



CANCER  
GENOMICS  
CONSORTIUM

## CGC 25<sup>th</sup> Annual Meeting

August 4 – 7, 2024  
St. Louis, MO



### Cancer Genomics Consortium, 15<sup>th</sup> Annual Meeting

August 4-7, 2024

Hyatt Regency at the Arch, St. Louis, Missouri

**SATURDAY, AUGUST 3, 2024**

#### In-Person Unconference

*Unconference participation incurs an additional registration fee.*

**9:00 AM – 5:00 PM**    **In-Person VICC/CGC/CiViC/ClinGen Cancer Variant Curation and Coding Unconference**

**Presenters TBA**

**SUNDAY, AUGUST 4, 2024**

#### Pre-Meeting Workshops

*Workshop participation incurs an additional registration fee.*

**9:00 – 10:30 AM**    **Leadership Workshop**  
**Moderators:** Xiaoyu Qu, *Fred Hutchinson Cancer Center* and Teresa Smolarek, *Cincinnati Children's Hospital Medical Center*  
**Presenter:**  
Michael Johnson, *University of Washington*

**10:30 – 10:45 AM**    **Coffee Break for Workshop Attendees**

**10:45 AM – 12:15 PM**    **Bioinformatics Workshop**  
**Moderator:** Alex Wagner, *Nationwide Children's Hospital*  
**Presenters:**  
Malachi Griffith, *Washington University in St. Louis School of Medicine*  
Alan Rubin, *Walter and Eliza Hall Institute*  
Sumaiya Iqbal, *Broad Institute*

## Opening of the 15<sup>th</sup> Annual Cancer Genomics Consortium

1:00 – 1:05 PM

### Welcome

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

1:05 - 1:15 PM

### Presidential Address

Rashmi Kanagal-Shamanna, *MD Anderson Cancer Center*

1:15 – 2:15 PM

### Keynote Presentation

#### Enabling clinical translation of high-throughput functional assay data

Alan Rubin, *Walter and Eliza Hall Institute*

**Introduction:** Wesley Goar, *Nationwide Children's Hospital*

2:15 – 3:00 PM

### Speed Abstracts Session I: Precise genetic diagnosis of hematological and other malignancies

**Moderators:** Zhenya Tang, *University of Nebraska Medical Center* and Xinyan Lu, *Northwestern University Feinberg School of Medicine*

#### Enrichment of Hodgkin and Reed-Sternberg (HRS) cells using size-based microfiltration

Brianna Munnich, *Washington University in St. Louis School of Medicine*

#### Technologist Award

#### Diagnostic next generation sequencing to Detect MYD88 L265P in lymphoplasmacytic lymphoma compared to ddPCR

Lauren Wainman, *Dartmouth-Hitchcock Medical Center*

#### Interplatform comparison of Stratys and Saphyr: Preliminary results of OGM clinical verification in hematologic cancers

Eric McGinnis, *Vancouver General Hospital*

#### The clinical implementation of technologies utilized for macrogenomic event detection in solid tumors

Lisa Lansdon, *Children's Mercy Kansas City & UMKC - School of Medicine*

#### Implementation of automatic slide processing for aneuploidy FISH test

Wenhua Zhou, *ARUP Laboratories*

3:00 – 3:30 PM

### Exhibitor Showcase: Illumina

(No CME or CEUs available)

3:30 – 4:15 PM

### Coffee Break

### Science Café Presentations

4:15 – 5:15 PM

### Session 1: Diagnostic and prognostic impact of molecular profiling across hematological neoplasms

**Moderators:** Amanda Dixon-McIver, *IGENZ* and Laveniya

Satgunaseelan, *Royal Prince Alfred Hospital*

#### Hot-spot D816 KIT has different clinical outcome compared to non-D816 KIT variants in myeloid neoplasms

Barina Aqil, *Northwestern University Feinberg School of Medicine*

**Implementation and utility of gene expression profile (GEP)-based classification of pediatric b-lymphoblastic leukemia**

Gordana Raca, *Children's Hospital Los Angeles*

**Reduced subclone diversity in clonal cytopenia of undetermined significance compared to myelodysplastic syndrome**

Sridhar Nonavinkere Srivatsan, *Washington University School of Medicine in St Louis*

**Best practices for testing and reporting of FISH studies in multiple myeloma: Recommendations from the CGC working group**

Xinyan Lu, *Northwestern University Feinberg School of Medicine*

**5:15 – 5:45 PM**

**Speed Abstracts Session II: Standardization, bioinformatics workflows, and data integration for personalized healthcare**

**Moderators:** Angela Lager, *University of Chicago* and Nathan Kopp, *Medical College of Wisconsin*

**Standardizing fusion calls in a computable format with FUSOR for downstream clinical assessment**

Jeremy Arbesfeld, *The Ohio State University*

**Developing a robust bioinformatics workflow to support personalized neoantigen vaccine clinical trials**

Kartik Singhal, *Washington University in St Louis*

**Contextualizing clinical significance using FDA label supplemented DGI data**

Matthew Cannon, *Nationwide Children's Hospital*

**Trainee Award**

**AmpliconSuite: Analyzing focal amplifications in cancer genomes**

Bhargavi Dameracharla, *University of California, San Diego*

**5:45 – 6:15 PM**

**CGC 2024 Business Meeting**

**6:15 - 8:30 PM**

**Welcome Reception**

CGC Exhibit Hall, Grand Ballroom ABCD

**MONDAY, AUGUST 5, 2024**

**8:30 – 9:30 AM**

**Keynote Presentation**

Melissa B. Davis, *Morehouse School of Medicine*

**Introduction:** Thuy Phung, *University of South Alabama*

**9:30 – 10:15 AM**

**Session 2: Genomic equity and inclusivity: Bridging the gap in diagnostics and personalized care across diverse populations**

**Moderator:** Rashmi Kanagal-Shamanna, *MD Anderson Cancer Center*

**Ethnic and molecular disparities in prostate adenocarcinoma incidence: data from 19 cohort studies**

Amy Brady, *SUNY Upstate Medical University*

**Trainee Award**

**Clinical impact of in-house molecular testing for underserved cancer patients in southern Alabama**

Thuy Phung, *University of South Alabama*

**An evaluation of clinical significance of the TP53 polyadenylation signal-disrupting variant rs78378222-G**

Dayo Shittu, *NIH/National Human Genome Research Institute*

**10:15 – 10:45 AM**

**Panel Discussion**

**Moderator:** Rashmi Kanagal-Shamanna, *MD Anderson Cancer Center*

**10:45 – 11:30 AM**

**Coffee Break with Exhibitors**

**Science Café Presentations**

**11:30 AM – 12:00 PM**

**Exhibitor Showcase: Guardant Health**

**Liquid Biopsy in Cancer Care: Current Applications and Future Signatures**

Jill Tsai, *Guardant Health*

*(No CME or CEUs available)*

**12:00 – 12:30 PM**

**Invited Speaker Presentation**

**Current and Future Integrations of Genomics and AI**

Chad Vanderbilt, *Memorial Sloan Kettering Cancer Center*

**Introduction:** Chuan Gao, *Memorial Sloan Kettering Cancer Center*

**12:30 – 1:00 PM**

**Speed Abstracts Session III: Integrated sample processing and genomic analysis approaches that improve diagnostic yield for hematologic malignancies**

**Moderators:** Xiaoyu Qu, *Fred Hutchinson Cancer Center* and Xinrui Shi, *University of Virginia*

**Intrachromosomal amplification of chromosome 21 as the sole chromosomal aberration in a primary AML patient**

Leila Youssefian, *University of California, Los Angeles*

**Tumor specific cell sorting improves sensitivity of FISH: Implications for patients with hematologic malignancies**

Luise Hartmann, *Hematologics Inc.*

**High resolution cytogenomic analysis reveals characterizing abnormalities in APL-like leukemia**

Shivaprasad Sathyanarayana, *Dartmouth Hitchcock Medical Center*

**FIP1L1::KIT fusion in a case of peripheral T-cell lymphoproliferative neoplasm responsive to tyrosine kinase inhibitor**

Kristin Deeb, *Emory University*

- 1:00 – 1:15 PM**      **CGC Updates**  
Rashmi Kanagal-Shamanna, *MD Anderson Cancer Center*  
(No CME or CEUs available)
- 1:15 – 2:15 PM**      **Buffet Lunch**  
Exhibit Hall and Foyer
- 2:15 – 3:15 PM**      **Session 3: Advances in molecular profiling for tumor risk assessment and management**  
**Moderators:** Lynne Abruzzo, *Medical University of South Carolina* and Kristin Deeb, *Emory University School of Medicine*
- Methylation profiling more accurately predicts recurrence risk in meningiomas compared to current WHO grading criteria**  
Lucas Santana dos Santos, *Northwestern University*
- Advancing personalized prostate cancer care: Utilizing miRNA profiling and machine learning for metastasis prediction**  
Gobi Thillainadesan, *Sunnybrook Research Institute*
- Detection of somatic tumor mutations in circulating plasma DNA of patients with sellar and skull base tumors**  
Mallory Tucker, *University of Washington*
- Methylation sequencing enhances interpretation of clonal hematopoiesis dynamics**  
Alyssa Parker, *Vanderbilt University*
- Trainee Award**
- 3:15 – 3:45 PM**      **Panel Discussion**  
**Moderators:** Lynne Abruzzo, *Medical University of South Carolina* and Kristin Deeb, *Emory University School of Medicine*
- 3:45 – 4:00 PM**      **Exhibitor Showcase**  
(No CME or CEUs available)
- 4:00 – 4:15 PM**      **Exhibitor Showcase**  
(No CME or CEUs available)
- 4:15 – 5:00 PM**      **Coffee Break with Exhibitors**  
**Science Café Presentations**
- 5:00 – 5:30 PM**      **Invited Speaker Presentation**  
**Interpretable and context-free deconvolution of multi-scale transcriptomic lung cancer data**  
Robert Sebra, *Icahn School of Medicine at Mount Sinai*  
**Introduction:** Huan Mo, *NHGRI*
- 5:30 – 6:30 PM**      **Session 4: Global initiatives in enhancing interpretation of the somatic genome**

**Moderators:** Avinash Dharmadhikari, *Children's Hospital Los Angeles/ University of Southern California Keck School of Medicine* and Leila Youssefian, *University of California, Los Angeles*

**Enhancing precision oncology: the value of open-source knowledgebase integration**

Cameron Grisdale, *Canada's Michael Smith Genome Sciences Centre*

**Classifying the oncogenicity of 100 variants from pediatric cancer patients using a standardized assessment framework**

Wesley Goar, *Nationwide Children's Hospital*

**Somatic genomic testing and variant curation practices in Australian and New Zealand diagnostic testing laboratories**

Grace Pendlebury, *Australian Genomics & QIMRB Berghofer*

**Addition of non-gene features to the CIViC data model**

Arpad Danos, *Washington University in St. Louis*

**6:30 – 8:00 PM**

**Early Career Social**

*For attendees in training or recently out of training*

Park View Room, Fourth Floor

**TUESDAY, AUGUST 6, 2024**

**8:30 – 9:00 AM**

**Invited Speaker Presentation**

*TBA pending approval from the FDA*

**9:00 – 9:30 AM**

**Invited Speaker Presentation**

**To a carpenter, every problem is a nail: The FDA brings a hammer to diagnostic medicine**

Dara Aisner, *University of Colorado Anschutz Medical Campus*

**Introduction:** Fady Mikhail, *University of Alabama at Birmingham*

**9:30 – 10:15 AM**

**Session 5: Development of resources for the reimbursement and clinical reporting standardization of cancer genomic testing**

**Moderators:** Fady Mikhail, *University of Alabama at Birmingham* and Niroshi Senaratne, *University of California Los Angeles*

**Reimbursement for molecular pathology testing for neoplasia: The 2024 update**

Xiaoyu Qu, *Fred Hutchinson Cancer Center*

**Current next generation sequencing reporting practices: a GOAL Consortium report**

Celeste Eno, *Cedars-Sinai Medical Center*

**A cross-consortia initiative for aligning the definitions and descriptions of gene fusions**

Alex Wagner, *Nationwide Children's Hospital*

- 10:15 – 10:45 AM**      **Panel Discussion**  
**Moderator:** Yasmine Akkari, *Nationwide Children's Hospital*  
(No CME or CEUs available)
- 10:45 – 11:30 AM**      **Coffee Break with Exhibitors**  
**Science Café Presentations**
- 11:30 – 11:45 AM**      **Exhibitor Showcase: QIAGEN**  
**Expert perspectives on the challenges and opportunities of implementing comprehensive genomic profiling**  
Ravindra Kolhe, *Medical College of Georgia, Augusta University*  
(No CME or CEUs available)
- 11:45 AM – 12:00 PM**      **Exhibitor Showcase**  
(No CME or CEUs available)
- 12:00 – 12:30 PM**      **Invited Speaker Presentation**  
**Cell-free DNA and AI technology for liquid biopsy detection of cancer early and prediction of cancer treatment response**  
Aadel Chaudhuri, *Mayo Clinic*  
**Introduction:** Trevor Pugh, *University of Toronto*
- 12:30 – 2:00 PM**      **In-Person Round Table Discussions with Lunch**  
*Table topic selection was during conference registration.*  
Hyatt Regency Fourth Floor Foyer and Mills Meeting Rooms
- 2:00 – 2:30 PM**      **Speed Abstract Session IV: Innovative tools and challenges in genetic variant analysis**  
**Moderators:** Chuan Gao, *Memorial Sloan Kettering Cancer Center* and Xinming Zhuo, *Columbia University*
- pVACsplice: A computational tool for predicting and prioritizing alternative splicing neoantigens**  
My Hoang, *Washington University School of Medicine in St. Louis*
- Customize your variant interpretation workflow with OpenCRAVAT**  
Rachel Karchin, *Johns Hopkins University*
- Identifying challenges in variant normalization**  
Anastasia Bratulin, *The Ohio State University*
- 2:30 – 2:45 PM**      **Exhibitor Showcase**  
(No CME or CEUs available)
- 2:45 – 3:30 PM**      **Coffee Break with Exhibitors**  
**Science Café Presentations**

3:30 – 4:30 PM

**Keynote Presentation**

**Precision interception in multiple myeloma and it's precursor conditions**

Irene Ghobrial, *Dana Farber Cancer Institute*

**Introduction:** Linda Baughn, *Mayo Clinic*

4:30 – 6:00 PM

**Poster Session**

CGC Exhibit Hall, Grand Ballroom ABCD

5:45 – 9:00 PM

**Departure for Pre-Registered Social Activities**

*On-site registration may be available – please check with the meeting registration desk if you are interested in attending one of these events.*

*Participants pick up tickets at the CGC 2024 Registration Desk.*

- **St. Louis Riverboat Cruise:**

*Meet at 5:30 PM in the Hyatt Regency Lobby to walk to the river entrance on the far side of the arch. Boat loads at 5:45 PM and departs promptly at 6:00 PM. Cruise is one hour in length.*

- **St. Louis Cardinals vs. Tampa Bay Rays:**

*Meet at 6:00 PM in Hyatt Regency Lobby to walk to the event together or join the group at Busch Stadium. Game starts at 6:45PM.*

- **Bowling:**

*Meet at 6:00 PM in Hyatt Regency Lobby to get to the event together or join the group at Flamingo Bowl. Reservations at 6:30PM.*

**WEDNESDAY, AUGUST 7, 2024**

9:00 – 10:00 AM

**Session 6: Genomic analyses of solid tumors: Arrays, sequencing and developing a gene list**

**Moderators:** Teresa Smolarek, *Cincinnati Children's Hospital Medical Center* and Rebecca Smith, *Vanderbilt University Medical Center*

**Integrated comprehensive genomic profiling of meningiomas: A single institutional study**

Mohana Priya Jayavel, *Northwestern Memorial Hospital*

**Technologist Award**

**Significant copy number variants and loss of heterozygosity in Wilms tumor: Insights from Nationwide Pediatric Oncology**

Melanie Babcock, *Nationwide Children's Hospital and The Ohio State University*

**The clinical utility of the TSO500 clinically-verified test in patients with solid tumors - The Mayo Clinic experience**

Hussam Al Kateb, *Mayo Clinic*

**Formation of a tumor-specific gene list: the Central Nervous System (CNS) tumor taskforce experience**

Madina Sukhanova, *Feinberg School of Medicine Northwestern University*



10:00 – 11:00 AM

**Session 7: Updates in oncogenicity guidelines and classification rules for prioritizing variants in somatic disease**

**Moderators:** Wahab Khan, *Dartmouth Hitchcock Medical Center*, and Michael Babcock, *Dahl-Chase Diagnostic Services*

**Modifying cancer variant interpretation guidelines for the curation of histone H3 variants - the 'next step' of the CI**

Laveniya Satgunaseelan, *Royal Prince Alfred Hospital*

**Prioritization of defining and supportive diagnostic variants in pediatric tumors**

Laura Corson, *Oncology Consultant*

**Step 2 updates for the oncogenic assessment of FLT3 variants by the ClinGen FLT3 Somatic Cancer Variant Curation expert**

Nathan Kopp, *Medical College of Wisconsin*

**Piloting NTRK fusion-specific oncogenicity guidelines: Lessons learned**

Jason Saliba, *Washington University School of Medicine*

11:00 – 11:30 AM

**Coffee Break with Exhibitors**

11:30 AM – 12:30 PM

**Session 8: Advancements in cancer-adjacent genetic diagnostics: Guidelines, assays, and case studies**

**Moderators:** Alex Wagner, *Nationwide Children's Hospital and the Ohio State University College of Medicine* and Grace Pendlebury, *Australian Genomics & QIMR Berghofer MRI*

**Challenges of classifying variants associated with disorders of somatic mosaicism and guideline creation**

Alexa Dickson, *Washington University in St Louis*

**UMI-based expanded NGS panel in precision molecular diagnosis of vascular anomalies: Early results**

Avinash Dharmadhikari, *Children's Hospital Los Angeles*

**Examining potential candidate genes within deletions of 3p14.2 to 3p14.1 in two cases of autism and developmental delay**

Rebecca Smith, *Vanderbilt University Medical Center*

**Clinical SNP-array adds value to diagnosis and surveillance of bone marrow failure syndromes**

Lucilla Pizzo, *University of Utah, ARUP Laboratories*