



**American Academy of Maxillofacial Prosthetics**  
**70<sup>th</sup> Annual Meeting: October 21 – 24, 2023**  
**Omni San Diego Downtown, San Diego, California**

**Program Speaker – Kenneth Kronstadt**

**Title**

The Orbiting Condyle, Revisited: Exploring the Connections Between the Oral Health of Oncology Patients and Astronauts in Long-Term Microgravity

**Abstract**

An oncology patient and an astronaut may seem to have little in common upon first glance; however, both represent unique populations who face various health challenges in specific environments in which possible treatments may be limited due to situational constraints. As human spaceflight programs have taken steps to return to the moon, to increase flight duration, and to eventually journey to Mars, understanding of biological processes in microgravity and the effect of long-term microgravity on human biology has taken on new dimensions. This presentation will focus on the broad history of oral health and dentistry during the major milestones of spaceflight, review past and current research efforts, and explore the similarities between proposed treatment modalities (preventative, active, and maintenance) for the cancer patient and the astronaut facing an extended journey to deep space in microgravity.

**Biography**

Dr. Kenneth L. Kronstadt is a maxillofacial prosthodontist at Memorial Sloan Kettering Cancer Center. He received his Doctor of Dental Medicine from University of Pennsylvania School of Dental Medicine. He completed a General Practice Residency in the Dental Service of Yale-New Haven Hospital, where he eventually served as an attending. He then completed specialty training in prosthodontics at the Michael E. DeBakey Veterans Affairs Medical Center in Houston, Texas, as well as a Master of Science in Dentistry at University of Texas Health Science Center at Houston School of Dentistry. Having developed a keen interest in maxillofacial prosthetics, he then pursued a fellowship at Memorial Sloan Kettering Cancer Center, eventually accepting a position as an attending and faculty member. While he treats patients with a wide range of oncologic conditions and needs, he has a passion for providing dental implant therapy and related prosthetic rehabilitations; he is actively involved in ongoing research in these areas. Dr. Kronstadt also has a background in classical music and the humanities, and he enjoys being a patron of the arts in New York City.