2025 Orthodontic Faculty Development Fellowship Award
Dr. Heeyeon Suh, University of the Pacific

Short Biography

I am currently a full-time faculty member at the Department of Orthodontics at the University of the Pacific. I have had the privilege of working with esteemed faculty members and mentors, including Dr. Oh, the department chair, who has been instrumental in my professional growth. My educational journey is marked by numerous achievements, including receiving the AAO full-time faculty fellowship award and AAOF 2025 Orthodontic Faculty Development Fellowships (OFDFA). In addition to my clinical and teaching responsibilities, I am engaged in research focused on craniofacial growth prediction, leveraging advanced statistical methods and artificial intelligence (AI) to improve orthodontic treatment outcomes.

Brief Description of the Project

This study builds upon our previously funded research on craniofacial growth prediction. Although our prior work using deep neural network-based AI demonstrated promising results, it was limited by a small sample size. In this project, we aim to expand the dataset to better account for individual variability. Our goal is to develop more robust and reliable prediction tools that will assist orthodontists in treatment planning, ultimately leading to more efficient and effective patient care.

Statement of How Orthodontic Education Will Benefit from the Award

Integrating AI and advanced statistical methods into treatment planning will better prepare future orthodontists to manage complex cases and make informed clinical decisions. This will contribute to higher standards in both education and patient care.

Why the Foundation is Important to the Project

The foundation's support is essential to the success of this project. Funding will allow us to acquire the advanced computing resources needed for AI model development and support collaborations with experts in machine learning and orthodontics. In addition, the support will help fund my tuition for a two-year master's program in Data Science, which is critical for deepening my understanding of predictive modeling and interdisciplinary research, both vital components of this project. The Foundation's support will also provide opportunities for professional development, such as attending national conferences and seminars.

How Foundation Funding is Expected to or has Benefitted Your Career

The Foundation's funding will have a transformative impact on my career. It will enable me to pursue advanced research in AI-based growth prediction and participate in conferences, where I can learn from and connect with experts in orthodontics and data science. The support will also fund my Data Science master's program, further strengthening my skills in model development, evaluation, and interdisciplinary collaboration.