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: 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”
Ruby Sponsor – Cellecta

Alex Chenchik, PhD, President, Cellecta, 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