



Society for Craniofacial Genetics & Developmental Biology 45th Annual Meeting

September 20th – 21st, 2022

Sanford Consortium for Regenerative Medicine
University of California, San Diego
La Jolla, California

Tuesday, September 20th, 2022

Check in (8:00 – 8:30 AM)

Welcome (8:30 – 8:35 AM)

*Dr. David Clouthier, University of Colorado Anschutz Medical Campus
President, Society for Craniofacial Genetics and Developmental Biology*

Workshops (8:35 – 10:25 AM)

8:35 – 9:30 AM

Single Cell RNA Sequencing Workshop

Dr. Nils Lindstrom, University of Southern California

9:30 – 10:25 AM

Kids First Data Workshop

Dr. David Higgins, Children's Hospital of Philadelphia

Coffee Break (10:25 – 10:40 AM)

Awards Session (10:40 AM – 12:00 PM)

Session Chair: Dr. David Clouthier, University of Colorado Anschutz Medical Campus

10:40 – 11:20 AM

David Bixler Excellence in Craniofacial Research Award

Dr. Ralph Marcucio, University of California, San Francisco

11:20 – 12:00 PM

Marylou Buyse Excellence in Craniofacial Research Award

Dr. Loydie Jerome-Majewska, McGill University

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

Signaling in Craniofacial Development (1:00 – 2:15 PM)

Session Chair: Dr. Matthew Harris, Harvard University

1:00 – 1:30 PM

Plenary talk: Dr. Tom Schilling, University of California Irvine

Genetic analysis of craniofacial skeletal growth zones in fish

- 1:30 – 1:45 PM **Dr. Katherine Fantauzzo**, University of Colorado Anschutz Medical Campus
PDGFR dimer-specific activation, trafficking and downstream signaling dynamics
- 1:45 – 2:00 PM **Dr. Nadege Gougnard**, New York University
MMP moonlighting function: Transcriptional regulation of epithelial to mesenchymal transition by MMP28
- 2:00 – 2:15 PM **Kuo-Chang Tseng**, University of Southern California
In vivo recording lineage history of cranial neural crest

Coffee Break (2:15 – 2:30 PM)

SCGDB Business meeting (2:30 – 2:55 PM)

- 2:30 – 2:40 PM President's Comments (Dr. David E. Clouthier)
- 2:40 – 2:45 PM Treasurer's report (Dr. Jean-Pierre Saint-Jennet)
- 2:45 – 2:55 PM Election for Vice President and Treasurer (Dr. Rolf Stottmann)

Genomics of Craniofacial Development (3:00 – 4:15 PM)

Session Chair: Dr. Jean-Pierre Saint-Jennet, New York University

- 3:00 – 3:30 PM **Plenary talk: Dr. Yang Chai**, University of Southern California
Spatiotemporal cellular movement and dynamic fate decision of post-migratory cranial neural crest cells
- 3:30 – 3:45 PM **Dr. Licia Selleri**, University of California San Francisco
Regulatory dynamics of midfacial growth in evolution and disease
- 3:45 – 4:00 PM **Dr. Chan Hee Mok**, University of California San Francisco
Characterization of PBX-bound chromatin landscape at the SHH locus in the frontonasal ectodermal zone
- 4:00 – 4:15 PM **Mathi Thiruppathy**, University of Southern California
Investigating cartilage diversity through comparative multi-omics analysis

Break and poster setup (4:15 – 5:00 PM)

Poster Session and Reception (5:00 – 7:00 PM)

Light refreshments will be served.

Wednesday, September 21st, 2022

Human Genetics of Craniofacial Development (8:30 – 9:45 AM)

Session Chair: Dr. Rolf Stottmann, Nationwide Children's Hospital

- 8:30 – 9:00 AM **Plenary talk: Dr. Elizabeth Leslie**, Emory University
From GWAS to genomes: Elucidating the genetic architecture of orofacial clefting
- 9:00 – 9:15 AM **Dr. Andre Tavares**, George Washington University
Dissecting the role of Six1 and Six1-associated genes in craniofacial development and disease
- 9:15 – 9:30 AM **Dr. Rebekah Charney**, University of California Riverside
The Mowat-Wilson syndrome factor ZEB2 controls the early formation of human cranial neural crest through BMP signaling modulation
- 9:30 – 9:45 AM **Azeez Alade**, University of Iowa
Two-stage analyses of GWAS data identified additional risk loci for non-syndromic orofacial clefts in the African population

Coffee break (9:45 – 10:00 AM)

Translational and Regenerative Approaches in Craniofacial Biology (10:00 AM – 11:30 AM)

Session Chair: Dr. Amy Merrill-Brugger, University of Southern California

- 10:00 – 10:30 AM **Plenary talk: Dr. Sarah Knox**, University of California San Francisco
(Re)generating acinar cells of the salivary glands takes nerve
- 10:30 – 10:45 AM **Dr. James Nichols**, University of Colorado Anschutz Medical Campus
Distinct and redundant roles for zebrafish her genes during osteoblast differentiation and craniofacial patterning
- 10:45 – 11:00 AM **Dr. Xiaolei Zhao**, University of Texas Health Science Center at Houston
A novel role for Yap and Taz in promoting osteogenesis and preventing chondrogenesis in neural crest cells
- 11:00 – 11:15 AM **Brittany Hufft-Martinez**, University of Kansas Medical Center
SPECC1L deficiency genetically interacts with ciliary IFT-A deficiency to cause cleft palate that is ameliorated with folic acid supplementation

Awards and closing remarks (11:30 – 11:45 AM)

Dr. Amy Merrill-Brugger, University of Southern California

Adjourn - 11:45 AM