

# Research Day 2022

Three-hundred participants gathered virtually earlier this year to hear lectures and celebrate the winners of the college's 38th Research Day. The day began with a faculty lecture from Dean Carroll Ann Trotman and included a lecture on "The Power of the Face: Restoring Paralysis and Clefting" by distinguished lecturer Sarah M. Knox, PhD, associate professor in the Department of Cell & Tissue Biology at the University of California, San Francisco, School of Dentistry. The event concluded with awards recognizing the exceptional research efforts of dental students, graduate students, post-doctoral fellows, residents and faculty.

## Faculty "Paper of the Year" Awards

### Category: Basic Research

**Authors:** Mukherjee et al.

Publication: "Acquisition of oral microbiota is driven by environment, not host genetics." *Microbiome*. 2021; 9:54.

### Category: Clinical Research

**Authors:** Azadani EN et al.

Publication: "The association between traumatic dental and brain injuries in American children." *Dental Traumatology*. 2021;37:114-122.  
Division of Pediatric Dentistry

### Category: Social and Behavioral Sciences and Public Health Research

**Authors:** Claman DB et al.

Publication: "Accuracy of Parental Self-Report of Medical History in a Dental Setting: Integrated Electronic Health Record and Nonintegrated Dental Record." *Pediatric Dentistry*. 2021;43(3):230-6.  
Division of Pediatric Dentistry

## Dean's Awards for Excellence in Research

### Dental Student Award

**1st place:**

**William Vu 2022 (DDS)**

Advisor: Purnima Kumar, BDS, PhD  
Title: A Comparative Study on the Effects of E-Cigarettes and Smoking on the Oral Metabolome

**2nd place:**

**Joe Kainrad 2023 (DDS)**

Advisor: Do-Gyoon Kim, PhD  
Title: Gingival Epithelium Gene Regulation and Inflammatory Response to JUUL E-cigarettes

**3rd place:**

**Parker Heiner 2023 (DDS)**

Advisor: Ching-Chang Ko, DDS, PhD  
Title: Dental crowding predicted by machine learning from clinical photos

## Graduate Student Award

### 1st place:

**Natalie Andras, DDS/PhD**

Advisor: Brian Foster, PhD

Title: Dentoalveolar Defects from Neural Crest

Conditional Deletion of Bone Sialoprotein

### 1st place:

**Shifa Shahid, PhD**

Advisor: John Bartlett, PhD

Title: Altered Enamel Phenotype of

ADAM10 Conditional Knockout Mice

### 2nd place:

**Michelle Scott, DDS/PhD**

Advisor: Purnima Kumar, BDS, PhD

Title: Impact of JUUL e-cigarettes on

oralhost microbial interactions

## Center for Clinical and Translational Science Best Clinical and Translational Abstract

**William Vu 2022 (DDS)**

Advisor: Purnima Kumar, BDS, MS, PhD

Title: A Comparative Study on the Effects of

E-Cigarettes and Smoking on the Oral Metabolome

## Post-doctoral Fellow Award

**Fatma F. Mohamed**, Division of Biosciences

Advisor: Brian Foster, PhD

Title: Alpl ablation in neural crest lineages causes

dentoalveolar defects characteristic of hypophosphatasia

## ADDR/Dentsply Student Clinician Award

**Natalie Andras, DDS/PhD**

Advisor: Brian Foster, PhD

Title: Dentoalveolar Defects from Neural Crest

Conditional Deletion of Bone Sialoprotein

## OSU Alumni Merit Award

**Joe Kainrad 2023 (DDS)**

Advisor: Do-Gyoon Kim, PhD

Title: Gingival Epithelium Gene Regulation and

Inflammatory Response to JUUL E-cigarettes

## OSU Alumni Achievement Award

**Parker Heiner 2023 (DDS)**

Advisor: Ching-Chang Ko, DDS, PhD

Title: Dental crowding predicted by

machine learning from clinical photos

## AADR Student Research Day Award

**Kelly Doan 2022 (DDS)**

Advisor: Do-Gyoon Kim, PhD

Title: Alveolar Bone Mineral Density

in Women With Aging