



**37<sup>TH</sup> ANNUAL MEETING  
SANFORD CONSORTIUM FOR REGENERATIVE MEDICINE  
OCTOBER 18, 2014**

<b>Welcome</b> 8:45-9:00	<b>Auditorium</b> Introductory Announcements
<b>Genomic Approaches to Uncover Disease Mechanisms</b>	
<b>Chair</b> 9:00-9:30	<b>Andrew Wilkie</b> <u>Les Biesecker</u> <i>Hypothesis-testing and hypothesis-generating approaches to clinical genomic research</i>
9:15-9:30	<u>Maria Rita Passos-Bueno</u> Transcriptome, Epigenome and Exome analyses to explore the missing heritability in nonsyndromic cleft lip and palate
9:30-9:45	<u>Kerstin Ludwig</u> Identification of a novel susceptibility locus for nonsyndromic cleft lip and palate at chromosome 15q13
9:45-10:00	<u>Zena Wolf</u> Whole genome sequencing of dogs identifies a frameshift mutation within ADAMTS20 that is responsible for naturally occurring cleft lip, palate, and syndactyly
10:00-10:15	<u>Robert Cornell</u> Transcription factors and cis-acting elements in the periderm gene regulatory network
10:15-10:45 <i>Break</i>	
<b>Comparative Models of Craniofacial Development and Function</b>	
<b>Chair</b> 10:45-11:15	<b>Sarah Knox</b> <u>Blaire Van Valkenburgh</u> Complicated Noses: nasal turbinal anatomy and function in Carnivora
11:15-11:30	<u>Kara Powder</u> Evaluation of species-specific ontogenetic trajectories for craniofacial morphologies in Lake Malawi cichlids
11:30-11:45	<u>Ryan Bloomquist</u> Developmental plasticity of stem cells in tooth and taste bud renewal
11:45-12:00	<u>Lindsey Mork</u> Jagged-Notch and Prrx1 locally inhibit cartilage differentiation to sculpt the upper face

12:00-12:15 Pierre Le Pabic  
Fat-Dachsous signaling coordinates cartilage differentiation and polarity during craniofacial development

**Lunch and Business Meeting**

12:15-1:15 Lunch – Bella Vista Cafe  
1:15-2:00 Business Meeting - Auditorium

**Genetic Insights into Craniofacial Development and Disease**

**Chair** **Tim Cox**  
2:00-2:15 Elaine Emmerson  
A distinct Sox2-positive progenitor cell population contributes to acinar cell maintenance in the human salivary gland  
2:15-2:30 Nathan Wilson  
SPECC1L modulation of adherens junctions and PI3K-AKT signaling is required for collective cell migration in facial morphogenesis  
2:30-2:45 Radhika Atit  
A Feed-forward loop between Wnt/ $\beta$ -catenin signaling and Twist1 contributes to cranial bone agenesis and dermal hypoplasia  
2:45-3:00 Mark Leid  
Transcriptional control of craniofacial sutural patency by BCL11B  
3:00-3:15 Camilla Teng  
Interactions between Tcf12 and Twist1 in sutural development  
3:15-3:45 *Coffee*

**Mechanisms of Craniofacial Disorders and Repair**

**Chair** **Lisa Sandell**  
3:45-4:00 Samantha Bruggmann  
GLI-dependent etiology of craniofacial ciliopathies  
4:00-4:15 Annita Achilleos  
The craniofacial-specific role of the ribosomal gene Polr1c and its role in Treacher Collins syndrome  
4:15-4:30 Laurence Legeai-Mallet  
Disturbed cartilages of the mandible in achondroplasia result in abnormal mandible shape, size, and position  
4:30-4:45 Ayeshah Chaudhry  
Mutations in ERF gene as a new genetic cause of craniosynostosis – enabling parents and clinicians to understand why a child is affected  
4:45-5:15 Ralph Marcucio  
Mechanisms of Skeletal Regeneration

**Scientific Poster Reception – Sanford Consortium Lobby**

5:30- 7:30 Poster presentation, reception and awards