Bree Zhang

Website: www.breez-world.com

Education

Brown University Psychology Sc.B Honors Degree, GPA 3.97

- Brown University Graduation Baccalaureate Performer and Bearer of Class of 2022 Banner

Columbia University College of Dental Medicine, DDS In Progress, DAT: 27 **Columbia University Mailman School of Public Health**, MPH In Progress

Leadership Experience

Columbia Dental Class of 2026, Class President

- Met regularly with school administration and school deans to communicate class concerns. Sent weekly emails to the Class of 2026 with resources, updates, events, announcements. Organized with class council to ensure academic concerns, financial questions, social programming, and other class projects are going smoothly.

American Student Dental Association, Chair of National Council on Advocacy New York, NY (2024-present)

Supervised and directed activities of the National Advocacy Council on legislative and regulatory issues that
impact the dental profession, focusing on the theme "Barriers to Care." Organized Advocacy Month. Launched
grassroots initiatives to promote action-oriented advocacy, including organizing a voter registration contest that
had over 1,400+ participants. Facilitated idea exchanges with Legislative Liaisons and created resource drives and
guides to improve advocacy events on the local and district level.

American Student Dental Association, District 2 Chief of Operations & Legislative Liaison NY (2023-present)

As Chief of Operations, coordinated, supervised, and guided cabinet members according to the vision of the
District Trustee. Facilitated monthly district-wide meetings, scheduled individual check-in meetings, and organized
district 2 drive containing documents & resources. As Legislative Liaison, launched the first ASDA District 2
Advocacy Scholarship Program. Created a new Advocacy District 2 Listserv. Organized advocacy district events,
coordinated with state dental associations, county associations, compiled resources for chapters to promote
advocacy campaigns. Informed cabinet and district members on NY, NJ & federal legislative updates.

American Public Health Association Oral Health Section, Student LiaisonNew York, NY (2022-2023)

- Selected as the Student Assembly Liaison of the Year, receiving a awarded scholarship to travel and attend APHA Annual conference in Georgia. Spearheaded social media strategy and created oral health and public health infographics for APHA Oral Health Section. Established communicating channels between ASDA with APHA. Engaged pre-dental students in public health and APHA activities.
- International Collaboration and Exchange Program, Fellow & Team Leader New York, NY (2022-2023)
 Engaged with students in 20+ universities across 4 continents. Facilitated small peer group conversations differences in healthcare systems, health ethics and law challenges, advancements in biotechnology, reflections on the topic of anatomy body donation, and experiences during the global pandemic.

Brown University Class of 2022, Class President

 Planned class-wide events, focusing on inclusivity and accessibility to promote class spirit and unity, sustaining traditions while creating new ones that represent the ever-changing student demographic. Also served as resource channel for academic, social, and extracurricular support for students during the virtual semester. Planned Senior Week and will be responsible for planning Brown Class of 2022 five-year reunion.

National & State Appointments

NYSDA Substance Abuse and Well-being Committee, ASDA Representative New York, NY (2024-present) Appointed as student representative to New York State Dental Association, providing student perspective on substance use and well-being (education, patient care, finding support services, etc.). Wrote article related to substance abuse or addiction on an ASDA and/or NYSDA publication. Collaborated with NYSDA staff to develop social media posts to educate NYSDA membership on related issues.

ADA National Fluoridation Advisory Committee, ASDA Representative,

New York, NY (2024-2026)

Providence RI (2019-2022)

New York, NY (2027) New York, NY (2024)

Providence RI (2022)

New York, NY (2022-2024)

- Appointed as student representative on the American Dental Association National Fluoridation Advisory Committee (NFAC) for the 2024-26 term to assist in providing evidence-based fluoridation assistance to the Membership and public at-large. The committee serves as the go-to resource to respond to misinformed anti-fluoridation efforts and to assist community water fluoridation startups in communities across the US.

ACU AAP Community Health Center Pediatric Working Group, Representative New York, NY (2024-present)

- Served with American Academy of Pediatrics and Association for Clinicians of Underserved working group on relevant initiatives including: 1) early childhood primary care promotion and prevention, surveillance and screening, brief interventions, referrals, and care coordination. 2) implementation and initiatives tailored to CHCs that may create sustainability opportunities for a high-quality and holistic early childhood continuum of care. 3) Identification of yet-to-be-determined collaborative opportunities to promote a highquality and holistic care 4) early childhood continuum of care and its alignment with AAP recommendations. 5) Consultation on established strategies previously used to improve developmental screening and referral and team-based, integrated care in community health center settings. 6) Consultation on practice transformation coaching strategies engaging health centers to improve early childhood development access to care, clinical team value-based care practices and long-term health outcomes.

ADA Give Vets a Smile, ASDA Representative,

New York, NY (2024-2026)

 Appointed as student representative on one-year term on the ADA Give Veterans A Smile (GVAS) National Advisory Committee. The committee is an advisory committee to the ADA's Department of Corporate Social Responsibility and Philanthropy, and is responsible for providing strategic advice to the Department with respect to matters of concern in the provision of care for veterans.

Education and Teaching Experience

Lipton Interprofessional Research and Education, Grant Developer and Student Advisor New York, NY (2024)

 Spearheaded the development of the Lipton Interprofessional Research and Education Fellowship, a grant awarding collaboration between Columbia University College of Dental Medicine students with professional schools at Columbia such as Medicine, Social Work, Nursing, Public Health, Biomedical Engineering, and Computer Science, to create and implement projects that enhance students' educational experiences.

Columbia Dental Medicine Oral Histology, Academic Liaison
 Led lab sessions for Oral Histology course for 2nd year dental students at Columbia Dental Medicine. Reviewed key histological landmarks in the craniofacial region, drawing comparisons between developmental and embryonical structures to anatomical landmarks. Reviewed lecture content and connected it to lab content.

- Columbia Dental Population Oral Health Management, Academic Liaison New York NY (2024-present)
 Facilitated discussion sections on concepts such as patient-centered quality, financing and alternative payment mechanisms, integrated interprofessional delivery systems, quality and accountability, health measurement, and non-clinical health determinants.
- Columbia IYRC Medicine and Research Program, Teaching Fellow New York NY (2023-present)
 Worked as a teaching fellow in the IYRC Summer Research Program and Winter STEM Program. Taught high school students from around the world foundational medical topics focusing on public health relevance (STI, substance use, diabetes, mental health, motivational interviewing). Held weekly office hours, facilitated discussions, acted as standardized patients for students, and created lectures on Eating Disorders, Art in Medicine, and Oral Systemic Link for students. Presented at International Young Researcher's Conference in Tokyo.
- PrincetoNow Education Services Inc., Senior Essay Specialist
 Princeton NJ (2018-present)
 Served as college counselor and essay advisor. Guided high-school students in developing, editing, and polishing application essays. Interviewed students about talents and interests, helped formulate extracurricular activities and career goals. Provided mock interviews and tips.
- Children's Medical Foundation, Fellowship Associate Summer Intern Hong Kong, China (2019)
 Implemented and executed CMF 2019 Social Impact Fellowship through curriculum and logistical development. Generated and managed communications and social media strategy through platforms like LinkedIn, Instagram, Facebook, and Salesforce. Designed promotional material, signage, and invitations for branding and marketing.

Huaxia Bridgewater Chinese School, Founder and Teacher of Guzheng Class Bridgewater NJ (2014-2018)

 Founded the first guzheng (21-stringed Chinese harp) class at Huaxia Chinese school for children age 6-13. Led students to perform in Bridgewater Rehabilitation Center, Somerville Heritage Festival, Patriots Baseball Stadium.

Research Experience

Oral Health for Ob/Gyn Residents and Medical Students, Grant Recipient

- Was awarded the 2024 Columbia University Provost Grant for Innovative Course Design, working with the Vice Chair of Education and Residency Program Director in the Department of Ob/Gyn to develop an educational module "Oral Health and Pregnancy" to be delivered to Ob/Gyn residents and medical students during their MCY clerkship for the 2025 calendar year and to incorporate dental care into routine prenatal care through a streamlined prenatal dental referral for patients in the ambulatory care network clinics where students and residents serve as providers.

Lipton Narrative Medicine in Dentistry Fellowship, Scholarship Recipient New York, NY (2022-present)

- Developing pilot research project assessing the introduction of basic pillars of narrative medicine into Columbia University first-year dental curriculum, including the experience of close reading, reflective writing and sharing with peers. Conducted literature review, wrote IRB proposal, designed survey, collected data.
- Harvard School of Dental Medicine, Global Health Starter Kit Co-Author Boston MA (2020-2023)
 Spearheaded the development of Module 7 "COVID-19: Global Lessons for a Global Profession" (now published) within Harvard School of Dental Medicine's Global Health Starter Kit, a competency-based global health starter curriculum that has registered users across 30 countries and was published as an mOralHealth case study in the WHO Mobile Technologies for Oral Health Implementation Guide.

Sobel Causality and Mind Lab, Research Assistant & UTRA Recipient Providence RI (2020-2022) Studied children's reasoning and social cognition in early development. Received the Undergraduate Research and Teaching Award Stipend for senior thesis, "Effects of Different Types of Praise on Children's Motivational Frameworks." Designed and drew digital storyboards for experiments, coded, transcribed, and interpreted data.

Anterior Crossbite Correction Research, 2nd Author
 Studied anterior crossbite correction through bottle-feeding under Dr. Zhu and Dr. Rosivack at Rutgers School of Dental Medicine. Contacted hospitals, collected data & reference photos, generated diagrams, wrote and revised drafts as 2nd-author of "Does the position of a bottle during infant feeding influence the jaw's postural position?"

Clinical Experience

Mercer Oral Surgery, Surgical Assistant Intern

 Provided quality gentle care for patients. Chair-side assisted with four-handed dentistry in procedures such as crowns, bridges, composite, veneers, root canals, pulpotomy, bone grafts, extractions, and implants. Sterilized and disinfected operatories. Fabricated models, made retainers, whitening trays & custom trays for impressions, operated CEREC 3-D scanning and milling technology and laser technology. Designed office's new website.

Dental Associates of Rhode Island, Dental Assistant/Practice Coordinator Providence RI (April 2020- Sept 2020)

- Dental assisted with four-handed dentistry on restorative and cosmetic procedures while spearheading practice innovations. Integrated music therapy into waiting rooms and operating room. Created social media communication channels and oral health educational infographics. Coordinated dental practice's community-based involvement with dog rescue shelters, donation drives, and efforts to send essential supplies to civilians of Ukraine.

Mercer Oral Surgery, Surgical Assistant Intern

- Worked during initial COVID-19 outbreak to reduce patient flux to emergency rooms. Chair-side assisted in oral and maxillofacial surgeries such as general anesthesia, bone grafts, implants, wisdom teeth extractions, biopsies, alveoloplasty. in patient scheduling, coordinating with insurance companies about benefits and claims, and interfacing with other dental offices for medical records and physician's clearances.

Rhode Island Free Clinic, Dental Assistant

- Volunteered in newly established dental clinic to provide service to uninsured low-income adults through chairside assisting, sterilizing and disinfecting dental operatories, charting medical records and treatment plan options

Invited Talks and Conference Presentations

- "Creating Your Own Ice Cream Flavor" TEDx Speaker at Brown University (Providence, RI, 2022) <u>Access full talk here</u>
- "Columbia Mobile Dental Clinic: Reducing Barriers to Care" American Dental Association Smile Conference (Orlando, Florida 2023)

Hamilton NJ (2020-2021)

Hamilton NJ (April 2020- Sept 2020)

Providence RI (2019-2020)

New York, NY (2024-present)

- "COVID-19: Global Lessons for a Global Profession" American Public Health Association Annual Conference (Atlanta, Georgia 2023)
- **"Does the position of a bottle during infant feeding influence the jaw's postural position?** Columbia Birnberg Day Research Conference
- **"Painting Metaphors in Medicine"** International Young Researcher's Conference (Tokyo, Japan 2023) <u>Access presentation here</u>
- "Oral Health Education Global Voices for Global Action" Youth Voices: The Future of Global Oral Health Conference (NYU College of Dentistry 2024)

Fellowship and Grant Support

- **2024** Columbia University Provost Grant for Innovative Course Design: Awarded \$2000 to develop "Oral Health and Pregnancy" an educational module for medical students in the Ob/Gyn clerkship
- Lipton Narrative Medicine in Dentistry Fellowship: Awarded \$7000 to pilot a needs-assessment survey and research project for incorporating how Narrative Medicine can be implemented in the dental curriculum
- Brown University Undergraduate Research and Teaching Award Recipient received \$2500 stipend to conduct developmental psychology research for senior thesis (2021)

Scholarships and Awards

- National Health Service Corps Scholarship Recipient awarded 2 years of full tuition and monthly living stipend payments for dental school in exchange for practicing in a health professional shortage area after graduation (2022)
- Columbia University College of Dental Medicine Title VII Predoctoral DDS-MPH Training Fellow for the Care of Special Needs and Vulnerable Persons and Populations (DDS-MPH Fellow/Scholar): Awarded 1 year of full tuition (\$60,000) and additional stipend (\$12,000) to pursue accelerated MPH with and monthly living stipend through CDM's program sponsored by the federal Health Resources and Services Administration's Predoctoral Training in General, Pediatric, and Public Health Dentistry and Dental Hygiene Program award (Grant # D85HP45708).
- American Institute of Public Health Action Equity Trailblazer Student Research Award awarded \$1000 for "her significant contribution to groundbreaking research on the impact of bottle feeding positioning on the development and correction of anterior crossbite, addressing oral health disparities and promoting equity." (2024)
- American Public Health Association Student Assembly Liaison of the Year Scholarship awarded scholarship to travel and attend APHA Annual conference in Atlanta, Georgia (2023)
- Community Health Center Pediatric Workgroup Stipend Award awarded \$1100 to take part in American Academy of Pediatrics (AAP) and the Association of Clinicians for the Underserved's (ACU) working group (2023)
- American Student Dental Association District 2 Outstanding Advocate Recipient (2022)
- American Student Dental Association District 1-3 Legislative Liaison of the Year Recipient (2024)

Research/Education Publications

"COVID-19: Global Lessons for a Global Profession"

Zhang B., Zokaie T. Module 7: COVID-19- Global Lessons for a Global Profession In: Toward Competency-Based Best Practices for Global Health in Dental Education: A Global Health Starter Kit 2nd Edition. Senior editor Seymour B., Assistant editors Clem B, Ramesh N, Suri D., Advisory editor Barrow J. A project of the Consortium of Universities for Global Health Global Oral Health Interest Group and Harvard School of Dental Medicine; 2022. Available at: <u>https://hsdm.harvard.edu/global-health-starter-kit</u>

"Does the position of a bottle during infant feeding influence the jaw's postural position?"

Zhu H, Zhang B, Rosivack RG. Does the position of a bottle during infant feeding influence the jaw's postural position?. J Indian Soc Pedod Prev Dent. 2019;37(4):405-408. doi:10.4103/JISPPD_91_18 Available at: https://pubmed.ncbi.nlm.nih.gov/31710017/

"Eating Disorders and Oral Health"

Zhang B, (2024) "N Y State Dent J November 2024," The New York State Dental Journal: Vol. 90 No. 5., Article 3. Available at: <u>https://issuu.com/brownst303/docs/nysdj_augsept24_final</u>

Projects and Initiatives

Planetary Health Report Card in Dentistry 2023-2024

Served as student lead during the PHRC inaugural launch of the dental pilot of the Planetary Health Report Card. Planetary Health Report Card is a metric-based tool for evaluating and improving planetary health content in health professional schools, implemented at 151 health professional schools participating in the PHRC across 18 countries and 7 healthcare disciplines.

Prepared by: Dental students and faculty from 3 Dental schools in India and the United Kingdom With Support from: Josiah Macy Jr. Foundation Global Consortium on Climate and Health Education Planetary Health Alliance phreportcard.org

Oral Health for the Elderly

Worked with RI Dept Oral Health Program at RI Department to provide oral hygiene training sessions to caretakers at nursing homes. Created presentation for on causes of gum disease & tooth decay, proper setup and maintenance of teeth, dentures and partials, dealing with residents with dementia, parkinsons and paralysis, and identifying 10 types of oral pathologies. Worked with 46 nursing homes to deliver content.

> Powerpoint to train nursing staff Daily Oral Hygiene Record for Nursing Staff Monthly Oral Hygiene Record for Nursing Staff

Oral Health Education for Children

Created initiative "Oral Health Education for Children" teaching local elementary schoolers about the importance of oral health, proper oral hygiene & dietary habits, and fluoride benefits. Presented at schools in under-resourced areas – started within Brown Pre-dental Society and continuing initiative in Columbia ASDA Advocacy Committee.

PowerPoint for children

Columbia ASDA Pre-dental Advocacy Fellow Initiative

Created a new "Columbia ASDA Pre-dental Advocacy Fellow" position selecting pre-dentals from an application in which they help plan events during advocacy month, create advocacy related educational infographics. (DOC Access Act, Ensuring Lasting Smiles Act, REDI Act, Student Loan Refinancing Act for student loan reform, The Medicaid Dental Benefits Act, Improving Social Determinants Act), and present on "Advocacy 101" to pre-dental chapters including across the nation.

Lessons in a Lunchbox

Spearheaded a collaboration between chapters of Columbia Dental Medicine's American Student Dental Association, American Dental Education Association, and Student National Dental Association to bring oral health education lessons to elementary schoolers in the local Washington Heights area in the form of "Lessons in a Lunchbox" Program, a curriculum created by the Children's Oral Health Institutev. The lessons are aimed to teach 2nd and 3rd grade elementary school students oral health and oral hygeine, included with a free interactive lunchbox that includes oral hygiene instructions, a nutrition diagram, and a "carrot" case with a toothbrush and toothpaste.

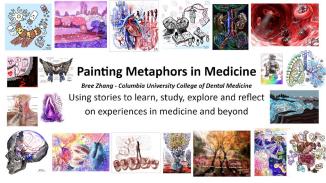
Art Publications and Accolades

Intima Journal of Narrative Medicine "Buckets of Oxygen, Buckets of Love" (2023) Brown Journal of Medical Humanities "A Thank You to Our Donors" (2023) – (Art referenced in <u>NYTimes interview</u>) Brown University Bookstore Artist "Brunoscapes" (2022) Columbia Pathology and Cell Biology Newsletter "Histology of Central Park" (2023) Columbia Medical School "Scenes of the Vagelos Education Center" (2024) Columbia Global Consortium on Climate and Health Education "Our Body is an Earth" (2022) <u>Reflexions: Literary & Fine Arts Journal at Columbia University Irving Medical Center</u> "Reproductive Justice and Oral Health" (2023)

National ACP Internal Medicine Meeting – artwork presented in talk by Dr. Esquitin from Columbia University Harvard Medical School - artwork presented in anatomy lectures by Dr. Sabine Hildebrant

Watson Institute for International and Public Affairs "Time Capsule" Exhibit (2021)

Brown University Science Center Annual Art Exhibit "Exploration" (2019)



<u>See Art Portfolio</u>

Music Accolades

Vagelos College of Physicians and Surgeons Class of 2028 White Coat Ceremony Performance (2024) Brown University Baccalaureate Commencement Performance (2022) Carnegie Hall (2014, 2015, 2016, 2017, 2019) Metropolitan Museum of Art (2015, 2016) The First Baptist Church in America (2022) New Jersey Symphony Orchestra Evening Gala (2019) McCarter Theater (2015, 2017)

Awards and Honors

Gold Prize, Sinovision Television Teen's Talent Competition (2017) Orchestral compositions "Journey" & "Dancing in Snowflakes" performed by MFCYO Orchestra at Drew University (2017-2018) 4th Place, Central China TV Talent Competition (2017) Grand Prize, National League of Performing Arts Young Musician's Showcase Competition (2015) 1st Place, Princeton International Chinese Music Competition Award (2014) <u>See Music Composition Portfolio</u>

Published Writing

<u>Contour Magazine</u> "Don't Forget to Advocate for You" (2023) <u>Contour Magazine</u> "Politics in Dentistry" (2024) <u>Columbia Global Consortium on Climate and Health Education</u> "Our Body is an Earth" (2022)

In the News

<u>New York Times interview</u> "Honoring the Body Donors Who Are a Medical Student's 'First Patient" (2023) <u>Columbia News Interview</u> "A Long-standing Interest in Psychology led her to the Dental School" (2024)

Infographics

Does Poor Oral Health Impact Your Economic Circumstances?

(commissioned by Dr. Burton Edelstein, Columbia University professor emeritus of dental medicine and health policy and management)

Politics and Dentistry: Overview of the NIH/NIDCR

What's Going on with Fluoridation?

Preventing Oral Cancer with the HPV Vaccine

What is the "Jaw Epidemic"Diabetes and Oral HealthClimate Change and Oral HealthSeizures: What Dental Providers Should KnowHow does Paid Parental Leave Impact a Baby's Orofacial Development?What is Tetracycline Staining?Gun Violence is a Public Health CrisisHow do we Make Our Dental Practices More Accessible?What's Going on with Dental Lobby Day?The Medical Loss Ratio ReferendumEating Disorders and Oral HealthWhat is the NHSC Scholarship?Access to Oral Health is a Reproductive Justice Issue

Patient Education Infographics <u>A Patient's Guide to Pregnancy and Oral Health</u> <u>How to Take care of your baby's oral health</u> <u>Dental Sealants</u> <u>7 types of dentists</u> <u>Trick or Treat Your Teeth: 6 tips during Halloween!</u> <u>What are Cavities?</u> <u>What is a filling?</u> <u>What is gum disease?</u>

<u>Animations</u>

My Human: A Story of Oral Health Inequity

This video is a 2 minute hand-drawn animation that tells a story from the perspective of a tooth who observes its human girl, Smiles, suffering from tooth decay. Over Covid-19, the girl's tooth decay worsens to the point it interferes with her daily life, and she eventually develops an abscess that takes her to the emergency room with only one option: to extract her tooth.

What is a Root Canal?

Root canals are one of the most feared procedures that cause a lot of dental anxiety. This 30-second hand-drawn animation teaches patients the basic process of root canals to decrease patient fear and anxiety.

Mental Health and Oral Health

This infographic explores the bidirectional relationship between oral and mental health, starting with how mental health impacts oral health (biological channels and social channels) to how oral health impacts mental health (functional wellbeing, social mobility, psychosocial development).

How Does Gum Disease Affect your Organs?

A brief overview of how periodontal disease impacts all organs in the body system through systemic inflammation.

What is the "Oral Systemic Link?"

The video uses the metaphor of a house with different rooms (organs) to explain how the mouth is connected to the rest of the body, using COVID-19 as an example to explain systemic inflammation, secondary bacterial infections, and the mouth serving as a doorway, a mirror, and a bathtub for replication.

> <u>Certificates</u> Mental Health First Aid Basic Life Support and CPR

<u>Skills</u>

Fluent in Mandarin (writing, reading, speaking) Digital art (Photoshop, Clip Studio Paint) Infographics (Canva) Music composition and mixing (Studio One 3, Muse-score) Filmmaking and Video Editing (Adobe Premiere) Excel and Powerpoint