

AAO Foundation Award Final Report

Principal Investigator	Thyagaseely Premaraj
Co-Investigator	
Secondary Investigators	
Award Type	Orthodontic Faculty Development Fellowship Award
Project Title	
Project Year	2012
Institution	University of Nebraska Medical Center
Summary/Abstract (250 word maximum)	<p>The award was used to supplement my salary. Activities during the award period:</p> <p>Grant Support obtained:</p> <ol style="list-style-type: none"> 1. Shift in Species Composition of Supra gingival Microbiome as a Risk factor in Dental Caries – a comparative study with braces/ Invisalign® treatment : Principal investigator : T. Premaraj. Funding: Align Tech Inc.®, \$ 25,000.00 for July 2012. 2. Osseointegration of Dental Implants – a comparative study. PI : T. Premaraj; Funding : UNMC college of dentistry summer research grant, \$ 2250.00 for May 2012 3. Bacterial population study of Root Canal Infections: PI: T. Premaraj; Funding : UNMC, seed grant , \$ 5000.00, July 2012. <p>Mentorship:</p> <p>Master student thesis advisor</p> <ol style="list-style-type: none"> 1. MS Medical Sciences Interdepartmental Area, Nima Rohani, DDS, Section of orthodontics, Evaluation of enamel decalcification effects on orthodontic primers with varying filler contents, degree expected 12/2014 <p>Master student thesis committee member</p> <ol style="list-style-type: none"> 1. MS Medical Sciences Interdepartmental Area, Callie Owen, DDS, Section of orthodontics, Simvastin in TMJ disorders, degree expected 12/2013 2. MS Medical Sciences Interdepartmental Area, Jared Schottger, DDS, section of orthodontics, evaluation of cone beam radiographs in image distortion, degree expected 12/2014 <p>Dental student research advisor</p> <ol style="list-style-type: none"> 1. Amanda Meyer, oral epithelial reaction to Invisalign® plastic- an in vitro study, 7/2012- 1/2013. 2. Tami Luebke, Differential expression of chemokines in PDL cells subjected to mechanical loading, 7/2011- 8/2012

	<p>Teaching: 2011-2012</p> <p>ORT 576 Ortho concepts I Course director ORT 588 Orthodontic concepts II Course director ORT 590 Orthodontic lab techniques Course director PG 844 Cephalometrics Instructor Dentofacial Clinical Conference Instructor Critical Review of Current Literature Instructor</p> <p>Service: 2011-2012</p> <p>College and University Committees:</p> <ol style="list-style-type: none"> 1. Executive Faculty Committee, College of Dentistry 2. Curriculum Committee, College of dentistry 3. Admission committee, Post-doctoral residency in Orthodontics, UNMC
<p>Were the original, specific aims of the proposal realized?</p>	<p>yes</p>
<p>Were the results published? If not, are there plans to publish? If not, why not?</p>	<p>Published Abstracts:</p> <ol style="list-style-type: none"> 1. A. Meyer, S. Premaraj, M. Beatty and T. Premaraj, Oral Epithelial Cell Response to Orthodontic Plastic - Preliminary Report, J Dent Res., 91 (Spec Iss B): 366, 2012 2. K. Russell, T. Premaraj, and S. Premaraj, Expression of Chemokines in Periodontal Tissues during Orthodontic Tooth Movement, J Dent Res., 91 (Spec Iss B): 641, 2012 3. S. Premaraj, F. Chau and T. Premaraj, Tooth Extraction/Hypofunction-Induced Changes in Alveolar Osteocyte Expression of SOST/Sclerostin, J Dent Res., 91 (Spec Iss B): 1617, 2012
<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>N/A</p>
<p>To what extent have you used, or how do you intend to use, AAOF funding to further your career?</p>	<p>I was able to accomplish most of the goals that I have planned for 2012-2013 for the academic development. Grant submission, mentoring students in research, teaching activities and service activities. The grant helped me working towards promotion and tenure to be a successful academic.</p>