**2024 OFDFA**
**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. 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 to improve orthodontic treatment outcomes.

## Brief Description of the Project

The focus of my research is on craniofacial growth prediction, a critical area in orthodontics. The project aims to develop and validate growth prediction models using the Partial Least Squares (PLS) statistical method and Artificial Intelligence (AI) based on a deep neural network algorithm. This research addresses the limitations of traditional growth prediction methods and aims to provide orthodontists with more accurate tools for treatment planning, ultimately leading to better treatment outcomes.

## Statement of How Orthodontic Education Will Benefit from the Award

The award will significantly enhance orthodontic education by supporting the development of innovative growth prediction models. By incorporating AI and advanced statistical methods into orthodontic treatment planning, the award will ensure that future orthodontists are well-equipped to handle complex cases and make informed decisions, thereby improving the overall quality of care.

## Why the Foundation is Important to the Project

The Foundation's support is crucial for the success of this project. The funding will enable the acquisition of necessary resources, such as access to the AAOF legacy collection and advanced computing tools for AI model development. Additionally, the Foundation's support will facilitate collaboration with leading experts in the field. This support will also provide opportunities for professional development through attendance at key conferences and seminars.

## How Foundation Funding is Expected to or has Benefitted Your Career

The Foundation funding will make a significant impact on my career by enabling me to pursue advanced research and professional development opportunities. It will facilitate my attendance at various educational conferences, where I will gain valuable insights and network with experts in

orthodontics. The funding will also support my continued research efforts, contributing to the advancement of orthodontic knowledge and practice. This will not only enhance my career but also benefit the broader orthodontic community by providing a scientific basis to solve complex clinical problems.