AAO Foundation Award Final Report

Principal Investigator	Joorok Park
Co-Investigator	
Secondary Investigators	
Award Type	Orthodontic Faculty Development Fellowship Award
Project Title	Development of Frame Reference in 3D Cephalometric Analysis
Project Year	July 1, 2011 – June 30, 2012
Institution	University of the Pacific, Arthur A. Dugoni School of Dentistry
Summary/Abstract (250 word maximum)	The main goal of this research was to identify and investigate the potential landmarks that are suitable to establish the frame of reference in 3D volumetric imaging. An important part of the study was to evaluate the reliability of various 3D landmarks. First, we compared the 3D coordinate values of a set of anatomical landmarks on CBCT-derived volumetric images constructed by two software programs whose output is commonly used by clinicians and researchers. With 19 CBCT DiCOM files generated from initial CBCT images of UOP orthodontic patients whom had seven radiopaque tie points on their facial soft tissue. The original DiCOM files of the 19 subjects were used to construct 3D volumetric images in both InVivo and Dolphin 3D. Preliminary results showed a systematic difference in landmark location operation in the two software programs.
Were the original, specific aims of the proposal realized?	Yes. I was able to develop my professional career in teaching and clinical research.
Were the results published? If not, are there plans to publish? If not, why not?	Not yet, I am currently preparing the materials for publication for the first part of this study.
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, however, it is planned to be presented in the future.
To what extent have you used, or how do you intend to use, AAOF funding to further your career?	The AAOF Orthodontic Faculty Development Fellowship Award has supported my salary and has allowed me to dedicate my time in developing my professional career in teaching and clinical orthodontic research.