Research Aid Award

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A short biography

My predoctoral training at Penn Dental and now my graduate training at University of Maryland has peeked my interest in Orthodontics and interdisciplinary care.

I am interested in furthering research in the field of craniofacial growth and Orthodontic tooth movement, mini-screws and orthodontic therapy. My future plan is to further research the various theories that force me to add an innovative and distinct component to the practice of orthodontics and devote time to academics

A brief description of the project

Bone remodeling and bone loss have varied implications in orthodontics. The placement of a transcortical mini-screw in the healing buccal plate of a socket may preserve the alveolar bone following tooth extraction with minimal risks and less invasive methods than ridge preservation surgeries. Successful outcomes from this study will demonstrate that placements of mini-screws at the buccal plates of extraction sites significantly reduce bone loss at the sites without side effects. Therefore, the results from this study will achieve a sustainable impact in the field of orthodontics.

How orthodontic education will benefit from their award

As a specialty our mindset has evolved from extraction philosophy to evidence-based extraction practices. The most common complication of closing extraction spaces are gingival clefts, relapse of orthodontic treatment, esthetic issues and possible future periodontal problems. If the extraction site is left unattended, the common concern is loss of dimensions of the ridge. Our research concept proposes using Temporary Anchorage Devices for preservation of the dimensions of the alveolar bone. This project seeks to broaden our horizons in understanding bone healing in an extraction socket and subsequent remodeling patterns. By testing our hypothesis, we aim to reduce the pace of remodeling and preserve the dimensions of the ridge. This outcome will greatly influence not only the Orthodontic field but other specialties as well.

Why the Foundation is important to their project

As of now, participants are responsible for cost of the CBCTs as needed for treatment. However, participants are charged a 30% reduced fee for initial CBCT and a 40% reduced fee for final CBCT.

We anticipate the RAA award will help ease the burden on the patients and help recruit more participants for the study. The fund from the Research Aid Award will be used to cover the CBCT cost for subjects and publication cost.

How Foundation funding is expected to or has benefitted Recipient's career

The Foundation funding will ease the monetary burden that the patients have to bear; this in turn will help me recruit more subjects for the study. It is my hope that I will be able to finish the project in a timely manner. I plan to publish this study in orthodontic literature and thus initiate a lifelong career in research and academics.