

AAO Foundation Award Final Report

Principal Investigator	Lucia H.S. Cevidanes
Co-Investigator	
Secondary Investigators	
Award Type	Faculty Development Program
Project Title	3D Characterization of Facial Asymmetry
Project Year	July 2008 - July 2009
Institution	University of North Carolina School of Dentistry
Summary/Abstract (250 word maximum)	Funding from the AAOF in the Faculty Development Program would provide a solid platform for my career. My career goals are (1) to strengthen my clinical skills and teaching portfolio in order to become an effective attending in the orthodontic graduate clinic and a course director of graduate and predoctoral didactic courses; (2) to strengthen my clinical research background through completion of didactic and seminar series given through the K award; and (3) to develop an independent research program in the utilization of 3D images for diagnosis, treatment planning and treatment followup for orthodontic and orthognathic surgical treatment that will allow me to successfully compete for research funding. Development in these three areas will provide the skills and knowledge base for me to be an orthodontic educator and researcher with a successful career as a tenured academic faculty member.
Were the original, specific aims of the proposal realized?	<p><u>Clinical Practice and Teaching Activity:</u> AAOF funding gave me the protected time to rotate through UNC's Master's level didactic courses and increase my faculty practice activity. To enhance my teaching abilities, I was able to participate in all predoctoral and graduate courses to better understand how the courses are structured and sequenced, and how the examination and grading processes operate. I prepared and presented both graduate and undergraduate lectures and seminars with orthodontic faculty. Successful completion of these activities prepared me to receive orthodontic certification in September 2008 and successfully passing the ABO written exam in April 2009.</p> <p><u>Education Program for Research:</u> To strengthen my abilities in this area, I needed a stronger background in clinical research design and statistics related to evaluation of treatment outcomes in human patients. I was able to take graduate-level courses in epidemiology and biostatistics in UNC's School of Public Health. I continued to</p>

	<p>participate in the mini-courses offered by the clinical scholars program and in the imaging group seminars.</p> <p><u>Research Projects:</u> The focus of my_research activities was the 3D superimposition techniques to facilitate evaluation of changes related to orthognathic surgery and subsequent remodeling/relapse during cone-beam CT images of patients treated in the Dentofacial Program.</p>
<p>Were the results published? If not, are there plans to publish? If not, why not?</p>	<p>Two manuscripts are currently in preparation for submission, awaiting feedback from the co-authors. Manuscript 1 is the comparison of methods for quantification of 3D asymmetry. Manuscript 2 is the classification of the severity of 3D asymmetry.</p>
<p>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?</p>	<p>The preliminary results of this proposal were presented at the 2009 IADR Meeting in Miami by my MS PhD student, Abeer Alhadidi (Alhadidi A, Cevidanes LHS, Mol A, Ludlow J, Styner M. 3D Analysis of Facial Asymmetry Based on Midsagittal Plane Computation. J Dent Res 88 (Spec Iss A):311, 2009). The final results will be submitted for presentation at next year's AAO meeting.</p>