

AAO Foundation Award Final Report

Principal Investigator	Peter T. Gakunga, BDS, MS, PhD
Co-Investigator	
Secondary Investigators	
Award Type	Orthodontic Faculty Development Fellowship Anthony A. Gianelly Teaching Fellowship Award
Project Title	Molecular Basis for the Growth of the Cranial Base Synchrondroses
Project Year	2006
Institution	University of Texas Health Science Center at San Antonio Dental School
Summary/Abstract (approximately 250 words)	<p>Teaching</p> <p>Graduate: I participated in the residency clinical seminar series as well as teaching in the residency clinic. I was course director for the Craniofacial Growth and Development Section of the Biomedical Core Course. This is a course offered to all graduate students at the UTHSCSA Dental School. I continued to refine this team taught course to make it relevant to clinical graduate students.</p> <p>Undergraduate: I participated in teaching Early Development and Craniofacial Developmental Defects to the sophomore class. I was a group leader in the Junior Orthodontic Case Analysis Seminar Series. In this course we piloted web based presentations that were developed in the last period of the AAOF award</p> <p>Research</p> <p>I have continued to run studies to characterize the molecular mechanisms involved in growth in the cranial base synchrondroses. By testing the hypothesis that chondrocyte-extracellular matrix signaling through CD44-hyaluronan interaction is crucial for chondrocyte differentiation and growth.</p>

Research supported by AAOF was presented at the IADR/AADR meeting. One resident that I supervised presented his research at the AAO meeting.

Service

I serve on the University-wide International Affairs Committee; the Dental School's Clinical Quality Assurance Committee and Nominations Committee; and the department of Orthodontics Residency Selection Committee.