



**2024 RAA**

**Dr. Christie Shen-University of Pennsylvania**

### **1) Short Biography**

Dr. Christie Shen is a second-year orthodontic resident at the University of Pennsylvania School of Dental Medicine. Originally from Los Angeles, California, she completed her undergraduate studies in Public Health at Johns Hopkins University and earned her DDS from the Herman Ostrow School of Dentistry at the University of Southern California. In her free time, Dr. Shen enjoys searching for the perfect chocolate chip cookie and exploring various cafes.

### **2) Brief Description of the Project**

Maxillary molar distalization to correct molar relationships and to create space for relieving crowding has been a long-lasting subject of debate in orthodontics. In the past two decades, clear aligners have attracted the attention of orthodontic professionals as an esthetic, less invasive, and more hygienic choice for patients seeking orthodontic treatment. When used for molar distalization in a sequential distalization protocol, clear aligners have been reported to produce anchorage loss in opposing arches. To achieve more efficient molar distalization while avoiding unfavorable side effects on the opposing arch, temporary anchorage devices (TADs) have been recently utilized in combination with clear aligners during molar distalization. However, a detailed evaluation of the molar distalization efficiency as well as the vertical and transverse control by this combined approach is missing. The current study aims to perform a detailed evaluation of the molar distalization efficacy of the clear aligners with TADs approach. If successful, the current study could provide an evidence-based clinical guideline for clear aligner therapy on patients who need molar distalization.

### **3) Statement of How Orthodontic Education Will Benefit from Your Award**

The AAOF Research Aid Award will support research on molar distalization using clear aligners and TADs. This research will generate data to inform clinical guidelines, improve patient care, promote further research opportunities, and enhance orthodontic education.

### **4) Why the Foundation is Important to Your Project**

The Foundation is crucial to this project by providing essential financial support that enables comprehensive research. This funding allows for the acquisition of necessary resources, such as advanced technology and materials, and supports the data collection and analysis required for the study. Dr. Shen is deeply honored to receive funding from the AAOF for her research on molar distalization with clear aligners and TADs. This support not only advances her research but also significantly contributes to the orthodontic field.

### **5) How Foundation Funding is Expected to or Has Benefitted Your Career**

The funding from the American Association of Orthodontists Foundation (AAOF) has significantly benefitted Dr. Shen's career by providing the resources necessary to conduct in-depth research on molar distalization with clear aligners. The research findings, backed by the AAOF's prestigious support, will enhance her visibility within the professional community and strengthen her academic portfolio, opening doors for future research funding and career advancement in both clinical and academic settings.