



Suzanne Abreu

AAOF Research Aid Award

**Project Title:** The Influence of Population Variation and Obesity on Facial Growth

I am currently a rising second-year orthodontic resident at the University of Illinois Chicago. Building on my academic journey, I obtained my Bachelor of Arts degree from Smith College in 2017, and later earned my Doctor of Dental Surgery (DDS) degree and advanced public health certificate (CPH) from New York University in 2022. Throughout my educational career, I have been driven by a strong commitment to research, public health efforts, and community service. These experiences have shaped my perspective and deepened my understanding of the connection between oral health and overall well-being. As I continue my journey through orthodontic residency, I am fueled by an unwavering desire to contribute to scientific advancements within the field.

The area of research that I am currently exploring delves into the intricate relationship between self-reported ancestry, food security, body mass index (BMI), and their potential impact on the timing and pattern of facial skeletal growth in children. In this study, we aim to shed light on the influence of these factors on mandibular morphology, including mandibular length and mandibular angle. Previous studies have suggested a possible correlation between obesity in children and Class 3 malocclusions, as well as brachycephalic facial profiles. By uncovering potential disparities in facial skeletal growth patterns among different populations, we can gain a better understanding of who may be more susceptible to unfavorable facial skeletal growth patterns. Childhood obesity is not merely an orthodontic concern; it is a pressing public health issue with far-reaching implications for an individual's overall quality of life. Through our research, we hope to identify optimal timing and treatment strategies for orthodontic intervention in children with obesity, ultimately improving their oral health and overall well-being. These findings have the potential to revolutionize how the next generation of orthodontists approach treatment for patients with obesity, leading to more effective and personalized care.

In my pursuit of scientific excellence, I am grateful for the support provided by the American Association of Orthodontists Foundation (AAOF). Their invaluable guidance and constructive feedback have helped shape the direction of my research project and refine its methodology. Additionally, the financial support granted by the AAOF has played a pivotal role in incentivizing patient participation, allowing us to collect more data and ensure our study's robustness. The AAOF is comprised of an esteemed network of accomplished and inspiring orthodontists – receiving the Research Aid Award has allowed me to become a part of that prestigious network and make a meaningful impact in the field of orthodontics.

Looking ahead, I am deeply committed to continued professional growth and lifelong learning. After completing my orthodontic education, I aspire to pursue a craniofacial fellowship, where I can dive deeper into the intricate complexities of craniofacial anomalies. I also intend to

maintain my connection with academia by serving as part-time faculty. Inspired by the mentors who have played a pivotal role in shaping my professional journey, I aim to pay forward the knowledge and guidance I have received, equipping future clinicians with the skills and expertise needed to advance our specialty and provide exceptional care to patients.