Neither electronic health records nor genomics were practical, scalable or affordable technologies a decade ago. Currently, both are undergoing massive expansion, a change brought on by the falling price of technology and by a growing interest in their application to practical problems encountered by clinicians, researchers, industry and government officials. For example, through these technologies, hundreds to thousands of variations in genes, proteins or other molecules can be identified within an individual patient or among a group of patients. Once these genomic data are linked to public and private databases, researchers will be able to sort out the impact of these variations and whether the variants are known to be associated with disease processes.

It is reasonable to predict that both electronic health records and genomics technology will be ubiquitous a decade from now - routinely integrated with each other for purposes of research, clinical care, and patient engagement. But that integration has not yet occurred, and until it does, the promise of these technologies will not be fulfilled. By convening BD4BC, Komen hopes to create an international community capable of and committed to merging genomics and electronic health records and using these data to improve breast cancer research and clinical care. A white paper outlining the issues, approaches, and next steps to achieve this goal will be developed and will serve as the basis for future programs for the strategic development of this initiative.
Sir John Bell, MD, FRS, HonFREng, PMedSci
Oxford University
Oxford, England

Ruth Brenner, MBA
The Robertson Foundation
New York, NY

Nancy G. Brinker
Founder, Susan G. Komen
Dallas, TX

Elad Gil, PhD
Color Genomics
Burlingame, CA

Todd R. Golub, MD
Dana-Farber Cancer Institute
Boston, MA

Cheryl Jernigan, CPA, FACHE
Komen Advocate in Science
Kansas City, MO

Mia Levy, MD, PhD
Vanderbilt-Ingram Cancer Center
Nashville, TN

Judith A. Salerno, MD, MS
President & CEO, Susan G. Komen
Dallas, TX

George Sledge, Jr, MD
Stanford University
Stanford, CA

Eric Winer, MD
Dana-Farber Cancer Institute
Boston, MA
THURSDAY, OCTOBER 8, 2015

Welcome
Marc Tessier-Lavigne, PhD
President, Rockefeller University

Nancy G. Brinker
Founder, Susan G. Komen

Julian Robertson
Founder, Robertson Foundation

Overview
George W. Sledge, Jr., MD
Professor and Chief
Division of Oncology
Stanford University Medical Center

Framing the Conversation: Presentations

Big Data: Better Treatment
Professor Sir Rory Collins
Head, Nuffield Department of Population Health
University of Oxford

Innovation in Cancer Therapy
Henry S. Friedman, MD
James B. Powell, Jr. Professor of Neuro-Oncology
Deputy Director, The Preston Robert Tisch Brain Tumor Center
Duke University

Big Data for Breast Cancer: A Patient/Advocate Perspective
Jane Perlmutter
Patient Advocate

Leveraging Electronic Health Records and Big Data to Create a Data Fluent Culture for Cancer Medicine
Mia Levy, MD, PhD
Director Cancer Clinical Informatics
Vanderbilt-Ingram Cancer Center

Privacy, Informed Consent, Data Access and Transparent Analysis: PIC_DATA and the Challenges Ahead for Data-Sharing and BreastCancer Research
Robert Cook-Deegan, MD
Director, Center for Genome Ethics, Law & Policy
Institute for Genome Sciences & Policy
Duke Global Health Institute

Continuing the Conversation: Key Questions
Reception and Dinner

Introduction
Judy Salerno, MD, MS
President and CEO
Susan G. Komen

Reflections on Precision Medicine
Charles L. Sawyers, MD
Investigator, Howard Hughes Medical Institute
Chairman, Human Oncology & Pathogenesis Program
Memorial Sloan Kettering Cancer Center

FRIDAY, OCTOBER 9, 2015
General Session

BD4BC: An Image Analysis Perspective
Sir Michael Brady
Department of Oncology
University of Oxford

Working Group Session #1:
From Bits to Biology: Accelerating Breast Cancer Research via Big Data
  • Moderator: Gordon Mills

Risky Business: Informatics and Risk Modeling for Breast Cancer
  • Moderator: Elad Gil

EHRs and Analytics: Improving the Quality and Consistency of Patient Care
  • Moderator: Mia Levy

Working Group Session #2:
APIs, Platforms, and Open Data: the Value of Sharing
  • Moderator: Joe Gray

One Size Does Not Fit All: Data Mining for Better Breast Cancer Outcomes
  • Moderator: Karen Gelmon

EHRs and Analytics: Improving the Quality and Consistency of Patient Care
  • Moderator: Mia Levy

Breakout Group Reports and Final Recommendations
Moderator: Eric P. Winer, MD

Closing Remarks
Eric P. Winer, MD
Director, Breast Oncology Program
Susan F. Smith Center for Women’s Cancers
Thompson Chair in Breast Cancer Research
Dana-Farber Cancer Institute
Amy Abernethy, MD, PhD  
Flatiron Health  
New York, NY

Lisa Anderson  
Invitae  
San Francisco, CA

Dvir Aran, PhD  
University of California, San Francisco  
San Francisco, CA

Ravi V. Atreya  
Vanderbilt University  
Nashville, TN

Sunil Badve, MD, FRCPA  
Indiana University  
Indianapolis, IN

Michael Barbouche  
Forward Health Group  
Madison, WI

Andy Beck, MD, PhD  
Harvard University  
Boston, MA

Hirdey Bhathal, PhD  
ZibdyHealth  
San Diego, CA

Chris Boone, PhD, MHA, FACHE, CPHIMS, PMP  
Health Data Consortium  
Washington, DC

Sir Mike Brady, PhD, FRS, FREng, FIEE, FInstP, FAAA  
University of Oxford  
Oxford, England

Vernal Branch  
Patient Advocate  
Richmond, VA

Ruth Brenner, MBA  
Robertson Foundation  
New York, NY
Nancy Brinker  
Founder, Susan G. Komen  
Dallas, TX

Diana S.M. Buist, PhD, MPH  
Group Health Research Institute  
Seattle, WA

Lisa Carey, MD  
University of North Carolina at Chapel Hill  
Chapel Hill, NC

Kaye Ceille, MBA  
ZipCar, Inc.  
Boston, MA

Professor Sir Rory Collins  
University of Oxford  
Oxford, United Kingdom

Deb Collyar  
Patient Advocates in Research (PAIR)  
Danville, CA

Robert Cook-Deegan, MD  
Duke University  
Durham, NC

Hongyeu Dai, PhD  
M2Gen  
Tampa, FL

Robert B. Darnell, MD, PhD  
New York Genome Center  
New York, NY

Helena Deus  
Foundation Medicine  
Cambridge, MA

Kevin Fitzpatrick  
CancerLinQ, LLC  
Alexandria, VA

Henry S. Friedman, MD  
Duke University  
Durham, NC
Karen Gelmon, MD  
British Columbia Cancer Agency  
Vancouver, BC

Cindy Geoghegan  
Patients and Partners, LLC  
Project Data Sphere, LLC

Elad Gil  
Color Genomics  
Burlingame, CA

Alan Gilbert  
GE healthymagination  
Washington, DC

Jared Goodner  
Akido Labs  
Los Angeles, CA

Hugh Gordon  
Akido Labs  
Los Angeles, CA

Joe Gray, PhD  
Oregon Health and Sciences University  
Portland, OR

Obi Griffith, PhD  
Washington University  
St. Louis, MO

Laurie Habel, PhD  
Kaiser Permanente  
Oakland, CA

Benjamin Haibe-Kains, PhD  
University of Toronto  
Toronto, ON

Mike Hassett, MD, MPH  
Dana-Farber Cancer Institute  
Boston, MA

Christos Hatzis, PhD  
Yale University  
New Haven, CT
Melissa Troester, PhD
University of North Carolina – Chapel Hill
Chapel Hill, NC

Eric Winer, MD
Dana-Farber Cancer Institute
Boston, MA

Chunhua Wang, PhD, MS
Columbia University
New York, NY

Maryan Zirkle, MD, MS, MA
PCORI
Washington, DC