Tuesday, June 13 - FaceBase 2023 Community Forum

HSC Conference Center Ballroom 2200 E Trojan Way, Los Angeles, CA 90033 / Zoom sent separately.

Meeting Objectives

The theme of the FaceBase 2023 Community Forum is **"Empowering data-driven research across the full translational science spectrum of dental, oral, and craniofacial (DOC) research"**.

The goal of the meeting is to highlight data availabilities, demonstrate emerging FaceBase features, resources, and capabilities, and explore how FaceBase can better serve translational DOC research.

Pacific	
9:00 AM *(5 min)*	**Introduction** *Yang Chai, DDS, PhD, USC*
9:05 AM *(15 min)*	**Opening Remarks** *Rena D'Souza, DDS, PhD, Director of NIDCR*
9:20 AM *(30 min)*	**FaceBase Year in Review & Future Plans** *(20 min talk/10 min Q&A)* *Carl Kesselman, PhD, USC, and Rob Schuler, PhD, USC*
Clinical and Public Health Research Session Discuss specific interests and needs of the clinical and public health research community and the unique impact that FaceBase can make.	
9:50 AM *(20 min)*	**Olivier Duverger, PhD (NIDCR)** - Discuss molecular mechanisms underlying enamel development and how these processes are disrupted in OI and Loeys-Dietz syndrome. Discuss potential interventions and strategies for preventing and treating enamel defects in these disorders. (Remote)
10:10 AM *(20 min)*	**Mary Marazita, PhD (Univ of Pittsburgh) and Jin Xiao, DDS, PhD (Univ of Rochester)** - Discuss the genetic and environmental factors that contribute to dental caries in Appalachian populations, as well as potential interventions and strategies for preventing and treating this disease. (Remote and in person)
10:30 AM *(20 min)*	**Abimbola Oladayo, BDS, MPH, MS (Univ of Iowa)** – Discuss translating basic science discoveries into practical, community-based applications – the importance of bridging the gap between basic science research and real-world applications, engaging communities, and improving health outcomes for diverse populations. Cover bioethical issues as well. (Remote)
10:50 AM (15 min)	*Break – 15 min*
Data Science Session Explore the potential of data science to identify patterns and associations in DOC data that can lead to more accurate and earlier diagnosis of craniofacial syndromes and diseases.	
11:05 AM *(20 min)*	**Jay Patel, BDS, MS, PhD (Temple University)** - Is developing computational methods and tools to analyze and integrate genomic and clinical data in the context of oral cancer; discuss the specific data science approaches and tools that he is using in his research. (Remote)
11:25 AM *(20 min)*	**Harrison Brand, PhD (Harvard University)** – Discuss current research calculating polygenic risk scores including data previously generated by Elizabeth Leslie. Discuss using powerful data analytics to answer questions in the clinical realm. Polygenic risk scores are a growing field in DOC research. (In person)

11:45 AM *(20 min)*	**Ross Whitaker, PhD (Univ of Utah)** - Discuss how CranioRate uses data-driven approaches, such as machine learning and computer vision, to identify patterns and associations in craniofacial imaging data (In person)
12:05 PM *(1 hour)*	*Lunch – 60 min*
Basic Research Session Discuss the role of model organisms in advancing our understanding of DOC conditions and identify opportunities for further development and utilization of these models in research.	
1:05 PM *(20 min)*	**Gage Crump, PhD (USC) –** Discuss research on zebrafish, specifically investigating the genes, signaling pathways, and cellular interactions involved in craniofacial development. Could touch on recent work on craniosynostosis (which is a focal point of the FaceBase translational pilot project). (In person)
1:25 PM *(20 min)*	**Hong Li, PhD (Univ of Colorado, School of Dental Medicine)** - Discuss how her research team has developed humanized mouse models for studying oral cancer and other craniofacial conditions. The use of humanized mouse models should be of interest to many of our attendees. (Remote)
1:45 PM *(20 min)*	**Crystal Rogers, PhD (UC Davis)** - Discuss using avian models to study the role of specific genes and signaling pathways in craniofacial development, such as the BMP and FGF signaling pathways. The avian model is a new model organism for FaceBase – we only have one dataset so far and this speaker may help promote awareness of FaceBase for other DOC researchers who conduct avian studies. (In person)
2:05 PM *(20 min)*	**Lightning Talks (20 minutes)** One-minute videos of one slide bullet points given by each poster presenter to summarize their poster (collated into one video).
2:25 PM *(15 min)*	*Break - 15 min*
2:40 PM *(65 min)*	**Panel**: **Data recruitment and public sharing that supports research spanning the full translational spectrum** **Moderators: Yang Chai and Rob Schuler** Panelists: Speakers from earlier in the day will serve on the panel and connect the research they presented with how FaceBase could best support their data sharing needs and support the needs of other researchers across the translational spectrum.
FaceBase and Data Management Sharing Plans	
3:45 PM *(20 min)*	**Data Management and Sharing (DMS) Plans Policy** – NIDCR [Speaker TBD] With Q&A
4:05 PM *(20 min)*	**How FaceBase can help with DMS Plans** – Rob Schuler With Q&A
4:25 PM *(20 min)*	**FaceBase Data Submission Overview** – Rob Schuler, Alejandro Bugacov PhD, USC, and Laura Pearlman, USC With Q&A
4:45 PM *(15 min)*	*Break and Prepare for Poster Session - 15 min*
5:00 PM *(90 min)*	**Poster Session and Reception**
6:30 PM	**Group Dinner at 7:00 pm (Perch)**