A Vision of the Future

The Eighth International Symposium on Hereditary Breast and Ovarian Cancer

May 5-8
Centre Mont-Royal, Montréal, Québec, Canada

Organized by:
Heredity Breast + Ovarian Cancer Foundation

In collaboration with:
McGill Program in Cancer Genetics, McGill University

www.brcasymposium.ca
Symposium Committees

Organizing Committee

CHAIR: Harley Eisman, MD, Co-Founder, Hereditary Breast and Ovarian Cancer Foundation, Montréal, QC, Canada

SCIENTIFIC PROGRAMME DIRECTOR: William Foulkes, MBBS, PhD, Director, Program in Cancer Genetics, McGill University, Montréal, QC, Canada

PUBLIC CONFERENCE PROGRAMME DIRECTOR: Laura Hayes, McGill University, Montréal, QC, Canada

Scientific Programme Committee

William Foulkes, MBBS, PhD, Director, Program in Cancer Genetics, McGill University, Montréal, QC, Canada (Chair)

Lawrence Brody, PhD, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, USA

Lisa Madlensky, PhD, CGC, Moores UCSD Cancer Center, University of California San Diego, La Jolla, CA, USA

Mark Robson, MD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Marc Tischkowitz, MBBS, PhD, University of Cambridge, Cambridge, UK

Clare Turnbull, MD, PhD, MFPH, Institute of Cancer Research, London, UK

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Yann Joly, PhD, McGill University, Montréal, QC, Canada

Wendy McKinnon, MS, CGC, University of Vermont Cancer Center, Burlington, VT, USA

Marjanka Schmidt, PhD, Netherlands Cancer Institute, Amsterdam, and Leiden University Medical Center, Leiden, The Netherlands

Britta Weigelt, PhD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Jeffrey Weitzel, MD, City of Hope National Medical Center, Duarte, CA, USA
Who Should Attend
Primary care physicians, specialist physicians, researchers, nurses and genetic counsellors who are interested in furthering their knowledge in the field of hereditary breast and ovarian cancer.

Symposium Objectives
The programme was developed to present to both clinicians and researchers the most up-to-date information on hereditary breast and ovarian cancer.

Upon completion of the programme the learner will be able to:

- Better and more efficiently identify individuals who are at high risk for hereditary cancer;
- Review the latest developments in the genetics and molecular science of hereditary breast and ovarian cancer;
- Be able to discriminate between clinically useful and less clinically useful breast cancer susceptibility gene tests;
- Be informed of new approaches to management of hereditary prostate cancer risk;
- Describe state of the art approaches to the management of individuals with inherited mutations;
- Apply cutting edge science to treat breast and/or ovarian cancer patients who have inherited mutations;
- Identify and understand prevention and early diagnostic strategies for individuals at risk for hereditary breast cancer;
- Compare and contrast BRCA management models in countries with different health resources and priorities;
- Identify issues and elaborate priorities for hereditary breast, ovarian and pancreas cancer basic science and clinical research;
- Fully consider ethical issues surrounding population testing for breast and ovarian cancer risk;
- Better understand the factors influencing risk communication among families carrying a BRCA mutation.
Tuesday, May 5, 2020  18:30 - 20:30

16:00  REGISTRATION

18:30  GENETICS AND GENOMICS GLOSSARY  
– An Introductory Session

CHAIR:  Marc Tischkowitz, MD, PhD, University of Cambridge, Cambridge, UK

Nomenclature – Why is it important and what do I need to know?  
Steven Harrison, PhD, Broad Institute of MIT and Harvard, Cambridge, MA, USA

Next-Generation Sequencing (NGS) – The Basics  
Britta Weigelt, PhD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Variant Interpretation – A User’s Guide  
Clare Turnbull, MD, PhD, MFPH, Institute of Cancer Research, London, UK

Polygenic Risk Score: What does it mean and what does it measure?  
Paul Pharoah, BM, BCh, PhD, University of Cambridge, Cambridge, UK

DNA Repair – A simple introduction to a complex world  
Ralph Scully, MBBS, PhD, Beth Israel Deaconess Medical Center, Boston, MA, USA

Questions and Discussion
Wednesday, May 6, 2020
8:00 - 18:00

7:00  REGISTRATION / CONTINENTAL BREAKFAST

8:00  Welcome and Introduction to the Programme
     Overview of Today’s Sessions

8:15  SESSION 1:
     Mutations, variants, databases
     CHAIR: Lawrence Brody, PhD, National Human Genome Research
            Institute, National Institutes of Health, Bethesda, MD, USA

     Variant interpretation in the genomic era
     Jonathan Berg, MD, University of North Carolina School
     of Medicine, Chapel Hill, NC, USA

     Functional classification of HRD gene variant using
     CRISPR screens
     Lea Starita, PhD, University of Washington, Seattle, WA, USA

     Proffered Papers 1, 2, 3
     Question and discussion period (all speakers)

9:45  BREAK

10:15 SESSION 2:
     Pathology – Clinical relevance
     CHAIR: Blaise Clarke, MD, University Health Network, Toronto,
            ON, Canada

     Breast cancer susceptibility genes, pathology
     and outcome
     Marjanka Schmidt, PhD, Netherlands Cancer Institute,
     Amsterdam, and Leiden University Medical Center, Leiden,
     The Netherlands

     Where do ovarian cancers originate and
     why does it matter?
     Christopher Crum, MD, Brigham and Women’s Hospital,
     Boston, MA, USA

     Proffered Papers 1, 2, 3
     Question and discussion period (all speakers)

11:45  LUNCH
SESSION 3:  
Applied functional and computational genetics  
CHAIR: Britta Weigelt, PhD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Mutational profiles – New approaches to genetic diagnosis and treatment  
Serena Nik-Zainal, MD, PhD, University of Cambridge, Cambridge, UK

DNA Repair – Clinical relevance for breast cancer/ovarian cancer  
Ralph Scully, MBBS, PhD, Beth Israel Deaconess Medical Center, Boston, MA, USA

Proffered Papers 1, 2, 3  
Question and discussion period (all speakers)

POSTER SESSION 1

SESSION 4:  
SPECIAL ROUND TABLE  
Population-based approaches to genetic testing and risk assessment – Beyond the current models  
MODERATORS: Lawrence Brody, PhD, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, USA; and Clare Turnbull, MD, PhD, MFPH, Institute of Cancer Research, London, UK

INTRO, OVERVIEW, CONSIDERATIONS  
Paul Pharoah, BM, BCh, PhD, University of Cambridge, Cambridge, UK

POPULATION TESTING  
Integrated service provider program: the Geisinger experience  
Adam Buchanan, MS, MPH, LGC, Genomic Medicine Institute, Geisinger Health System, Danville, PA, USA

National approaches: USA and beyond  
Stephen Chanock, MD, National Cancer Institute, Rockville, MD, USA

Founder testing – the Israel approach: Is it generalizable?  
Ephrat Levy-Lahad, MD, Shaare Zedek Medical Center, Jerusalem, Israel
**Thursday, May 7, 2020**  
8:00 - 18:40

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<tr>
<td>7:00</td>
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<td>8:00</td>
<td><strong>Introduction to the Day’s Proceedings</strong></td>
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<td><strong>Remembering Henry Lynch</strong></td>
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<td><em>Lisa Madlensky</em>, PhD, CGC, Moores UCSD Cancer Center, University of California San Diego, La Jolla, CA, USA</td>
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<td>8:15</td>
<td><strong>SESSION 5:</strong></td>
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<td>Early diagnosis of breast and prostate cancer in BRCA1 or BRCA2 heterozygotes</td>
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<td><strong>CHAIR:</strong> <em>Jeffrey Weitzel</em>, MD, City of Hope National Medical Center, Duarte, CA, USA</td>
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<td><strong>MRI and the early diagnosis of breast cancer in BRCA1 and BRCA2 heterozygotes</strong></td>
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<td><em>Steven Narod</em>, MD, FRCP, Canada Research Chair in Breast Cancer, Women’s College Research Institute/University of Toronto, Toronto, ON, Canada</td>
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<td><strong>Prostate cancer in men with BRCA1 or BRCA2 pathogenic variants – the IMPACT study</strong></td>
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<td><em>Elena Castro</em>, MD, PhD, CNIO-IBIMA Genitourinary Cancer Research Unit, Institute of Biomedical Research in Málaga (IBIMA), Málaga, Spain</td>
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<td><strong>SESSION 6:</strong></td>
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<td>New developments in cancer treatment in HBOC</td>
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<td><strong>CHAIR:</strong> <em>Ephrat Levy-Lahad</em>, MD, Shaare Zedek Medical Center, Jerusalem, Israel</td>
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<td><strong>Update on therapy for breast cancer for women with BRCA1/2 pathogenic variants</strong></td>
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<td><em>Mark Robson</em>, MD, Memorial Sloan Kettering Cancer Center, New York, NY, USA</td>
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<td><strong>New treatments for BRCA-deficient ovarian cancer</strong></td>
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<td><em>Ursula Matulonis</em>, MD, Dana-Farber Cancer Institute, Boston, MA, USA</td>
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SESSION 7:  
Genetic Counselling – New challenges  
CHAIR: Antonis Antoniou, PhD, University of Cambridge, Cambridge, UK

Genetic Counselling for a general population: lessons learned  
Lauren Ryan, MS, LCGC, Color Genomics, Burlingame, CA, USA

A practical approach to handling direct-to-consumer data  
Lisa Madlensky, PhD, CGC, Moores UCSD Cancer Center, University of California San Diego, La Jolla, CA, USA

Proffered Papers 1, 2, 3  
Question and discussion period (all speakers)

POSTER SESSION 2

SESSION 8:  
Special Interest Groups (SIGs)

Moderated one-hour interactive discussions with the aim of fostering bilateral knowledge transfer. Participants will rank these SIGs in order of preference and will be assigned to participate in two SIGs on a first-come, first-reserved basis.

SIG 1 Rarer moderate to highly penetrant breast and ovarian cancer syndromes – CDH1, PTEN, TP53, NTHL1 and others  
In this session, attendees will join the presenters in exploring clinico-pathological and management aspects of important breast and ovarian cancer susceptibility genes.  
Marc Tischkowitz, MD, PhD, University of Cambridge, Cambridge, UK (session lead)  
Nicoline Hoogerbrugge, MD, PhD, Radboud University Medical Center, Nijmegen, The Netherlands  
Jeffrey Weitzel, MD, City of Hope National Medical Center, Duarte, CA, USA

SIG 2 Genetic counselling – How to expect the unexpected?  
In this interactive case-based session, Dr. Hurley will explore advanced concepts in genetic counselling and will show how counsellors can help clients cope with the challenges associated with discovering their genetic status.  
Karen Hurley, PhD, Cleveland Clinic, Cleveland, OH, USA
SIG 3  
**Hereditary prostate, pancreatic and male breast cancer: Research updates and surveillance recommendations**  
In this session, the presenters will discuss the latest research on prevention, early diagnosis and treatment of hereditary forms of these three cancers.  

**Elena Castro**, MD, PhD, CNIO-IBIMA  
Genitourinary Cancer Research Unit, Institute of Biomedical Research in Málaga (IBIMA), Málaga, Spain  
**George Zogopoulos**, MD, PhD, McGill University Health Centre, Montréal, QC, Canada  
**Justin Lorentz**, CGC, Sunnybrook Odette Cancer Centre, Toronto, ON, Canada  

SIG 4  
**Moderate risk genes – When and where are they useful?**  
Hear the latest about recent research into moderate risk breast and ovarian cancer genes – and get practical management advice at the same time.  

**Paul James**, MBChB, DPhil, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia (*session lead*)  
**Mark Robson**, MD, Memorial Sloan Kettering Cancer Center, New York, NY, USA  
**Lisa Madlensky**, PhD, CGC, Moores UCSD Cancer Center, University of California San Diego, La Jolla, CA, USA  
**Marjanka Schmidt**, PhD, Netherlands Cancer Institute, Amsterdam, and Leiden University Medical Center, Leiden, The Netherlands  

SIG 5  
**Ethico-legal issues around usage of genomic data**  
The new genomics have thrown up a slew of ethico-legal issues, from data access to discrimination, to solving crimes using DNA from relatives. Come and learn what’s troubling the ethicists.  

**Yann Joly**, PhD, McGill University, Montréal, QC, Canada (*session lead*)  
**Gabrielle Bertier**, PhD, Icahn School of Medicine at Mount Sinai, New York, NY, USA  
**Nathalie Bolduc**, MSc, Quebec Breast Cancer Foundation, Montréal, QC, Canada  
**Robert Cook-Deegan**, MD, Arizona State University, Washington, DC, USA
**SIG 6**  
**Ovarian cancer – a multi-faceted view**  
Join five experts in various aspects of the study of hereditary ovarian cancer for a stimulating, in-depth discussion of the key issues in research and practice in 2020.

**Paul Pharoah**, BM, BCh, PhD, University of Cambridge, Cambridge, UK *(session lead)*

**Antonis Antoniou**, PhD, University of Cambridge, Cambridge, UK

**Blaise Clarke**, MD, University Health Network, Toronto, ON, Canada

**Ursula Matulonis**, MD, Dana-Farber Cancer Institute, Boston, MA, USA

**Britta Weigelt**, PhD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

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**Friday, May 8, 2020**  
**8:00 - 13:10**

7:00  CONTINENTAL BREAKFAST

8:00  **Introduction to the Day’s Proceedings**

8:15  **SESSION 9:**  
**Insight from large datasets of women with breast cancer**  
**CHAIR:**  **Stephen Chanock**, MD, National Cancer Institute, Rockville, MD, USA

**Population-based studies of breast cancer risk in association with established and candidate breast cancer susceptibility genes**  
**Fergus Couch**, PhD, Mayo Clinic, Rochester, MN, USA

**Generation and analysis of genomic data at population level: the UK experience**  
**Clare Turnbull**, MD, PhD, MFPH, Institute of Cancer Research, London, UK

**Proffered Papers 1, 2, 3**

**Question and discussion period (all speakers)**

9:45  **BREAK**
Marla Miller-Gross

Marla Miller-Gross passed away less than two years after being diagnosed with "routine" breast cancer, months shy of her fortieth birthday. Marla's courage in opting for genetic testing has touched lives far far beyond those that she befriended while living.

Out of Marla's tragedy, HBOC was born and the drive to improve the outcome of women and families with hereditary breast and ovarian cancer.

10:15  SESSION 10: Polygenic risk scores in practice
CHAIR: Mark Robson, MD, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Polygenic risk scores and the CanRisk breast and ovarian cancer risk prediction tool
Antonis Antoniou, PhD, University of Cambridge, Cambridge, UK

Multifactorial breast cancer risk assessment
Paul James, MBChB, DPhil, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

Proffered Papers 1, 2, 3
Question and discussion period (all speakers)

11:55  CLOSING SESSION: The Marla Miller Memorial Lecture

Introductory Remarks
William Foulkes, MBBS, PhD, Director, McGill University Program in Cancer Genetics, Montréal, QC, Canada

The Icelandic approach to population-based testing for high risk alleles for breast and ovarian cancer
Kári Stefánsson, MD, PhD, deCODE Genetics, Reykjavík, Iceland

Presentation by the Miller Family

Closing Remarks
Harley Eisman, MD, Co-Founder, Hereditary Breast and Ovarian Cancer Foundation, Montréal, QC, Canada

Marla Miller-Gross

Marla Miller-Gross passed away less than two years after being diagnosed with "routine" breast cancer, months shy of her fortieth birthday. Marla's courage in opting for genetic testing has touched lives far far beyond those that she befriended while living.

Out of Marla's tragedy, HBOC was born and the drive to improve the outcome of women and families with hereditary breast and ovarian cancer.
Call for Abstracts

The Programme Committee is pleased to once again issue a Call for Abstracts for **oral** and **poster** presentations.

Interested participants are invited to submit abstracts on topics related to hereditary breast, ovarian, prostate and pancreatic cancer. **Submissions are welcome from all disciplines.** Specific topic categories are listed below. Abstracts may be in English or French.

Abstracts accepted for presentation as orals will be included in the programme as **10-minute proffered papers**. Presenters will take part with the invited faculty in the question and discussion period scheduled in each session.

**Abstract Submission Deadlines**
- for Oral presentation: November 6, 2019
- for Poster presentation: January 17, 2020

**Publication of Abstracts**
All accepted abstracts will be published in the Symposium Book of Abstracts. In addition, most of the abstracts will also be published in a recognized publication in online only format.

**Topic Categories**
- Biology of hereditary cancers
- BRCA1/2 mutations, variants of unknown clinical significance and databases
- Clinical issues for management
- Education
- Ethics and legal issues
- Genome-wide approaches to identify new genetic risk factors
- Molecular pathology and genetic analyses of BRCA1/2-associated cancers
- Non-BRCA1/2 genetic factors associated with cancer risk
- Psycho-oncology
- Risk assessment and genetic counselling issues

**How to Submit an Abstract**
Please complete the Online Abstract Submission Form on the Symposium website: www.brcasymposium.ca.
Living with BRCA

6th Biennial Conference on Hereditary Breast and Ovarian Cancer for Gene-Carriers, At-Risk Individuals, and Their Families

Wednesday, May 6, 2020 • 8:00 – 16:00
Centre Mont-Royal, Montréal, Québec

Attendees will have the opportunity to learn about:

- The most current information about cancer risks, surveillance, and risk reduction options for BRCA1 and BRCA2 carriers;
- Emerging evidence regarding pancreatic risk and screening as well as related BRCA 1&2 cancer risks in men;
- Psychological coping tips for cancer previvors and survivors.

Our experts in medicine, biology, psychology, and wellness, are united in one goal: bettering the lives of those living with BRCA and their families and friends.

ORGANIZING COMMITTEE

Laura Hayes, McGill University, Montréal, QC, Canada (Chair)
Laura Palma, MSc, CGC, CCGC, and Evan Weber, MSc, CGC, CCGC, McGill University Health Centre, Montréal, QC, Canada
The Hereditary Breast and Ovarian Cancer Foundation (HBOC) is a community-oriented volunteer driven charity with a tripartite mission: Awareness, Action and Research. It seeks to fulfill its mission by working in cooperation with university and hospital-based programmes in cancer genetics, oncology, surgery, gynecology and plastic and reconstructive surgery.

For more information, visit www.hboc.ca.

Our vision for a comprehensive approach to hereditary cancer.

Human Genetics is now at the forefront of academic medicine. In addition, its applicability to the management of individuals with, or at risk of, cancer has created the sub-specialty of clinical cancer genetics. Hereditary cancer has been a prominent area of research at McGill University in the last two decades and breast and ovarian cancer continue to be the most important areas of our work in lessening the burden of cancer for women and their families.

For more information, please visit www.medicine.mcgill.ca/oncology/programs/programs_cancergenetics.asp
Registration Information

Register online at [www.brcasymposium.ca](http://www.brcasymposium.ca) or download the registration form and send it to the Symposium Secretariat. For inquiries, please contact the Secretariat (see below).

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*Full Symposium* fees include access to sessions, continental breakfast each day, buffet lunch (May 6-7), coffee breaks, and the Symposium documentation.

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**BRCA Symposium Secretariat**

c/o O’Donoughue & Associates
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Mansonville, QC
Canada J0E 1X0
Tel: +1 450-292-3456, ext. 227
Fax: +1 450-292-3453
E-Mail: registration@brcasymposium.ca

**Symposium Venue**

Centre Mont-Royal
2200 Mansfield Street, Montréal, QC, Canada
Montréal

About Montréal
A striking union of European charm and North American attitude, Montréal seduces visitors with a harmonious pairing of the historic and the new, exquisite architecture, fine dining... and the spontaneous joie de vivre of its inhabitants.

Hotel Accommodation

Take advantage of the great hotel rates that have been negotiated!

Group code: “BRCA2020”

HOTEL OMNI MONT-ROYAL
1050 Sherbrooke Street West
Tel: +1 514-284-1110
Toll-free: 1-800-843-6664*
Rate: $209 CAN per night single or double occupancy*
(Valid only until April 6, 2020)

LE ST-MARTIN HOTEL PARTICULIER – CENTRE-VILLE
980 de Maisonneuve West
Tel: +1 514-843-3000
Toll-free: 1-877-843-3003*
Rate: $191 CAN per night single or double occupancy
(Valid only until April 5, 2020)

BEST WESTERN VILLE-MARIE HOTEL & SUITES
3407 Peel Street
Tel: +1 514-288-4141
Toll-free: 1-800-361-7791*
Rates: $190 CAN per night single or double occupancy
(1 Queen bed)
$200 CAN per night single or double occupancy
(2 Queen beds)
(Valid only until April 6, 2020)

Rates do not include the 3.5% lodging tax, nor the applicable taxes (GST: 5% and QST: 9.975%) per room, per night.
*Toll-free numbers are for Canada & USA only.

If you wish to make your reservation online, please visit our “Accommodations” page at www.brcasymposium.ca. Remember to mention that you are participating in the Hereditary Breast and Ovarian Cancer Symposium to receive the preferential room rates.