### Day 1 - Thursday, August 4, 2016

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<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>4:00</td>
<td>Welcome reception with refreshments Sponsored by FEI Portland Aerial Tram OHSU Kohler Pavilion</td>
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### Day 2 - Friday, August 5, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>7:00</td>
<td>Continental breakfast &amp; registration</td>
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<tr>
<td>7:45</td>
<td>Welcome and introduction</td>
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<tr>
<td>8:00</td>
<td>Dispelling Assumptions about Young Women’s Breast Cancer; it’s not all about TNBC</td>
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<tr>
<td>9:00</td>
<td>Break Sponsored by Illumina</td>
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### Session I 8:00 – 9:00 am

<table>
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<td>Dispelling Assumptions about Young Women’s Breast Cancer; it’s not all about TNBC</td>
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### Session II 9:30 am - 10:50 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>9:30</td>
<td>The Role of the Invadopodia Scaffold Tks5 in Breast Cancer Tumorigenesis</td>
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<tr>
<td>9:50</td>
<td>Microenvironmental Selection during Breast Tumor Evolution</td>
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**Session I - Epidemiology and Risk**

**8:00 – 8:20**

**Dispelling Assumptions about Young Women’s Breast Cancer; it’s not all about TNBC**

Chair: Pepper Schedin, Ph.D.

- Professor, Department of Cell, Developmental & Cancer Biology
- Co-Lead, Cancer Prevention and Control, Knight Cancer Institute
- Oregon Health & Science University, Portland, Ore.

**8:20 – 8:40**

**How Risky is a Pregnancy/Lactation/Involution Cycle?**

Christine Watson, Ph.D.

- Professor, Department of Pathology
- University of Cambridge, UK

*(Dr. Watson’s travel sponsored by Newnham College, University of Cambridge.)*

**8:40 – 9:00**

**Elucidating the Origins of Aggressive Breast Cancer in African-American Women**

Christine Ambrosone, Ph.D.

- Senior Vice President for Population Sciences
- Chair, Department of Cancer Prevention and Control
- Roswell Park Cancer Institute, Buffalo, N.Y.

**9:00 – 9:30**

**Break Sponsored by Illumina**

**Session II 9:30 am - 10:50 pm**

**9:30 – 9:50**

**The Role of the Invadopodia Scaffold Tks5 in Breast Cancer Tumorigenesis**

Chair: Sara Courtneidge, Ph.D.

- Professor, Departments of Cell, Developmental & Cancer Biology and Biomedical Engineering
- Associate Director for Translational Sciences, Knight Cancer Institute
- Oregon Health & Science University, Portland, Ore.

**9:50 – 10:10**

**Microenvironmental Selection during Breast Tumor Evolution**

Kornelia Polyak, M.D., Ph.D.

- Professor of Medicine, Dana-Farber Cancer Institute
- Harvard Medical School, Boston, Mass.
10:10 – 10:30  **Window Studies in Early Breast Cancer to Determine Metabolic Response Pathways to Hypoxia and Metformin**
Adrian Harris, M.D., D.Phil  
*Professor of Medical Oncology  
University of Oxford, UK*

10:30 – 10:50  **Targeting Early Events in Breast Cancer**
Thea Tlsty, Ph.D.  
*Professor, Department of Pathology  
University of California, San Francisco, Calif.*

**KEYNOTE ADDRESS**

10:50 – 11:30  **A Comprehensive Understanding of Cancer Genes and Mutational Signatures in Breast Cancer**
Sir Michael Stratton, FRS, FMedSci, FRCPath  
*Professor and Director  
Wellcome Trust Sanger Institute  
Hinxton, Cambridge, UK*

**SESSION III**  
2:00 – 3:40 pm  **The Early Breast Cancer Microenvironment**

**2:00 – 2:20**  
**Leveraging Immunobiology of the Breast as a Target for Therapy**
Chair: Lisa Coussens, Ph.D.  
*Professor and Chair, Department of Cell, Developmental and Cancer Biology; Associate Director for Basic Science  
Knight Cancer Institute  
Oregon Health & Science University, Portland, Ore.*

**2:20 – 2:40**  
**Determining Microenvironment Effects on Breast Cancer Phenotypes and Therapeutic Response using Microenvironment Microarrays**
James Korkola, Ph.D.  
*Assistant Professor, Department of Biomedical Engineering  
Oregon Health & Science University, Portland, Ore.*

**2:40 – 3:00**  
**Innate Immune Regulation of Early Metastatic Colonization**
Alana Welm, Ph.D.  
*Associate Professor, Department of Oncological Sciences  
University of Utah, Salt Lake City, Utah*

**3:00 – 3:20**  
**A Biophysical Perspective of Breast Cancer Risk**
Valerie Weaver, Ph.D.  
*Professor and Director, Center for Bioengineering and Tissue Regeneration, University of California, San Francisco, Calif.*

**3:20 – 3:40**  
**Plasticity of the Stem Cell State in Normal Development and Cancer**
Christopher Dravis, Ph.D.  
*Staff Scientist  
Gene Expression Laboratory  
The Salk Institute, La Jolla, Calif.*

**3:40 – 4:40**  
**Organized tours of the Advanced Multiscale Microscopy Core Zeiss and FEI Instrumentation**
*CLSB 3N054 to the P2 Level*

**4:40 – 5:45**  
**Hotel break – regroup at Willamette Star**
*Caruthers Landing, 110 SE Caruthers, Portland OR 97214*

**6:00 pm**  
**River dinner cruise on the Willamette Star**
Day 3 - Saturday, August 6, 2016

7:00 – 8:00  Continental breakfast

Session IV 8:00 - 9:40 am  Hormonal Considerations in Breast Cancer Progression and Development

8:00 – 8:20  Elf5 and the Acquisition of the Lethal Phenotype by Luminal Breast Cancers
Chair: Christopher Ormandy, Ph.D.

8:20 – 8:40  Hacking the Hormone Code in Breast Cancer
Myles Brown, M.D.

8:40 – 9:00  Targeting Pathways/Processes Downstream of the Estrogen Receptor in Endocrine Therapy Refractory Breast Cancer
Donald McDonnell, Ph.D.

8:00 – 8:20  An Improved Preclinical Model for ER Positive Breast Cancer
Cathrin Brisken, M.D., Ph.D.

9:20 – 9:40  Estrogen Receptor Mutations in Endocrine Resistant Breast Cancer
Steffi Oesterreich, Ph.D.

9:40 – 10:10  Break

Session V 10:10 am - 11:50 am  Signal Transduction in Breast Cancer

10:10 – 10:30  Oncogene-Mediated Signal Transduction in Transgenic Mouse Models of Human Breast Cancer
Chair: William Muller, Ph.D.

10:30 – 10:50  Managing Phenotypic Heterogeneity in Basal-Like Breast Cancer to Improve Therapeutic Efficacy
Rosalie Sears, Ph.D.

10:50 – 11:30  Systems Approach to Breast Cancer Signaling
Gordon Mills, M.D., Ph.D.

11:30 – 11:50  Autophagy-Dependent Secretion in Breast Cancer Desmoplasia and Progression
Jayanta Debnath, M.D.

11:50 – 12:10  IABCR 2018 Preparation by the Executive Organizing Committee
11:50 - 12:10  Break

12:10 – 1:05 pm  IABCR Sponsors Lunch Presentations

12:10 – 12:15  Attendees get boxed lunches in seminar room and take their seats.

12:15 – 12:20  Introduction by Dr. Joe W. Gray

12:20 – 12:35  Capabilities of the GeneXpert Platform for Oncology Diagnostics Applications
  Michael Bates, M.D.  
  Vice President, Oncology Research and Development
  Cepheid
  Portland, OR

12:35 – 12:50  Targeting a Highly Drug Tolerant Cancer Cell Population Characterized by Heregulin Expression in Advanced Breast Cancer with Seribantumab
  Greg Finn, Ph.D.  
  Associate Director, Clinical Development
  Merrimack Pharmaceuticals
  Cambridge, MA

12:50 – 1:05  Highly Multiplexed Single Molecule Counting: NanoString Platform from Lab to Clinic
  Alessandra Cesano, M.D., Ph.D.  
  Chief Medical Officer
  NanoString
  Seattle, WA

1:05 – 2:00  Break

2:00 – 4:00  Susan G. Komen® Public Panel with Audience Q&A  
  CLSB Lecture Halls 3A003A & B
  Confronting the Confusion: How to Think about Breast Cancer Screening

4:00 – 5:00  Reception  
  CLSB Atrium

5:00 – 6:00  Travel to hotels

6:00  Conference dinners at various Portland restaurants

Day 4 - Sunday, August 7, 2016  
CLSB Learning Studios 3A001 & 2

7:00 – 8:15  Continental breakfast

8:15 – 8:35  The Early Evolution of the Breast Cancer Genome
  Chair: Paul Spellman, Ph.D.  
  Professor, Department of Molecular and Medical Genetics
  Program Leader for Quantitative Oncology, Knight Cancer Institute
  Oregon Health & Science University, Portland, Ore.

8:35 – 8:55  BRCA 1 Stabilizes Mammary Epithelial Progenitor Cell Differentiation State by Supporting DNA Interstrand Cross Link Repair
  David Livingston, M.D.  
  Emil Frei Professor of Genetics and Medicine
  Dana-Farber Cancer Institute
  Harvard Medical School, Boston, Mass.

8:55 – 9:15  A Functional Genomics Approach to Identify Therapeutic Vulnerabilities in Breast Cancer
  Laura Heiser, Ph.D.  
  Assistant Professor, Department of Biomedical Engineering
  Oregon Health & Science University, Portland, Ore.
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<tr>
<th>Time</th>
<th>Session VII 10:05 - 11:00 am</th>
<th>Technologies for Early Detection and Characterization</th>
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<tr>
<td>10:05 – 10:30</td>
<td><strong>Multiscale Characteristics of Breast Cancer</strong></td>
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<td>Chair: Joe W. Gray, Ph.D.</td>
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<td>Department of Biomedical Engineering</td>
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<td>Director, Center for Spatial Systems Biomedicine</td>
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<td>Associate Director for Biophysical Oncology, Knight Cancer Institute</td>
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<td>10:30 – 10:50</td>
<td><strong>PET Imaging of Breast Cancer Phenotypes, Implications for Individualized Medicine</strong></td>
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<td>Jeanne Link, Ph.D.</td>
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<td><strong>Professor, Diagnostic Radiology</strong></td>
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<td>Director, Radiochemistry Research Center</td>
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<td>10:50 – 11:10</td>
<td><strong>Early Tumor Detection and Surgery Guided by Protease-Activated Cell Penetrating Peptides</strong></td>
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<td>Roger Tsien, Ph.D.</td>
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<td><strong>Professor, Departments of Pharmacology and Chemistry and Biochemistry</strong></td>
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<td>University of California, San Diego, La Jolla, Calif.</td>
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<td>11:10 – 11:30</td>
<td><strong>Rapid Detection of Exosome Biomarkers for Breast Cancer</strong></td>
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<td>Michael Heller, Ph.D.</td>
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<td><strong>Professor of NanoEngineering and BioEngineering</strong></td>
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<td>Jacobs School of Engineering</td>
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<td>Sadik Esener, Ph.D.</td>
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<td>Director, Center for Early Detection Research</td>
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<td>11:30 – 12:00</td>
<td><strong>Closing remarks</strong></td>
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<td></td>
<td>Drs. Joe W. Gray and William Muller</td>
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