

The University of Pittsburgh, School of Dental Medicine
Department of Orthodontics and Dentofacial Orthopedics

The University of Pittsburgh is located just outside downtown Pittsburgh in southwestern Pennsylvania. As the largest university in the area, the University of Pittsburgh serves 34,000 students in the undergraduate, graduate and professional schools.

The Advanced Education Program in Orthodontics and Dentofacial Orthopedics at the University of Pittsburgh School of Dental Medicine requires a three-year course of study. The goals of the program are to provide an excellent education in the specialty of Orthodontics and Dentofacial Orthopedics, to provide high quality clinical care and to conduct research designed to advance the knowledge of the specialty. The curriculum reflects this mission and provides residents with the necessary knowledge and experience to enter the specialty well prepared for practice. The curriculum is based upon a solid foundation of scientific principles and methods that residents may use as a rational framework for understanding treatment and evaluating future changes in the specialty. The application of basic and clinical scientific knowledge to the practice of orthodontics is the fundamental tenet of the curriculum.

Successful completion of the program leads to a certificate in Orthodontics and Dentofacial Orthopedics, and enables graduates to participate in the American Board of Orthodontics certifying examination. Students may also pursue a course of study leading to a Master of Dental Science degree in Orthodontics and Dentofacial Orthopedics.

The program is made up of complementary components designed to produce well-rounded orthodontists. The components are as follows: clinical training, which prepares the resident for specialty board certification; education from a broad curriculum, which provides residents with greater insight on the nature of orthodontics; and research, which enriches the profession and develops critical thinking.

The curriculum for the Orthodontics and Dentofacial Orthopedics Residency Program is designed to be taught at the postdoctoral level. The path of study followed by the residents comprises a core curriculum of graduate level basic sciences followed by a broad course of study in craniofacial biology, clinical sciences, and orthodontic techniques. A significant portion of the curriculum is devoted to clinical orthodontics allowing the resident to attain proficiency developed through a broad and diverse experience in patient care.

Conferences involving growth and development, dental statistics, occlusion and malocclusion, development of the dentition, dentofacial abnormalities, biomechanical orthodontics, genetics, bone biology, cephalometrics, diagnosis and treatment planning, evidence-based care, surgical orthodontics, practice management, and orthodontic technique provide an excellent foundation in the basic and clinical sciences. Orthodontic conferences and literature review sessions provide opportunities for critical analysis of historical and current literature with application to contemporary orthodontic principles in case diagnosis and treatment planning.

Scholarly activity in the form of basic or clinical research is a fundamental component of the curriculum. Residents design, implement, and complete a research project that provides greater knowledge of the specialty and permit residents to develop the ability to apply the scientific method. This year, two of the Program's graduating residents earned Master of Dental Science degrees. Dr. Corey Shook completed a thesis on **The Role of Prickle1 in the Development of the Pituitary Gland in the Beetlejuice Mouse**, and Dr. Rahman Ullah completed his thesis on **The Role of Prickle 1 in determining the Craniofacial Morphology of Beetlejuice mice**.