

## AAO Foundation Award Final Report

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| Principal Investigator                 | Peter T. Gakunga, BDS, MS, PhD  |
| Co-Investigator                        |   |
| Secondary Investigators                |   |
| Award Type                             | Michael Matlof Memorial Teaching Fellowship Award   |
| Project Title                          | Molecular Mechanisms Controlling Growth in Cranial Base   |
| Project Year                           | 2007  |
| Institution                            | University of Texas Health Science Center at San Antonio  |
| Summary/Abstract<br>(250 word maximum) | <p>I have continued to grow in my faculty development goals</p> <p><b>Teaching</b><br/> Graduate:<br/> I assumed teaching responsibilities in the residency clinical seminars as well as one clinical session a week. I continued as course director for the Craniofacial Growth and Development Section of the Biomedical Core Course. In addition I assumed responsibility for the entire Biomedical Core Course. This is a course offered to all graduate students at the UTHSCSA Dental School, and the largest course in dental graduate school in San Antonio.<br/> I also served on residents' MS thesis committees</p> <p>Undergraduate:<br/> I assumed the role of course director for the dental undergraduate Craniofacial Growth and Development Course. I was a group leader in the Junior Orthodontic Case Analysis Seminar Series. We implemented web-based presentations that were developed as part of the AAOF award</p> <p><b>Research</b><br/> I have continued my studies to characterize the molecular mechanisms involved in growth in the cranial base synchondroses. By testing the hypothesis that TGF-beta family of growth factors regulate chondrocyte maturation. Research supported by AAOF was presented at the 37<sup>th</sup> American Association of Dental Research, April 2-5, 2007, Dallas, TX, USA</p> <p><b>Service</b></p> |

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|  | <p>I serve on the University-wide International Affairs Committee; and Institutional Animal Care and Use Committee, the Dental School's Clinical Quality Assurance Committee; and serve as secretary to the dental school faculty council, and the department of Orthodontics Residency Selection Committee.</p> |
| <p>Were the original, specific aims of the proposal realized?</p>  | <p>Yes. These were realized as well as the opening up of new hypothesis that we are now exploring</p>  |
| <p>Were the results published? If not, are there plans to publish? If not, why not?</p>  | <p>The manuscript is in preparation for submission to the American Journal of Orthodontics and Dentofacial Orthopedics</p>   |
| <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>Yes<br/> 37<sup>th</sup> American Association of Dental Research, April 2-5, 2007, Dallas, TX, USA</p> <p>BMP regulates endochondral growth in the cranial base synchondroses</p> <p>B. T. Nguyen, and P. T. Gakunga, University of Texas - San Antonio / Health Science Ctr, USA</p>                         |