10TH ANNUAL SCIENTIFIC SYMPOSIUM A CME/CNE - Certified Conference

BRCA1, BRCA2 and Beyond: An Update on Hereditary Cancer

Keynote Speaker and Basser Global Prize Awardee: Andre Nussenzweig, PhD

TUESDAY, MAY 10 - WEDNESDAY, MAY 11, 2022

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 researchers and clinicians. This symposium will provide new information on progress in cancer screening and prevention, as well as ongoing work in targeted therapy for BRCA1/2 and other mutation carriers through a series of lectures and panel discussions.

PROGRAM OBJECTIVES

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

- Discuss new research on the genetic epidemiology of *BRCA1/2* and other homologous recombination deficiency (HRD) genes.
- Describe current ethical, legal and social issues associated with carrying a *BRCA1/2* mutation.
- Review new approaches to screening and prevention of hereditary breast, ovarian, pancreatic and prostate cancer.
- Discuss new advances in treatment for mutation carriers of *BRCA1/2* and other known cancer susceptibility genes.

WHO SHOULD ATTEND

Healthcare providers including medical oncology, surgical oncology, gynecology oncology, OB-GYN, genetic counselors, primary care physicians, physician assistants and nurses/nurse practitioners who are interested in the genetics of *BRCA1/2* related cancers.



KEYNOTE SPEAKER AND BASSER GLOBAL PRIZE AWARDEE Andre Nussenzweig, PhD National Cancer Institute (NCI)

The Basser Center is honored to announce that Andre Nussenzwieg, PhD, of the National Cancer Institute (NCI), is the recipient of the ninth annual Basser Global Prize. Dr. Nussenzweig serves as Branch

Chief of the Laboratory of Genome Integrity in the NCI's Center for Cancer Research. Dr. Nussenzweig's work on the fundamental aspects of DNA repair, replication, and genome integrity in cells has led to important discoveries that have applications for the development of biomarkers and targeted therapeutics for the treatment of BRCA-mutated cancers. In 2011, Dr. Nussenzweig established a new department at NCI called the Laboratory of Genome Integrity. He is also an elected member of the European Molecular Biology Organization, a National Institutes of Health Distinguished Investigator and a 2019 inductee into the National Academy of Medicine.



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 National Academy of Medicine, Dr. Domchek is also a significant contributor to the oncology literature. She has authored/co-authored more than 350 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, among others.

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

Adam Fredo, PA-C

Physician Assistant Medical Oncology Penn Medicine

Roger Greenberg, MD, PhD

Professor of Cancer Biology Investigator, Penn Center for Genome Integrity Director of Basic Science, Basser Center for BRCA

Mosetta Harris, CRNP

Nurse Practitioner Rena Rowan Breast Center Penn Medicine

Katherine Nathanson, MD

Pearl Basser Professor of BRCA-Related Research Deputy Director, Abramson Cancer Center Director of Genetics, Basser Center for BRCA

PENN MEDICINE FACULTY

George Burslem, PhD

Assistant Professor Department of Biochemistry and Biophysics

Jessica Ebrahimzadeh, MS, LCGC

Genetic Counselor Mariann & Robert MacDonald Cancer Risk Evaluation Center Basser Center for BRCA

Kara Maxwell, MD, PhD

Assistant Professor of Medicine and Genetics Staff Physician, Corporal Michael Crescenz VA Medical Center

Robert H. Vonderheide, MD, DPhil

Director, Abramson Cancer Center Vice President, University of Pennsylvania Health System Vice Dean, Perelman School of Medicine

GUEST SPEAKERS

Kara Bernstein, PhD

Associate Professor Department of Pharmacology Chemical Biology, School of Medicine University of Pittsburgh School of Medicine

Karlene Cimprich, PhD

Professor of Chemical and Systems Biology Stanford University School of Medicine

Gillian Hanley, PhD

Assistant Professor Department of Obstetrics and Gynecology University of British Colombia, Vancouver Coastal Health Research Institute

Neil Johnson, PhD

Associate Professor of Molecular Therapeutics Fox Chase Cancer Center

Jos Jonkers, PhD

Professor of Molecular Experimental Oncogenetics and Cancer Therapeutics University of Leiden, The Netherlands

Serena Nik-Zainal, MD, PhD

Professor of Genomic Medicine and Bioinformatics University of Cambridge

Kenneth Offit, MD, MPH

Chief, Clinical Genetics Service Vice Chair, Department of Medicine (Academic Affairs) Member, Sloan Kettering Institute Robert and Kate Niehaus Chair in Inherited Cancer Genomics Memorial Sloan Kettering Cancer Center

Stephen Pettitt, PhD

Senior Staff Scientist CRUK Gene Function/Target Validation & DDR Laboratories Institute of Cancer Research, London

Mark Robson, MD

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

Agata Smogorzewska, MD, PhD

Associate Professor Genome Maintenance The Rockefeller University

Andrew Tutt, MB, ChB, PhD, FMedSci

Head of the Breast Cancer Research Director, Breast Cancer Now Research Centre The Institute of Cancer Research, London

Elton Zeqiraj, PhD

Sir Henry Dale Fellow Astbury Centre for Structural Molecular Biology School of Molecular and Cellular Biology University of Leeds

Lee Zou, PhD

Professor of Pathology, Harvard Medical School Scientific Co-Director, MGH Cancer Center James and Patricia Poitras Endowed Chair in Cancer Research

10th annual scientific symposium AGENDA

TUESDAY, MAY 10, 2022

7:30-8:15am	Registration
8:15-8:30am	Welcome and Introductions
Morning Session	
8:30-9:00am	Jos Jonkers, PhD
	Insights from mouse models of BRCA associated breast cancer
9:00-9:30am	Neil Johnson, PhD
	BRCA1-PALB2 in DSB repair
9:30-10:00am	Elton Zeqiraj, PhD
	Structure and function relationships of BRCA1-BARD1 interactions
10:00-10:30am	BREAK
10:30-11:00am	George Burslem, PhD
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10:30-11:00am 11:00-11:30am 11:30am-12:00pm 12:00-1:15pm 1:15-1:45pm	George Burslem, PhD Chemical tools for the study of ubiquitination Lee Zou, PhD Impacts of transcription and RNAs on DNA break repair Karlene Cimprich, PhD RNA-mediated genome instability LUNCH & POSTER RECEPTION Serena Nik-Zainal, MD, PhD

10th annual scientific symposium AGENDA

TUESDAY, MAY 10, 2022

1:45-2:15pm	Agata Smogorzewska, MD, PhD
	Mechanism of tumorigenesis in the setting of DNA interstrand crosslink repair deficiency
2:15-2:45pm	Kara Bernstein, PhD
	Mutation cluster in breast and ovarian cancer suppressor <i>RAD51C</i> identified by comprehensive analysis of cancer variants
2:45-3:15pm	BREAK
3:15-4:30pm	Global Prize presentation and keynote address Andre Nussenzweig, PhD
	How BRCA proteins promote genome stability
5:00-6:30pm	Breakthroughs and Discoveries panel moderated by Susan Domchek, MD and featuring Andre Nussenzweig PhD, Andrew Tutt MB, ChB, PhD, FMedSci, and Kara Maxwell, MD, PhD
	This lay session is open to the public.

10th annual scientific symposium AGENDA

WEDNESDAY, MAY 11, 2022

7:30-8:15am	Registration
8:15-8:30am	Welcome and Introductions
8:30-9:00am	Andrew Tutt, MB, ChB, PhD, FMedSci
	Optimising systemic therapy for women with <i>BRCA1/2</i> mutations and HR deficient breast cancer: Recent data from the clinic and future directions
9:00-9:30am	Stephen Pettitt, PhD
	Targeting PARP inhibitor resistance
9:30-10:00am	Robert H. Vonderheide, MD, DPhil
	Opportunities for immune prevention and interception of mutant BRCA cancers
10:00-10:30am	BREAK
10:30-11:00am	Kara Maxwell, MD, PhD
	BRCA and prostate cancer – from genetics to clinical care
11:00-11:30am	Kenneth Offit, MD, MPH
	Emerging approaches and regulatory challenges to population genetic testing
11:30am-12:00pm	Katherine Nathanson, MD
	Integration of genetics into the EHR: the PennChart Genomics Initiative
12:00-1:15pm	LUNCH
1:15-1:45pm	Gillian Hanley, PhD
	Outcomes following ovarian cancer prevention for both those at general population risk for ovarian cancer and those with BRCA mutations

10th annual scientific symposium AGENDA

WEDNESDAY, MAY 11, 2022

1:45-2:15pm	Mark Robson, MD
	Liquid biopsy for early detection - how close are we?
2:15-2:45pm	Jessica Ebrahimzadeh, MS, LCGC
	Year in review: Updates and trends in hereditary cancer genetic counseling
2:45-3:45pm	Case panel moderated by Susan Domchek, MD and featuring Mark Robson, MD and Basser Center genetic counselor Dana Farengo Clark, MS, MS, LCGC
3:45-4:00pm	Wrap up and Evaluations

Registration Information

This conference is **FREE** but we strongly recommend registration.Registration is required for continuing education credits.

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.

NURSE/NURSE PRACTITIONERS The program will award 11.5 NCPD hours.

PHYSICIANS Penn Medicine 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.

PHYSICIAN ASSISTANTS AAPA accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credits[™] from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 11.5 Category 1 credits for completing this activity.

GENETIC COUNSELORS The National Society of Genetic Counselors (NSGC) has authorized Basser Center for BRCA- University of Pennsylvania to offer up to 1.1 CEUs or 11 Category 1 contact hours for the activity Basser Center 9th Annual Scientific Symposium. The American Board of Genetic Counseling (ABGC) will accept CEUs earned at this program for the purposes of genetic counselor certification and recertification.

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 <u>basserinfo@pennmedicine.upenn.edu</u> by April 29, 2022.

SPECIAL REQUESTS

If special requests for food or other logistics are required, contact <u>basserinfo@pennmedicine.upenn.edu</u> by April 29, 2022.

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



For more information, contact Basserinfo@pennmedicine.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 Pennylvania 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 Penn Medicine Station (formerly University City Station) is within walking distance of the medical campus. For more information, visit <u>www.septa.org</u>.



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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.



