PhD

11:45-12:15 *BRCA1* Exon Splicing and PARP Inhibitor Resistance  
Neil Johnson, PhD

**12:15-1:15 Lunch**



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#### **Afternoon Session: Novel Approaches to Prevention and Therapy**

1:15-1:45 Long Non-coding RNAs (lncRNAs) in PARPi/platinum Resistance of BRCA Mutant Cancer

Lin Zhang, MD

1:45-2:15 Clinical Experience with PARP in Ovarian Cancer and the New Path to Regulatory Approval

Robert Coleman, MD

2:15-2:45 Prospect of a Vaccine to Prevent BRCA1/2 Cancers

Robert Vonderheide, MD, DPhil

2:45-3:00 Break

#### **3:00-4:15 Global Prize Presentation and Keynote**

*BRCA1* and *BRCA2* and Inherited Breast and Ovarian Cancer: From Gene Discovery to Public Health

Mary-Claire King, PhD

**4:15-5:00 Poster Session/Reception**



# Basser Research Center for BRCA

## 3<sup>RD</sup> ANNUAL SCIENTIFIC SYMPOSIUM AGENDA

**TUESDAY MAY 12, 2015**

### **Biomedical Research Building (BRB)**

*Auditorium and Commons area*

8:00-8:30 Registration

8:30-8:45 Welcome/Introductions

### **Morning Session: Clinical Application of Germline and Somatic Genetics**

8:45-9:15 Massively Parallel Sequencing Brings Together the Somatic and Inherited Genome  
Katherine Nathanson, MD

9:15-9:45 Defining the Actionable Genome  
David Solit, MD

9:45-10:15 Cyclin-dependent Kinase Inhibition: A Novel Strategy for Overcoming PARP Inhibitor Resistance  
Geoff Shapiro, MD

10:15-10:45 Break

10:45-11:15 New Approaches to the Integration of Cancer Susceptibility Testing into Clinical Practice  
Mark Robson, MD

11:15-11:45 Breast Cancer Susceptibility Genes: Yes, No, Maybe So  
William Foulkes, MB, PhD

11:45-12:15 Modeling the Genetic Susceptibility to Breast and Ovarian Cancer: Incorporating Cancer Risks Conferred by *BRCA1*, *BRCA2* and Others into Risk Prediction Models  
Antonis Antoniou, PhD



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**12:15-1:15 Lunch**

**Afternoon Session: Counseling Issues and Panel Discussion**

1:15-1:45 Decision Support for BRCA Genetic Testing in the Primary Care and Community Settings  
*Katherine Crew, MD, MS*

1:45-2:15 The Promise and Peril of Panel Testing for Inherited Cancer Susceptibility  
*Jill Stopfer, MS, CGC*

2:15-3:15 Panel discussion moderated by *Susan Domchek, MD*

**3:15-3:30 Wrap up/Evaluations**



# Registration Information

**REGISTER ONLINE**

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

## ACCREDITATION AND CREDIT INFORMATION

**Physicians:** The Perelman School of Medicine at the University of Pennsylvania is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Perelman School of Medicine at the University of Pennsylvania designates this live activity for a maximum of 11.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**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 approver by the American Nurses Credentialing Center's Commission on Accreditation.

**NSGC:** 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

Perelman School of Medicine at the University of Pennsylvania, Office of Continuing Medical Education, adheres to the ACCME *Standards for Commercial Support*. Faculty disclosure information will be made available in the conference materials and syllabi. 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](mailto:basserinfo@uphs.upenn.edu)

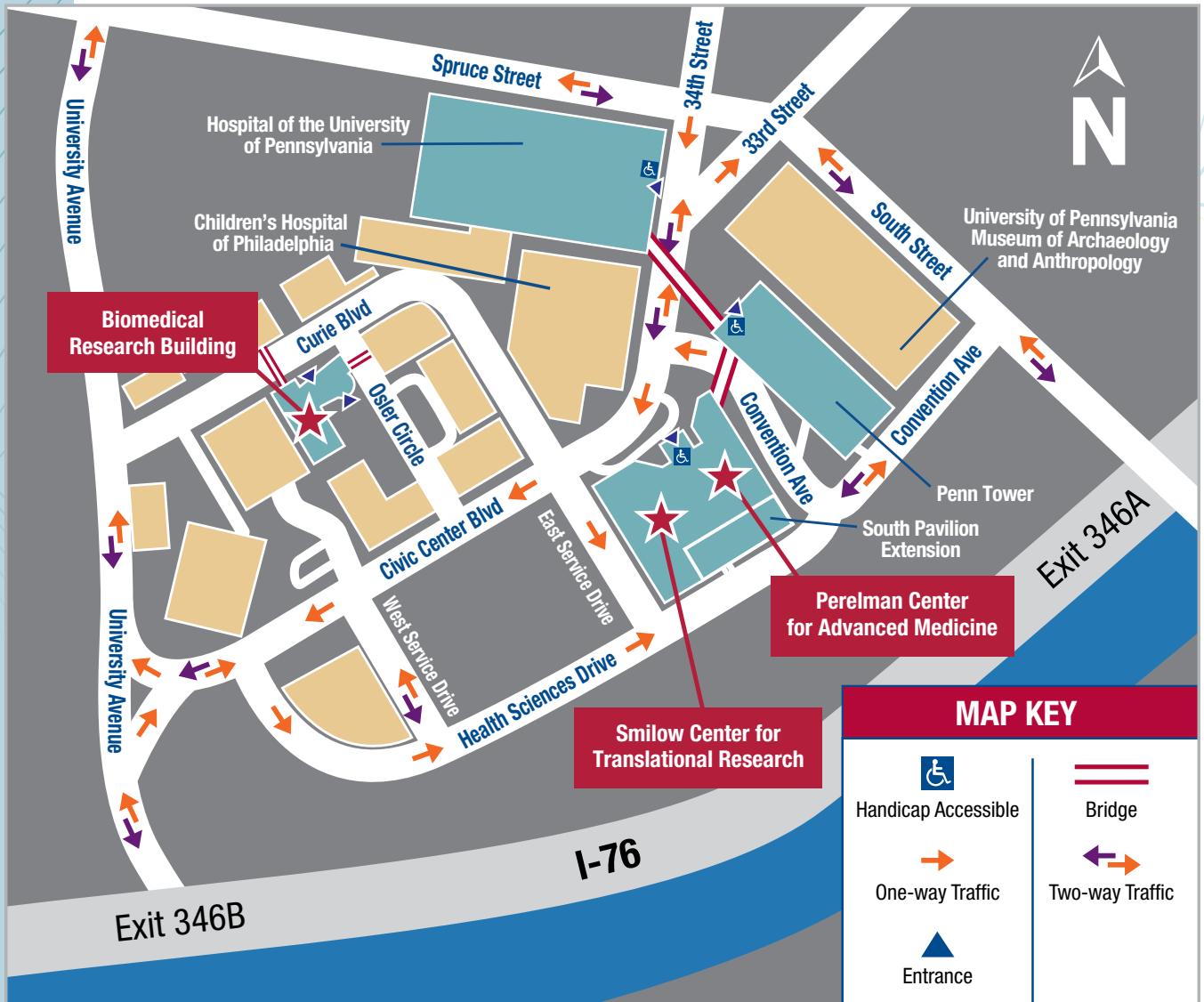
## NONDISCRIMINATION STATEMENT

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).

For more information, contact [Basserinfo@uphs.upenn.edu](mailto:Basserinfo@uphs.upenn.edu) or call 215.662.4348.

# Visiting Information

## PENN MEDICINE CAMPUS MAP



### HOTEL

A block of rooms has been reserved at the **Sheraton Hotel – Philadelphia/University City** at a special group rate of \$175 per night.

**Rooms must be reserved by Friday, April 10, 2015** to take advantage of the group rate.

[RESERVE YOUR ROOM](#)

For more information, contact [Basserinfo@ups.upenn.edu](mailto:Basserinfo@ups.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](http://www.Septa.org)

