

## AAO Foundation Award Final Report

Principal Investigator	Judith Lampasso, DDS, PhD
Co-Investigator	
Secondary Investigators	
Award Type	Orthodontic Faculty Development Fellowship
Project Title	Robert E. Gaylord Teaching Fellowship Award
Project Year	2004
Institution	SUNY at Buffalo
Summary/Abstract (250 word maximum)	In the funding year 2004-2005 I was very successful in my goals. Firstly, within the Department of Orthodontics I mentored a total of four orthodontic residents on Masters' projects. The results of the concerted efforts of two students involving a study on neuromuscular headache and dental cross-bite resulted in a published manuscript in the 2007 December issue of the AJO-DO. Two other orthodontic residents were successful in attaining their masters' degree based on their thesis on cervical vertebrae and their efforts also resulted in a poster presentation at the AAO meeting in San Francisco May 2005. This work has been subsequently continued by a future student and the concerted effort of all three studies resulted in a poster presentation at the AAO meeting in Las Vegas May 2006. On my own research, with the support of the AAOF I completed a number of studies within my basic science research on bone biology. We worked on delineating the role of specific PKC isoforms in the developing osteoblast by using Osteoblastic cells from numerous sources. We made use of Osteoblastic cells derived from human mesenchymal stem cells, MC3T3 (a primary murine Osteoblastic cell line), as well as primary human osteoblast cultured from alveolar bone explants. These studies resulted in a published scientific article (see below).
Were the original, specific aims of the proposal realized?	Yes.
Were the results published? If not, are there plans to publish? If not, why not?	Lampasso, J.D., Chen W, Marzec, N. (2006) The expression profile of PKC isoforms during MC3T3-E1 differentiation. <i>International Journal of Molecular Medicine</i> ; 17(6):1125-1131.  Lambourne, C., Lampasso, J.D., Buchanan jr. WC., Dunford R., McCall W. (2007) Malocclusion as a risk factor in the etiology of headaches in children and adolescents. <i>American Journal of Orthodontics &amp; Dentofacial Orthopedics</i> : 132(6):754-761
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?	J. Lampasso, B. Garner, E. Eaton, R. Bevilacqua and CB Preston.(2005) Cervical Vertebrae Morphology used for Skeletal Maturation Determination. 2005 AAO San Francisco, CA  R. Bevilacqua, J. Lampasso. (2006) Cervical Vertebrae Morphology used for Skeletal Maturation Determination. The reliability of staging. 2006 AAO, Las Vegas, NV