

UCSF SCHOOL OF DENTISTRY PRESENTS

# 2023 Global Oral Health Symposium

## Global Oral Health Today and Moving Forward:

Reflections on the World Health Organization  
Global Oral Health Status Report

Wednesday, May 17, 2023

A web conference: 10 a.m. – 12 p.m. (PDT, SAN FRANCISCO)



**UCSF** School of  
Dentistry

## 2023 UCSF School of Dentistry Global Oral Health Symposium

**Wednesday, May 17th**

10:00 - 12:00 (San Francisco, Pacific Daylight Time)

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**Welcome: Dr. Benjamin Chaffee**, University of California San Francisco

**Keynote Talk: Dr. Habib Benzian**, New York University

*“A turning point for oral health globally? Updates and reflections on recent developments”*

**Audience Q & A**

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**Focused Talk: Dr. Lucy O’Malley**, University of Manchester, United Kingdom

*“Work force planning in oral healthcare - how are we doing it?”*

**Audience Q & A**

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**Focused Talk: Dr. Noha Gomaa**, Western University, Canada

*“Global oral health: At the crossroads of the structural environment and biological mechanisms”*

**Audience Q & A**

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**Focused Talk: Dr. Thiago Machado Ardenghi**, Federal University of Santa Maria, Brazil

*“The role of social capital and social inequalities in oral health status: reflections from childhood to adolescence”*

**Audience Q & A**

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**Reflection and Discussions: Dr. Cristin Kearns**, University of California San Francisco

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**Roger Mraz**, Program Administrator, UCSF Office of Graduate and Research Affairs

**UCSF Information Technology**

## Speaker Bios and Abstracts



**Habib Benzian, DDS, MScDPH, PhD.**

*“A turning point for oral health globally? Updates and reflections on recent developments”*

Dr. Habib Benzian is a Professor of Epidemiology & Health Promotion at NYU Dental College and Co-Director of the only WHO Collaborating Center for oral health in the PAHO region. With more than 20 years of global health experience, he is a leader in advocating for oral health globally. As an expert in international public health, health policy, NCDs, school health, and WASH in schools, he bridges academia, policy, and practice. He advises organizations such as WHO and UNICEF, and has supported major policy processes at the global, regional, and national level, including the WHO Global Strategy on Oral Health and the Global Oral Health Action Plan. He was part of the editorial team for the first-ever WHO Global Oral Health Status Report and is now a Global Health Research Fellow at Stellenbosch Institute of Advanced Studies, Africa’s premier research institute which partners with the Nobel Foundation and the Royal Swedish Academy of Sciences, researching global oral health governance and political priority setting.

**Abstract:** “The state of global oral health is alarming” – a remarkable statement from the recent World Health Organization (WHO) Global Oral Health Status Report. The report reveals snapshots of massive inequalities in oral health worldwide and provides the latest data and information on oral health. This report is just one of several global policy developments that marks a turning point for global oral health. For the first time in history, the 194 member states of the WHO have agreed on a global oral health action plan. The plan outlines 100 tangible actions across six strategic action areas, including the main oral diseases; oral health promotion, prevention and care; workforce; oral health research and education. Additionally, the plan is supported by a global monitoring framework with eleven global targets and a comprehensive set of indicators. The overall context of the global oral health action plan is aligned with the Sustainable Development Goals and their target date of 2030. These policy advances have dramatically changed the landscape for all stakeholders in oral health, including planners, activists, and advocates. They offer new and unprecedented opportunities for involvement and action. It is crucial to understand this changing landscape and identify areas for local, national, and regional action in alignment with the global policy frameworks.



**Lucy O'Malley, PhD**

*"Work force planning in oral healthcare - how are we doing it?"*

Dr. Lucy O'Malley is currently Senior Lecturer in Health Services Research in the Division of Dentistry at the University of Manchester, UK. A social and behavioural scientist by background, Lucy has been working as a multidisciplinary researcher in oral health research for more than 10 years. Lucy is driven by a strong belief in health care equity and is particularly interested in doing research that has the potential for meaningful positive impact for patients and the public. Much of Lucy's research is related to dental public health and primary care dentistry and she has interests in the use of behavioural science within oral health care, evidence synthesis and the implementation of evidence into practice as well as effective workforce planning.

**Abstract:** Background: Access to oral healthcare depends on both the agency of patients and the structure of the healthcare systems. Healthcare systems must be appropriately resourced and an essential aspect of this is that there must be enough oral healthcare professionals in the system. The numbers of workers is often left down to market forces to determine. While this may be appropriate in other sectors, it is flawed when it comes to healthcare with the inverse care law meaning that those who are most in need of care are least likely to receive it. Hence demand does not reflect need and cannot be used as a proxy measure for need in populations. Needs based oral healthcare work force planning is essential for healthcare equity and for efficient use of resources. In order to identify workforce planning models used in oral health and assess how they work, a scoping review of the global literature was carried out.

Methods: Medline, Embase, HMIC and EconHealth, were searched via OVID in addition to the grey literature. No limits were placed on country. A single reviewer completed initial screening of abstracts; two independent reviewers completed secondary screening and data extraction. A narrative synthesis was conducted.

Results: A total of 4009 records were screened resulting in 42 included papers detailing 47 models. Of these models, 22 assessed supply (of oral healthcare workforce) and demand (conceptualised either as population number or utilisation level) and presented ratios which are compared relatively between and across regions. A number of models (n=24) used population disease levels to estimate need. A major limitation in all approaches seen was that current or recent 'snapshots' of oral health levels are used which are unlikely to be good estimates of future need.

Conclusions: A significant barrier for needs-based workforce planning is the scarcity of good quality data. Cohort methods can be used to help identify and predict changes in need overtime and prepare for epidemiological transitions in population health arising from the lived experiences of current cohorts. Such data is expensive in both time and resources and this problem is far greater in less developed countries across the world. It is critical that information systems are developed to effectively capture data necessary to accurately plan future oral healthcare workforces.



**Noha A. Goma, BDS, MSc, PhD**

*“Global Oral Health: At the Crossroads of the Structural Environment and Biological Mechanisms”*

Dr. Noha Aziz-Ezzat Goma is Assistant Professor and Associate Director for Research in Dentistry at the Schulich School of Medicine & Dentistry, Western University, Canada. She leads an interdisciplinary research program that centres around the biological impact of social and environmental exposures on oral diseases and related morbidities over the life-course, with a special focus on factors that are amenable to clinical and policy interventions. Noha received her dental degree and specialty training in oral pathology at the Faculty of Dentistry, Alexandria University, Egypt. She then completed her PhD at the Faculty of Dentistry, University of Toronto, followed by a Clinician-Scientist Fellowship at SickKids Research Institute at the Hospital for Sick Children in Toronto. Dr. Goma currently serves on the National Advisory Working Group of the Office of the Chief Dental Officer of Canada. She is an active member of the International Association for Dental Research and an affiliate of the Social Exposome Research Cluster at the University of British Columbia.

**Abstract:** The WHO Global oral health status report demonstrated the growing burden of oral diseases while emphasizing the role of the determinants of oral health that lie within the socioeconomic, political, and environmental contexts that impact individuals and populations. This presentation will discuss the pathways by which these structural factors contribute to oral diseases and subsequent oral health inequalities locally and globally. We will first elaborate on contemporary knowledge on the theoretical models that link socioenvironmental exposures to oral health. Drawing on recent empirical findings, we will then dive deeper into the mechanisms by which such structural exposures can become ‘biologically embedded’ to alter the risk of oral diseases and related major health conditions over the life-course including epigenetic processes, which may ultimately lead to health inequalities. We will conclude by shedding light on some of the current and prospective social-to-biological research opportunities that can contribute to a better understanding of global oral health.



## Thiago Machado Ardenghi, PhD

*“The role of social capital and social inequalities in oral health status: reflections from childhood to adolescence.”*

Dr. Thiago Machado Ardenghi is an Associate Professor of Pediatric Dentistry and Dental Epidemiology, School of Dentistry, Federal University of Santa Maria, Brazil. PhD in Pediatric Dentistry for the University of São Paulo, and the former Provost of Graduate programs and Research- Federal University of Santa Maria, Brazil. My research expertise is in dental public health, focusing on dental caries, socioeconomic inequalities and oral epidemiology. My main research area also includes strategies for improving the children Oral Health-Related Quality of life, involving theoretically-driven research and quantitative methods in epidemiology, pediatric dentistry and data analysis.

**Abstract:** Health inequalities require an understanding of how SES influences health outcomes and how they produce different vulnerabilities across social groups. Social capital, whose concept encompasses the positive consequences of sociability and social trust, has been highlighted as one of the main social determinants of health. Therefore, the focus of this talk is to explore the pathways in which social inequalities and social capital can influence normative (clinical conditions, such as dental caries) and subjective (oral health-related quality of life) outcomes of children over time, assessing their direct and indirect effects through a 10-year cohort study. The future challenges for conducting studies in this area will also be discussed.



### **Benjamin Chaffee, DDS, MPH, PhD**

Dr. Benjamin Chaffee is Associate Professor of Oral Epidemiology and Dental Public Health at the University of California San Francisco and Director of the UCSF School of Dentistry Program in Global Oral Health. His NIH-funded research includes studies of new and emerging tobacco products (particularly use among adolescents), dental professional engagement in tobacco cessation, early-life influences of children's oral health, and the clinical management of dental caries by risk assessment. Past and current collaborations include work with investigators in Brazil, Kenya, Tanzania, and Vietnam. Dr. Chaffee has authored more than 100 scholarly publications and regularly provides continuing education lectures and workshops for dental professionals.



### **Cristin Kearns, DDS, MBA**

Dr. Cristin Kearns is an Assistant Professor in the University of California, San Francisco School of Dentistry and Philip R. Lee Institute for Health Policy Studies. She is one of the first academics to rigorously study the influence of the sugar industry on health. She has helped identify 600,000 pages of food industry-related documents now available online to researchers and the public in the UCSF Library Food Industry Documents Archive. She is a commissioner on the Lancet Commission of Global Oral Health for which she leads the commercial determinants sub-group.