

NEWS ON ADVANCES IN THE PREVENTION, DETECTION, AND TREATMENT OF HEAD AND NECK CANCERS

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UPMC Hillman Cancer Center Recruits New Head and Neck Oncologist

By Christine A. Platania Head and Neck SPORE Coordinator, UPMC Hillman Cancer Center



We are pleased to announce the arrival of Dan Zandberg, MD to the Division of Hematology-Oncology in the Department of Medicine at the University of Pittsburgh and UPMC Hillman Cancer Center.

Dr. Zandberg completed his undergraduate degree at the University of Delaware in the Medical Scholars Program then completed his Doctor of Medicine (MD) at Jefferson Medical College. He completed his internship and residency in Internal Medicine at George Washington University Medical Center and went on to complete a fellowship in Hematology-Oncology at the University of Maryland. Following completion of his fellowship, Dr. Zandberg became an Assistant Professor of Medicine and Associate Member of the Tumor Immunology

of Medicine and Associate Mer

and Immunotherapy Program at the University of Maryland Marlene and Stewart Greenbaum Comprehensive Cancer Center.

Dr. Zandberg joins the Hillman Cancer Center as an Associate Professor of Medicine in the Division of Hematology-Oncology, Director of the Head and Neck Cancer and Thyroid Cancer Disease Section in the Division, and Co-Director of the UPMC Hillman Cancer Center Head and Neck Cancer Research Program. His clinical practice and research is focused in head and neck and thyroid cancers. Specifically, Dr. Zandberg's primary research interests are in the development and conduct of novel clinical trials with a focus on immunotherapy, to improve outcomes in head and neck cancer patients. He has extensive experience treating patients with head and neck cancer including with immunotherapy.

"We are excited to have added such a skilled physician and investigator to our team," says Dr. Robert Ferris, Director of the UPMC Hillman Cancer Center.

Looking in the rearview mirror

By Glenn Brooks Cancer survivor gabrooks@yahoo.com

When I was initially asked to write an article for Headway – I immediately had an idea of what I wanted to say, but the question was HOW did I want to say it? Low and behold, my inspiration was found in a rather inconspicuous situation... driving west on I-80.

The drive was mostly normal, random showers with sunshine – typical of a western Pa. spring day. The hour was approaching evening...and I noticed a car tailgating me...and my focus turned to the rearview mirror. I was completely annoyed, practically enraged...but then, without reason, my focus left the mirror and directly in front of me was an amazing skyline... dramatic clouds of all shapes, sizes and altitudes, distinct rays of sun shining through, and a clear highway ahead.

And I realized, my cancer journey was much like this experience – and for that matter, ANY time one is faced with a challenging or unfortunate situation, you have two options – to focus on the rearview mirror (the past) or focus on the windshield (the future).

Now, don't for a second think that I've forgotten those moments from when I heard "squamous cell carcinoma, head and neck cancer, chemotherapy, radiation and HPV positive." Oh no, I won't forget that – as it scared me beyond words can express. And I also won't forget the odd and expected side effects of the treatments – hiccups, nausea, odd smells, and a highly effective weight loss program (said tongue in cheek).

But again, here's the choice I made – after the treatments had ended, after recovery was well-underway and after I was told "there is no cancer present" – to accept the fact, to move on, and to make this

bonus life-time beneficial to others. And I chose to cope with the new "normals" (such as neuropathy, dry mouth, difficulty swallowing, and painful sore throat) of life while fully embracing memories and significant life events that have occurred since April of 2012.

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Since that "all clear" message, I've watched both of my daughters graduate from high school and enroll in college. My wife and I celebrated a milestone 25th wedding anniversary. I've walked my daughter down the aisle at her wedding and welcomed her husband to our family. I've celebrated birthdays and holidays with family and friends. I've taken hikes, day trips and visits to my favorite places. And I've witnessed two Stanley Cup parades, while cheering the Pens from the garage near Smithfield Street.

Of course, it hasn't been all unicorns and rainbows - there have been moments of gut-wrenching sadness. I've said goodbye to two of my cousins taken too soon, as well as family and friends...and a beloved puppy. I've walked alongside my wife, diagnosed with cancer in 2014, and several other guys I've connected with. I've struggled with financial challenges. I've made some poor decisions. I've been told "your position is no longer necessary" – after 7+ years of hard work.

Bottom line – I've experienced the ebbs and flows of life – but the blessing is – I've experienced them...both good and bad, happy and sad – because I live. You can not ignore the past – the challenges and the trials – because they are real, because they happened – no matter how you desire to forget.

It's important to state "yes, the cancer journey is difficult" and at the height of the unpleasantness, it requires your utmost attention and effort. But once those treatments have ended, you have a conscious choice to make – to focus on



Glenn Brooks with his family at his daughter's wedding

that rearview mirror, or, look ahead at what might just be.

Well, for me – though I can still know the past is always there – I think I'll focus forward.

Tips during chemoradiotherapy

By Tami Wasserman-Wincko, MS, CCC-SLP Department of Otolaryngology, University of Pittsburgh Medical Center

Chemoradiotherapy causes early side effects such as ulcerations, thick mucous, pain, dry mouth, and altered taste. These side effects often interfere with swallowing and create challenges during treatment. It is very important to eat and complete swallowing exercises during and after treatment.

Here are some important tips to remember:

- If you are going to be receiving chemoradiotherapy, have your swallowing assessed before you get started. The UPMC Head & Neck Cancer Survivorship Program offers a comprehensive evaluation and will help prepare you for swallowing changes.
- Work with a swallowing therapist. It is important to practice tongue strengthening and range of motion exercises during treatment. Studies have shown that those who eat and exercise do better in the long run.
- Swallowing often becomes effortful during treatment. This is normal. Choose foods that you can swallow easily and those with high calories. A few suggestions: cream soups, high calorie drinks (i.e. Boost, Ensure). If you have special dietary needs, work with a dietitian.
- Don't skip meals. Eating is exercise! Plan and take food with you to chemotherapy. Even if you eat small amounts more frequently, it will help with nutrition and will keep those muscles moving.
- If your tongue is sensitive during treatment, avoid spicy and acidic food and drink.

- Thick mucous is common. Drinking water may help thin and clear the mucous. Follow the instructions given to you by your swallowing therapist.
- Keep your mouth clean. Brush and floss your teeth after every meal. See a dentist for fluoride trays.
- When treatment is over, it's time to look ahead. Follow-up with your swallowing team to discuss your "new normal" and find out what exercises you should be doing for life to maintain function. The UPMC Head & Neck Cancer Survivorship Team is here to help you.

Tami Wasserman-Wincko is a speechlanguage pathologist in the Department of Otolaryngology at UPMC and is part of the UPMC Head and Neck Cancer Survivorship Team. She can be contacted at wassermantl@ upmc.edu or 412-647-6439.

UPMC Head & Neck Cancer Survivorship Clinic is a multidisciplinary clinic that operates on Thursdays in the Eye & Ear Institute, 3rd floor clinic, 203 Lothrop Street, Pittsburgh, Pa. This unique clinic sees patients in all stages of their disease and screens for hearing loss, swallowing difficulties, stiffness, oral health issues, and depression and anxiety. One co-pay is required. At the end of the visit, a detailed summary is provided to the patient and to all treating physicians. For more information, or to make an appointment for an evaluation, please call 412-683-7253.

The UPMC Survivorship Clinic Marathon Team

By Leila J. Mady, MD, PhD, MPH Physician Resident, PGY-5, University of Pittsburgh Medical Center, Department of Otolaryngology - Head and Neck Surgery

There was a lot to celebrate race weekend at the 2018 DICK'S Sporting Goods Pittsburgh Marathon. This year marked the event's 10th Anniversary celebration, with nearly 40,000 participating Runners of Steel! Through the marathon's Run for a Reason program, thousands of charity runners commit to training while raising awareness and money for philanthropic causes. An estimated 3,000 charity runners are expected to raise \$1.5 million this year alone. For the first time, faculty, residents, staff and friends from the University of Pittsburgh Medical Center Department of Otolaryngology - Head and Neck Surgery came together to run as the UPMC Survivorship Clinic Marathon Team, benefiting the Eye & Ear Foundation of Pittsburgh. In its inaugural

year, the UPMC Survivorship Clinic Marathon Team had 35 participants, including 27 runners and 8 volunteers, together raising \$35,330.

Most cancers of the head and neck arise from the cells that line the mucosal surfaces inside the mouth, nose, and throat. Alcohol and tobacco use have been traditionally linked to cancers involving the oral cavity, oropharynx, hypopharynx, and larvnx. However, there has been a growing incidence in tumors involving the tonsils or the base of the tongue that are associated with cancer-causing viruses, specifically human papillomavirus (HPV). HPV-associated oropharyngeal cancer tends to present in younger and healthier individuals. In the United States, oropharyngeal cancers caused by HPV infection are on the rise, while the rates of oropharyngeal cancers related to other causes are decreasing. The treatment to cure head and neck cancer (HNC) is often associated with persistent treatment-related effects, which may limit a patient's function, autonomy, and quality of life. Following recovery from the immediate side effects of therapy, almost every patient finds that their body has been changed forever.

The Department of Otolaryngology at the University of Pittsburgh knew that they had to do more to help patients through their cancer diagnosis and treatment. Survivorship has been described as living with, through, and beyond cancer. According to this definition, cancer survivorship begins at the time of diagnosis. With a goal to eliminate fragmented cancer care, the UPMC Survivorship Clinic was established to empower patients to cope with the substantial life-long consequences of treatment. The Survivorship Clinic is a multi-disciplinary collaboration of nurses, doctors, swallowing therapists, dental medicine, physical therapists, and other healthcare providers, including geriatric and mental health specialists. The overall



For additional topics on the prevention, detection and treatment of cancer, including head and neck cancer, visit http:// www.upmc cancercenters. com/portal_

headneck/publications.cfm for archived issues of Headway.

purpose of the clinic is to increase access to resources and improve quality of life for patients who need help. The UPMC Survivorship Clinic is the first of its kind and seeks to serve as a national mode for comprehensive team-based cancer care.

The UPMC Survivorship Clinic Marathon Team was created to raise awareness and funding to support this new, personalized model of care. Seven half-marathon runners and twenty marathon relay participants, representing four relay teams, coursed through Pittsburgh's neighborhoods, crossed multiple bridges, and over all three rivers to cross the finish line on May 6th. In the running world, the term PR, short for personal record, signifies an athlete's best time in a race. A new PR is often rare and challenging to capture, but when it happens, the accomplishment is a joyous one to celebrate. The UPMC Survivorship Clinic Marathon Team set its own PR, when it almost doubled its initial fundraising goal of \$20,000. Race finishers and volunteers celebrated their journey with a post-race party sponsored by the Sunseri Family. Inspired by the spirit of the race and fueled by a mission to continuously improve patient care, the UPMC Survivorship Clinic Marathon Team has already set its eye on next year's race. After all, it's never too early to start training for a new PR.



The UPMC Survivorship Clinic Marathon Team

Osteoradionecrosis

By Satish Kumar, DMD, MDSc, MS and Antonia Teruel Castellon, DMD, MS, PhD University of Pittsburgh School of Dental Medicine





Dr. Satish Kumar

Castellon

Osteoradionecrosis (ORN) is one of the potentially serious late complications after radiation therapy for head and neck cancers. Radiation therapy causes decreased blood flow to tissues by damaging some small blood vessels in the area of radiation. This leads to a decrease in oxygen which delays healing of tissues - such as healing after tooth extraction. This delay in healing causes death of cells (necrotic process) in the jaw bones. It usually is diagnosed when there is an exposed (\geq 20mm²) and non-healing necrotic jaw bone (>2-6 months) that has been radiated in the past.^{1,2} About 2-15% of patients undergoing radiation therapy seem to be afflicted by this complication and it usually occurs within 3 years after radiation therapy. The lower jaw bone along the back molar teeth area seems to be affected more commonly.

Studying patients with and without ORN in the past, experts have found risk factors that can potentially increase the risk of ORN. Patients with poor dental health before radiation therapy seem to have higher risk of ORN as they often need to undergo dental treatment after radiation therapy. Patients with dental diseases such as cavities and periodontal (gum) diseases necessitating teeth extractions have higher risk of ORN. In fact, any oral surgery that involves the jaw bone, including diagnostic bone biopsies, may increase risk of ORN. Patients who have received very high doses of radiation ranging around 65-70Gy have higher risk of ORN. Radiation therapy often causes dry mouth and limited jaw opening (trismus) due to tightening of jaw muscles and tissues. These can prove very challenging to maintaining good oral hygiene and hence indirectly increase risk of ORN.

Unfortunately, there is no definitive treatment for ORN. Hyperbaric oxygen therapy (HBO) may reduce the risk of osteoradionecrosis after extraction of teeth after radiation therapies. The best way to manage ORN is prevention. Experts recommend that all patients undergo a comprehensive dental examination.⁴ Any treatment, especially those that can lead to higher risk of ORN, such as dental extractions, must be completed before beginning radiation therapy. Large dental cavities or severe periodontal disease need to be treated to maintain these teeth as well. Otherwise these teeth may need extraction in the future, thereby risking ORN.

If dental extraction becomes unavoidable after radiation therapy, your dentist will use procedures and medicines (atraumatic techniques; antibiotics) to minimize risk of ORN. HBO may be recommended though its effectiveness has been uncertain. Some patients may need dental implants to replace missing teeth. The decision whether to proceed with dental implants should be weighed cautiously against the risk of ORN. Experts advise considering dental implants in patients with a relatively low dose of radiation in the jaw bones (<50Gy) after 24 months of completion of radiation therapy. Again, there may be several comorbid factors such as immune status, other medications such as chemotherapy, current oral hygiene status that may increase risk of ORN and the dentist/ periodontist/oral surgeon may be able to assess the risk on an individual basis and advise accordingly.

Maintaining immaculate oral hygiene is important during and after radiation therapy. Following good oral hygiene practices with a soft tooth brush, floss, interproximal brushes, antibacterial mouth rinses and use of fluorides is necessary to prevent dental cavities and periodontal diseases. Cleaning of dentures as advised by your dentist is important to prevent fungal (candida/yeast) infection that can sometime harbor in these dentures. Please see your dentist regularly for routine and specialized dental care for prevention and management of cancer complications.

¹ Marx RE. A new concept in the treatment of osteoradionecrosis. J Oral Maxillofac Surg, 41 (1983), pp. 351-357.

² Shaw R, et al. Refining the definition of mandibular osteoradionecrosis in clinical trials: The cancer research UK HOPON trial (Hyperbaric Oxygen for the Prevention of Osteoradionecrosis). Oral Oncol. 2017 Jan;64:73-77.

³ Bennett MH, et al. Hyperbaric oxygen therapy for late radiation tissue injury. Cochrane

Database Syst Rev. 2016 Apr 28;4: CD005005. ⁴ Buglione M, et al. Oral toxicity management in head and neck cancer patients treated with chemotherapy and radiation: Dental pathologies and osteoradionecrosis (Part 1) literature review and consensus statement. Crit Rev Oncol Hematol. 2016 Jan;97:131-42

The role of family caregivers

By Alexis Hahn, MA and Donna Posluszny, PhD Center for Counseling and Cancer Support (CCCS) and Biobehavioral Oncology Program, UPMC Hillman Cancer Center

Family caregivers play a vital role as they provide the person with cancer with both practical and emotional support. Caregivers may be spouses or partners, family members, or friends who are often not paid and not trained for the caregiving job. Caregivers may have a variety of responsibilities including: providing support and encouragement, giving medications, scheduling appointments, providing a ride to appointments, paying bills, assisting with meals, helping with daily chores, bathing, grooming, or dressing the person, and/or trying to keep other family members and friends informed of what is happening. Often the family caregiver keeps the household running while the patient receives or recovers from cancer treatment.

According to the American Cancer Society (ACS), good communication with the person you are caring for, along with involving the patient as much as possible, promotes optimal health and well-being. It may be difficult for the patient to take part in decision-making or activities of daily living due to the effects of cancer treatment. Here are some tips to help care for the patient:

- Help them live life as normal as possible
- Encourage them to share their feelings and be a support for them along the way
- · Allow them to decide when they need help
- Try to be realistic, flexible, and creative with solving problems
- Respect the person's need to be alone

You may find that the person you are caring for may be acting differently withdrawn, angry, or sad. They may be shielding you from how they are feeling because they may not want you to worry. Let the person know that you are open to listening and to talking with them about their feelings.

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Head & neck cancer support groups

- A cancer support group, primarily for head and neck cancer patients, family members, and caregivers meets the first Wednesday of each month at UPMC Cancer Center, Upper St. Clair, 200 Oxford Drive, Suite 500, Bethel Park, Pa. To register, call 412-622-1212.
- Department of Otolaryngology Head & Neck Cancer Support Group Meetings are held the first Tuesday of each month from 2:30-3:30 pm, Eye & Ear Institute, 203 Lothrop Street, 5th floor, Pittsburgh, Pa. Contact: Tami Wasserman-Wincko at wassermantl@upmc.edu, 412-647-6439.
- Let's Talk Laryngectomy Support Group Meetings are held the first Tuesday of each month at 7:00 pm, Forbes Regional Hospital, 2570 Haymaker Road, Monroeville, Pa. Contact: Rich Boguszewski at rbogos@gmail.com or Dan Evans at djevans222d@gmail.com. https://LetsTalkGroupPgh.wixsite.com/LaryngectomyHelp

Speaking up: voice restoration following total laryngectomy

Danielle M. Columbe, MA, CCC-SLP

Communication with spoken word is often the primary means of connecting with others. When one has a cancer of the larynx (voice box), a surgical procedure called a total laryngectomy may be necessary to remove the voice box and results in the loss of one's ability to speak. Following the surgery, individuals no longer breathe through their mouth or nose, but rather through an opening in the neck called a stoma. Adapting to the feelings and functions of the new anatomy can take some time and the loss of one's voice can be an emotional one.

The Speech-Language Pathology Division here at UPMC has a specialized team of clinicians trained in treating patients in regaining the ability for their voice to be heard once again. Options for communication following the surgery include use of an electrolarynx (an electric wand type device held to the neck or used with an oral adapter to create vibrations), esophageal speech (similar to swallowing air and belching), Alternative Augmentative Communication (devices which speak written text) and the mostly widely used tracheoesophageal speech.

A tracheoesophageal puncture (TEP) may be performed during or after the total laryngectomy and is a procedure where a puncture is made to create a tract between the trachea (breathing tube) and the esophagus (swallowing tube). This puncture allows a small device

> called a voice prosthesis to be placed. The voice prosthesis is a one-way valve which, when breathing and covering the

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stoma, directs the passage of air through the puncture via the voice prosthesis. The tissues of the esophagus become the vibratory source of the air passing up through the oral cavity and allow a person to create voicing. The one way function of the valve also prevents any food and liquid from entering the airway.

Voice prostheses are not permanent or a one time device. They are meant to be replaced once they begin to deteriorate. As the voice prosthesis begins to fail, it is common while drinking liquids to notice dripping from the center of the voice prosthesis into the lungs, referred to as aspiration. When this leaking occurs, it requires replacement of the voice prosthesis to prevent aspiration. Factors which help to promote optimal voicing and longer voice prosthesis device life include: daily cleaning of the voice prosthesis and airway, frequent oral care, diet modification, management of reflux disease and even consideration for swallowing difficulties.

Heat and Moisture Exchange (HME) systems are invaluable to keeping the airway covered and restoring the necessary humidification in managing mucous production via the stoma. When clinically appropriate, the Speech-Language Pathologist can assist patients toward tracheoesophageal voicing via a voice prosthesis with use of a hands-free device to allow voicing without the need to digitally occlude the stoma.

While the care and maintenance of a voice prosthesis and adapting to a new method of speech production can be overwhelming at first, restoring the ability for one's voice to be heard is priceless. In our clinic, the TEP Speech team regularly sees 220+ individuals who are managed for voicing via TE Speech following a total laryngectomy. Whether it be to address leaking through or around the voice prosthesis, difficulties with TE voicing or any other questions surrounding speaking or swallowing after a total laryngectomy, the SLPs at UPMC are here to support and encourage every step of the way toward voice restoration. We are located in the ENT Clinic in Oakland. Appointments are scheduled Monday-Friday during clinic hours. The phone number is 412-647-2100.

Local and national support groups are available for individuals, caregivers and providers during the transition into the new way of life and for many years to come. Such groups serve as wonderful outlets to share similar experiences, challenges, helpful tips and incredible success stories with those whose lives have been touched on the path to voice restoration following total laryngectomy.

The role of family caregivers *continued from page 4*

Cancer affects not only the person with cancer, but also the person's caregiver and loved ones. Caring for someone with cancer can be a stressful experience. The caregiver must also take care of themselves during this process. This includes keeping to normal routines as much as possible, getting enough exercise and sleep, and eating well. Below are some tips to ensure that you (the caregiver) are taking care of yourself:

- Engage in activities you enjoy
- Spend time with family and friends
- Think about joining a support group for caregivers
- Give yourself credit for what you've done
- Try meditation, yoga, music, or deep breathing to relax
- Learn to say "no" when asked to do something that you do not want to do
- Give yourself permission to express your feelings
- Share responsibilities. Don't try to be the sole caretaker. Involve others and let them also provide caregiving support

The American Cancer Society and National Cancer Institute can provide information, resources, and support for those diagnosed with cancer and for caregivers caring for someone with cancer. The phone number for American Cancer Society is 800-277-2345 and the number for the National Cancer Institute is 1-800-4-CANCER (1-800-422-6237)

Swallowing Disorders Center

The UPMC Swallowing Disorders Center is dedicated in helping patients with swallowing problems as they undergo treatment for head and neck cancer. Early intervention with swallowing exercises has been linked to better quality of life outcomes. It is highly recommended that patients be seen by the swallowing team to begin a therapy program as soon as the plan for treatment has been identified.

The process begins with a swallowing evaluation to assess baseline swallowing function and to identify if posture changes, swallowing strategies, and/or diet modification will help the patient swallow better. While some patients require a feeding tube during the course of treatment, the ultimate goal is to return to eating and drinking as soon as possible. We provide assistance during the transition from a modified diet or tube feedings back to a regular diet. When returning to a regular diet is not possible, we help to develop an individualized plan to take certain foods or liquids safely.

We recently completed a study in which weekly questionnaires were given to eleven patients as they underwent chemo-radiation therapy to help us better understand what patients experience during the phases of treatment. This type of information is helping us tailor our therapy approaches to achieve better outcomes. For most, increased difficulty with swallowing occurs toward the end of treatment and may even last a few weeks after the completion of treatment. Once patients are feeling better, the goal is to re-establish the exercise program and begin aggressive intervention so patients can return to an oral diet safely. The team is also participating in a multi-center study involving a special device to exercise the tongue. The device measures baseline tongue pressures so patients can improve strength with practice and meet specific target goals. Grip strength assessments are also being used in the center to determine if there is a relationship between weakness and dysphagia (difficulty swallowing).

The UPMC Swallowing Disorders Center has two locations:

- UPMC Eye & Ear Institute (Oakland) 412-647-6461
- UPMC Shadyside 412-621-0123

Clinical trials

For more information about head and neck clinical trials, contact Amy at 412-864-1728 or Denise at 412-864-3759.

Contact information

American Cancer Society	1-800-227-2345
Assistance with Coping	
Cancer Caring Center	412-622-1212
Cancer Information and Referral Services	
Clinical Trials 412-864-1728 or 412-864-3759	
Eye & Ear Foundation	412-383-8756
Face2Face Healing	1-844-323-4325
Family Care Giver Education and Support	
Gumberg Family Library	412-623-4733
Head and Neck Cancer Support Group	
Heart and Hands Ministry	
Hopwood Library at UPMC Shadyside	
Hyperbaric Oxygen Treatment	412-647-7480
Our Clubhouse	
Pain and Supportive Care	
Prostate Cancer Support Group	
Satchels of Caring Foundation	412-841-1289
Swallowing Disorders Center	
UPMC Eye & Ear Institute (Oakland)	
UPMC Shadyside	
UPMC Division of Sleep Surgery	
Mercy	
Monroeville	
American Cancer Society website	www.cancer.org
Head and Neck Cancer	
Program websiteUPMCHillman.com/headandneck	

Head and Neck Cancer Program website

Looking for more information about patient services, current research, clinical trials, news and events, and other valuable information pertaining to head and neck cancers? Check out the website for the Head and Neck Program of UPMC Hillman Cancer Center at UPMCHillman.com/headandneck.

Head and Neck Oncology Eye & Ear Institute 203 Lothrop St., Ste. 300 Pittsburgh, PA 15213 412-647-2100

Head and Neck Cancer Program UPMC Hillman Cancer Center 5150 Centre Ave. Pittsburgh, PA 15232 412-647-2811

Robert L. Ferris, MD, PhD

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