



Dr. Thy Tran
2026 Research Aid Award
University of Illinois-Chicago

1) Short Biography

I was born and raised in Amarillo, Texas. I earned my Bachelor of Science in Biology from the University of Texas at Arlington, along with a minor in Disability Studies and a certificate in Medical Humanities. During my undergraduate years, I was fortunate to receive the Bill & Melinda Gates Millennium Scholarship, which supported my education and broader academic experiences. I also participated in a Multi-Country International Honors Program focused on global health and globalization, with learning experiences in Washington, D.C., India, South Africa, and Brazil.

I went on to earn my Doctor of Dental Medicine (DMD) degree from the Arizona School of Dentistry & Oral Health in 2024. I am currently finishing my last year of orthodontic residency at the University of Illinois Chicago. I am grateful for the training and mentors who have guided me so far in my journey. My research project is called, "Chemical Leaching and Optical Properties of Clear Retainers After Various Cleaning Methods."

2) Brief Description of the Project:

This project focuses on investigating the effect of various cleaning methods on the chemical leaching and light transmittance properties of clear retainers.

3) Statement of How Orthodontic Education Will Benefit From My Award

Clear Orthodontic retainers are popular to be given to orthodontic patients due to their esthetic appearance and ease of fabrication and use. The cleaning of these clear retainers is critical to maintain their esthetic appearance, and the cleaning techniques may also affect their biocompatibility. The leaching of unwanted chemicals from the clear retainers after cleaning has never been studied or reported, so this study aims to evaluate the unwanted chemicals leached from clear retainers, both vacuum-formed and 3D direct-printed types, after different cleaning techniques, as well as their light transmittance.

4) Why the Foundation is Important to My Project

Without the foundation's generous support, researching the safety aspects of clear retainer materials would be very challenging. We would not be able to perform a thorough and unbiased analysis of the samples due to the high cost of chemical leaching analysis and acquire different commercially available materials. The foundation's support is critical, as the knowledge gained from this study will be a valuable tool for understanding the critical role of cleaning methods in the safety and physical properties of long-term-use clear retainers.

5) How Foundation Funding Has Benefitted My Career

The Research Aid Award has provided recipients with an avenue in their academic careers. The findings from this project would provide information for public safety. For me, the foundation has given me the opportunity to gain intensive research experience, allowing me to learn various research methods that have broadened my perspective in the field. This experience will give me the opportunity to explore academic career options after graduating from the orthodontic residency program, aligning with the foundation's goal of excellence in research and patient care.