Biomedical Research Award

Dr. Phimon Atsawasuwan, *The University of Illinois at Chicago*

Phimon Atsawasuwan, D.D.S., M.Sc., M.Sc., M.S., Ph.D., Associate Professor, Department of Orthodontic

Dr. Phimon Atsawasuwan received his D.D.S. and M.Sc. in Periodontics from Mahidol University, Thailand and another M.Sc. in Periodontology from Eastman Dental Institute, University College London, United Kingdom. He then received his Ph.D. in Oral Biology from the University of North Carolina at Chapel Hill and his M.S. and a certificate in Orthodontics from the University of Illinois at Chicago. Right after his graduation, he has been a diplomate, American Board of Orthodontics and joined the department of Orthodontics, University of Illinois at Chicago as a full-time faculty for 8 years. He was awarded Thomas M. Graber award of Special Merit from AAO for his M.S. thesis. He has published more than forty original articles in several peer-reviewed orthodontic journals and case reports in *AJO-DO, the Angle Orthodontist* and *JCO*. He serves as an ad-hoc reviewer for several peer-reviewed journals including *Journal of Dental Research, Scientific Reports, PLoS One, Bone, Gene, European Journal of Oral Sciences, Connective Tissue Research, the Angle Orthodontist and Progress in Orthodontics.* His research interests include cellular and molecular mechanisms of craniofacial anomalies and disorders, cellular and epigenetic control mechanisms of orthodontic tooth movement. He utilizes cell culture and animal models to investigate the cellular and epigenetic mechanisms of tooth movement and periodontal and bone remodeling.

He has been awarded the 2019 Biomedical Research Award from AAOF, which he proposes to investigate a novel nanoparticle delivery system for microRNAs for orthodontic purposes. He will collaborate with Dr. Richard Gemeinhart, an expert in microRNA biology and drug delivery system, to study the potential of the development of this novel delivery system for microRNAs and test the efficiency of the system *in vitro and vivo*.

With the generous Biomedical Research Award funding from AAOF, he will be able to conduct experiments and obtain some preliminary results for an application of extramural funding from the NIH. The ultimate career goal of Dr. Atsawasuwan is to be an independent investigator and renowned orthodontic educator. At this stage of his career, the funding from AAOF will be a great resource for his career development and preliminary results for the application of extramural federal funding.