# 2026 FaceBase Community Forum

## Bios of Speakers and Panelists

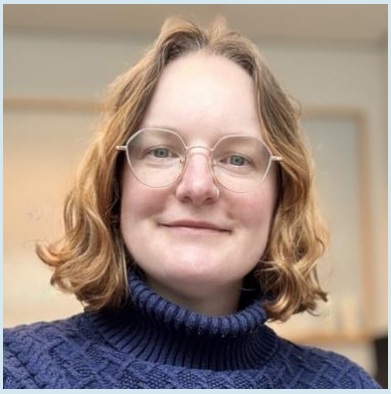
### Yang Chai, DDS, PhD University of Southern California

Yang Chai began as dean of the Herman Ostrow School of Dentistry of USC on July 1, 2025. Chai is University Professor of Dentistry, Stem Cell Biology and Regenerative Medicine, and Otolaryngology-Head & Neck Surgery, and holder of the G. Donald and Marian James Montgomery Professor of Dentistry at the University of Southern California.

As a clinician-scientist, Chai is most noted for his research on the molecular and cellular regulatory mechanisms of craniofacial development and birth defects. His studies have contributed to our understanding of the dynamic contribution of cranial neural crest cells during craniofacial development. His research has led to the successful rescue of cleft palate and suture regeneration in craniosynostosis in preclinical studies. He studies stem cells and is currently preparing for first-in-human clinical trials using innovative 3D-printed scaffolds combined with stem cells to regenerate tissue for patients who have lost bone due to trauma, congenital defects, or disease.

Chai is a member of the National Academy of Medicine. He is also an elected member of the American Academy of Arts and Sciences and a National Academy of Inventors senior member. He has authored more than 190 scientific papers and numerous book chapters, and edited a book titled Craniofacial Development. Chai has been continuously funded by the National Institutes of Health for more than 29 years. His work has earned him multiple awards, including the 2011 International Association of Dental Research Distinguished Scientist Award and 2023 Paul Goldhaber Award from Harvard University School of Dental Medicine.

Chai earned a DMD degree from Peking University School of Stomatology, where he also did his residency in oral and maxillofacial surgery. Afterward, he completed his DDS and PhD degree in craniofacial biology from the University of Southern California.



**Laura E. Cook, Ph.D.** Lawrence Berkeley National Laboratory

Dr. Laura Cook is a Postdoctoral Scholar with Dr. Axel Visel at Lawrence Berkeley National Laboratory, where she investigates the cis-regulatory architecture underlying vertebrate development, phenotypic evolution, and congenital birth defects. Her research combines single-cell multimodal genomics, comparative genomics, and in vivo CRISPR mouse engineering to functionally characterize developmental enhancers across the mammalian tree. A central focus of her work is generating prioritized regulatory maps of key developmental processes to predict and interpret the functional impacts of disease variants in congenital conditions. This work builds on her PhD research at the University of Melbourne, Australia, where she studied the regulatory basis of accelerated craniofacial development in marsupials.

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**Jifan Feng, Ph.D.** University of Southern California

Dr. Feng is a Research Associate at the Center for Craniofacial Molecular Biology, Herman Ostrow School of Dentistry, University of Southern California. Her research focuses on investigating the molecular mechanisms that regulate craniofacial mesenchyme development and mesenchymal stem cell biology using mouse models spatial genomics.

Dr. Feng obtained her Bachelor of Medicine degree in Dentistry from Nanchang University, where she developed a strong interest in craniofacial biology research. She subsequently completed her Ph.D. in Cell Biology at the Centre for Craniofacial & Regenerative Biology, King's College London, under the supervision of Prof. Paul Sharpe. During her doctoral studies, Dr. Feng conducted in-depth investigations into the perivascular identity of mesenchymal stem cells and explored the epigenetic regulation of the mesenchymal stem cell niche, employing the mouse incisor as a model. After completing her Ph.D., Dr. Feng joined Prof. Yang Chai's lab as a postdoctoral researcher at the Center for Craniofacial Molecular Biology, University of Southern California. Since then, she has been investigating the molecular mechanisms that govern tooth root development and palate development, employing a combination of mouse genetic studies and cutting-edge next-generation sequencing techniques. Dr. Feng also continues to actively contribute to projects exploring the biology of mesenchymal stem cells in the incisor, suture, and other craniofacial structures.

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## Michael Feolo, B.S., M.S. NIDCD/NIH

Michael Feolo is a Senior Bioinformatic Scientist in the Office of the Director at the National Institute of Dental and Craniofacial Research (NIDCR), NIH, where he co-chairs the Scientific Data Governance Board, leading efforts to improve the stewardship, quality, and reuse of scientific data. His work focuses on advancing data governance strategies and exploring emerging technologies to maximize the value of biomedical research data.

Prior to joining NIDCR, Mr. Feolo spent 25 years at the National Center for Biotechnology Information (NCBI), where he led the database of Genotypes and Phenotypes (dbGaP), a controlled-access repository supporting thousands of studies and millions of research participants. He also contributed to foundational genomic resources including dbSNP, dbMHC, and the International HapMap Project. His career has centered on enabling large-scale data sharing, integration, and responsible access to accelerate scientific discovery.

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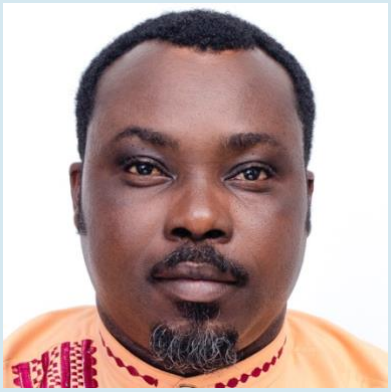

## Lord Jephthah Joojo Gowans, , PhD, SCGG, CHMGG, CiSG Kwame Nkrumah University of Science and Technology (Ghana)

Dr Gowans conceived, initiated, and executed the first-ever genetics and genomics research on orofacial clefts (OFCs) and craniosynostosis among Ghanaians. This ongoing research led to collaborative research between KNUST and the University of Iowa and the University of Washington, USA. His group employs omics technologies such as genomics, transcriptomics, phenomics, exposomics, functional genomics and epigenomics to study diseases with genetic underpinnings. His group remains the leader in craniofacial research among continental Africans and has discovered novel genetic susceptibility loci for craniofacial conditions, including OFCs and craniosynostosis. He also researches into ethical, legal, and social issues (ELSI) in genetics and genomics research among Africans. He conceived, initiated, and established the Human Genetics and Genomics (HuGENE) Laboratory at KNUST, where he serves as the Director/PI. Dr Gowans has served as the Contact Principal Investigator (PI) on several National Institutes of Health (NIH, USA) primary grants to KNUST, as well as Site PI for many NIH subawards from the University of Iowa and the University of Kentucky, all in the USA. For instance, in 2019, he was awarded a five-year Emerging Global Leader Award/Grant by NIDCR/FIC at NIH. Thus, he has great experience in international grant funding and collaborative research.

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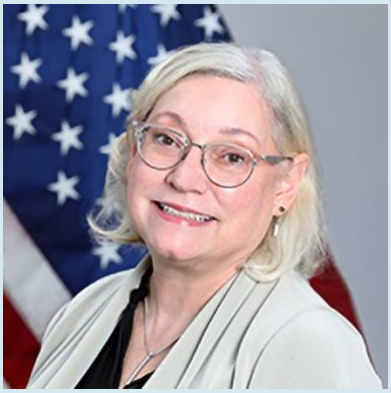


## Susan Gregurick, Ph.D. Associate Director for Data Science & Director, NIH/ODSS

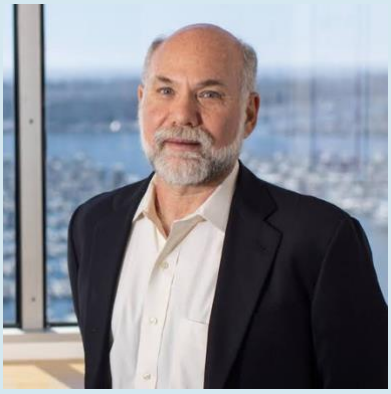
Susan K. Gregurick, Ph.D., was appointed Associate Director for Data Science and Director of the Office of Data Science Strategy (ODSS) at the National Institutes of Health (NIH) on September 16, 2019. Under her leadership, ODSS leads the implementation of the NIH Strategic Plan for Data Science through scientific, technical collaboration with the institutes, centers, and offices that comprise NIH. Dr. Gregurick received the 2020 Leadership in Biological Sciences Award from the Washington Academy of Sciences, which recognizes work of merit and distinction of scientists and leaders in the greater Washington area.

Prior to joining ODSS, Dr. Gregurick was the Division Director for Biophysics, Biomedical Technology, and Computational Biosciences at the National Institute of General Medical Sciences (NIGMS), where she led the institute's effort to reimagine the NIGMS technology programs through National and Regional Resources to support state-of-the-art facilities, equipment, technologies, research tools, software, and service.

Prior to government service, Dr. Gregurick was a professor of computational chemistry at the University of Maryland, Baltimore County. She received her B.S. in chemistry and mathematics from the University of Michigan and her Ph.D. in physical chemistry from the University of Maryland.

## Troy Hackett, PhD NIH/NIDCD

Troy A. Hackett, Ph.D. is a Program Officer at NIH/NIDCD and Professor of Hearing and Speech Sciences at Vanderbilt University Medical Center. Dr. Hackett serves with a team of NIDCD Program Officers who oversee development of the NIDCD Temporal Bone Initiative. This nationwide program supports human temporal bone donations for research, a network of research laboratories, and the EarBase repository with the goal of facilitating treatment and prevention of hearing and balance disorders. Dr. Hackett's research program combines multiomics with anatomy to explore the influence of hearing loss, noise exposure and age on auditory circuits.

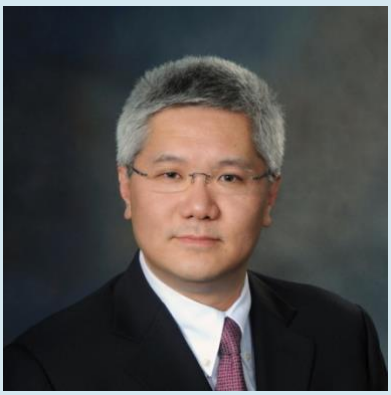


**Carl Kesselman, PhD** University of Southern California

Dr. Kesselman is the William M. Keck Professor of Engineering in USC's Viterbi School of Engineering and leads the Informatics Systems Research division at USC's Information Sciences Institute (ISI), with a focus on data-centric science, FAIR data ecosystems, sociotechnical systems, and reproducibility. His research advances FAIR data infrastructure through the Deriva platform for scientific data discovery and management, underpinning NIH-funded data resources. He is a Co-Principal Investigator of the FaceBase craniofacial research consortium. His honors include the IEEE Internet Award, the Lovelace Medal from the British Computer Society, and the Goode Memorial Award from the IEEE Computer Society. He is a Fellow of the IEEE, the British Computer Society, and the Association for Computing Machinery. Kesselman joined USC/ISI in 1997 and received his PhD in Computer Science from UCLA, an MS in Electrical Engineering from USC, and a BS in Electrical Engineering from SUNY Buffalo.

**Janina Kueper, M.D.** University of Pittsburgh

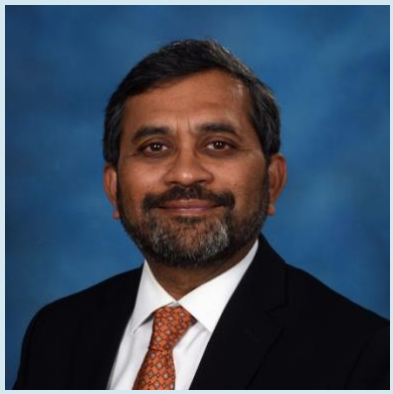
Dr. Janina Kueper graduated from Charité – Universitätsmedizin Berlin with a medical degree and doctorate in skeletal muscle tissue engineering in 2018/2019. She subsequently worked with Zebrafish, mice, and patient-derived iPSC models of craniofacial anomalies under Dr. Eric Liao at Harvard University, obtaining an AM in medical anthropology from the institution's Graduate School of Arts and Sciences in 2021. She is currently at the University of Pittsburgh with Dr. Goldstein, developing an arm of the CranioRate consortium focused on animal modeling.



**Brendan Lee, M.D., Ph.D.** Baylor College of Medicine

Dr. Lee is Professor and Chairman of the Department of Molecular and Human Genetics at Baylor College of Medicine. As a physician scientist, he studies structural birth defects of the skeleton, inborn errors of metabolism, and genomic medicine implementation. He identified the first mutations in a chondrodysplasia and Marfan syndrome, and in transcriptional factors that regulate matrix proteins. He showed how dysregulation of post-translational modification of collagens causes osteogenesis imperfecta (OI) leading to the discovery of many OI genes. He showed that increased TGFβ signaling is a common driver of OI and identified the roles of WNT1 and Notch signaling in skeletal homeostasis.

He leads multiple NIH research consortia including the Brittle Bone Disorders Consortium, the Undiagnosed Diseases Network, and the REJOIN consortium. He has also led development of genomic medicine diagnostics as part of his founding of a unique academic-commercial hybrid company Baylor Genetics. He was an HHMI Investigator prior to becoming Chairman of the Department in 2014.



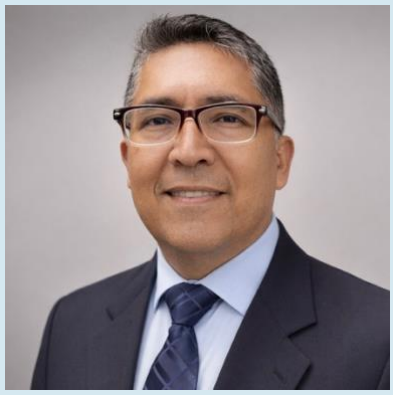
## Anup Mahurkar, B.E., M.B.A. NIH/NIDCD

Anup Mahurkar is an Associate Professor in the Department of Epidemiology and Public Health at the University of Maryland School of Medicine. His primary appointment is at the Institute for Genome Sciences where he is the Chief Information Officer and Associate Director for Software Engineering and IT. In addition, he also serves as the Executive Director for Software Infrastructure at the newly created UM3 - Institute for Health Computing.

Anup has an undergraduate degree in Electronics and Communication engineering, and a master's degree in international management. Anup has been working in biomedical research for over 32 years. Before joining IGS, he completed a six-year fellowship at the National Eye Institute at NIH and was at the Institute for Genomic Research for over a decade.

At IGS, he is responsible for overseeing bioinformatics analyses, the IT infrastructure, and development of software tools for genome sequence analysis. He is also responsible for developing data visualization tools used in clinical and genomic space. His group has developed infrastructure that is used across several data coordination centers.

At NIDCD, Anup serves as a Special Advisor to the Director on Data Science and Data Sharing.



## Pedro Sanchez, M.D. Cedars-Sinai

Dr. Pedro A. Sanchez is a physician–scientist dedicated to improving access to genetic diagnosis, treatment, and lifelong care for children with heritable disorders. As Director of Pediatric Clinical Genetics at Cedars-Sinai Medical Center and a faculty member across Cedars-Sinai, UCLA, and USC, he brings deep clinical expertise shaped by training at UCLA, the University of Pennsylvania, and the Children's Hospital of Philadelphia. A leader in Medical Genetics, he has contributed to multiple NIH-funded initiatives, authored more than 90 publications, and co-authored Smith's Recognizable Patterns of Human Deformation. Dr. Sanchez has also been

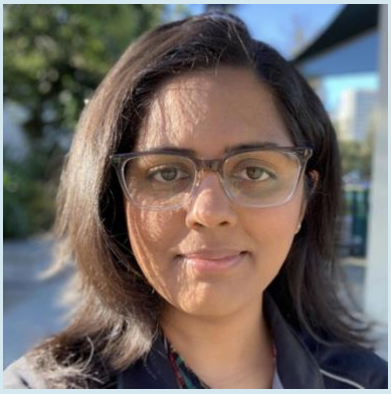
an essential clinical partner to the FaceBase initiative since its inception, helping to advance its mission through sustained collaboration and expertise. His current work spans clinical trials in XLHED fetal therapy, Hypochondroplasia, and Achondroplasia. Outside of work, he enjoys hiking and game nights with his wife and three children.

**Rob Schuler, Ph.D.** University of Southern California

Dr. Schuler is a Lead Scientist at the USC Information Sciences Institute, where he currently serves as the technical lead for the NIH/NIDCR-supported FaceBase Data Hub, focusing on craniofacial research. He previously held a leadership role in the NIH/NCRR's Biomedical Informatics Research Network, directing large-scale research data Grid projects for neuroimaging and veterinary pathology. Earlier, he was a senior research engineer on the Globus project and the Earth System Grid, supporting major scientific efforts such as LHC, LIGO, and the IPCC. He holds B.S., M.S., and Ph.D. degrees in Computer Science from the University of Southern California.

**Parish P. Sedghizadeh, DDS, MS** University of Southern California

Dr. Parish P. Sedghizadeh is a Professor of Clinical Dentistry at the University of Southern California, Herman Ostrow School of Dentistry. He is a board-certified Oral and Maxillofacial Pathologist and Diplomate of the American Board of Oral and Maxillofacial Pathology. He serves as the Department Chair of Diagnostic Sciences, which includes the specialty disciplines of Oral and Maxillofacial Pathology, Oral and Maxillofacial Radiology, Oral Medicine, and Orofacial Pain. Dr. Sedghizadeh is a clinical and surgical oral pathologist with an active practice profile. He is Director of the Oral Pathology and Radiology program at the Ostrow School of Dentistry, and Principal Investigator in the Infection and Immunity Laboratory. As a clinician-scientist, Dr. Sedghizadeh conducts clinical and laboratory research, publishes, consults, and teaches. He has over 100 peer-reviewed publications, a track-record of NIH grant funding, and his research laboratory and clinical research projects focus on oral/head and neck cancer and jaw osteomyelitis/osteonecrosis.



## Vidhya Venkateswaran, B.D.S., M.P.H., Ph.D.

NIH/NIDCR OD

Dr. Vidhya Venkateswaran is NIDCR's first Chief Data Scientist and a former ODSS/NIDCR DATA Scholar. In her current role, she works closely with NIDCR leadership and staff across the Institute in developing a data-driven strategy to advance NIDCR's scientific priorities. Dr. Venkateswaran developed and launched DDS Hub, NIDCR's flagship knowledge base for data-driven research. She also developed NIDCR's Common Data Element Framework to facilitate a unified data standardization approach for research data. She has organized and co-chaired several data science workshops, symposia, and seminars to disseminate NIDCR's efforts in the space and to deeply engage the research community. Dr. Venkateswaran co-chairs the NIDCR Scientific Data Governance Board and serves as an AI Ambassador to the NIH Office of the Chief AI Officer. She also serves as NIDCR's representative in several NIH data science, AI, and emerging technologies working groups.

Dr. Venkateswaran holds a B.D.S. from India and specialty training in Oral and Maxillofacial Radiology from University of California, Los Angeles (UCLA). She also earned an M.P.H. in Epidemiology from the Harvard T.H. Chan School of Public Health and a Ph.D. in Oral Biology (Bioinformatics) from UCLA. Her scientific research and expertise is in leveraging big data and electronic health records in the study of oral and craniofacial diseases and risk factors.

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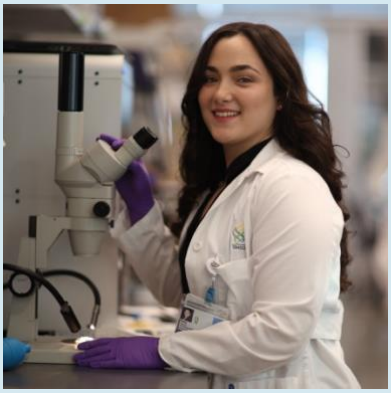


## Sofia Vignolo, Ph.D. Oregon Health & Science University (OHSU)

Sofia Vignolo received her Bachelor of Science in Biomedical Engineering from the University of Miami in 2018. Following graduation, she worked as a research data manager at Boston Children's Hospital in the Precision Vaccines Program. In 2020, she joined the Medical Scientist Training Program at Oregon Health & Science University, where she completed her PhD in Biomedical Engineering in April 2026 in the laboratory of Dr. Luiz Bertassoni. She is currently completing her clinical training as part of her MD degree and is expected to graduate in 2028. Sofia's research focuses on tissue engineering and bone regeneration, with an emphasis on designing biomimetic microenvironments to enhance craniofacial bone repair. Her clinical interests include dermatology and physical medicine and rehabilitation. Outside of her academic work, she has held multiple leadership roles, including serving as president of the Biomedical Engineering Society Student Chapter at OHSU and as program coordinator of the Partnership for Scientific Inquiry (PSI), an initiative dedicated to introducing biomedical

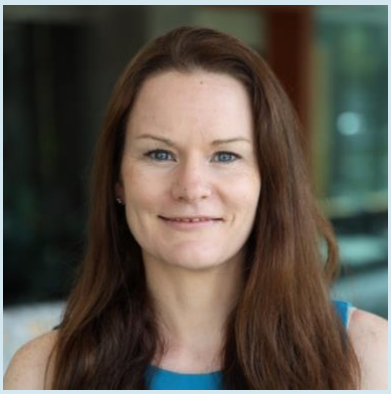
research to underrepresented high school students in Oregon.

**Axel Visel, Ph.D.** Lawrence Berkeley National Laboratory and Joint Genome Institute

Dr. Visel received his Ph.D. in 2004 from the Max Planck Institute in Hanover, Germany, where he developed tools for large-scale in situ gene expression analysis in mouse embryos and the adult mouse brain. His current research spans a broad range of functional genomics approaches aimed at understanding the biological functions encoded in the genomes of animals, plants, and microbes.

His laboratory has a longstanding interest in the role of distant-acting transcriptional enhancers in craniofacial development, evolution, and birth defects. Dr. Visel has been involved in FaceBase since its inception in 2008, leading two data production spoke projects in phases 1 and 2 and serving on the Scientific Advisory Group in subsequent phases. Over this period, his laboratory has contributed more than 100 datasets, all of which are now publicly available through FaceBase.

Dr. Visel is a Senior Staff Scientist at Lawrence Berkeley National Laboratory and Deputy Director of Science at the Joint Genome Institute (JGI), a Genome Science User Facility funded by the U.S. Department of Energy. He also holds an appointment as Adjunct Professor in the School of Natural Sciences at the University of California, Merced.

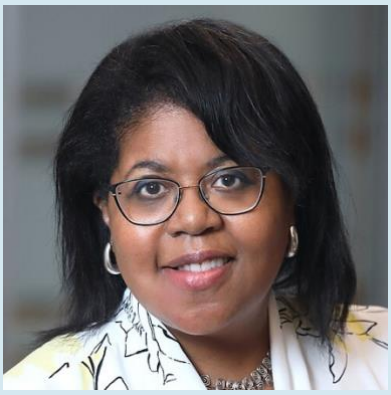


**Susan Walsh, Ph.D.** Indiana University Indianapolis

Susan Walsh received her BSc. in Biochemistry from University College Cork, Ireland, an MSc. in DNA profiling from the University of Central Lancashire, UK, and a Ph.D. in Forensic Genetics from Erasmus University in the Netherlands. She was a Research Assistant at the University of Sydney, Australia, and a Postdoctoral Research Associate in Anthropology at Yale University, CT, USA. She is now Professor of Biology at Indiana University Indianapolis (IUI), IN, USA, where her laboratory focuses on understanding the geno:pheno relationship of human physical appearance, from pigment to facial structure.

**Lu Wang, Ph.D.** National Institute of Dental and Craniofacial Research (NIH/NIDCR)

Lu Wang, Ph.D., M.S., B.S., is Senior Advisor of Data Science in the Office of the Director, National Institute of Dental and Craniofacial Research (NIDCR), National Institute of Health (NIH), leading institute- and community-wide efforts to expedite data-driven science. Prior to joining NIDCR in 2018, Dr. Wang was a senior program director at the National Human Genome Research Institute (NHGRI), NIH, overseeing large-scale genomic data generation, management, analyses, and public sharing, disease genetics, genome editing, and SBIR/STTR programs, as well as international consortium initiatives. Prior to joining NIH, Dr. Wang served as Vice President of Research and Development and Chief Operations Officer in the private sector. She led the development and commercialization of several U.S. Food and Drug Administration 510(k)-cleared molecular products for transplant diagnostics and immunogenetics research. She is a leading/co-author of publications about NIH-led scientific initiatives, genomics methods, and mechanisms of transcriptional regulation. Dr. Wang holds B.S. and M.S. degrees in genetics. She earned her Ph.D. in microbiology from Cornell University while studying nutrient-modulated transcriptional regulation. Her postdoctoral training at The Rockefeller University focused on the transcriptional regulation of B-lymphocyte development.



**Jennifer Webster-Cyriaque, D.D.S., Ph.D.** Acting Director, National Institute of Dental and Craniofacial Research (NIH/NIDCR)

Dr. Jennifer Webster-Cyriaque is the acting director of the National Institute of Dental and Craniofacial Research, National Institutes of Health. An accomplished clinician, researcher, and leader, she previously served as a tenured full professor at the University of North Carolina (UNC) schools of dentistry and medicine for more than two decades, and as attending on clinical service at the UNC Hospital's dental clinic. Her research led into a potential etiologic agent for salivary gland disease in patients living with HIV, assessed the oral microbiome and its implications for cancer-causing viruses, and studied the impact of oral microbiome and oral health on HIV outcomes. She has held leadership roles in the Oral HIV/AIDS Research Alliance, National Dental Association Foundation, and multiple roles within the American Association for Dental, Oral, and Craniofacial Research. Since 2004, she has led the UNC Malawi project and provided assistance in founding Malawi's first dental school in 2019. Dr. Webster-Cyriaque earned her Ph.D. from UNC-Chapel Hill, her D.D.S. from SUNY Buffalo, and her B.A. from SUNY Buffalo.

**Benjamin Yixing Xu, M.D., Ph.D.** University of Southern California

Dr. Xu attended Yale University where he graduated cum laude with a B.S. in biomedical engineering. He received his M.D. and Ph.D. from Columbia University through the NIH-sponsored Medical Scientist Training Program, completing a thesis on how the brain uses eye position signals to coordinate accurate eye movements. Dr. Xu completed his residency in ophthalmology at the LAC+USC Medical Center and USC Roski Eye Institute, where he served as Chief Resident, and his glaucoma fellowship at the UCSD Shiley Eye Institute and Hamilton Glaucoma Center. His current research focus is developing novel interventions to enhance glaucoma care and prevent vision loss, combining non-invasive ocular imaging and artificial intelligence to develop precise tools for detecting and evaluating glaucoma. He studies the impact of glaucoma on diverse populations using big data, and draws on NIH-funded studies including the Chinese American Eye Study (CHES) and Los Angeles Latino Eye Study (LALES).