CONFERENCE PROGRAM

Tuesday, February 19

5:00 p.m.-6:15 p.m. WELCOME AND OPENING KEYNOTE ADDRESS
Legends Ballroom 1-4

Welcome
Melissa L. Bondy, Baylor College of Medicine, Dan L. Duncan Cancer Center, Houston, TX

5:15 p.m.-6:15 p.m. Opportunities in technology and connected health for population science
Warren A. Kibbe, Duke University, Durham, NC

6:15 p.m.-8:15 p.m. OPENING RECEPTION
Encore
Opening Reception sponsored by Susan G. Komen

Wednesday, February 20

7:30 a.m.-8:30 a.m. BREAKFAST
Encore

8:30 a.m.-10:45 a.m. PLENARY SESSION 1: UTILIZATION OF SOCIAL MEDIA, APPS, AND MOBILE TECHNOLOGY FOR PARTICIPANT ENGAGEMENT, RECRUITMENT, AND FOLLOW-UP
Legends Ballroom 1-4

Session Chair: Sophia S. Wang, City of Hope, Duarte, CA

8:30 a.m.-9:00 a.m. Cancer prevention and control using mobile and social media tools: Disruptive leaders in the field
Sheana Bull, University of Colorado Denver and Anschutz Medical Center, Aurora, CO

9:00 a.m.-9:30 a.m. Digital health and health equity
Usha Menon, University of Arizona Cancer Center, Tucson, AZ

9:30 a.m.-10:00 a.m. Data-driven recruitment: Implementation of digital marketing strategies for improved participant response rates and retention
Jennifer Benbow, City of Hope, Duarte, CA

10:00 a.m.-10:15 a.m. Feasibility of online recruitment and retention of a large-scale observational psychiatric initiative*
Anne-Mary N. Salib, 23&Me, Mountain View, CA
(not eligible for CME credit)

10:15 a.m.-10:30 a.m. Using web-based tools to assess familial cancer risk in diverse populations*
Heather S. Feigelson, Kaiser Permanente Institute for Health Research, Denver, CO

10:30 a.m.-10:45 a.m. Supporting post-mastectomy breast reconstruction choices through personalized risk prediction and a decision support tool*
Mary C. Politi, Washington University in St. Louis School of Medicine, St. Louis, MO

*Short talk from proposed abstract
10:45 a.m.-11:00 a.m.  BREAK
Abbey Road

11:00 a.m.-12:45 p.m.  PLENARY SESSION 2: REAL-TIME EXPOSURE MEASUREMENTS
Legends Ballroom 1-4

Session Chair: Marc T. Goodman, Cedars-Sinai Medical Center, Samuel Oschin Comprehensive Cancer Institute, Los Angeles, CA

11:00 a.m.-11:30 a.m.  Incorporating mobile health technology into a prospective cohort study to measure environment, physical activity, and sleep
Peter James, Harvard T.H. Chan School of Public Health, Boston, MA

11:30 a.m.-12:00 p.m.  Wearable sweat sensor for personalized health monitoring
Wei Gao, California Institute of Technology, Pasadena, CA

12:00 p.m.-12:30 p.m.  Title to be announced
Job G. Godino, University of California San Diego, San Diego, CA

12:30 p.m.-12:45 p.m.  Feasibility of assessing individual’s diet using a web-based dietary assessment tool, ASA24, in a longitudinal observational study*
Yikyung Park, Washington University in St. Louis School of Medicine, St. Louis, MO

1:00 p.m.-3:00 p.m.  LUNCH ON OWN

2:00 p.m.-3:00 p.m.  SPECIAL LUNCH SESSION
Legends Ballroom 1-4

New funding opportunities from the NCI Center for Cancer Training
Michele McGuirl, Center for Cancer Training, National Cancer Institute, Bethesda, MD (not eligible for CME credit)

A new NCI funding opportunity has been published for early-stage postdocs who wish to pursue careers as independent cancer researchers, and those in data and population sciences are especially encouraged to apply. Mentors and potential applicants (including international students and postdocs) are invited to learn more about this new pilot program and other funding opportunities offered by NCI.

3:00 p.m.-5:30 p.m.  PLENARY SESSION 3—PART I: LEVERAGING PUBLICLY AVAILABLE DATA FOR RESEARCH AND CLINICAL USE: FROM DATA LINKAGES TO MACHINE LEARNING
Legends Ballroom 1-4

Session Chair: Melissa L. Bondy, Baylor College of Medicine, Dan L. Duncan Cancer Center, Houston, TX

3:00 p.m.-3:30 p.m.  Improving researcher accessibility to publicly available data through creative integration, geospatial visualization, and open data portals
Ming Tsou, San Diego State University, San Diego, CA
Caroline A. Thompson, San Diego State University, San Diego, CA

3:30 p.m.-4:00 p.m.  Data science techniques for understanding your cancer catchment area
Jill S. Barnholtz-Sloan, Case Western Reserve University School of Medicine, Cleveland, OH

*Short talk from proffered abstract
CONFERENCE PROGRAM

4:00 p.m.-4:30 p.m. Finding, accessing, interoperating with, and reusing clinical data in artificial intelligence applications
Lucila Ohno-Machado, University of California San Diego, San Diego, CA

4:30 p.m.-5:00 p.m. Artificial intelligence or artificial inelegance—the state of AI in cancer diagnostics
Martin C. Stumpe, Google, Mountain View, CA

5:00 p.m.-5:30 p.m. A prospective cohort study embedded into integrated health care systems in the US to study cancer etiology, prevention, and early detection
Stephen J. Chanock, National Cancer Institute, Bethesda, MD

Dinner on Own

Thursday, February 21

7:30 a.m.-8:30 a.m. BREAKFAST
Encore

8:30 a.m.-9:45 a.m. PLENARY SESSION 3—PART II: LEVERAGING PUBLICLY AVAILABLE DATA FOR RESEARCH AND CLINICAL USE: FROM DATA LINKAGES TO MACHINE LEARNING
Legends Ballroom 1-4

Session Chair: Melissa L. Bondy, Baylor College of Medicine, Dan L. Duncan Cancer Center, Houston, TX

8:30 a.m.-9:00 a.m. Use of administrative and electronic health records to identify cancer recurrences
Christopher I. Li, Fred Hutchinson Cancer Research Center, Seattle, WA

9:00 a.m.-9:30 a.m. Linking heterogeneous data to enable knowledge discovery in health care
Tina Hernandez-Boussard, Stanford University, Stanford, CA

9:30 a.m.-9:45 a.m. Utilizing electronic fertility clinic records and registry linkage to establish a retrospective population-based cohort study to evaluate the association between in vitro fertilization (IVF) and subsequent cancer risk in women*
Britton Trabert, National Cancer Institute, Bethesda, MD

9:45 a.m.-11:15 a.m. PLENARY SESSION 4: MHEALTH-MOBILE TECHNOLOGIES FOR INTERVENTIONS AND HEALTH MESSAGING
Legends Ballroom 1-4

Session Chair: Peter Kraft, Harvard T.H. Chan School of Public Health, Boston, MA

9:45 a.m.-10:15 a.m. Mobile virtual human health care guides for young adult childhood cancer survivors
Albert Rizzo, University of Southern California, Los Angeles, CA
Donna Spruijt-Metz, University of Southern California, Los Angeles, CA

10:15 a.m.-10:45 a.m. Precision behavior change via digital health technologies
Eric B. Hekler, University of California San Diego, San Diego, CA

10:45 a.m.-11:15 a.m. Title to be announced
Rashmi Lakshminarayana, Medopad, London, United Kingdom

*Short talk from proffered abstract

MODERNIZING POPULATION SCIENCES IN THE DIGITAL AGE
CONFERENCE PROGRAM

11:15 a.m.-1:30 p.m.  POSTER SESSION AND LUNCH
Encore/ Legends Ballroom 5-6
Poster Session sponsored by Susan G. Komen

1:30 p.m.-3:15 p.m.  PLENARY SESSION 5: DATA INTEGRATION AND ANALYTICS
Legends Ballroom 1-4
Session Chair: Marc T. Goodman, Cedars-Sinai Medical Center, Samuel Oschin Comprehensive Cancer Institute, Los Angeles, CA
1:30 p.m.-2:00 p.m.  How digital disintermediation ("apps") and cloud computing change the precision prevention landscape
Jonas S. Almeida, Stony Brook University, Stony Brook, NY
2:00 p.m.-2:30 p.m.  EHR-based tools and algorithms for managing cardiovascular risk among survivors
Randi Foraker, Washington University in St. Louis, St. Louis, MO
2:30 p.m.-3:00 p.m.  California Teachers Study (CTS) Data Management Platform: A model for a repeatable turnkey, end-to-end, cloud-based data management, and analytics solutions for epidemiology cohorts
Sandeep Chandra, University of California San Diego, San Diego, CA
3:00 p.m.-3:15 p.m.  Geocoding and integrating multiple environmental exposomics sources: Assessing population hazard to lung carcinogens in 421 zip codes of a cancer center catchment area*
Thomas P. McKeon, University of Pennsylvania, Philadelphia, PA

3:15 p.m.- 3:30 p.m.  BREAK
Abbey Road

3:30 p.m.-5:15 p.m.  PLENARY SESSION 6: PRACTICAL GUIDE FOR MODERNIZING ONGOING STUDIES— PITFALLS AND SUCCESS STORIES FROM THE FIELD
Legends Ballroom 1-4
Session Chair: Sophia S. Wang, City of Hope, Duarte, CA
3:30 p.m.-4:00 p.m.  Leveraging modern data science to optimize discovery within epidemiologic treasures: Case study—the Nurses’ Health Study
Francine Grodstein, Harvard T.H. Chan School of Public Health, Boston, MA
4:00 p.m.-4:30 p.m.  Insights from adopting a data commons approach: The California Teachers Study
James V. Lacey, City of Hope, Duarte, CA
4:30 p.m.-5:00 p.m.  Opportunities and lessons learned from the Cancer Research Network
Lawrence H. Kushi, Kaiser Permanente, Oakland, CA
5:00 p.m.-5:15 p.m.  Device-based, objective measurement of physical activity and sedentary behavior in a large U.S. cohort*
Alpa V. Patel, American Cancer Society, Atlanta, GA

5:15 p.m.- 5:30 p.m.  BREAK
Abbey Road

*Short talk from proffered abstract
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5:30 p.m.- 6:30 p.m.  SECOND KEYNOTE ADDRESS
Legends Ballroom 1-4

An ecosystem for the cancer data continuum
Anthony Kerlavage, Center for Biomedical Informatics & Information Technology, Rockville, MD

DINNER ON OWN

Friday, February 22

7:30 a.m.-8:30 a.m.  BREAKFAST
Encore

8:30 a.m.-10:30 a.m.  PLENARY SESSION 7—PART I: PRACTICAL GUIDE FOR LAUNCHING A NEW STUDY—REPORTS FROM THE FIELD
Legends Ballroom 1-4

Session Chair: Peter Kraft, Harvard T.H. Chan School of Public Health, Boston, MA

8:30 a.m.-9:00 a.m.  Early progress on the All of Us Research Program
Joshua C. Denny, Vanderbilt University, Nashville, TN

9:00 a.m.-9:30 a.m.  Title to be announced
Deborah Schrag, Project GENIE, Dana-Farber Cancer Center, Boston, MA

9:30 a.m.-10:00 a.m.  An innovative approach to improve clinical trials using adaptive in silico design
Judy Barkal, M2Gen, Tampa, FL
(not eligible for CME credit)

10:00 a.m.-10:15 a.m.  Linking electronic health records with cancer registry data for epidemiology and health services research: Challenges and opportunities*
Caroline A. Thompson, San Diego State University, San Diego, CA

10:15 a.m.-10:30 a.m.  Field application of digital technologies for health assessment in the 10,000 Families Study*
Bharat Thyagaranjan, University of Minnesota, Minneapolis, MN

10:30 a.m.-11:30 a.m.  PLENARY SESSION 7—PART II: CLOSE-OUT SESSION: AN OPEN PANEL DISCUSSION AND Q&A ON THE SCIENTIFIC EFFORTS OF THE FUTURE
Legends Ballroom 1-4

Session Chair: Peter Kraft, Harvard T.H. Chan School of Public Health, Boston, MA

11:30 a.m.  CLOSING REMARKS

*Short talk from proffered abstract