Biomedical Research Award

Dr. John Burnheimer, University of Pittsburgh

Dr. John Burnheimer is a graduate of the University of Pittsburgh, School of Dental Medicine. Dr. Burnheimer completed his residency training at West Virginia University and is board certified in orthodontics. Presently, he is a full-time faculty member and Director of the Pre-doctoral Program at the University of Pittsburgh.

This project concerns "Disparities in Orthodontic Health in Southwestern Pennsylvania".

Current research suggests that rural adolescents suffering from malocclusion have difficultly gaining access to orthodontic treatment. The result is a disparity in both access to care and occlusal status when compared to national norms. Research also suggests that the severity of this disparity is greater in the rural Appalachian region than in other rural areas of the United States. A reasonable next step aimed at addressing this disparity is to add to



our understanding of the extent of the need and demand for orthodontic care in a rural Appalachian population. For those individuals where need and demand diverge, additional study of the factors that lead to lower demand should be determined.

This proposed research will address two specific aims. The first aim is to characterize the occlusal status of children in the mixed dentition who receive care in a general medical facility serving rural Northern Appalachian residents. The second aim will be to identify factors that create barriers to care.

Additionally, orthodontic education and pediatric dentistry education will benefit by giving both pediatric and orthodontic residents the opportunity to increase their knowledge of barriers to care in this rural population. Upon graduation, these residents will be better able to screen this age group for care and either treat this group of patients or make the proper referral.

The Foundation is important to this project in providing the necessary financing for the current study and as a resource for future investigations.

The Foundation funding is expected to benefit my career by allowing time to focus on research, providing financing for special equipment and travel, and salary support for clinical assistants. Professionally, there are academic and training benefits afforded by allowing me to increase the depth of my knowledge in this field and allowing me to master the scientific method.