PROfiles *in Head and Neck Surgery*

Volume 9, Issue I September 2015

Letter for Physicians • Department of Head and Neck Surgery • The University of Texas MD Anderson Cancer Center

Mission Statement

The mission of the Department of Head and Neck Surgery is to deliver the highest possible clinical care for patients with head and neck cancer, to lead the world in head and neck oncologic research and cancer prevention, and to educate the future leaders in the field.

On the inside
New Fellows3
Blazing the Trail through No-Man's Land4
New Faculty Profiles 6
PROfiles Publications8
Hats Off11
Faculty and Areas of Interest12

Chairman's Note

In this issue of PROfiles we highlight our multidisciplinary MD Anderson Skull Base Tumor Program. With the approach to the surgical treatment of head and neck tumors moving from large open access, open field surgery to minimal access surgery, it has been the vision of the Department of Head and Neck Surgery at The University of Texas MD Anderson Cancer Center to develop a cutting-edge program that provides advanced, yet safe, minimal access surgery for patients with tumors of the skull base.

In order to build a program that encompasses the new approaches of this advanced and complex surgery it was fundamental to create a foundation built on skill, expertise and innovative technology. Development of a comprehensive multidisciplinary skull base program was accomplished by recruiting a neurosurgeon, **Shaan** Raza, MD adept at both open and endoscopic surgery, partnership with well-trained and experienced head and neck endoscopic surgeons who are well versed in the oncologic principles of cancer management, and incorporating advanced technology in image guidance capabilities.

The result is our state of the art Skull Base Tumor Program codirected by **Ehab Y. Hanna, MD, FACS,** an internationally recognized skull base surgeon in both open techniques and minimal access approaches and **Franco DeMonte, MD, FACS,** professor of neurosurgery at MD



Randal S. Weber, MD

Anderson. Dr. Hanna is supported by a skilled team of endoscopic surgeons including, Michael E. Kupferman, MD FACS, who specializes in both open and endoscopic approaches to tumors of the skull base, with a focus in minimally invasive techniques, Shirley Y. Su, MD, FRACS, from the Royal Australasian College of Surgeons, who completed our Head and Neck Surgery Fellowship and obtained additional training in the newest techniques in endoscopic skull base surgery at the University of Pittsburgh and Paul Gidley, MD, FACS, who specializes in hearing loss, lateral skull base tumors, temporal bone cancers and acoustic neuromas.

In parallel with our clinical expertise, the MD Anderson Proton Therapy Center—with the introduction of intensity modulated proton therapy (IMPT)—provides some significant treatment advantages over

Chairman continued from page 1

conventional proton beam therapy, especially for treating skull base tumors. The skull base region is one of the ideal sites for IMPT because it delivers a precise dose of radiation to the tumor, thereby avoiding excessive dose to vital structures such as the optic nerve, the carotid artery, and the brain.

The components are fully integrated to make it possible for us to provide the safest, most progressive treatment for our patients with tumors of the skull base. The goal, of course, is to achieve the best possibility of cure, minimize the likelihood of significant complications and hopefully return the patients to their activities of life and daily living.

Recent recruitments

We have successfully recruited several new faculty who bring expertise in transoral robotic surgery, skull base surgery, oral oncology, ophthalmology and research.

Neil Gross, MD, joined the faculty as associate professor. He has significant experience in head and neck ablative surgery, endocrine surgery of the head and neck, and trans-oral surgery of the larynx and oropharynx via a robotic approach.

Shirley Y. Su, MBBS, FRACS, was appointed assistant professor. She has formal training in oncological surgery as well as open and expanded endoscopic skull base procedures. She is involved in building a head and neck tertiary referral practice at our MD Anderson Clear Lake Regional Care Center and participates in oversight of our Survivorship Program at the main campus.

Alex Won, DDS, was appointed assistant professor in the Section of Oral Oncology and Maxillofacial Prosthodontics. He was accepted in the Oral Oncology and Maxillofacial Prosthodontics Fellowship Program at MD Anderson in 2014, spending his year in clinical instruction. His research is focused on the area of oral outcomes and performance measures

Cynthia Tung, MD, was appointed assistant professor, in the Section of Ophthalmology. She is an outstanding clinician with a long-standing interest in dry eye and ocular surface disease. She received her undergraduate degree in Biological Sciences at Cornell University in Ithaca, New York and her medical degree at the University of Rochester School of Medicine. Her research is directed toward objectively quantifying the tear film dimensions in patients with chronic and acute graft vs. host disease.

Curtis Pickering, PhD, was appointed assistant professor, serving as a full-time laboratory researcher. He came to MD Anderson as the first fellow in a new post-doctoral fellowship training program, the TRIUMPH Program in Translational Research, where he helped lead an ambitious head and neck cancer genomics project. His expertise in translational genomics makes him a critical part of the Department of Head and Neck Surgery as we move into the era of cancer genomics and personalized medicine.

Accomplishments and upcoming events

We are hosting the second bi-annual "Value Based Head and Neck Cancer Care Symposium" in November 2016. In conjunction with the symposium, the department will host Current Concepts in Head and Neck Surgery, in partnership with the University of Toronto and Memorial Sloan-Kettering Cancer Center. U.S. News & World Report ranked the Department of Head and Neck Surgery fifth among ear, nose & throat departments in its 2015-2016 survey. This ranking reflects the strength and excellence of our patient care, educational programs, and research.

Fellowship match

The results of the 2016 head and neck surgical oncology fellowship match have been announced. Joining the fellowship program are Ashley Mays, MD, from Wake Forest in Winston-Salem, North Carolina; Samantha Tam, MD, from Queens University in Kingston, Ontario, Canada; and Marietta Tan, MD, from Johns Hopkins in Baltimore, Maryland. This year's fellows were chosen from a selective list of highly qualified candidates. We look forward to having them join our research and clinical training programs in 2016.

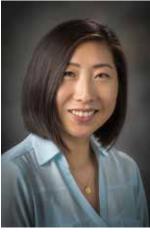
Randal S. Weber, MD

Chairman, Department of Head and Neck Surgery MD Anderson Cancer Center John Brooks Williams and Elizabeth Williams Distinguished University Chair in Cancer Medicine

New Fellows

In fellows are participating in the multiple fellowship opportunities offered by the Department of Head and Neck Surgery for the 2015-2016 academic year. The fellowships provide advanced training in both clinical practice and translational and basic science research, preparing participants to meet challenges and opportunities alike in the years to come.

The Advanced Head and Neck Surgical Oncology Fellowship one-year clinical tract has two new fellows, Harold Heah, MBBS and Vlad Sandulache, MD, PhD.



Sun "Jamie" Ahn, MD



Steven B. Chinn, MD



Alicia Estrella, DMD



Ryan Goepfert, MD



Vlad Sandulache, MD, PhD



Harold Heah, MBBS



Natalie Silver, MD



Byung Joo Lee, DDS



Angela Wong, DMD

Both Drs. Heah and Sandulache will be spending this strictly clinical year in Head and Neck Surgery. Dr. Heah is also a fellow candidate from Singapore whom we are excited to have joining us outside of the AHNS match.

We currently have two fellows, Sun "Jamie" Ahn, MD and Steven B. Chinn, MD, in the Advanced Head and Neck Surgical Oncology and Reconstruction Fellowship, which is offered jointly by the Departments of Head and Neck Surgery and Plastic Surgery. Dr. Ahn is beginning her first year in Head and Neck Surgery while Dr. Chinn will be spending his second year of the program with the Department of Plastic Surgery.

Ryan Goepfert, MD and Natalie Silver, MD are both in the two-year combined research and clinical HNS tract of the Advanced Head and Neck Surgical Oncology Fellowship. Dr. Goepfert will dedicate this entire first year to clinical research with Katherine Hutcheson, PhD. Dr. Silver is beginning the second half of her fellowship with a clinical year in Head and Neck Surgery.

Participating in the Maxillofacial Prosthetics and Oncologic Dentistry Fellowship are Alicia Estrella, DMD; Byung Joo Lee, DDS and Angela Wong, DMD.

Blazing the Trail through No-Man's Land MD Anderson's Skull Base Tumor Program

By Joanne Salt

eep within the skull between the base of the brain and the upper neck lies the skull base, an area once considered inaccessible to surgeons. Benign and malignant tumors found in this "no-man's land", as it was commonly called, were considered unreachable with little hope for a cure. Since the advent of the first Skull Base Society in 1990, formed by collaboration between head and neck surgeons and neurosurgeons, great strides in this relatively new surgical specialty have been made. The result has been a remarkable change in outcomes – 60 years ago the five-year survival rate for skull base cancer patients was less than 30% – today a remarkable 70% of patients are surviving five years or more.

Disease that invades this complex area of the skull has the potential to threaten such critical functions as cognitive ability, seeing, hearing, breathing, swallowing and speaking, and demands a far-reaching treatment approach. The University of Texas MD Anderson Cancer Center has answered this demand with its multidisciplinary Skull Base Tumor Program. The program, which has tripled in size over the last decade, is a pioneer in the field of skull base surgery offering expert surgical techniques, tailor-made treatment options, state of the art technology, and unparalleled research.

Multidisciplinary team

At the core of the MD Anderson Skull Base Tumor Program is the multidisciplinary team of head and neck surgeons, neurosurgeons, neurootologists, plastic surgeons, radiation oncologists, medical oncologists, pathologists, diagnostic radiologists and rehabilitation specialists. This multidimensional group of specialists works in tandem to provide the best possible outcomes for patients who are diagnosed with the rare and complex tumors of the skull base.

"We want people to be able to function normally after this surgery – speak normally, hear normally, see normally, eat normally – this is vital. In order to accomplish this our team of surgeons, including neurosurgeons, reconstructive vascular plastic surgeons and neuro-otologists, work meticulously to ensure the optimal functional outcome is met so that the quality of life for our patients is not comprised," said Dr. Ehab Y Hanna, MD, FACS, program co-director. "These are very important aspects of our program."

Comprehensive treatment options

There are many different types of tumors that occur in the skull base region including chordomas (cancerous bone tumors at the base of the skull), meningiomas (aggressive tumors that originate in the lining of the brain and are usually benign) and acoustic neuromas (noncancerous tumors that develop on the nerve that connects the inner ear with the brain). More commonly, tumors extend to the skull base from nearby sites such as the nasal cavity, sinuses, orbit, or salivary glands.

Due to the complexity of these tumors and the areas affected within the skull base, it is extremely important that treatment options are specifically tailored to the individual.

"Individualizing care can only happen if you have the full menu of options available to you. The old saying is that if you only have a hammer in your hand then everything looks like a nail," said Hanna. "We use a multitude of approaches in dealing with tumors of the skull base including open and endoscopic surgery, intensity modulated proton therapy (IMPT), stereotactic radiation and other nonsurgical techniques. Because of the comprehensive menu of treatment options available to us, we can pick and choose the treatment for each individual patient. It is not just which treatments they receive, but how they are sequenced that is so important. "

Endoscopic, or minimally invasive, surgical techniques to remove cancerous and benign tumors of the skull base have increased over the last decade. The tumor is accessed through the nasal cavity, minimizing the trauma associated with the open approach and providing surgeons the ability to perform complex procedures with fewer complications, decreased rehabilitation and lower morbidity.

MD Anderson is leading the way in this arena having reported the largest number of malignant skull base tumors treated with the minimally invasive approach to date in North America.

"One advantage of the endoscopic treatment of skull base tumors is that we are able to reach a lot of hard to reach areas through the nose. This means that patients can have biopsies of suspicious lesions much more easily, giving us an opportunity to operate on a higher amount of benign tumors, thus decreasing the morbidity," said Shirley Y. Su, MD, FRACS, assistant professor of head and neck surgery.

While there are definitive advantages to using minimally invasive techniques



to treat skull base tumors, it is not a one-size-fits-all surgical solution.

"Minimal access surgery is definitely an option for some patients, however it might not always be the answer for all, due to the size or location of the tumor," said Hanna. "While we are always trying to minimize the intensity, toxicity and side effects of treatment, we cannot compromise the cure rates, the cure possibilities or the potential for cure. For some patients the decision to go with an open approach is the best approach for them."

Targeted technology

Another important aspect of the program is the medical and radiation oncology components that offer highly innovative drug therapy and targeted radiation to treat skull base tumors. One element of this arsenal is intensity modulated proton

Photo by F. Carter Smith

therapy (IMPT), a targeted radiation treatment that delivers precise, conformal radiation to the tumor. This requires adequately dosing the tumor, while simultaneously sparing the surrounding healthy tissue – a feat that requires specialty training and skill.

"The area of the skull base has a lot of high-stakes real estate including the brain, the optic nerve and the cranial nerves," said Hanna. "Radiation damage to these areas causes cognitive problems, blindness, and brain problems. It is important to target the radiation. This target, or sweet spot, is accessed by accurate planning and advanced technology, but most importantly it is targeted by the expert - it is not the IMPT machine, it is the man or the woman behind the machine. Our experts specialize in head and neck tumors, they know the anatomy, they know what to avoid, and they know what and how much to dose. That is what sets us apart."

Research

The basic and translational research component of the program is focused on reaching a better understanding of the biology of these tumors through continued genomic research. By integrating technology through the use of robotics, precise radiation and new active drugs in a multidisciplinary fashion MD Anderson aims to improve the outcome, minimize the morbidity and tailor the treatment for skull base tumors based on genomic characteristics.

Great strides have been made in this area including the isolation of the first-ever cell line of Sinonasal Undifferentiated Carcinoma (SNUC), one of the most deadly types of skull base tumors. This discovery has unlocked the future study of SNUC in the laboratory and in animal models.

MD Anderson researchers have also designed the first-ever mouse model of skull base tumors which has opened the door to studying skull base tumors in vivo to explore new treatment options.

The MD Anderson Skull Base Tumor Program is a comprehensive, multidisciplinary program dedicated to the treatment of all skull base tumors, from the benign to the malignant, dwelling in the anterior, middle and posterior of the skull base in both pediatric and adult patients via open, endoscopic surgical and non-surgical approaches. It has tripled in faculty as well as in number of procedures performed over the last 7 years, with 200 skull base cases a year in 2007 to over 700 in 2014, with 30% of those done via minimal access. Six surgeons make up the surgical team dedicated to skull base tumors program co-directors, Ehab Y Hanna, MD, FACS, and Franco DeMonte, MD, FACS; and faculty consisting of Paul Gidley, MD, FACS, Michael E. Kupferman, MD, FACS, Shaan Raza, MD, and Shirley Y. Su, MD, FRACS.

New Faculty Profiles



Yunyun Chen, PhD, joined our faculty in November 2013 as an instructor. Dr. Chen's expertise is in the areas of cell biology, molecular

biology, pharmacology and animal model techniques.

Dr. Chen received her doctoral degree from the Tsinghua University Department of Biological Sciences and Biotechnology in Beijing, China, in 2007. She served as a postdoctoral fellow in the Department of Neurology at University of Texas Medical Branch and then transferred to MD Anderson as a postdoctoral fellow in the Department of Neurosurgery, transferring to the Department of Head and Neck Surgery in 2009. Dr. Chen has been critical in the establishment of both an oral tongue and thyroid orthotopic xenograft mouse model as preclinical platforms for assessment of targeted therapeutic agents. She has continued to evaluate other targeted therapy agents, including a microRNA that specifically targets EGFR, AKT1 and mTOR in head and neck squamous cell carcinoma.



Shirley Y. Su, MBBS, FRACS joined our

faculty in October 2013 as an assistant professor. Dr. Su was awarded her medical

degree from Monash University, Melbourne, Victoria, Australia. She received her residency training and board certification in otolaryngology from the Royal Australasian College of Surgeons. She completed a clinical fellowship in head and neck oncological surgery at MD Anderson followed by an additional one year fellowship in open and minimally invasive endoscopic skull base surgery at the University of Pittsburgh Medical Center, a leader and pioneer in this field.

Dr. Su has formal training in oncologic surgery as well as open and expanded endoscopic skull base procedures. Dr. Su is a member of the American Head and Neck Society and the North American Skull Base Society. She has received several awards during her career and authored multiple peerreviewed publications. She is dedicated to providing the highest quality care to patients with head and neck tumors and skull base disorders. Her research interests include minimally invasive surgery, cancers of the nose, sinuses and cranial base.

Dr. Su is involved in building a head and neck tertiary referral practice at our MD Anderson Clear Lake Regional Care Center and participates in oversight of our Survivorship Program at the main campus.



Yoko Takahashi, PhD, research instructor, joined our faculty in February 2014. Dr. Takahashi served as a senior research

assistant in the Department of Head and Neck Surgery, focusing on basic and translational research for understanding and characterizing the molecular characteristics of sinonasal and skull base cancers. Dr. Takahashi established the first-ever cell line for a patient with sinonasal undifferentiated carcinoma. This novel cell line allowed our laboratory to characterize molecular markers and biological behaviors of this very aggressive tumor. This undoubtedly will open much needed and anticipated translational research for these deadly tumors that until now could not be studied in the laboratory. This is a significant milestone which has been recognized worldwide.



Dr. Ruth Aponte-Wesson, DDS, MS, joined our faculty in February 2014 as associate professor in the Section of

Oral Oncology and Maxillofacial Prosthodontics. Dr. Aponte-Wesson obtained her undergraduate degree from La Presentación, Mérida, Venezuela, where she graduated with a Bachelor of Science in Biological Sciences. She graduated from the Universito of Los Andes Mérida, Venezuela, where she earned a Doctórate of Dental Sugerí. She received her postgraduate training in advanced prosthodontics at the University of Alabama (UAB) School of Dentistry, where she subsequently completed her maxillofacial prosthodontics training and obtained her Master of Science in Maxillofacial Biotechnology. She served as the director of the Maxillofacial Prosthetics Program at UAB from 2010 to 2013 and is board certified by the American Board of Prosthodontics.

Dr. Aponte Wesson has extensive interest in the promotion of the oral oncology specialty and maxillofacial engineering through the advancement of academic and clinical excellence in patient care, education, and evidencebased medicine.



Curtis Pickering, PhD,

joined the department in April 2014 as an assistant professor, serving as a full-time laboratory researcher.

He completed his graduate school training at the University of California at San Francisco. He came to MD Anderson as the first fellow in a new post-doctoral fellowship training program, the TRIUMPH Program in Translational Research, where he helped lead an ambitious head and neck cancer genomics project. His expertise in translational genomics makes him a critical member of the Department of Head and Neck Surgery Basic and Translational Research Program as we move into the era of cancer genomics and personalized medicine.



Nikhil Chari, PhD, joined our faculty in April 2014 as an instructor. He brings his expertise in the molecular biology of

cancer, specifically in the area of epithelial biology, to our Head and Neck Cancer Pre-clinical Research Program.

Dr. Chari obtained his doctoral degree from The University of Texas Health Science Center at Houston and MD Anderson, Graduate School of Biomedical Sciences.

He is conducting research on the role of microRNA regulation in head and neck squamous cell carcinomas (HNSCC). His expertise is in signal transduction, transcriptional regulatory systems and tumor biology. His research identified novel interactions between the hedgehog family and the TP63/TP53 network that have potential roles in cancer progression.



Kristina R. Dahlstrom,

PhD, joined our faculty in June 2014 as an instructor to support the MD Anderson Oropharynx Program,

funded through the \$10 million gift from Charles and Daneen Stiefel to the MD Anderson Head and Neck Cancer Program. Dr. Dahlstrom will support Erich M. Sturgis, MD, MPH, Oropharynx Program director and leader of the program's Public Advocacy and Prevention Section. Dr. Dahlstrom will help to develop a collaborative framework to increase HPV vaccination rates in the Houston metropolitan area and statewide. Additionally, she will have responsibility for demographic and epidemiologic studies of HPV-related oropharyngeal cancer.

Dr. Dahlstrom completed her postdoctoral fellowship at McGill University. She has many years of training and work experience at MD Anderson and The University of Texas School of Public Health. Her interests are to reduce the burden of HPV on society and promote this area of research.



Neil Gross, MD, joined our faculty in September 2014 as an associate professor. Dr. Gross received his undergraduate

degree in Biology, with honors, from Washington University in Saint Louis, followed by his medical degree at Oregon Health and Science University (OHSU) in 1998. Following his internship he was a resident in otolaryngology at OHSU. He went on to a fellowship in head and neck surgery and oncology at Memorial Sloan-Kettering Cancer Center from 2003-2005. A portion of his fellowship was devoted to training in research. He is board certified in otolaryngology. In 2006 Dr. Gross was appointed as assistant professor in the Department of Otolaryngology Head and Neck Surgery at OHSU and in 2011 he was promoted to associate professor.

Dr. Gross has significant experience in head and neck ablative surgery, endocrine surgery of the head and neck, and transoral surgery of the larynx and oropharynx via a robotic approach. During his fellowship at Memorial Sloan-Kettering Cancer Center he participated in a number of clinical trials in collaboration with radiation oncology and the division of gastroenterology department of medicine. He conducted an important study on venous thromboembolism incidence and prevention at OHSU which has important implications for preventing this serious complication in surgical patients.



Alexander Won, DDS, joined our faculty in July 2015 as an assistant professor in the Section of Oral Oncology and Maxillofacial

Prosthodontics. Dr. Won obtained his degree in dentistry from Meharry Medical College in Nashville, followed by a degree in prosthodontics at the University of California San Francisco. He was accepted in the Oral Oncology and Maxillofacial Prosthodontics Fellowship Program at MD Anderson in 2014, spending his year in clinical instruction.

He was the recipient of the 2009 American College of Prosthodontics Achievement Award and the 2009 Hanau Best of the Best Award for Excellence Prosthodontics. Dr. Won's research interest is the area of oral outcomes and performance measures.



Cynthia Tung, MD

joined our faculty in August 2015 as an assistant professor, in the Section of Ophthalmology. She

received her undergraduate degree in Biological Sciences at Cornell University in Ithaca, New York and her medical degree at the University of Rochester School of Medicine. Dr. Tung is an outstanding clinician with a long-standing interest in dry eye and ocular surface disease.

Her research is directed toward defining the characteristics of the tear film and ocular surface in patients with acute and chronic graft versus host disease.

Publications

Zhou G, Wang J, Zhao M, Xie TX, Tanaka N, Sano D, Patel AA, Ward AM, Sandulache VC, Jasser SA, Skinner HD, Fitzgerald AL, Osman AA, Wei Y, Xia X, Songyang Z, Mills GB, Hung MC, **Caulin C,** Liang J, Myers JN. Gain-offunction mutant p53 promotes cell growth and cancer cell metabolism via inhibition of AMPK activation. Mol Cell. 2014 Jun 19;54(6):960-74. doi: 10.1016/j.molcel.2014.04.024. Epub 2014 May 22. PubMed PMID: 24857548; PubMed Central PMCID: PMC4067806. IF=14.018

Savar A, Acin S, Gonzalez CL, El-Sawy T, Mejia O, Li Z, Esmaeli B, Lacy-Hulbert A, El-Naggar AK, McCarty JH, **Caulin C.** Loss of epithelial p53 and αvintegrin cooperate through Akt to induce squamous cell carcinoma yet prevent remodeling of the tumor microenvironment. Oncogene. 2015 Jan 22;34(4):516-24. doi: 10.1038/onc.2013.585. Epub 2014 Jan 27. PubMed PMID: 24469034; PubMedCentral PMCID: PMC4303549. IF=8.459

Li X, Moses RE, Jin J, Cao W, **Caulin C.** Stresses, aging, and age-related disorders. Oxid Med Cell Longev. 2014;2014:320564. doi: 10.1155/2014/320564. Epub 2014 Dec 30. PubMed PMID: 25610525; PubMed Central PMCID: PMC4293784. IF=3.516

Rao NG, Trotti A, Kim J, Schell MJ, Zhao X, Amdur RJ, Brizel DM, **Chambers MS**, Caudell JJ, Miyamoto C, Rosenthal DI. Phase II Multicenter Trial of Caphosol for the Reduction of Mucositis in Patients Receiving Radiation Therapy for Head and Neck Cancer. Oral Oncol 81(2, Supplement):S75, 8/2014. e-Pub 6/2014. PMID: 24954065.

Ch'ng S, Skoracki RJ, Selber JC, Yu P, Martin JW, Hofstede TM, **Chambers MS**, Liu J, Hanasono MM. Osseointegrated Implant Based Dental Rehabilitation in Head and Neck Reconstruction Patients. Head Neck. e-Pub 12/2014. PMID: 25546139.

Tamí-Maury I, Aigner CJ, Hong J, Strom S, **Chambers MS**, Gritz ER. Perception of tobacco use prevention and cessation among faculty members in Latin American and Caribbean dental schools. J Cancer Educ 29(4):634-41, 12/2014. e-Pub 1/2014. PMCID: PMC4082477 Fornage BD, Edeiken BS, **Clayman GL.** Use of transoral sonography with an endocavitary transducer in diagnosis, fine-needle aspiration biopsy, and intraoperative localization of retropharyngeal masses. AJR Am J Roentgenol. 2014 May;202(5):W481-6. doi: 10.2214/ AJR.13.11398. PubMed PMID: 24758683. IF=2.731

Henderson YC, Toro-Serra R, Chen Y, Ryu J, Frederick MJ, Zhou G, Gallick GE, Lai SY, **Clayman GL.** Src inhibitors in suppression of papillary thyroid carcinoma growth. Head Neck. 2014 Mar;36(3):375-84. doi: 10.1002/ hed.23316. Epub 2013 Jun 1. PubMed PMID: 23729178; PubMed Central PMCID: PMC4401074. IF=2.641

Ahn SH, Henderson YC, Williams MD, Lai SY, **Clayman GL**. Detection of thyroid cancer stem cells in papillary thyroid carcinoma. J Clin Endocrinol Metab. 2014 Feb;99(2):536-44. doi: 10.1210/jc.2013-2558. Epub 2013 Dec 3. PubMed PMID: 24302752; PubMed Central PMCID: PMC3913805. IF=6.209

Gillenwater AM, Vigneswaran N, Fatani H, Saintigny P, El-Naggar AK. Proliferative verrucous leukoplakia (PVL): a review of an elusive pathologic entity! Adv Anat Pathol. 2013 Nov;20(6):416-23. doi: 10.1097/ PAP.0b013e3182a92df1. Review. PubMed PMID: 24113312. IF=3.229

Gillenwater AM, Vigneswaran N, Fatani H, Saintigny P, El-Naggar AK. Proliferative verrucous leukoplakia: recognition and differentiation from conventional leukoplakia and mimics. Head Neck. 2014 Nov;36(11):1662-8. doi: 10.1002/hed.23505. Epub 2014 Aug 28. Review. PubMed PMID: 24115154. IF=2.641

Hellebust A, Rosbach K, Wu JK, Nguyen J, Gillenwater A, Vigneswaran N, Richards-Kortum R. Vital-dye-enhanced multimodal imaging of neoplastic progression in a mouse model of oral carcinogenesis. J Biomed Opt. 2013 Dec;18(12):126017. doi: 10.1117/1. JBO.18.12.126017. PubMed PMID: 24362926; PubMed Central PMCID: PMC3869894. IF=2.859 Raza SM, Ramakrishna R, Weber RS, Kupferman ME, **Gidley PW,** Hanna EY, DeMonte F. Nonmelanoma cutaneous cancers involving the skull base: outcomes of aggressive multimodal management. J Neurosurg. 2015 Apr 24:1-8. [Epub ahead of print] PubMed PMID: 25909577.

Lambert EM, Garden AS, DeMonte F, Roberts DB, **Gidley PW.** Radiation-associated malignancies of the ear canal and temporal bone. Laryngoscope. 2015 May;125(5):1198-204. doi: 10.1002/lary.25071. Epub 2014 Dec 4. PubMed PMID: 25476255.

Gombos DS; Principles of Cryotherapy; Clinical Ophthalmic Oncology 2nd Edition.Takiar V, Gombos DS, Mourtada F, Rechner LA, Lawyer AA, Morrison WH, Garden AS, Beadle BM. Disease control and toxicity outcomes using ruthenium eye plaque brachytherapy in the treatment of uveal melanoma. Pract Radiat Oncol. 2014 Jul-Aug;4(4):e189-94. doi: 10.1016/j. prro.2013.08.004. Epub 2013 Sep 25. PubMed PMID: 25012839.

Kim MM, Dabaja BS, Medeiros J, Kim S, Allen P, Chevez-Barrios P, **Gombos DS**, Fowler N. Survival Outcomes of Primary Intraocular Lymphoma: A Single-institution Experience. Am J Clin Oncol. 2014 Jan 2. [Epub ahead of print] PubMed PMID: 24390272 IF=3.062

Gombos DS; Principles of Cryotherapy; Clinical Ophthalmic Oncology 2nd Edition

Gelbard A, Hale KS, Takahashi Y, Davies M, Kupferman ME, El-Naggar AK, Myers JN, **Hanna EY.** Molecular profiling of sinonasal undifferentiated carcinoma. Head Neck. 2014 Jan;36(1):15-21. doi: 10.1002/hed.23267. Epub 2013 Apr 30. PubMed PMID: 23633104; PubMed Central PMCID: PMC3874284. IF=2.641

Gross ND, Bauman JE, Gooding WE, Denq W, Thomas SM, Wang L, Chiosea S, Hood BL, Flint MS, Sun M, Conrads TP, Ferris RL, Johnson JT, Kim S, Argiris A, Wirth L, Nikiforova MN, Siegfried JM, Grandis JR. Erlotinib, erlotinib-sulindac versus placebo: a randomized, double-blind, placebo-controlled window trial in operable head and neck cancer. Clin Cancer Res. 2014 Jun 15;20(12):3289-98. doi:10.1158/1078-0432.CCR-13-3360. Epub 2014 Apr 11. PubMed PMID: 24727329; PubMed Central PMCID: PMC4104657. IF=8.772

D'Souza G, **Gross ND**, Pai SI, Haddad R, Anderson KS, Rajan S, Gerber J,Gillison ML, Posner MR. Oral human papillomavirus (HPV) infection in HPV-positive patients with oropharyngeal cancer and their partners. J Clin Oncol. 2014 Aug 10;32(23):2408-15. doi: 10.1200/JCO.2014.55.1341. Epub 2014 Apr 28. PubMed PMID: 24778397; PubMed Central PMCID: PMC4263818. IF=18.428

Patel SA, Magnuson JS, Holsinger FC, Karni RJ, Richmon JD, **Gross ND**, Bhrany AD, Ferrell JK, Ford SE, Kennedy AA, Méndez E. Robotic surgery for primary head and neck squamous cell carcinoma of unknown site. JAMA Otolaryngol Head Neck Surg. 2013 Nov;139(11):1203-11. doi: 10.1001/ jamaoto.2013.5189. PubMed PMID: 24136446. IF=1.794

Bell D, Saade R, Roberts D, Ow TJ, Kupferman M, DeMonte F, **Hanna EY.** Prognostic utility of Hyams histological grading and Kadish-Morita staging systems for esthesioneuroblastoma outcomes. Head Neck Pathol. 2015 Mar;9(1):51-9.doi: 10.1007/s12105-014-0547-3. Epub 2014 May 8. PubMed PMID: 24806334; PubMed Central PMCID: PMC4382491.

Takahashi Y, Bell D, Agarwal G, Roberts D, Xie TX, El-Naggar A, Myers JN, **Hanna EY.** Comprehensive assessment of prognostic markers for sinonasal squamous cell carcinoma. Head Neck. 2014 Aug;36(8):1094-102. doi: 10.1002/hed.23423. Epub 2013 Oct 26. PubMed PMID: 23836481. IF=2.641

Awan MJ, Mohamed AS, Lewin JS, Baron CA, Gunn GB, Rosenthal DI, Holsinger FC, Schwartz DL, Fuller CD, **Hutcheson KA**. Late radiation-associated dysphagia (late-RAD) with lower cranial neuropathy after oropharyngeal radiotherapy: A preliminary dosimetric comparison. Oral Oncol 50(8):746-52, 8/2014. e-Pub 6/2014. PMCID: PMC4158823.

Setton J, Lee NY, Riaz N, Huang SH, Waldron J, O'Sullivan B, Zhang Z, Shi W, Rosenthal DI, **Hutcheson KA,** Garden AS. A multiinstitution pooled analysis of gastrostomy tube dependence in patients with oropharyngeal cancer treated with definitive intensitymodulated radiotherapy. Cancer 121(2):294-301, 1/2015. e-Pub 10/2014. PMID: 25286832. Smith BG, **Hutcheson KA**, Little LG, Skoracki RJ, Rosenthal DI, Lai SY, Lewin JS. Lymphedema outcomes in patients with head and neck cancer. Otolaryngol Head Neck Surg 152(2):284-291, 2/2015. e-Pub 11/2014. PMCID: PMC4397961.

Monroe MM, Pattisapu P, Myers JN, **Kupferman ME.** Sentinel Lymph Node Biopsy Provides Prognostic Value in Thick Head and Neck Melanoma. Otolaryngol Head Neck Surg. 2015 Jun 12. pii: 0194599815589948. [Epub ahead of print] PubMed PMID: 26070510.

Takiar V, Ma D, Garden AS, Li J, Rosenthal DI, Beadle BM, Frank SJ, Fuller CD, Gunn GB, Morrison WH, Hutcheson K, El-Naggar AK, Gold KA, **Kupferman ME**, Phan J. Disease control and toxicity outcomes for T4 carcinoma of the nasopharynx treated with intensity modulated radiotherapy. Head Neck. 2015 May 20. doi:10.1002/hed.24128. [Epub ahead of print] PubMed PMID: 25994561.

Raza SM, Ramakrishna R, Weber RS, **Kupferman ME,** Gidley PW, Hanna EY, DeMonte F. Nonmelanoma cutaneous cancers involving the skull base: outcomes of aggressive multimodal management. J Neurosurg. 2015 Apr 24:1-8. [Epub ahead of print] PubMed PMID: 25909577.

Wu X, Bhayani MK, Dodge CT, Nicoloso MS, Chen Y, Yan X, Adachi M, Thomas L, Galer CE, Jiffar T, Pickering CR, Kupferman ME, Myers JN, Calin GA, **Lai SY.** Coordinated targeting of the EGFR signaling axis by microRNA-27a*. Oncotarget.2013 Sep;4(9):1388-98. PubMed PMID: 23963114; PubMed Central PMCID: PMC3824521. IF=6.359

Sandulache VC, Chen Y, Lee J, Rubinstein A, Ramirez MS, Skinner HD, Walker CM, Williams MD, Tailor R, Court LE, Bankson JA, Lai SY. Evaluation of hyperpolarized [1-¹³C]pyruvate by magnetic resonance to detect ionizing radiation effects in real time. PLoS One. 2014 Jan 27;9(1):e87031. doi: 10.1371/ journal.pone.0087031. eCollection 2014. PubMed PMID: 24475215; PubMed Central PMCID: PMC3903593. IF=3.234

Monroe MM, **Lai SY.** Sentinel lymph node biopsy for oral cancer: supporting evidence and recent novel developments. Curr Oncol Rep. 2014 May;16(5):385. doi: 10.1007/s11912-014-0385-1. Review. PubMed PMID: 24633882. IF=2.891 Awan MJ, Mohamed AS, **Lewin JS**, Baron CA, Gunn GB, Rosenthal DI, Holsinger FC, Schwartz DL, Fuller CD, Hutcheson KA. Late radiation-associated dysphagia (late-RAD) with lower cranial neuropathy after oropharyngeal radiotherapy: A preliminary dosimetric comparison. Oral Oncol 50(8):746-52, 8/2014. e-Pub 6/2014. PMCID: PMC4158823.

Smith BG, Hutcheson KA, Little LG, Skoracki RJ, Rosenthal DI, Lai SY, **Lewin JS**. Lymphedema outcomes in patients with head and neck cancer. Otolaryngol Head Neck Surg 152(2):284-291, 2/2015. e-Pub 11/2014. PMCID: PMC4397961.

Frank SJ, Cox JD, Gillin M, Mohan R, Garden AS, Rosenthal DI, Gunn GB, Weber RS, Kies MS, **Lewin JS**, Munsell MF, Palmer MB, Sahoo N, Zhang X, Liu W, Zhu XR. Multifield optimization intensity modulated proton therapy for head and neck tumors: a translation to practice. Int J Radiat Oncol Biol Phys. 2014 Jul 15;89(4):846-53. doi: 10.1016/j. ijrobp.2014.04.019. Epub 2014 May 24. PubMed PMID: 24867532; PubMed Central PMCID: PMC4171724 IF=4.258.

Zhang Y, Sturgis EM, Dahlstrom KR, Wen J, Liu H, Wei Q, Li, G. et al. Telomere length in peripheral blood lymphocytes contributes to the development of HPVassociated oropharyngeal carcinoma. Cancer Res 2013;73(19):5996-6003, PubMed PMID:23928994; PMCID: PMC3790860.

Song X, Sturgis EM, Huang Z, Li X, Li C, Wei Q, **Li G.** Potentially functional variants of p14ARF are associated with HPVpositive oropharyngeal cancer patients and survival after definitive chemoradiotherapy. Carcinogenesis 35 2013;(1):62-8, PubMedPMID:3025847; PMCID: PMC387194.

Zhang C, Sturgis EM, Zheng H, Song X, Wei P, Jin L, **Li G.** et al. Genetic variants in TNF-α promoter are predictors of recurrence in patients with squamous cell carcinoma of oropharynx after definitive radiotherapy. Int J Cancer 2013;134(8):1907-15, PubMedPMID:3025847; PMCID: PMC3947426.

Ch'ng S, Skoracki RJ, Selber JC, Yu P, Martin JW, Hofstede TM, Chambers MS, Liu J, Hanasono MM. Osseointegrated Implant Based Dental Rehabilitation in Head and Neck Reconstruction Patients. Head Neck. e-Pub 12/2014. PMID: 25546139. Myers JN, Kies Me; Chemotherapy and Targeted Biologic Agents for Head and Neck Squamous Cell Carcinoma Cummings Otolaryngology: Head & Neck Surgery; Volume/Issue Number 6.

Pickering CR, Ow TJ, **Myers, JN;** Sequencing HNC Emergence of Notch Signaling; Molecular Determinants of Head and Neck Cancer.

Monroe MM, **Myers JN;** Targeted Therapy in Head and Neck Squamous Cell Carcinoma; Targeted Therapy in Translational Cancer Research.

Gadhikar MA, Sciuto MR, Alves MV, Pickering CR, **Osman AA**, Neskey DM, Zhao M, Fitzgerald AL, Myers JN, Frederick MJ. Chk1/2 inhibition overcomes the cisplatin resistance of head and neck cancer cells secondary to the loss of functional p53. Mol Cancer Ther. 2013 Sep;12(9):1860-73. doi: 10.1158/1535-7163.MCT-13-0157. Epub 2013 Jul 9. PubMed PMID: 23839309; PubMed Central PMCID: PMC3955083. IF=5.683

Zhou G, Wang J, Zhao M, Xie TX, Tanaka N, Sano D, Patel AA, Ward AM, Sandulache VC, Jasser SA, Skinner HD, Fitzgerald AL, **Osman AA**, Wei Y, Xia X, Songyang Z, Mills GB, Hung MC, Caulin C, Liang J, Myers JN. Gain-offunction mutant p53 promotes cell growth and cancer cell metabolism via inhibition of AMPK activation. Mol Cell. 2014 Jun 19;54(6):960-74. doi:

10.1016/j.molcel.2014.04.024. Epub 2014 May 22. PubMed PMID: 24857548; PubMed Central PMCID: PMC4067806. IF=14.018

Chuang HC, Yang LP, Fitzgerald AL, **Osman AA**, Woo SH, Myers JN, Skinner HD. The p53-reactivating small molecule RITA induces senescence in head and neck cancer cells. PLoS One. 2014 Aug 13;9(8):e104821. doi: 10.1371/ journal.pone.0104821. eCollection 2014. PubMed PMID: 25119136; PubMed Central PMCID: PMC4132078 IF=3.234

Pickering CR, Zhang J, Neskey DM, Zhao M, Jasser SA, Wang J, Ward A, Tsai CJ, Ortega Alves MV, Zhou JH, Drummond J, El-Naggar AK, Gibbs R, Weinstein JN, Wheeler DA, Wang J, Frederick MJ, Myers JN. Squamous cell carcinoma of the oral tongue in young non-smokers is genomically similar to tumors in older smokers. Clin Cancer Res. 2014 Jul 15;20(14):3842-8. doi: 10.1158/1078-0432. CCR-14-0565. Epub 2014 May 29. PubMed PMID: 24874835; PubMed Central PMCID: PMC4102633.

Hah JH, Zhao M, **Pickering CR**, Frederick MJ, Andrews GA, Jasser SA, Fooshee DR,Milas ZL, Galer C, Sano D, William WN Jr, Kim E, Heymach J, Byers LA, Papadimitrakopoulou V, Myers JN. HRAS mutations and resistance to the epidermal growth factor receptor tyrosine kinase inhibitor erlotinib in head and neck squamous cell carcinoma cells. Head Neck. 2014 Nov;36(11):1547-54. doi: 10.1002/hed.23499. Epub 2014 Mar 20. PubMed PMID: 24123531; PubMed Central PMCID:PMC4010580.

Pickering CR, Shah K, Ahmed S, Rao A, Frederick MJ, Zhang J, Unruh AK, Wang J,Ginsberg LE, Kumar AJ, Myers JN, Hamilton JD. CT imaging correlates of genomic expression for oral cavity squamous cell carcinoma. AJNR Am J Neuroradiol. 2013 Sep;34(9):1818-22. doi: 10.3174/ajnr.A3635. Epub 2013 Jun 13. PubMed PMID: 23764725.

Xu L, Tang H, El-Naggar AK, Wei P, **Sturgis EM.** Genetic variants in DNA doublestrand break repair genes and salivary gland carcinoma susceptibility. PLoS One 2015 Jun 2; 10(6): e0128753. PMID: 26035306.

Dahlstrom KR, Anderson KS, Cheng JN, Chowell D, Li G, Posner M, **Sturgis EM.** HPV serum antibodies as predictors of survival and progression among patients with HPV-positive squamous cell carcinoma of the oropharynx. Clinical Cancer Research 2015;21(12):2861-2869. PMID: 26078432.

Xu L, Tang H, Chen DW, El-Naggar AK, Wei P, **Sturgis EM.** Genome-wide association study identifies common genetic variants associated with salivary gland carcinoma and its subtypes. Cancer 2015;(in press) [2015 Mar 30, Epub ahead of print] PMID: 25823930.

Li J, Perlaky L, Rao P, **Weber RS**, El-Naggar AK. Development and characterization of salivary adenoid cystic carcinoma cell line. Oral Oncol. 2014 Oct;50(10):991-9. doi: 10.1016/j. oraloncology.2014.06.012. Epub 2014 Jul 30.PubMed PMID: 25086988. IF=3.607

Frank SJ, Cox JD, Gillin M, Mohan R, Garden AS, Rosenthal DI, Gunn GB, **Weber RS,** Kies MS, Lewin JS, Munsell MF, Palmer MB, Sahoo N, Zhang X, Liu W, Zhu XR. Multifield optimization intensity modulated proton therapy for head and neck tumors: a translation to practice. Int J Radiat Oncol Biol Phys. 2014 Jul 15;89(4):846-53. doi: 10.1016/j. ijrobp.2014.04.019. Epub 2014 May 24. PubMed PMID: 24867532; PubMed Central PMCID: PMC4171724. IF=4.258

Ang KK, Zhang Q, Rosenthal DI, Nguyen-Tan PF, Sherman EJ, **Weber RS,** Galvin JM,Bonner JA, Harris J, El-Naggar AK, Gillison ML, Jordan RC, Konski AA, Thorstad WL, Trotti A, Beitler JJ, Garden AS, Spanos WJ, Yom SS, Axelrod RS. Randomized phase III trial of concurrent accelerated radiation plus cisplatin with or without cetuximab for stage III to IV head and neck carcinoma: RTOG 0522. J Clin Oncol. 2014 Sep 20;32(27):2940-50. PubMed PMID: 25154822; PubMed Central PMCID: PMC4162493.

Henderson YC, Toro-Serra R, Chen Y, Ryu J, Frederick MJ, **Zhou G,** Gallick GE,Lai SY, Clayman GL. Src inhibitors in suppression of papillary thyroid carcinoma growth. Head Neck. 2014 Mar;36(3):375-84. doi: 10.1002/ hed.23316. Epub 2013 Jun 1. PubMed PMID: 23729178; PubMed Central PMCID: PMC4401074. IF=2.641

Zhou G, Wang J, Zhao M, Xie TX, Tanaka N, Sano D, Patel AA, Ward AM, Sandulache VC, Jasser SA, Skinner HD, Fitzgerald AL, Osman AA, Wei Y, Xia X, Songyang Z, Mills GB, Hung MC, Caulin C, Liang J, Myers JN. Gain-offunction mutant p53 promotes cell growth and cancer cell metabolism via inhibition of AMPK activation. Mol Cell. 2014 Jun 19;54(6):960-74. doi: 10.1016/j.molcel.2014.04.024. Epub 2014 May 22. PubMed PMID: 24857548; PubMed Central PMCID: PMC4067806. IF=14.018

Ren G, Hu J, Wang R, Han W, Zhao M, **Zhou** G, Zhang C, Zhang Z. Rapamycin inhibits Toll-like receptor 4-induced pro-oncogenic function in head and neck squamous cell carcinoma. Oncol Rep. 2014 Jun;31(6):2804-10. doi: 10.3892/or.2014.3134. Epub 2014 Apr 11. PubMed PMID: 24737049. IF=2.301



Theresa Hofstede DDS, associate professor of oral oncology, was the recipient of the Young Alumni Award of Distinction from the Schulich School of Medicine and Dentistry Western University, London, Ontario, Canada.

Dan Gombos, MD, professor and chief of Ophthalmology Section, received the Senior Achievement Award from the American Academy of Ophthalmology Society. He has been appointed to the Board of Directors of the American Association of Ocular Oncology and Pathology.

Erich Sturgis, MD, received endowed position: the Christopher and Susan Damico Chair for Viral Associated Malignancies.

Randal Weber, MD, was elected as president of the American Board of Otolaryngology.

Mark Chambers, DMD, MS, was elected president of the American Academy of Maxillofacial Prosthetics.

Mark Zafereo, MD, was elected president of the Houston Society of Otolaryngology — Head and Neck Surgery.

Ehab Hanna, MD, served as the president of the North American Skull Base Society 2013-2014. It is the mission of the NASBS to support, coordinate, and enhance efforts to generate scientific information useful to specialists in the care of diseases of the skull base.

Gary Clayman, MD, was the winner of the 2014 Cattlemen for Cancer Research Hero Award. The Hero Award honors an MD Anderson clinician or researcher for outstanding contributions to the care of patients from Central Texas.

Charlie Schreiner, APN, received the 2014 Excellence in Advance Practice Nursing Award from the MD Anderson Cancer Center.

Promotions

Carlos Caulin, PhD was promoted to associate professor.

Abdullah Osman, PhD was promoted to assistant professor.

Accolades

The Department of Head and Neck Surgery was ranked by U.S. News & World Report as fifth in the nation out of 738 hospitals for ear, nose & throat. This ranking reflects the strength and excellence of our patient care, educational programs, and research.

Charles and Daneen Stiefel, of Raleigh, N.C., pledged \$10 million to the Head and Neck Cancer Center at The University of Texas MD Anderson Cancer Center. In honor of their generosity, the head and neck center is named the Charles and Daneen Stiefel Center for Head and Neck Cancer.

The University of Texas MD Anderson Cancer Center Department of Head and Neck Surgery Unit 1445/710085-40-100171-33 1515 Holcombe Blvd Houston, Texas 77030

Non-Profit Org. U.S. Postage PAID Permit No. 7052 Houston, TX

Faculty and Areas of Interest

Randal S. Weber, MD, Chairman Skin cancer, salivary gland tumors,thyroid, parathyroid

Ruth Aponte-Wesson, DDS *Oral and facial rehabilitation*

Richard C. Cardoso, DDS, MS Oral morbidities of cancer therapy

Carlos Caulin, PhD Molecular mechanisms of and genetic alterations in head and neck cancer

MarkS. Chambers, DMD, MS Xerostomia, osteoradionecrosis, mucositis

Gary l.Clayman, DMD, MD *Thyroid, parathyroid*

Mitchell J. Frederick, PhD Antiogenesis, chemotaxis, transcription factors, proteinase inhibitors

Paul W.Gidley, MD Ear, temporal bone, lateral and posterior skull base

Ann M. Gillenwater, MD Oral cavity, thyroid, salivary gland, skin

Dan Gombos, MD Ocular oncology Neil Gross, MD Robotic surgery (TORS),oropharynx cancer, skin cancer

Ehab Y.Hanna, MD Skull base, orbit, thyroid, salivary glands

Amy C. Hessel, MD Oral cavity, larynx, pharynx, salivary gland, thyroid

Theresa M. Hofstede, DDS Maxillofacial prosthodontics, implant rehabilitation, radiation-induced xerostomia

Katherine A. Hutcheson, PhD Swallowing, late effects, survivorship, alaryngeal voice restoration

Michael E.Kupferman, MD Skull base, thyroid, skin, salivary glands

Stephen Y. Lai, MD, PhD Salivary gland, larynx, thyroid/parathyroid, oral cavity

Jan S. Lewin, PhD Voice and swallowing rehabilitation/restoration

Carol M. Lewis, MD, MPH Skin cancer and melanoma, cancer of the oral cavity, pharynx and larynx,thyroid Guojun Li, MD, PhD, MSc Molecular and clinical epidemiology

Jack W. Martin, DDS, MS Oral rehabilitation/restoration, oral premalignant lesions

Jeffery N. Myers, MD, PhD Oral cavity, melanoma

Kristen B. Pytynia, MD, MPH *Thyroid, epidemiology*

Erich M. Sturgis, MD, MPH *Head and neck sarcomas*

Shirley Y. Su, MD Skull base, skin, thyroid, salivary gland

Cynthia Tung, MD Ocular oncology

Mark Zafereo, MD Salivary gland tumors, melanoma, thyroid and parathyroid

Ge Zhou, PhD, MS

PROfiles *in Head and Neck Surgery*

Department of Head and Neck Surgery

Chairman Randal S. Weber, MD

Faculty Advisor, *PROfiles* Randal S. Weber, MD

Managing Editor, *PROfiles* Joanne Salt

*my*Giving

The head and neck surgery team continuously strives to improve treatment and outcomes for our patients. If you are interested in supporting our research efforts through a donation, then contact the MD Anderson Development Office at 713-792-3450 or 800-525-5841. Please specify that you would like to direct your donation to head and neck surgery.

You may also visit MD Anderson's Development Office website at https://www.mdanderson.org/gifts

Contact us

Phone 713-792-6920

E-mail headandnecksurgery@mdanderson.org

> Visit us at http://www.mdanderson.org/ departments/headandneck