



Introduction

The *Sustainability in Dental Practice* elective is an effort established by Brittany Zhang and Daniel Ta, dental students from the University of California, San Francisco – School of Dentistry. This elective introduces dental students to the concepts of climate change and sustainability and its consequential effects on healthcare. Within the context of this weekly course, students will interact with leading researchers in climate science; learn how to set up and operate a sustainability-focused dental practice within the constructs of the law; discuss and differentiate between studies with significant outcomes versus studies pushing an agenda; learn about sustainability projects and programs offered by the University of California, San Francisco; and implement plans to change practices and policies in the School of Dentistry with sustainable ideas in mind.

This course is designed to facilitate the best learning outcomes from its students. An even mix of lectures, self-study and discussion are incorporated to avoid overloading the students which can result in complacency. The course aims at focusing on positive outcomes of action and how quality of life can improve rather than negative outcomes associated with inactivity to foster the idea that there is hope in the cause. Though offered primarily to students of the School of Dentistry, lectures are taught by members of all interdisciplinary programs to demonstrate solidarity in the cause. Lastly, this course encourages student analysis of data and peer engagement in order to solidify knowledge and introduce critical thinking, constructive debate, and teamwork into the learning environment.

Elective participants this year include 42 students from University of California, San Francisco – School of Dentistry.

Learning Objectives

By the end of this program, students will have had the opportunity to:

- Define the concepts of climate change and sustainability.
- Understand the intricate relationship between climate change and health.
- Demonstrate a comprehensive perspective on the role that sustainability plays on economic and environmental issues.
- Differentiate evidence-based climate science from unsubstantiated claims.
- Understand the effects dental materials have on the environment.
- Successfully integrate sustainability management strategies in a dental setting. Be familiar with current sustainability initiatives at UCSF and beyond.

Why Teach Sustainability in Dentistry?

Climate change and sustainability have been increasingly important topics in science, especially in health. In the field of healthcare, dentistry has the tendency to lag behind in advancement compared to its medical counterparts. Dentistry's interprofessional involvement has grown in recent years, but these topics are rarely, if ever, discussed in practice. This course is aimed at introducing the concept of climate change and sustainability into the realm of dentistry and bridging the gap between dentistry and health.

Student Reflections

"Proud of my classmates Brittany Zhang and Danny Ta for teaching us about how climate change will affect public health and how we as future dentists can take better care of our planet with how cleanly we run our clinics."



"I am really glad that this class was offered. Climate change is a big concern for me personally, and it's never mentioned in dentistry. I learned that I am not alone in my concerns and there are others in my field that want to make a difference."

"Thankful to have taken this elective hosted by Danny Ta and Brittany Zhang. Climate change is a huge global concern that a lot of people are aware of but don't necessarily know a lot about. The elective sheds more light on how climate change not only affects our weather and ecosystems, but also our health and the way we deliver healthcare."



"Climate change may seem unrelated to dentistry, but this elective proved otherwise. I truly enjoyed discovering the impact of dentistry on the environment, discussing means in which we could make practicing dentistry more sustainable, and finding out how our personal efforts can instill change in our local and global community."

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