University of Pittsburgh Medical Center **Department of Otolaryngology**



Marian Mosites Initiative for Personalized Head and Neck Cancer Research

In the Department of Otolaryngology at the University of Pittsburgh, physicians treat patients with cancer of the head and neck. This type of cancer can develop in the mouth, throat, or voice box, affecting more than 50,000 people in the United States each year. Cancer of the head and neck can be attributed to environmental causes, such as tobacco use, or infections of the mouth caused by the proliferation of human papillomavirus (HPV). It can affect the form and function of the face, mouth and throat and is truly a terrible and life-altering disease.

The Department of Otolaryngology intends to not only treat cancers of the head and neck aggressively, but to also understand why one's immune system failed to reject this particular tumor. We will strive to answer why your immune system was weakened, what

For more information on our research, please contact Lawton Snyder, *Executive Director*, Eye & Ear Foundation.

Research donations can be made at **eyeandear.org** or made payable to Eye & Ear Foundation.

Eye & Ear Foundation

203 Lothrop Street, Suite 251 Eye and Ear Institute Pittsburgh, PA 15213 412.864.1300 **0** 412.864.1305 **F Iawtons@eyeandear.org**

For **ENT Clinic** appointments or physician questions, please call 412-647-2100.

weakened it, and how we can turn it back on to work for you. These answers, many times, lie in the unique genetic makeup of each person. Identifying what genetic properties that someone has and the genetic properties of one's tumor can lead to a 'personalized' approach to determining the optimal course of treatment. The more we learn about one's genetic pedigree, and what mutations exist, the more options present themselves for a unique and specialized treatment.

Thanks to a very generous donation from Steven and Marian Mosites, the Marian Mosites Initiative for Personalized Head and Neck Cancer Research was established at the Eye & Ear Foundation of Pittsburgh. Spearheading this Mosites Initiative, Robert Ferris, MD, PhD, Division Chief of Head and Neck Surgery within the Department of Otolaryngology is now screening adults with HPV, a leading cause of head and neck cancer, by taking samples and studying how drugs that are already FDA approved can be used to change the way that HPV cells in humans with different genetic profiles proliferate as non-cancerous conditions. With enhanced screening opportunities in personalized medicine, the perceived inevitability of an invasive surgical removal, chemotherapy and radiation is becoming less and less. One specific goal of these personalized forms of therapies is the reduction of toxic substances and lowered appearance of



Robert L. Ferris, MD, PhD, FACS, Chief, Division of Head and Neck Surgery

negative side effects that often come hand in hand with these traditional treatments. This approach has already proven to be effective in clinical trials, and as enhanced screening practices are adopted, the world will see truly groundbreaking new options for curing cancers of the head and neck.

With this help from the Mosites Family, as well as other Eye & Ear Foundation donors, we are initiating research to provide more effective treatments with less side effects, and ultimately, better outcomes for patients.