

## AAO Foundation Award Final Report

Principal Investigator	John C. Huang, DMD, DMedSc.
Co-Investigator	
Secondary Investigators	
Award Type	Orthodontic Faculty Development Fellowship
Project Title	Application of Volumetric Imaging Tools in Orthodontic Diagnosis and Treatment Planning
Project Year	2004
Institution	University of California San Francisco Department of Growth and Development Division of Orthodontics
Summary/Abstract	<p>We have identified numerous areas of potential applications for 3-D craniofacial imaging in the dental specialties of orthodontics, periodontics, oral and maxillofacial surgery, TMJ, and craniofacial anomalies. Several projects are underway to examine the accuracy and precision of digital measurements by CBCT devices, as well as whether increased amounts of information in radiographic records will affect the diagnosis and treatment of cases that were previously diagnosed using conventional 2-D plain film radiographs. Preliminary findings indicate there are significant increases in the confidence of clinicians using 3-D CBCT images. Work is also in progress to develop a method of superimposition to follow growth in patients seeking orthodontic treatment.</p>