Cancer Genomics Consortium, 10th Annual Meeting, *Preliminary Agenda*
August 11 - 14, 2019   Renaissance Hotel, Nashville, Tennessee

*Unless individually noted, all sessions are available for CME/CEUs*

**Sunday, August 11th, 2019**

**Pre-Meeting Workshops**

8:30 – 10:00 AM  **Vendor Workshop** *(No CME or CEUs available)*
Automating the Cytogenetics Laboratory
Jim Stanchfield

Bioinformatics: Understanding What’s Underneath the Hood

10:00-10:05 AM  **Welcome and Introduction**
Scott Newman, St. Jude Children’s Research Hospital

10:05-10:25 AM  **Common File Formats, and their Manipulation Using Python**
Jennifer Hauenstein, Emory University

10:25-10:45 AM  **Community Resources for Clinical Variant Classification in Cancers**
Alex Wagner, Washington University School of Medicine

10:45-11:05 AM  **Algorithms for Copy Number Segmentation**
Soheil Shams

11:05-11:25 AM  **Making and Running Bioinformatics Workflows**
Scott Newman, St. Jude Children’s Research Hospital

11:25-11:30 AM  **Q & A Session, Round Table Discussion**

11:30 AM - 12:00 PM  Coffee Break in Ballroom Foyer

**Practical Cases and Concepts for the Molecular Cytogenetics Laboratory**

12:00-12:05 PM  **Welcome and Introduction**
Gordana Raca, Children’s Hospital Los Angeles

12:05-12:30 PM  **Inconsistent FISH and Molecular Results: Possible Causes and Appropriate Follow Up**
Moderators: Teresa Smolarek, Cincinnati Children’s Hospital Medical Center and Patricia Miron, University of Massachusetts

12:30-12:55 PM  **Determining Ploidy and Mosaicism Level from SNP Data**
Moderators: Xinjie Xu, ARUP, and Gordana Raca, Children’s Hospital Los Angeles

12:55-1:20 PM  **Circulating DNA Analysis in Prenatal Screening or Cancer Diagnostics**
Moderators: Marilyn Li, Children's Hospital of Philadelphia and Svetlana Yatsenko, Children’s Hospital of Pittsburg
Opening of the 10th Annual Cancer Genomics Consortium

2:30 – 2:35 PM  Welcome
Adrian Dubuc, Harvard Medical School

2:35 - 2:45 PM  Presidential Address
Min Fang, Seattle Cancer Care Alliance

The Copy Number Landscape: Importance, Implications and New Approaches

2:45 – 3:00 PM  Introduction

3:00 - 3:15 PM  Building a Pretreatment Risk - Stratification Model for Follicular Lymphoma with Genomic Alterations and Clinical Parameters
Xiaoyu Qu, Fred Hutchinson Cancer Research Center

3:15 - 3:30 PM  Non-Random Distribution of Copy Number Variants in Hematologic Neoplasms with Chromothripsis
Madina Sukhanova, Northwestern University Feinberg School of Medicine

3:30- 3:45 PM  Integrated Whole-Genome Sequencing and Bioinformatics Analysis for Copy Number Profiling Identifies a Recurrent Alteration Associated with Poor Survival in Stage III Colorectal Cancer
Charlie Xia, Stanford University School of Medicine

3:45 - 4:30 PM  Vendor Showcase  (No CME or CEUs available)
Utility of Whole-Genome Single Nucleotide Polymorphism Microarray (SNPM) and Targeted Somatic Mutations in Evaluation of Challenging Cases in Anatomical Pathology
Ravindra Kolhe, Augusta University

4:30 - 5:00 PM  Coffee Break in Exhibit Area

Diagnostic Approaches to CNS Tumors

5:00 - 5:30 PM  A Contemporary Molecular View of Diffuse Gliomas with Implications for Diagnosis and Treatment
Dan Brat, Northwestern University Feinberg School of Medicine

5:30 - 5:45 PM  Molecular Characterizations of Adult Diffuse Gliomas by the Oncoscan CNV Plus Assay and Next-Generation Sequencing (NGS)
Xinyan Lu, Northwestern University Feinberg School of Medicine

5:45 - 6:00 PM  Detecting Mutations in Cerebrospinal Fluid: Liquid Biopsy for Diagnosis of Central Nervous System Metastases
Mauli Shah, University of Texas, MD Anderson Cancer Center

6:00 - 6:15 PM  Expansion of the Validation of Illumina MethylationEPIC BeadChip for Medulloblastoma (MB) Subgrouping and Copy Number Analysis Across Institutions and Results from the Initial 47 Clinical Cases
Teresa Smolarek, Cincinnati Children’s Hospital Medical Center

7:00 - 9:00 PM  Opening Reception & Celebration:
10 Years of the Cancer Genomics Consortium
**Monday, August 12th, 2019**

**7:30 - 8:10 AM**  
**Vendor Showcase** *(No CME or CEUs available)*

- **Optical Mapping and its Role as a Cytogenomics Tool in Cancer**  
  Brynn Levy, Columbia University Medical Center, New York Presbyterian Hospital

- **Application of Optical Next-generation Mapping for Comprehensive Assessment of Structural Rearrangements in Hematological Malignancies**  
  Rashmi Kanagal-Shamanna, University of Texas, MD Anderson Cancer Center

**Myeloid Malignancies: Present and Evolving Approaches**

**8:30 - 8:45 AM**  
**Additional Structural Chromosomal Abnormalities Have a Negative Prognostic Effect in Patients with inv(16)/t(16;16) Acute Myeloid Leukemia (AML)**  
Zhenya Tang, University of Texas MD Anderson Cancer Center

**8:45 - 9:00 AM**  
**Mate Pair Sequencing Characterization of 5q/7q Co-Deleted Acute Myeloid Leukemia: A Prospective Study to Discover Novel Co-Abnormalities in Complex Karyotypes**  
Beth Pitel, Mayo Clinic

**9:00 - 9:30 AM**  
**Next Generation Sequencing for Myeloid Neoplasms: A Diagnostic Management Team Approach**  
Adam Seegmiller, Vanderbilt University School of Medicine

**9:30 - 10:30 AM**  
**Keynote Presentation: Biological Heterogeneity of AML: Implications for Prognosis and Treatment**  
Clara D. Bloomfield, Ohio State University

**10:30 - 11:15 AM**  
Coffee Break in Exhibit Hall

**11:15 AM - 12:00 PM**  
**Vendor Showcase** *(No CME or CEUs available)*

- **New Paradigms in Neuro-Oncology and Sarcoma Powered by DNA Methylation Classifiers**  
  Matija Snuderl, NYU Langone and Claire Attwooll

**The Era of Personalized Medicine: Detection and Reporting of 'Actionable' Alterations**

**12:00 - 12:15 PM**  
**The Spectrum of NTRK Fusion-Associated Pediatric Tumors**  
Xiaonan Zhao, Children’s Hospital of Philadelphia

**12:15 - 12:30 PM**  
**MCG 2.0: A Highly Curated, Scalable Precision Cancer Medicine Resource**  
Marilyn Holt, Vanderbilt-Ingram Cancer Center

**12:30 - 12:45 PM**  
**Provider Notification for New Oncology Approvals for Biomarker-Driven Therapies**  
Neha Jain, Vanderbilt Ingram Cancer Center

**12:45 – 1:00 PM**  
TBD

**1:00 - 2:00 PM**  
Buffet Lunch in Exhibit Hall and Foyer

**2:00 - 2:45 PM**  
Panel Discussion: Cancer Microarrays
Next Generation Structural Variation: from Diagnostic to Discovery

2:45 - 3:00 PM  NGS-Based Detection of Translocations in Plasma Cell Myeloma
Linda Baughn, Mayo Clinic

3:00 - 3:15 PM  Comprehensive Diagnostic and Discovery Platform for Translocation Renal Cell Carcinomas Using AMP/RNA-seq
Yajuan Liu, University of Washington

3:15 - 3:30 PM  Comparison of Four Next Generation Sequencing Platforms in Fusion Detection: Oncomine by ThermoFisher, AmpLISeq by Illumina, FusionPlex by ArcherDX, and QIAseq by Qiagen
Xiaoyu Qu, Seattle Cancer Care Alliance

3:30 – 3:45 PM  TBD
3:45 - 4:15 PM  Coffee Break in Exhibit Hall

Clinical Experiences from Molecular Profiling

4:15 - 4:30 PM  Utility of OncoScan Array Testing to Advance Clinical Characterization of Renal Neoplasms
Edward Hughes, Dartmouth-Hitchcock Medical Center

4:30 - 4:45 PM  Molecular Profiling of Gynecologic Cancers – Clinical Experience Evaluating ~80 Cases for Treatment and Management of Disease
Qian Nie, The Jackson Laboratory

4:45 - 5:00 PM  The Melbourne Genomics Health Alliance Lymphoma Flagship
Greg Corboy, University of Melbourne

5:00 - 7:00 PM  Poster Viewing Session with Cash Bar in Exhibit Hall

Tuesday, August 13th, 2019

Immunotherapy and Biomarkers

8:30 - 8:45 AM  Unexpected Karyotype Findings and Lineage Switching During Anti-CD19 CAR-T Immunotherapy for Lymphoid Malignancies
Kate Kroeger, Seattle Cancer Care Alliance

8:45 - 9:00 AM  Using Blood-Based Gene Expression Profiling to Assess Responsiveness to Immunotherapy of Advanced Non-Small-Cell Lung Cancer
Jie Wu, Philips Research North America

9:00 - 9:15 AM  Correcting Neoantigens by Accounting for Proximal Variants
Jasreet Hundal, Washington University School of Medicine

9:15 – 9:30 PM  TBD
9:30 - 10:30 AM  Keynote Presentation: Clinical computational oncology for precision cancer medicine
Eli Van Allen, Dana-Farber/Partners Cancer Care, Harvard Medical School and Broad Institute of MIT

10:30 - 11:15 AM  Coffee Break in Exhibit Hall

11:15 AM - 12:00 PM  Vendor Showcase (No CME or CEUs available)
Implementation of a cost-effective NGS program in a laboratory with limited resources
Stacie Lupo, Legacy Health
12:00 - 12:30 PM  Special Presentation: What the CGC Can Do for You!

12:30 - 2:15 PM  **Round Table Discussions with Lunch**
Please sign up for table topics during conference registration.

The 'Omic' Horizon: New Considerations for Genomic Testing

2:15 - 2:30 PM  Standardization and Systematization of Somatic Variant Refinement Using a Standard Operating Procedure and Deep Learning
*Erica Barnell, Washington University School of Medicine*

2:30 - 2:45 PM  Ultra-Deep Sequencing of Classical Hodgkin Lymphoma (cHL) Reveals Novel Somatic Mutations and Exemplifies the Utility of Deep Sequencing in the Characterization of Rare Malignant Cells
*Felicia Gomez, Washington University School of Medicine*

2:45 - 3:00 PM  Identification of Recurrent, Non-Coding Mutations Across Breast Cancer Molecular Subtypes
*Kelsy Cotto, Washington University School of Medicine*

3:00 - 3:15 PM  Towards a Clinical Grade NGS Assay for DNA Hypermethylation in Prostate Cancer
*Palak Patel, Queen's University*

3:15 - 3:30 PM  Uncovering the Genetic Etiology of Inherited Bone Marrow Failure Syndromes Using a Custom-Designed NGS Panel
*Fumin Lin, Children's Hospital of Philadelphia*

3:30 - 4:00 PM  Coffee Break in Exhibit Hall

4:00 - 4:45 PM  **Vendor Showcase: (No CME or CEUs available)**

- How Data-Driven Medicine is Empowering Oncology
  - Combining Genomic and Radiomic Analyses for Improved Cancer Management
    *Gioia Althoff*

- Overcoming the Challenges of Somatic Variant Calling
  *Tamara Maas*

Updates to Guidelines for CNV Interpretation

4:45 - 5:10 PM  Technical Standards for the Classification and Reporting of Constitutional Copy Number Variants: A ClinGen/ACMG Joint Consensus Recommendation
*Erin Riggs, Geisinger*

5:10 - 5:30 PM  ACMG/CGC Technical Laboratory Standards for Interpretation and Reporting of Acquired Copy Number Abnormalities (CNAs) and Copy-Neutral Loss of Heterozygosity (CN-LOH) in Neoplastic Disorders
*Gordana Raca, Children's Hospital Los Angeles, University of Southern California*

5:30 - 6:00 PM  Interactive Session: ‘CNV classification’

**Optional Social Activities**
(Sign up for activities during conference registration. Some activities require additional payment.)

- A Night at the Grand Ole Opry
- Downtown Tour on the Nashville Pedal Tavern
- CGC Social: Experience the Broadway Street Nightlife with Your Colleagues
The Balancing Act: Cost Versus Effectiveness of Genomic Testing

8:30 - 8:45 AM  Clinical Use of a Rapid and Targeted NRAS-BRAF Mutation Test for Melanoma Samples; When and If to Reflex to Next Generation Sequencing
Lauren Petersen, Dartmouth-Hitchcock Medical Center

8:45 - 9:00 AM  Detection of Gene Fusions in Sarcomas is Improved by Targeted Anchored Multiplex PCR Based Next Generation Sequencing
Ruthann Pfau, Nationwide Children’s Hospital

9:00 - 9:30 AM  The PT Alphabet Soup: LDT, FDA, NGS, Non-NGS, @#$!%
Annette Kim, Brigham and Women’s Hospital, Harvard Medical School

9:30 - 10:30 AM  Keynote Presentation: Population Genomic Screening Experience at Geisinger Strongly Supports Routine Genomic Screening for HBOC and Lynch Syndrome
David H. Ledbetter, Geisinger

10:30 - 11:15 AM  Coffee Break in Exhibit Hall

Curation of the Genome

11:15 - 11:30 AM  A New Somatic Variation Model Enables Precise Search Strategies for Clinical Interpretations of Patient Tumors
Alex Wagner, Washington University School of Medicine

11:30 - 11:45 AM  Aggregating Evidence to Determine the Clinical Significance of Cancer Variants in the CIViC Knowledgebase
Kilannin Krysiak, Washington University School of Medicine

11:45 AM - 12:00 PM  Curation of Variants Associated with Pediatric Tumors Within the Clinical Genome Resource (ClinGen)
Gordana Raca, Children’s Hospital Los Angeles, University of Southern California

12:00 - 12:30 PM  CGC 2019 Business Meeting

Closing Remarks