



Thursday, September 7, 2023

11:00 a.m. – 7:30 p.m.

**Hospitality Desk**

Indigo West Foyer

**Pre-Conference Workshops**

1:00 p.m. – 2:30 p.m.

**Navigating Clinical Genomic Databases**

Heidi Rehm, Broad Institute of MIT and Harvard, Kaitlin Samocha, Center for Genomic Medicine, Mass General Hospital (Workshop-Co-Chairs)

2:45 p.m. - 4:15 p.m.

**Leveraging the *All of Us* Researcher Workbench to Advance Precision Health**

**Description:** Participants will learn about the extensive data available on the *All of Us* Researcher Workbench and through a guided tour, complete an example genomic analysis.

**Alexander Bick, Vanderbilt**

4:15 p.m. – 5:00 p.m.

**Welcome Drink – Exhibit Hall**

Indigo Ballroom ABEF

5:00 p.m. – 5:10 p.m.

**Welcome**

Session I:

**Landscape of Genomic Medicine**

**(Chairs - Eric Green, National Human Genome Research Institute and Michael Talkowski, Massachusetts General Hospital and Broad Institute Chairs)**

Indigo Ballroom CDGH

5:10 p.m. – 5:40 p.m.

**Elaine Mardis, Co-Executive Director of the Institute for Genomic Medicine at Nationwide Children's Hospital**

“Precision diagnostics for pediatric cancer nationwide”

- 5:40 p.m. – 6:10 p.m.**      **Todd Golub, Director and Founding Member, Broad Institute of MIT and Harvard**  
 “Perspectives on cancer precision medicine”
- 6:10 p.m. – 6:40 p.m.**      **Allyson Berent, Chief Science Officer, FAST**  
 “The parents' journey through drug development: A story in Angelman Syndrome; making the impossible possible”
- 6:40 p.m. – 7:00 p.m.**      **Andrew Stergachis (Abstract Selected) University of Washington School of Medicine**  
 “Comprehensive, integrated long-read genomic, epigenomic, and transcriptomic characterization for solving the molecular basis of Mendelian conditions”
- 7:00 p.m. – 10:00 p.m.**      **Welcome Reception**  
 Promenade Plaza

**Friday, September 8, 2023 (Morning)**

- 7:30 a.m. – 7:30 p.m.**      **Hospitality Desk**  
 Indigo West Foyer
- 7:30 a.m. – 9:00 a.m.**      **Breakfast**  
 Indigo Terrace
- Session II:**      **Genomic Medicine I: Developmental and Clinical Genomics (Chairs - Wendy Chung, Columbia University and Stephen Kingsmore, Rady Children’s Institute for Genomic Medicine)**  
 Indigo Ballroom CDGH
- 9:00 a.m. – 9:30 a.m.**      **Yufeng Shen, Columbia University**  
 “Genetic architecture of developmental disorders”
- 9:30 a.m. – 10:00 a.m.**      **Lyn Chitty, University College London**  
 “The impact of genomics on the prenatal diagnosis service in the English National Health Service”
- 10:00 a.m. – 10:30 a.m.**      **Alexandre Reymond, UNIL, Universite de Lausanne & Past President, ESHG**  
 “Blurring the boundaries between rare **and** common diseases”

- 10:30 a.m. – 10:50 a.m.**      **Meredith Wright (Abstract Selected) Rady Children’s Institute for Genomic Medicine**  
 “Performance of BeginNGS, an artificial intelligence–enabled genome sequencing system, for universal newborn screening, diagnosis, and precision medicine for 410 severe childhood genetic diseases in over 460,000 individuals”
- 10:50 a.m. – 11:15 a.m.**      **Coffee Break/Exhibit Hall**  
 Indigo Ballroom ABEF
- Session III:**                      **The Great Debate - Genetics, Environment and Health (Chairs - Heidi Rehm, Massachusetts General Hospital and Broad Institute, Geoff Ginsburg, Chief Medical and Scientific Officer, *All of Us* Research Program)**
- 11:15 a.m. – 12:15 p.m.**      **Panelists:**  
**Gary Miller, Environmental Health Sciences, Columbia University**  
**Philip Awadalla, Ontario Institute for Cancer Research (OICR)**  
**Alison Motsinger-Reif, National Institute of Environmental Health Sciences**

**Friday, September 8, 2023 (Afternoon)**

- 12:15 p.m. – 2:00 p.m.**      **AGBT Lunch**  
 Indigo Terrace
- 12:30 p.m. – 2:00 p.m.**      **Rady Children’s Institute for Genomic Medicine, Lunch and Learn (204 A&B)**  
 “Empowering precision care and improving outcomes in the NICU and PICU by ultra-rapid genome sequencing”
- 2:15 p.m. – 2:50 p.m.**      **Sponsor Workshops (Howard McLeod, Intermountain Healthcare, Chair)**  
 Indigo Ballroom CDGH
- 2:15 p.m. – 2:35 p.m.**      **Diamond Sponsor – Agilent Technologies**  
**Bellal Moghis, MS, MBA, Director of Product Marketing & Strategy, Agilent’s Diagnostics and Genomics Group**  
 “Solving challenges in multiomic liquid biopsy testing using the new Agilent Avida dual-target enrichment solution”

- 2:35 p.m. – 2:50 p.m.**      **Emerald Sponsor – Codexis**  
**Mathew Miller, Ph.D., Associate Director, Life Science Technology & Applications, Codexis**  
 “An Engineered DNA ligase for highly efficient sample ligation in NGS library preparation”
- Session IV:**      **Towards a Complete Human Genome**  
**(Chairs - Eric Green, National Human Genome Research Institute and Michael Talkowski, Massachusetts General Hospital and Broad Institute Chairs)**  
 Indigo Ballroom CDGH
- 2:50 p.m. – 3:20 p.m.**      **Karen Miga, University of California, Santa Cruz**  
 “Expanding studies of rare disease using scalable long read sequencing”
- 3:20 p.m. – 3:50 p.m.**      **Michael Schatz, Johns Hopkins University**  
 “Analysis of pancreatic cancer risk variants using long read sequencing”
- 3:50 p.m. – 4:20 p.m.**      **Danny Miller, University of Washington**  
 "Streamlining clinical genetic testing with long-read sequencing"
- 4:20 p.m. – 4:40 p.m.**      **Kiran Garimella (Abstract Selected) Broad Institute of MIT and Harvard**  
 “New insights into genomic variation from long-read sequencing of >1000 African-American participants in the All of Us Research Program”
- 4:40 p.m. – 6:40 p.m.**      **Poster Session & Exhibit Hall, Wine and Cheese Reception**  
 Indigo Ballroom ABEF
- 6:45 p.m. – 9:00 p.m.**      **AGBT Dinner**  
 Promenade Plaza
- Saturday, September 9, 2023 (Morning)**
- 7:30 a.m. – 5:00 p.m.**      **Hospitality Desk**  
 Indigo West Foyer
- 7:30 a.m. – 9:00 a.m.**      **Breakfast**  
 Indigo Terrace

- Session V:**
- Session V: Genomic Mechanisms to Therapeutics**  
**(Chairs - Len Pennacchio, Lawrence Berkeley National Laboratory and DOE Joint Genome Institute, and Penelope Bonnen, Baylor University)**  
 Indigo Ballroom CDGH
- 9:00 a.m. – 9:30 a.m.**      **Melina Claussnitzer, Massachusetts General Hospital and Broad Institute of MIT and Harvard**  
 "Translating metabolic genetic risk to cellular function"
- 9:30 a.m. – 10:00 a.m.**      **Lea Starita, University of Washington and the Co-director of Brotman Baty Advanced Technology Lab**  
 "Understanding the functional effects of genetic variation at scale"
- 10:00 a.m. – 10:30 a.m.**      **Joe Gleeson, University of California, San Diego**  
 "Leveraging patient cohorts with pediatric brain disease for discovery and therapy"
- 10:30 a.m. – 10:50 a.m.**      **Altuna Akalin (Abstract Selected), Max Delbrueck Center**  
 "Cardiovascular disease biomarkers derived from circulating cell-free DNA methylation"
- 10:50 a.m. – 11:20 a.m.**      **Coffee Break & Exhibit Hall**  
 Indigo Ballroom ABEF
- Session VI:**
- Fireside Chat – a patient’s perspective with Wendy Chung, Columbia University**  
 Indigo Ballroom CDGH
- 11:20 a.m. – 12:20 p.m.**      **Luke Rosen, KIF1A.ORG, Founder**  
 "Susannah's Story"
- 12:20 p.m. – 12:35 p.m.**      **Sapphire Sponsor – Cambridge Consultants**  
**Symon Cotton, PhD, SVP of Lifescience, Cambridge Consultants**  
 "To capture too much, or too little, that is the question: making genomic data work in a clinical world"
- 12:35 p.m. – 12:47 p.m.**      **Ruby Sponsor – Fabric Genomics**  
**Michael Vishnevetsky, PhD, SVP of Business Development & Commercial Operations**  
 "Unlock the power of clinical whole genome sequencing at a price that empowers adoption today"

**12:47 p.m. – 12:59 p.m.**      **Ruby Sponsor – Collecta**  
**Alex Chenchik, PhD, President, Collecta, Inc.**  
"TCR & BCR repertoire analysis and other approaches for the discovery of drug targets, resistance mechanisms and biomarkers"

**Saturday, September 9, 2023 (Afternoon)**

**1:00 p.m. – 2:00 p.m.**      **AGBT Lunch**  
Indigo Terrace

**Session VII:**                      **Striving Towards Diversity and Equity in Precision Health**  
**(Chairs - Howard McLeod, Intermountain Healthcare and**  
**Catherine Cottrell, Institute for Genomic Medicine, Nationwide**  
**Children’s Hospital)**  
Indigo Ballroom CDGH

**2:00 p.m. – 2:30 p.m.**      **Peter Hulick, Northshore University Health System**  
"Improving access to genetics through primary care"

**2:30 p.m. – 3:00 p.m.**      **Charles Rotimi, NIH Distinguished Investigator and Scientific**  
**Director, NHGRI**  
"Ancestry and disease in the age of precision medicine"

**3:00 p.m. - 3:30 p.m.**      **Claudia Gonzaga-Jauregui, International Laboratory for Human**  
**Genome Research, LIIGH, UNAM**  
"Genomic equity for health in Latin America"

**3:30 p.m. – 3:50 p.m.**      **Kathryn Gray, (Abstract Selected) University of Washington**  
"Multi-omics for precision medicine in preeclampsia in an admixed population"

**3:50 p.m. – 4:00 p.m.**      **Final Comments**