



Cancer Genomics Consortium, 16th Annual Meeting

August 3-6, 2025

The Royal Sonesta Houston Galleria, Houston, Texas

All session times are in US Central Daylight Time.

SATURDAY, AUGUST 2, 2025

In-Person Unconference

Unconference participation incurs an additional registration fee.

9:00 AM – 5:00 PM **In-Person Variant Interpretation Unconference**
Presenters TBA

6:30 – 8:30 PM **Evening Social for Unconference Attendees**
Location TBA

SUNDAY, AUGUST 3, 2025

Pre-Meeting Workshops

Workshop participation incurs an additional registration fee.

8:30 – 10:00 AM **Navigating Academic vs. Non-academic Clinical Pathways and Achieving Success/Happiness in Academic Medicine**
Presenters:
Rachel Burnside, *University of Florida College of Medicine, FL*
Marilyn Bui, *Moffitt Cancer Center and Research Institute, FL*

10:00 – 10:15 AM **Coffee Break for Workshop Attendees**

10:15 – 11:45 AM **Bioinformatics Workshop on Recurrent Biomarkers in Cancer Genomes**
Presenters:
JianJiong Gao, *Memorial Sloan Kettering Cancer Center, NY*
Olena Vaske, *University of California Santa Cruz, CA*
Jinghui Zhang, *St. Jude Children's Research Hospital, TN*

Opening of the 16th Annual Cancer Genomics Consortium

1:00 – 1:05 PM **Welcome**

Fady Mikhail, *University of Alabama at Birmingham, AL*

1:05 - 1:15 PM

Presidential Address

Jane Houldsworth, *Icahn School of Medicine at Mount Sinai, NY*

1:15 – 2:15 PM

Keynote Presentation

Clinical application of genomics for childhood cancer patients - an update on two decades of precision oncology

Will Parsons, *Baylor College of Medicine and Texas Children's Hospital, TX*

2:15 – 3:15 PM

Platform Session 1: Solid Tumors

Rare oncogenic structural variations in *FGFR* genes in childhood brain tumors provide potential therapeutic targets

Mary Clay Bailey, *Baylor College of Medicine, TX*

Chromothripsis in meningiomas is associated with more aggressive behavior

Ha Nguyen, *Northwestern Medicine, IL*

Clinicopathologic features and outcomes for colorectal carcinomas with *KRAS* codon 146 mutations

Bryan Iorgulescu, *The University of Texas MD Anderson Cancer Center, TX*

Complex copy number variation in atypical melanocytic neoplasms and early melanoma: A focused study of 60 cases

Katherine Geiersbach, *Mayo Clinic, MN*

3:15 – 4:00 PM

Coffee Break

Science Café Presentations

4:00 – 4:30 PM

Diamond Exhibitor Showcase

(No CME or CEUs available)

4:30 – 4:45 PM

CGC Annual Award

4:45 – 5:15 PM

CGC 2025 Business Meeting

5:15 – 6:15 PM

Platform Session 2: Variant Curation, Interpretation, and Standardization

Advancing gene curation in hereditary cancer: A comprehensive re-curation of breast/ovarian and colon cancer genes

Jasmine Baker, *Baylor College of Medicine, TX*

The landscape of germline and somatic cancer variants in tumor suppressor genes

Suhasini Lulla, *Baylor College of Medicine, TX*

Application of expert panel-derived oncogenicity guidelines in *BCR::ABL1*-like B-lymphoblastic leukemia/lymphoma

Mark Evans, *Caris Life Sciences, UT*

Systematic curation of defining and supportive diagnostic variants to enhance genomic diagnostics in pediatric oncology

Morteza Seifi, *ClinGen, WI*

6:15 – 8:15 PM

Welcome Reception

CGC Exhibit Hall, Legends Ballroom

MONDAY, AUGUST 4, 2025

8:30 – 9:30 AM

Platform Session 3: Emerging Technologies in Clinical Genomics and Technical Lab Topics

Clinical utility of optical genome mapping (OGM) for B-cell acute lymphoblastic leukemia (B-ALL)

Angela Lager, *University of Chicago, IL*

Optical genome mapping on pediatric leukemia samples: A single hospital experience

John Herriges, *Children's Mercy Hospital, Kansas City, MO*

Impact of long-term plasma storage on cell free DNA biomarker studies

Zejuan Li, *Houston Methodist Hospital, Weill Cornell Medical College, TX*

Analytical validation and cross-platform analysis of the oncomine TCR pan-clonality assay for T-Cell receptor profiling

Mohamed Maher, *The University of Texas MD Anderson Cancer Center, TX*

9:30 – 10:30 AM

Invited Session 1

Federal regulations affecting molecular diagnostic testing and gene patenting

Donald Karcher, *George Washington University Medical Center, Washington, D.C.*

Roger Klein, *Arizona State University Law School, AZ*

10:30 – 11:15 AM

**Coffee Break with Exhibitors
Science Café Presentations**

11:15 – 11:30 AM

Platinum Exhibitor Showcase

(No CME or CEUs available)

11:30 AM – 12:00 PM

CGC Updates

12:00 – 1:00 PM

Platform Session 4: Hematologic Malignancies

Diagnostic utility of FISH testing for Ph-like B-ALL: A 5-year institutional experience

Fady Mikhail, *University of Alabama at Birmingham, AL*

Genomic characterization of *CRLF2*-rearranged pediatric B-ALL using transcriptome sequencing (RNA-Seq)

Gordana Raca, *Children's Hospital Los Angeles, CA*

Genomic Proximity Mapping (GPM): Evaluation of a next generation cytogenomic assay for acute myeloid leukemia

Min Fang, *Fred Hutchinson Cancer Center, WA*

Comparative analysis of targeted RNA-Seq and optical genome mapping for detecting clinically significant gene rearrangements

Gokce Toruner, *The University of Texas MD Anderson Cancer Center, TX*

1:00 – 2:00 PM

Buffet Lunch and Networking

Exhibit Hall and Foyer

2:00 – 3:00 PM

Invited Session 2

Genome mapping and sequencing technologies for characterizing structural variants

Lisa Lansdon, *Children's Mercy Hospital, Kansas City and University of Missouri-Kansas City School of Medicine, MO*

Fritz Sedlazeck, *Baylor College of Medicine, TX*

3:00 – 4:00 PM

Keynote Presentation

Molecular-genomic findings in leukemias: Diagnostic, prognostic, and therapeutic implications

Hagop Kantarjian, *The University of Texas MD Anderson Cancer Center, TX*

4:00 – 4:45 PM

Coffee Break with Exhibitors

Science Café Presentations

4:45 – 5:30 PM

Speed Abstract Session 1: Solid Tumors, Bioinformatics, Artificial Intelligence, Emerging Technologies, and Other Advances in Clinical Genomics

Tumor mutation burden (TMB) as a biomarker in advanced and metastatic breast cancers - An analysis of clinical NGS data in a 74 cases series

Liu Liu, *Brown University Health, RI*

Multi-modal validation and pan-cancer analysis of 9p21 loss: Diagnostic and prognostic implications

Holly Hill, *The University of Texas MD Anderson Cancer Center, TX*

Expanding MAVE data maps for use in human genomics applications

Jeremy Arbesfeld, *The Ohio State University, OH*

New Q-Band artificial intelligence-based chromosome analysis and karyotyping - A pilot evaluation

Cristina Steele, *Applied Spectral Imaging for Laboratorio Clinico Colcan, Columbia*

5-hydroxymethylcytosine as a liquid biopsy biomarker in colorectal cancer

Christopher Maher, *Washington University School of Medicine, MO*

Accurate and reliable detection of clonal hematopoiesis in plasma cell-free DNA

Alyssa Parker, *Vanderbilt University, TN*

5:30 – 6:30 PM

Poster Session (Odd Numbered Posters), Cash Bar

CGC Exhibit Hall

7:00 PM

Early Career Social

For attendees in training or recently out of training

TUESDAY, AUGUST 5, 2025

8:30 – 9:30 AM

Platform Session 5: Bioinformatics, Artificial Intelligence, and Machine-Learning

Prediction of BRAF V600 mutation status in cutaneous melanoma using an explainable deep learning model

Vibha Rao, *Dartmouth Health, NH*

Prediction of gene expression in NSCLC tumors and their microenvironment using an explainable machine learning model

Shrey Sukhadia, *Dartmouth Hitchcock Medical Center, NH*

Improving fusion detection sensitivity in the TruSight Oncology 500 Panel through DNA-based structural variant analysis

Qiliang Ding, *Mayo Clinic, MN*

Improved copy number estimation in central nervous system (CNS) tumors using methylation array

Drew Duckett, *Northwestern University, IL*

9:30 – 10:30 AM

Keynote Presentation

Discovering and defining the telomere biology disorders

Sharon Savage, *National Cancer Institute, National Institutes of Health, MD*

10:30 – 11:15 AM

Coffee Break with Exhibitors

Science Café Presentations

11:15 – 11:30 AM

Platinum Exhibitor Showcase

(No CME or CEUs available)

11:30 – 11:45 AM

Platinum Exhibitor Showcase

(No CME or CEUs available)

11:45 AM – 12:45 PM

Invited Session 3

Cancer genome bioinformatics in a clinical setting

Mark Cowley, *Children's Cancer Institute, Australia*

Sheryl Elkin, *QIAGEN Digital Insights, MA*

12:45 – 2:00 PM

In-Person Round Table Discussions with Lunch

Table topic selection is during conference registration.

2:00 – 2:45 PM

Speed Abstract Session 2: Variant Curation, Interpretation and Standardization, and Equity/Access in Genomic Medicine

Development of standards for the assessment of gene fusion oncogenicity

Karen Tsuchiya, *Nationwide Children's Hospital, OH*

The actionable transcriptome: A framework for incorporating transcriptional profiling into precision oncology

Amber Johnson, *The University of Texas MD Anderson Cancer Center, TX*

Introduction of an online portal for cancer-specific gene list curation
Beth Pitel, *Mayo Clinic, MN*

Enhancing data standardization and structure to improve clinical variant classification
Wesley Goar, *Nationwide Children's Hospital, OH*

Somatic variant classifications in ClinVar: An update after one year
Melissa Landrum, *NCBI/NLM/NIH, MD*

Clinical impact of in-house molecular testing of solid tumors in resource-limited settings: A pilot study in Pakistan
Romana Qazi, *Shaukat Khanum Memorial Cancer Hospital and Research Centre, Pakistan*

2:45 – 3:45 PM **Poster Session (Even Numbered Posters)**
CGC Exhibit Hall

3:45 – 4:30 PM **Coffee Break with Exhibitors**
Science Café Presentations

4:30 – 4:45 PM **Platinum Exhibitor Showcase**
(No CME or CEUs available)

4:45 – 5:00 PM **Platinum Exhibitor Showcase**
(No CME or CEUs available)

5:00 – 6:00 PM **Panel Discussion on the Integration of Cytogenetics and Molecular Genetics Laboratories**
Panelists:
Yasmine Akkari, *Nationwide Children's Hospital, OH*
Shashikant Kulkarni, *The University of Texas MD Anderson Cancer Center, TX*
Gordana Raca, *Children's Hospital Los Angeles, CA*
Dayna Wolff, *Medical University of South Carolina, SC*

7:00 – 8:30 PM **Optional After Hours Social Activities**
Register for activities during meeting registration. Participants can pick up tickets at the CGC 2025 Registration Desk.

Ice at the Galleria
Museum of Illusion

WEDNESDAY, AUGUST 6, 2025

9:00 – 10:00 AM **Platform Session 6: Germline/Constitutional Genomics, Mosaicism, and Equity/Access in Genomic Medicine**

Assessing the efficacy of additional cell analysis in detecting low-level constitutional mosaic karyotypes
Aiko Otsubo, *University of Michigan, MI*

Best practices for testing low-level mosaic variants: Recommendations from CGC somatic overgrowth & vascular anomalies working group
Avinash Dharmadhikari, *Children's Hospital Los Angeles, CA*

Genetic regulation of inflammatory proteomes: Bridging genomic disparities between African and European populations
Caroline Amour, *Kilimanjaro Christian Medical University College, Tanzania*

Current state of molecular cancer testing in resource-limited and underserved communities
Casey Brewer, *Cincinnati Children's Hospital Medical Center, OH*

10:00 – 11:00 AM

Invited Session 4

Clinical variant interpretation knowledgebases in cancer genomics

Beth Pitel, *Mayo Clinic and Variant Interpretation for Cancer Consortium (VICC), MN*

Alex Wagner, *Nationwide Children's Hospital and Variant Interpretation for Cancer Consortium (VICC), OH*

11:00 – 11:30 AM

Coffee Break with Exhibitors

11:30 AM – 12:30 PM

Platform Session 7: Diagnostic Challenge Case Studies

Detection of *IGH::MYC* and a cryptic *IGH::BCL6* rearrangement refines diagnosis in high-grade B-Cell lymphoma

Will Coward IV, *University of North Carolina Healthcare Cytogenetics Laboratory, NC*

Decoding the genetic complexity of B-ALL through long-read and RNA sequencing methods

Jiadi Wen, *Yale School of Medicine, CT*

Rare *TBL1XR1::JAK2* fusion in a patient with pediatric T-ALL identified by optical genome mapping and long-read sequencing

Aravindh Nagarajan, *Children's Mercy Hospital, Kansas City, MO*

A rare recurrent 11;19 rearrangement resulting in *KMT2A::MYO1F* fusion in pediatric AML

Manisha Sutariya, *University of Minnesota, MN*