

AAO Foundation Award Final Report

Type of Award	Orthodontic Faculty Development Fellowship Award
Principal Investigator	Nada M. Souccar
Title of Project	Three-Dimensional Age-Related Changes of the Adult Face
Period of AAOF support	July 2014-June 2015
Amount of Funding	\$15,000
Summary/Abstract (250 words max)	<p>Objectives: Investigate and compare the aging of the soft tissue of the face in African American (AAm) and Caucasian (Cm) males and establish a data base of facial norms for both ethnic groups.</p> <p>Methods: The faces of 100 AAm and 100 Cm males equally distributed in five age groups [20-30], [31-40], [41-50], [51-60], [61-70] were studied. Three-dimensional (3D) surface images were taken (3dMD system-3dMDface, Atlanta, Ga). Thirty-three soft tissue landmarks were plotted and their coordinates recorded (Vultus software-3dMDface, Atlanta, Ga). Means and standard deviations of distances from Nasion (origin) to all landmarks were calculated for each group and compared across the five age groups using an ANOVA test. Pairwise comparisons utilizing Tukey's honest significance test were performed when the overall model ANOVA F-test was statistically significant. The mean distances between AAm and Cm were compared using Student's t-test.</p> <p>Results: In AAm, significant differences ($p < 0.05$) by age groups were observed for median points Labiale superius and Chin-throat point, and bilateral points Exocanthion, Endocanthion, Orbitale, Christi philtri, Porion and Zygion. In Cm, significant differences were observed for median points Labiale superius, Stomion, Chin-throat point and bilateral points Christi philtri, Cheilon and Porion. The differences were more marked among those aged 51-60 or 61-70 years for all significant associations.</p> <p>Conclusions: The results suggest that soft tissue changes with age are more evident around the eyes in AAm and around the lips in Cm, in both cases after age 50. The norms established in this study could serve as quantitative references for adult males.</p>
Were the original, specific aims of the proposal realized?	This was a highly productive year. We were able to collect and analyze all the needed data as determined by the statistical analysis and study the aging process of the soft tissue in African American and Caucasian males. We now have reference measurement datasets as well as comparisons for Caucasian and African American males and females measurements for each age group. This completes the aims stated in the proposal.
Were the results	A manuscript detailing the different aspect of the project is currently being

<p>published? a.) If so, was AAOF support acknowledged. b.) If not, are there plans to publish? If not, why not?</p>	<p>prepared. The AAOF support will be acknowledged on the cover letter as well as in the manuscript, as required by the AAOF and the editorial guidelines.</p>
<p>Have the results of this proposal been presented? a.) If so, when and where? And was AAOF support acknowledged. b.) If not, are there plans to do so? If not, why not?</p>	<p>Abstracts will be submitted at the AAO annual meeting, the AADR meeting, and the UAB annual symposium at the Comprehensive Center for Healthy Aging. An oral presentation is planned in Lebanon in December 2015. The AAOF support will be acknowledged.</p>
<p>To what extent have you used, or how do you intend to use, AAOF funding to further your career?</p>	<p>I feel truly blessed for the support that the AAOF has given me through the Eugene E. West fellowship award. It helped me implement the four aspects of the career plan delineated in my original proposal. The funding allowed me to conduct my research as well as helped support my salary. I am grateful for the AAOF's commitment to support young educators for the advancement of the profession.</p>