



**Society for Craniofacial Genetics & Developmental Biology
46th Annual Meeting**

October 10th-12th, 2023

Cincinnati Children's Hospital Medical Center
Cincinnati, Ohio

Tuesday, October 10th, 2023

Cincinnati Art Museum

953 Eden Park Dr
Cincinnati, OH 45202
Great Hall & Fath Auditorium

Welcome (5:00 – 5:10 PM)

*Amy Merrill, PhD, University of Southern California
President, Society for Craniofacial Genetics and Developmental Biology*

Awards Session (5:10 – 6:40 PM)

Session Chair: Amy Merrill, PhD, University of Southern California

5:10 – 6:00 PM **David Bixler Excellence in Craniofacial Research Award**
Sally Moody, George Washington University

6:00 – 6:50 PM **Marylou Buyse Excellence in Craniofacial Research Award**
Justin Cotney, University of Connecticut Health Center

6:50 – 7:10 PM **Introduction of New NIDCR Program Officer**
Zubaida Saifudeen, PhD (Program Director of the Developmental Biology and Genetics Program, NIDCR).

Reception (7:10-9:00)

Hors d'oeuvres and drinks will be served.

Wednesday, October 11th, 2023

Sabin Auditorium,

Cincinnati Children's Hospital Medical Center

Location D

3333 Burnet Ave,

Albert Sabin Way,

Cincinnati, OH 45229

Check in (8:00 – 8:30 AM)

Workshops (8:35 – 10:25 AM)

Session Chair: Jean-Pierre Saint-Jeannet, PhD, New York University

8:35 – 9:30 AM

Spatial Transcriptomics Workshop

Matthew Warman, MD Harvard Medical School

9:30 – 10:25 AM

Scientific Communication

Jason Organ, PhD Indiana University School of Medicine

Communicating with Public Audiences Requires Different Approaches

Coffee Break (10:25 – 10:45 AM)

Signaling in Craniofacial Development (10:45 – 12:00 PM)

Session Chair: Katherine Fantauzzo, PhD, University of Colorado Anschutz Medical Campus

10:45 – 11:15 AM

Plenary talk: Lisa Taneyhill, PhD, University of Maryland, College Park

Building the trigeminal ganglion: A tale of two precursors

11:15 – 11:30 AM

Jennifer Fish, PhD, University of Massachusetts Lowell

Fgf8 dosage regulates patterning and symmetry of the first pharyngeal pouch, cleft, and arch

11:30 – 11:45 PM

Jennyfer Mitchell, PhD, University of Colorado Anschutz Medical Campus

Alx function in the frontonasal skeleton revives the pharyngeal arch-0 hypothesis

11:45 – 12:00 PM

Evan Brooks, Cincinnati Children's Hospital Medical Center

Ciliary protein C2cd3 is required for patterning mandibular musculoskeletal tissues

Lunch (12:00 – 1:15 PM) *Boxed lunch provided.*

Genomics of Craniofacial Development (1:15 – 2:30 PM)

Session Chair: Matthew Harris, PhD, Boston Children's Hospital & Harvard Medical School

1:15 – 1:45 PM

Plenary talk: Robert Cornell, PhD, University of Washington

An approach to the missing heritability of orofacial cleft: Transcriptional regulatory network models trained on single-cell multiome data reveal key regulators of periderm integrity.

- 1:45 – 2:00 PM Kara Powder, PhD, Clemson University
Determining the origins of craniofacial variation using comparative genomics in Lake Malawi cichlid fishes
- 2:00 – 2:15 PM Lorena Maili, PhD, Stowers Institute for Medical Research
Ribosome Biogenesis is Essential for Craniofacial Development and Palatogenesis
- 2:15 – 2:30 PM Timothy Nguyen, University of Iowa
It Takes Two to Tango: TFAP2 Paralogs in a Frontonasal Dysplasia-Related Neural Crest Gene Regulatory Network

SCGDB Business meeting (2:30 – 3:00 PM)

- 2:30 – 2:40 PM President's Comments (Amy Merrill, PhD)
- 2:40 – 2:45 PM Treasurer's report (Juhee Jeong, PhD)
- 2:45 – 2:55 PM Election for Secretary (host TBD)

Break (3:00 - 3:30 PM)

Human Genetics of Craniofacial Development (3:30 – 4:45 PM)

Session Chair: Juhee Jeong, PhD, New York University

- 3:30 – 4:00 PM **Plenary talk:** Timothy Cox, PhD, University of Missouri, Kansas City
Facing reality: the challenges of elucidating the genetics of common craniofacial anomalies
- 4:00 – 4:15 PM Soma Dash, PhD, University at Albany
Mediator complex subunit, Med23 is required in both neural crest cells and endothelial cells to regulate craniofacial development
- 4:15 – 4:30 PM Sarah Curtis, PhD, Emory University
Enrichment of de novo mutations in craniofacial enhancers in trios with orofacial clefts
- 4:30 – 4:45 PM Jang Kim, University of Oklahoma Health Sciences Center
Calvaria agenesis in a mouse model of Penttinen Syndrome

Break and poster setup (4:45 – 5:30 PM)

Poster Session and Reception (5:30 – 7:30 PM)

Light refreshments will be served.

Thursday, October 12th, 2023

Translational and Regenerative Approaches in Craniofacial Biology (8:30 AM – 9:45 AM)

Session Chair: Lindsey Barske, PhD, Cincinnati Children's Hospital Medical Center

- 8:30 – 9:00 AM **Plenary talk:** Mildred Embree, DMD, PhD, MS, Columbia University
The lower jaw joint as a model for defining cartilage niche and chondrocyte identity
- 9:00 – 9:15 AM Jianfu Chen, PhD, University of Southern California
The development of temporomandibular joint (TMJ) osteoarthritis and pain at spatial single-cell resolution
- 9:15 – 9:30 AM Michi Kanai, PhD, University of Colorado Anschutz Medical Campus
The Gq/11 Family of Gα Subunits is Necessary and Sufficient for Lower Jaw Development
- 9:30 – 9:45 AM Katherine Inskeep, Nationwide Children's Hospital
SMPD4 Mediated Sphingolipid Metabolism Regulates Brain and Primary Cilia Development

Coffee Break (9:45 – 10:00 AM)

Special Session: Clinical Management of Craniofacial Differences (10:00 AM – 11:30 AM)

Session Chair: Elizabeth Leslie, PhD, Emory University

- 10:00 – 10:30 AM Russell Reid, MD, PhD, University of Chicago
A-Head of the Game: The Need for Craniofacial Research from A Surgeon's Perspective
- 10:30 – 11:00 AM Howard Saal, MD, FACMG Cincinnati Children's Hospital Medical Center
Collaboration Between Clinical Genetics and Research Genomics: Expanding Our Understanding of Craniofacial Conditions
- 11:00 – 11:15 AM Britteny Underwood, Cincinnati, OH
Connecting Face to Face
- 11:15 – 11:30 AM Carolina Sommer, Born a Hero, Seattle, WA
It began when my daughter was BORN A HERO

Awards and closing remarks (11:30 AM – 12:00 PM)

Amy Merrill-Brugger, PhD, University of Southern California

Adjourn - 12:00 PM