

**Award Type:** Orthodontic Faculty Development Fellowship Award

**Principal Investigator:** James Chen DDS, PhD

**Title:** Critical Evaluation of an early phase orthodontic treatment protocol geared specifically for low socioeconomic families.

**Period of AAOF Support:** 7-01-2012 to 7-01-13

**Amount:** \$15,000

**Summary/Abstract:**

*Career development:* I completed my yearlong clinical research training fellowship in June of 2012, and concurrently I successfully completed ABO clinical examination. I received my ABO diplomat status in March of 2012. Since completion of the clinical research fellowship, I have initiated several other clinical research projects with students, ranging from TAD studies (in collaboration with National Taiwan University) to dental health economics studies. I submitted an NIH grant geared for clinical research faculty development in Feb 2012, and I am currently awaiting the response from the NIDCR.

*Teaching:* During the past year I continued to teach first year residents core classes regarding orthodontic treatment planning and diagnosis. My teaching contributions encompass four courses some of which last the whole academic year. My efforts in didactic and clinical teaching has led me to receive a faculty achievement award this past year. The first and second year residents selected me for this honor. For the upcoming academic year I will shift my time and focus from didactic teaching to developing more clinical research projects, due to the number of clinical research studies I have initiated or will be apart of.

*Research:* IRB approval was obtained in October of 2012, upon which participant recruitment began immediately. Currently, we have identified 12 active participants in the UCSF Orthodontic Clinic and 13 active participants at La Clinica. There is a broad range of types of malocclusions that required early interceptive orthodontic treatment: class II, class II, posterior crossbite, crowding, and spacing. Due to the broad nature of these existing malocclusions we anticipate data analysis to be difficult with a moderate amount of confounding. We anticipated to have recruited at least 30 participants in the La Clinica group and 20 participants in the UCSF group. The differences in participants is due to a significant restructuring of patient flow at La Clinica over the past year, and just do to a limited source of early interceptive cases at UCSF. However, with this limited participant basis, I was able to generate some basic preliminary data in support of a NIH career development grant. The K23 career development grant supports junior faculty development for five years. I was extremely pleased to be awarded this prestigious grant in September of 2013!

**Response to questions:**

1) *Were the original, specific aims of the proposal realized?*

No, the aims were not realized because the outcomes being measured required completion of orthodontic treatment for the study participants. The funding from AAOF has allowed me to setup the recruitment process and streamline recruitment. AAOF funding has helped provide vital seed money to recruit participants, who were used as preliminary data for an NIH K23 clinical research career development grant.

2) *Were the results published? If not, are there plans to publish? If not, why not?*

The results were not published due to the nature of the study. The outcomes assessed in this study will not be realized for another year most likely. However, the preliminary recruitment has

allowed me to apply for an NIH career development grant. I fully expect to publish these results once the study is completed. This publication will be critical for further funding to support possible randomized clinical controlled trials

3) *Have the results of this proposal been presented? If so, when and where? If not, are there plans to do so? If not, why not?*

No, these results have not been presented for the same reasons listed above; the outcomes could not be measured because of length of treatment necessary.

4) *To what extent have you used or how do you intend to use, AAOF funding to further your career?*

I am very appreciative of the support AAOF has given me during my initial academic career. With the support of the AAOF I was able to obtain important seed money to start my main research study. The \$15,000 was instrumental in getting my patient recruitment setup and to support laboratory costs associated with initial records for those participants. This initial setup was used as preliminary data for an NIH supported career development grant I submitted Feb. 2013. I intend to use AAOF funding to continue to provide vital seed money to start other large clinical research projects. It cannot be understated how important the initial start up support has been for my clinical research project. I truly look forward to applying for further support from the AAOF to other clinical research projects. Without this award I would not have been able to write, compete, and finally receive the prestigious NIH K23 Career development grant!