Pamela Klusack is in the business of love. She performs weddings, leading happy couples into wedded bliss. So when a tickle in her throat and dry cough began to impact her work, she didn’t hesitate to see her doctor.

It took five years and five physicians to determine that Pamela’s right vocal cord was the culprit of her problems. “The third ENT noticed a cyst on my right vocal cord and immediately referred me to Dr. Hogikyan,” Pamela says.

In February 2012, Norman D. Hogikyan, M.D., FACS, performed a laryngeal videostroboscopy, revealing an abnormal mass severely distorting the majority of her right true vocal cord. The nature of the mass could not be determined by office evaluation alone, so a CT scan was ordered. The results demonstrated a large submucosal cartilage-based mass of the thyroid cartilage of the larynx. Dr. Hogikyan performed an endoscopic biopsy of the mass. To everyone’s surprise, the biopsy determined the mass to be an osteoblastoma of the thyroid cartilage – an extremely rare lesion.

“As the saying goes, Pamela was treated for several different horses, but it turned out she had a zebra the whole time,” Dr. Hogikyan says.

Faced with a rare diagnosis and a patient who relied heavily on her voice in both her personal and professional lives, Dr. Hogikyan had a difficult decision to make.

“This tumor was fundamentally benign but behaved much like a cancer in terms of how it disrupted the framework of her larynx,” Dr. Hogikyan says. “Completely resecting the tumor while trying to preserve laryngeal function presented a tremendous surgical challenge. We needed to tailor an operation to include aspects of a laryngeal cancer resection and yet attempt to preserve vital voice-producing internal laryngeal structures.”

Pamela was up for the challenge, understanding the surgical team would enter surgery not knowing exactly what needed to be resected to remove the tumor.
FROM THE CHAIR

Every day, I have the distinct pleasure of working with an excellent team. We continue to serve the region, state and nation by providing patient- and family-centered care. I am delighted to again provide news of our department to you – our alumni, friends and supporters.

This newsletter gives you an in-depth look at our Division of Laryngology, Rhinology & General Otolaryngology, known around the department as LaRGO. This division boasts some of the best physicians in the field – physicians who are committed to stretching their minds in order to make room for new, innovative treatments in order to give our patients the Michigan Difference.

Our department family continues to grow as we welcome our new interns and fellows. You will learn more about these individuals later in this newsletter. We also welcomed two new faculty members: Gregory J. Basura, M.D., Ph.D., and Kelly M. Malloy, M.D., FACS. Dr. Basura joins our department having completed our Otology/Neurotology and post-doctoral research fellowships. His appointment is 50 percent clinical with the Division of Otology/Neurotology and 50 percent with the Kresge Hearing Research Institute. Dr. Malloy joins us from the University of Pennsylvania Health System. A graduate of our Head and Neck Oncology Fellowship, we are thrilled to have her back at U-M.

I am excited to share news of our Charles J. Krause Endowed Professorship. Thanks to approximately 80 individuals and/or families who acted on this opportunity, we have reached the level of funding required to begin the professorship process! That being said, it is not too late to give. If you wish to be a part of this important effort, please don’t hesitate to contact me.

In all, it has been a dynamic time for our department, which continues its commitment to providing exemplary clinical care, training the next generation of leaders in the field and shaping the future of research and patient care in otolaryngology.

Warm regards,

Carol R. Bradford, M.D., FACS
Chair, Department of Otolaryngology-Head and Neck Surgery
Professor, Otolaryngology, U-M Medical School

Taming a Medical Zebra (cont.)

“I knew it might not work, but I at least had to try. I am so thankful Dr. Hogikyan understood how important my voice is to me and was willing to think outside of the box,” says Pamela.

Dr. Hogikyan approached Pamela’s tumor through the neck, like he would for a partial laryngectomy for cancer. He dissected the internal laryngeal structures off the cartilage framework to preserve them before resecting the tumor and associated cartilage. A key determinant of her voice outcome would be whether he could maintain proper attachments of her vocal cords to the remaining laryngeal framework. The margin of the tumor was very close to a vital point at the front of the larynx. By designing incisions that encompassed the tumor but maintained key attachment points, the vocal cords and vocal function were preserved.

“It was an exciting moment in the operating room when we had the tumor free and could see that the voice-producing structures were intact,” Dr. Hogikyan says.

Today Pamela is back to doing weddings, with her voice intact.

“Pamela brings much joy to couples through her professional work. It is very gratifying for me to see her return to and thrive in her profession,” Dr. Hogikyan says. “This is what we hope to do as physicians and surgeons – enable patients to move on from a disease or injury and live life as it was meant to be for them and for their families. I like to think Pamela’s operation is representative of what we call the Michigan Difference here at U-M.”
Novel Therapies in Hereditary Hemorrhagic Telangiectasia (HHT) Treatment

HHT is a rare genetic disorder characterized by the presence of multiple telangiectases and arteriovenous malformations (AVMs) lacking intervening capillaries, resulting in direct connections between arteries and veins. These direct connections can be fragile and rupture, causing bleeding. Individuals with HHT may have telangiectases in the nose and on the face, hands and mouth. They may also have AVMs in the lungs, gastrointestinal tract, liver and brain.

Ninety-five percent of HHT patients have frequent epistaxis. Although many patients can manage their epistaxis with humidification and nasal lubricants, others experience more severe epistaxis, requiring regular medical attention. Until recently, treatment for telangiectases in the nose has been limited to cautery, laser ablation, septal dermoplasty and nasal closure. The two most widely used treatments, cautery and laser ablation, are short-term solutions, reducing or preventing epistaxis for just three to 18 months, requiring repeated interventions and trips to the operating room. This makes it difficult for patients to enjoy normal professional and social lives.

To provide better care for our patients, Melissa A. Pynnonen, M.D., Jeffrey E. Terrell, M.D., and Mark A. Zacharek, M.D., FACS, from our LaRGO division offer novel treatment methods with improved results.

Sotradecol (Sodium Tetradecyl Sulfate) Injections

Sotradecol is injected directly into the nasal AVMs. Sotradecol is a sclerosing agent. When injected intravenously, it causes inflammation of the inner layer of the vein, clotting and occlusion, therefore preventing epistaxis. Dr. Pynnonen is the first from our department to offer this treatment. She injects the Sotradecol directly into the nasal AVMs, which takes about 15 minutes and is done in the clinic. Patients experience minimal pain and are happy to avoid going to the operating room. To date, this off-label therapy prevents epistaxis for two to three months before repetition is necessary. Although repeated intervention is necessary, patients enjoy a significant decrease in epistaxis.

Avastin (Bevacizumab)

Avastin is an angiogenesis inhibitor commonly used to treat certain cancers. Over the last year, we have used Avastin to successfully treat HHT epistaxis. Drs. Terrell and Zacharek administer the initial treatment in the operating room. Patients receive full anesthesia and Avastin is injected submucosally throughout the anterior nasal cavity. Typically, patients see a substantial reduction in epistaxis frequency and severity for six months to a year. When bleeding resumes, patients transition to Avastin nasal spray. For individuals with severe epistaxis, the impact of this treatment is profound. In one case, a patient had severe epistaxis requiring 24 transfusions. After receiving limited cautery and Avastin, his epistaxis became a rare, minor occurrence. His hemoglobin rose substantially, and he required no transfusions for five months.

Thalomid (Thalidomide)

Originally used to treat pregnancy morning sickness in the 1950s-60s, Thalomid is an angiogenesis inhibitor today used to treat leprosy and multiple myeloma. Due to its ability to slow the growth of new blood vessels, Thalomid is also indicated for the treatment of HHT. Given the risks associated with pregnancy, Dr. Zacharek offers the treatment to a limited patient population. Women who are either pregnant or of child-bearing age are not offered the treatment, nor are individuals early in the disease’s onset. Instead, Dr. Zacharek recommends Thalomid to men and women 50 years of age or older, as their HHT tends to be more severe due to the disease’s natural progression. We’ve seen great success, with patients experiencing few, intermittent epistaxis and doubling their hemoglobin in just a few months.

Providing Patient-Centered Care

Given the range in severity of epistaxis in patients with HHT, there is no single best treatment. Instead, our physicians evaluate each patient on a case-by-case basis to determine which approach is best, whether it’s a more standard approach or one of these novel therapies. This allows us to provide patient-centered care that can be adapted over time as the disease progresses.

With HHT’s ability to affect so many systems of the body, multidisciplinary clinical efforts are important. Our department works closely with U-M pulmonologists, geneticists, radiologists, gastroenterologists, neurosurgeons, neurologists and dermatologists to proactively manage our HHT patients. We look forward to strengthening these relationships in the future as we work towards the common goal of effectively and efficiently treating and educating these complex patients.

Patty Ruzgis and Dr. Pynnonen during a follow-up visit.

“I have seen a significant decrease in nosebleeds and transfusions, and my hemoglobin is much higher. Now I have the energy to exercise, which I couldn’t do before.”

Patty Ruzgis receives Sotradecol injections once a month for management of her HHT. Now several months into treatment, Patty reports positive results.
It is a pleasure to feature good news, so let me start by sharing special recognition recently bestowed upon our team. Susan E. Shore, Ph.D., received the 2012 Collegiate Research Professorship from the Office of the Vice President for Research for her work in advancing the field of tinnitus research. Thomas E. Carey, Ph.D., received the 2012 Distinguished Clinical and Translational Research Mentor Award from the Michigan Institute for Clinical & Health Research for both his exemplary research and impactful mentoring. Finally, the Raphael lab staff received a UMHS Making a Difference Award for their exceptional care of research animals. Congratulations to all!

In April we enjoyed our annual Lawrence-Hawkins Lecture Day, which honors the legacy of our founding fathers, Merle Lawrence and Joe Hawkins. The event featured a lecture by a distinguished KHRI alumnus and scientific presentations by our students and fellows. This year’s Lawrence-Hawkins Lecturer was Andrew Forge, Ph.D., a friend of the KHRI since 1985 and now professor at the Ear Institute, University College London, United Kingdom. Dr. Forge presented on both his current scientific pursuits and earlier work, outlining his ties to the KHRI.

Presentations made by fifteen of our current trainees demonstrated the impressive breadth and depth of research carried out in our department.

Our research continues to catch public attention through University press releases. Dr. Shore’s studies on tinnitus, which provide new evidence that touch-sensing nerve cells may fuel tinnitus (published in the Journal of Neuroscience), were highlighted in February. The international collaboration with the Schacht lab to develop efficacious antibiotics devoid of the common side effects of ototoxicity was recognized in June (published in the Proceedings of the National Academy of Science).

Talking about research, we cannot ignore the highly-competitive funding environment. Fortunately, the KHRI holds its ground with grants to individual faculty laboratories and two overarching programs: a NIH-sponsored training grant for students and post-doctoral fellows, led by David C. Kohrman, Ph.D., and a P30 Research Center grant, led by Richard A. Altschuler, Ph.D., providing essential infrastructure for the scientific cores and technical support facilities at the KHRI. We just received notice that the P30 grant has been funded for another five years.

Although NIH funding is the mainstay of our research, philanthropy continues to play an important role in our being able to maintain excellence and push the cutting edge of science. We are most grateful to our alumni and friends who have provided and, hopefully, will continue to provide much needed philanthropic support. In particular, thanks to all who have supported our efforts towards establishing two endowed chairs honoring Merle Lawrence, Ph.D., and former department chair Charles J. Krause, M.D.

The Center for Hearing Disorders held its Spring Board Meeting in May in the new C.S. Mott Children’s Hospital. Department chair Carol R. Bradford, M.D., FACS, welcomed the members, who enjoyed a hospital tour, business meeting and reception. The Division of Pediatric Otolaryngology presented on the collaborative partnership activities driving their patient care and research, which was enthusiastically received and generated much discussion. Yehoash Raphael, Ph.D., provided an update on research progress in hearing and head and neck cancer, and Ora H. Pescovitz, M.D., Executive Vice President of Medical Affairs, thanked the group for their years of generous support of the department.

Life as usual also continues. Our faculty remains active in teaching, University committees and national and international endeavors – if research and applying for research funding leaves them any time! Staff and faculty did, however, take time out for the annual KHRI picnic in June. We continue to enjoy our work and look forward to the discoveries that await us.
Otolaryngology – Head and Neck Surgery Health Services Research Program

As defined by the Agency for Healthcare Research and Quality, “Health services research examines how people get access to health care, how much care costs and what happens to patients as a result of this care. The main goals of health services research are to identify the most effective ways to organize, manage, finance and deliver high quality care; reduce medical errors and improve patient safety.”

Over the years, our department has conducted health services research, but it has been compartmentalized. In an effort to formalize and centralize these efforts, we established the Otolaryngology-Head and Neck Surgery Health Services Research Program. This program is led by Melissa A. Pynnonen, M.D., who recently completed her master’s in health and health care research here at U-M through the one-year Robert Wood Johnson Clinical Scholars Program. Still in the early stages of development, current goals for the program include improving quality of care across the department, beginning with common otolaryngologic problems such as thyroid surgery, sinusitis and tonsillectomy, as well as securing NIH funding. The program will also incorporate an educational element, providing residents and fellows the opportunity to participate if desired.

RESEARCH AWARDS
JANUARY 2012-JUNE 2012

Quality of Life and Hearing Loss in Adolescents Research Study
P.I.: Marci M. Lesperance, M.D.
Sponsor: Washington University/ American Hearing Research Foundation
Project Dates: 7/1/2011– 6/30/2012

Integrating Cells into the Auditory Epithelium of Deaf Ears
P.I.: Yehoash Raphael, Ph.D.
Sponsor: NIH 1 R21 DC011631-01 A1
Project Dates: 12/07/11–11/30/13

Function of Somatosensory Pathways to Cochlear Nucleus
P.I.: Susan E. Shore, Ph.D.
Sponsor: NIH 2 R01 DC004825-11 A1
Project Dates: 2/1/12–2/28/17

Targeting Cancer Stem Cells with Dendritic Cell Vaccines
P.I.: Jeffrey S. Moyer, M.D., FACS
Sponsor: U-M Head and Neck Cancer SPORE Developmental Research Award
Project Dates: 4/1/12–3/31/13

Therapeutic Benefits of Proton Pump Inhibitors and H2 Blockers on Cancer Progression in Patients with Head and Neck Squamous Carcinoma
P.I.: Silvana M. Papagerakis, Ph.D.
Sponsor: U-M Head and Neck Cancer SPORE Developmental Research Award
Project Dates: 4/1/12–3/31/13

Prevention of Oscillopsia and Visual Blur During Head Turns: An Efference Copy Driven Compensatory Response in Patients with Bilateral Vestibular Hypofunction
P.I.: W. Michael King, Ph.D.
Sponsor: Michigan Institute for Clinical and Health Research (MICHR) Seed Grant
Project Dates: 5/1/12–4/30/13

Advanced Research Training in Otolaryngology
P.I.: Marci M. Lesperance, M.D., FACS
Co-Director: Mark E. Prince, M.D.
Sponsor: NIH 2 T32 DC005356-11
Project Dates: 7/1/12–6/30/17

Evaluation of a Biodegradable Splint for Treating Tracheomalacia
P.I.: Glenn E. Green, M.D.
Sponsor: MICHR T1 Bench to Bedside Grant
Project Dates: 7/1/12–6/30/13

Hearing, Balance and Chemical Senses Research Core Center
P.I.: Richard A. Altschuler, Ph.D.
Sponsor: NIH 2-P30-DC005188-11
Project Dates: 8/1/2012–7/31/2017

Rhinosinusitis: Variations in Care and Opportunities for Improvement
P.I.: Melissa A. Pynnonen, M.D.
Sponsor: The Triological Society, Triological Research Career Development Award
Project Dates: 8/1/12–7/31/14

Research Supplement to Promote Diversity in Health-Related Research
P.I.: Yehoash Raphael, Ph.D.
Sponsor: NIH 3-R01-DC010412-03S1
Project Dates: 9/1/2012–8/31/2014

Melissa A. Pynnonen, Director, Otolaryngology-Head and Neck Surgery Health Services Research Program
DIVISION UPDATES

FAÇIAL PLASTIC AND RECONSTRUCTIVE SURGERY/CRANIAL BASE SURGERY

- Jennifer C. Kim, M.D., and Garrett R. Griffin, M.D., traveled to Cusco, Peru to perform microtia surgery on children. Together they saw 60 children in clinic and completed 8 first-stage surgeries.

- The Cranial Base Destination Program held a strategic retreat to discuss ideas on how to improve quality of care and access. The program hopes to expand in order to meet the needs of more patients.

HEAD AND NECK ONCOLOGY

- Carol R. Bradford, M.D., FACS, was inducted into the American Laryngological Association at the Combined Otolaryngology Spring Meetings (COSM).

- Kelly M. Mallory, M.D., FACS, joins the division from the University of Pennsylvania Health System.

- The UM-MedImmune Research Collaboration selected its three initial launch projects, focused around the Comprehensive Cancer Center research teams and potential cancer stem cell therapeutics. This collaboration will bring in $1M across these three projects over the next year. Among these initial projects is one of our own head and neck cancer research projects, “Therapeutic Potential of the MedImmune CXCR4 and IL-6 Antibodies in Head and Neck Cancer,” run by Jacques E. Nor, DDS, Ph.D., Hasan Korkaya, Ph.D., and Mark E. Prince, M.D.

LARYNGOLOGY, RHINOLOGY AND GENERAL OTOLARYNGOLOGY (LaRGO)

- Norman D. Hogikyan, M.D., FACS, was inducted into the American Laryngological Association at COSM.

- Melissa A. Pynnonen, M.D., completed her master’s in health and health care research at U-M through the Robert Wood Johnson Foundation. She was appointed director of the Otolaryngology-Head and Neck Surgery Health Services Research Program.

- Mark A. Zacharek, M.D., FACS, was appointed director of the Michigan Sinus Center. He was also elected president of the Michigan Otolaryngological Society.

NEUROTOLOGY/OTOLOGY

- Gregory J. Basura, M.D., Ph.D., joins the division having completed our Otolaryngology/Neurotology and post-doctoral research fellowships.

- The division welcomes otology/neurotology fellow Cameron L. Budenz, M.D., who recently completed her T-32 Research Fellowship at the KHRI.

- After several years as an adjunct faculty member, Syed S. Rizvi, M.D., is retiring from clinical practice at U-M in August. It has been our pleasure to have Dr. Rizvi on our team. His passion for learning and teaching serves as an inspiration for faculty, fellows and residents. He will continue regular teaching in our Temporal Bone Dissection Courses.

- Steven A. Telian, M.D., began his five-year term as the secretary-treasurer of the American Otological Society.

- Alexander Arts, M.D., FACS, is leading a task force to develop a strategy to evaluate new implantable hearing devices. This group will determine which devices can realistically be introduced for clinical use in the department and provide clinical guidelines for patient assessment, perioperative logistics and outcome assessment. Input is welcome from clinical faculty, audiologists and other stakeholders.

- The Adult Otolaryngology Clinic in the UMHS Taubman Center is undergoing an expansion, which will benefit audiology. Improvements will include space for a sound booth, control room, earmold laboratory and hearing aid fitting room.

- Paul R. Kileny, Ph.D., continues to serve on the Michigan Audiology Board.

PEDIATRIC OTOLARYNGOLOGY

- The new Refractory to CPAP Clinic serves pediatric patients with residual OSA after adenotonsillectomy who are unable or unwilling to tolerate positive pressure therapy. Patients are evaluated by a pediatric sleep specialist, otolaryngologist, oral-maxillofacial surgeon and orthodontist during their clinic visit. Treatment recommendations are made after a case...
Conference and discussion at the end of the clinic.

- Subject recruitment has begun for a new research project evaluating the effects of continuous positive airway pressure therapy (CPAP) after adenotonsillectomy in children. Children five to 12 years old scheduled for adenotonsillectomy at least in part for the indication of sleep disordered breathing may be eligible to participate. The major goals of the study are to assess the extent that behavior, cognition and sleepiness in children may improve with the use of CPAP after adenotonsillectomy and to help identify which patients stand to gain most from additional assessment and treatment after surgery.

- Marc C. Thorne, M.D., and Susan L. Garetz, M.D., were honored with membership in the American Society of Pediatric Otolaryngology. Dr. Thorne is appointed to the Young Members Committee and Dr. Garetz to the Finance Committee. David J. Brown, M.D., currently serves on the Education Committee. Marci M. Lesperance, M.D., FACS, is serving on the Board of Directors for a four-year term as secretary. Dr. Lesperance was also recognized for completing a five-year term as a senior examiner for the American Board of Otolaryngology and a 10-year term on the editorial board of Archives of Otolaryngology-Head and Neck Surgery.

- Glenn E. Green, M.D., won a pediatric device innovation award from the Medical Innovation Center along with Scott J. Hollister, Ph.D., for their tracheal splint project.

**INTRODUCING**

**Gregory J. Basura, M.D., Ph.D.**

**Assistant Professor**

Dr. Basura joins our department having completed our Otology/Neurotology and post-doctoral research fellowships. His appointment is 50 percent clinical with the Division of Otology/Neurotology and 50 percent with the KHRI. Currently he is investigating the physiologic role of somatosensory integration in the auditory cortex following sensorineural hearing loss as it relates to tinnitus generation.

**Clinical Interests:** full spectrum of otologic and neurotologic disorders, with a particular interest in skull base tumors; cochlear implantation

**Research Interests:** currently investigating the role of multi-sensory integration in the modulation of tinnitus percepts in brainstem and auditory cortex

**Ph.D. Degree:** Anatomy and Cell Biology/Neuroscience, Wayne State University School of Medicine (2000)

**M.D. Degree:** University of Washington (2005)

**Residency:** The University of North Carolina (2010)

**Fellowship:** University of Michigan (2012)

**Certification:** American Board of Otolaryngology

**INTRODUCING**

**Kelly M. Malloy, M.D., FACS**

**Assistant Professor**

Dr. Malloy joins our department from the University of Pennsylvania Health System. A graduate of our Head and Neck Oncology Fellowship, we are thrilled to have her back at U-M. Dr. Malloy’s clinical expertise is in head and neck surgical oncology, microvascular reconstructive surgery and transoral robotic surgery. Her educational and scholarly interests are in simulation. She hopes to bring the otolaryngology simulation boot camp to U-M.

**Clinical Interests:** microvascular free tissue transfer, thyroid and parathyroid surgery, salivary malignancies, head and neck cutaneous malignancies, mucosal malignancies of upper aerodigestive tract

**Research Interests:** surgical simulation education, quality and performance improvement in otolaryngology and multidisciplinary inpatient surgical care, clinical trials development for robotic surgery in the head and neck

**M.D. Degree:** Jefferson Medical College (2002)

**Residency:** Thomas Jefferson University (2007)

**Fellowship:** University of Michigan (2008)

**Certification:** American Board of Otolaryngology
**Laryngology, Rhinology and General Otolaryngology (LaRGO)**

The LaRGO Division is the newest division in the department. Care is provided for adult patients in laryngology, rhinology and general otolaryngology. Faculty members are established leaders in their fields, with national reputations for clinical care and academic leadership. The division’s missions include patient care, education, research and service.

### PATIENT CARE

**Laryngology and Voice Disorders**

Under the direction of Norman D. Hogikyan, M.D., FACS, the U-M Laryngology and Voice Disorders Program provides comprehensive evaluation and treatment for disorders of the larynx and associated structures. This includes voice, swallowing and breathing problems and encompasses both benign and malignant diseases.

Laryngologic care is provided at both the UMHS Taubman Center clinic and at the U-M Vocal Health Center. Care at the Vocal Health Center includes the Multidisciplinary Clinic for Occupational or Professional Voice Users, where a laryngologist, speech pathologist and voice training specialist work together to provide innovative, tailored treatment for the speaking or singing voices. Currently located in the Livonia Center for Specialty Care, we look forward to expanding our Vocal Health Center services in the future when it moves to the Taubman Center.

**Rhinology**

Our rhinologists, Melissa A. Pynnonen, M.D., Jeffrey E. Terrell, M.D., and Mark A. Zacharek, M.D., FACS, evaluate and treat diseases and disorders of the nose and paranasal sinuses. The Michigan Sinus Center, under the direction of Dr. Zacharek, expands care to include a multidisciplinary clinic. We provide high-quality, efficient treatment by co-locating allergists, asthma specialists, pulmonologists, infectious disease specialists and otolaryngologists into one space. We have a strong relationship with our Division of Allergy and Clinical Immunology, with whom we work closely to care for patients who have triad asthma, developing advanced treatment programs, including postoperative aspirin desensitization.

In an effort to expand our allergy services, we have also established an Otolaryngic Allergy Clinic, under the leadership of Dr. Zacharek. The clinic offers skin allergy testing and immunotherapy options. The clinic complements our rhinology treatments, improving efficiency of care.

**General Otolaryngology and Sleep Medicine**

Our general otolaryngology program is led by Jeffrey J. Stanley, who has extensive experience with the entire scope of this field. Dr. Stanley also completed a subspecialty fellowship in Sleep Medicine, allowing us to expand our medical and surgical sleep medicine services. As a member of the multidisciplinary U-M CPAP Clinic, we help provide comprehensive evaluation of patients with sleep apnea who cannot tolerate CPAP. In an afternoon, patients see one of our otolaryngologists, as well as an oral and maxillofacial surgeon, a dentist and a sleep medicine specialist. The team of specialists confers at the end of the afternoon to develop a treatment strategy. If surgery is deemed necessary, Dr. Stanley has expertise in multiple options depending on patient-specific issues and anatomy.

### EDUCATION

Clinical and didactic teaching of residents and medical students take place on a daily basis. Faculty members instruct undergraduate, graduate and continuing medical education courses. The division is also actively involved in the department’s simulation initiatives.

### SERVICE

Service to both the community and University is an essential element of the division’s work. Community service efforts include lectures to public school students about tobacco use, free throat cancer screenings, World Voice Day activities and informational lectures to community and professional groups.

Jeffrey E. Terrell, M.D., who has expertise in clinical informatics, is an associate chief medical information officer at UMHS and involved in clinical information system projects across the institution.

### RESEARCH

Clinical research projects include health services research in rhinology and laryngology, trials of anti-inflammatory intranasal medications in postoperative rhinology patients, use of computer-aided sinus imaging and studying the relationship between inverting papilloma and allergic rhinitis. Basic science research endeavors include characterization of cellular changes in laryngeal paralysis, laryngeal reinnervation techniques, development of a sinus tissue culture laboratory for studies of nitric oxide and chronic rhinosinusitis and exploration of culture independent molecular-based techniques.
MEET OUR FACULTY

Norman D. Hogikyan, M.D., FACS
Division Chief, Division of Laryngology, Rhinology and General Otolaryngology (LaRGO)
Professor, Otolaryngology-Head and Neck Surgery, U-M Medical School

Clinical Interests: laryngology, including all types of voice and laryngeal disorders; endoscopic laser surgery; care of the professional voice

Research Interests: laryngeal paralysis, laryngeal reinnervation, voice-related quality of life (V-RQOL)

Personal Interests: running, gardening, family time, hiking, Michigan history

Jeffrey J. Stanley, M.D.
Clinical Assistant Professor, Otolaryngology, U-M Medical School
Clinical Interests: general otolaryngology, sleep medicine, obstructive sleep apnea, adult and pediatric sleep disorders, hearing loss, head and neck surgical oncology, facial plastic, reconstructive surgery

Research Interests: selection criteria and outcomes for surgical treatment for pediatric and adult obstructive sleep apnea

Personal Interests: spending time with family

Melissa A. Pynnnonen, M.D.
Director, Otolaryngology-Head and Neck Surgery Health Services Research Program
Clinical Associate Professor, Otolaryngology, U-M Medical School

Clinical Interests: diseases of the sinuses; cranial base disorders, including acute and chronic sinusitis; complications of sinusitis, including involvement of the eye or brain; polyposis; mucoceles; spinal fluid leaks; tumors involving the nasal cavity and sinuses

Research Interests: understanding the determinants and consequences of medical uncertainty in sinusitis care

Personal Interests: spending time with family, cooking, physical fitness, travel

Jeffrey E. Terrell, M.D.
Associate Chief Information Officer, UMHS
Professor, Otolaryngology, U-M Medical School

Clinical Interests: all disorders of the internal nose and of the sinuses, including sinusitis, allergies, chronic sinusitis, complications of sinusitis, sinus surgery, nasal polyps CSF leaks and more

Research Interests: clinical studies of medical and surgical interventions for sinusitis, health behaviors and quality of life measurement in head and neck cancer patients

Personal Interests: woodworking, photography, gardening, watching his kids play sports

Mark A. Zacharek, M.D., FACS
Director, Michigan Sinus Center
Director, Otolaryngic Allergy Clinic
Clinical Associate Professor, Otolaryngology, U-M Medical School

Clinical Interests: chronic sinusitis, allergic rhinitis and allergy immunotherapy, nasal polyps and nasal masses, endoscopic sinus, skull base surgery

Research Interests: mechanisms of chronic rhinosinusitis, Nitric Oxide (NO) and chronic rhinosinusitis, resident education, surgical simulation, 3D volumetric imaging of the sinus, skull base

Personal Interests: classical and jazz music, linguistics, history, travel, running
CONGRATULATIONS GRADUATING RESIDENTS

Nadeem Akbar, M.D., joined our department as a resident in 2006 after earning his medical degree from the University of Arkansas Medical School. He is a graduate of our Advanced Research Training in Otolaryngology Program, having extended his residency by one year to perform tinnitus research. His recent research interests involved investigating Vitamin D and its role in asthma, rhinitis and rhinosinusitis, in partnership with Waleed Abuzeid, M.D., and Mark Zacharek, M.D., FACS. Their research was published in *Current Opinion in Otolaryngology & Head and Neck Surgery* and *Current Opinion in Allergy and Clinical Immunology*. Dr. Akbar is pursuing a Rhinology Fellowship at the California Sinus Centers.

Favorite Residency Memory: The constant paging, computer background and e-mail “interactions” with my co-residents has provided near daily entertainment.

Advice for Current and Future Residents: Take advantage of learning opportunities whenever you can. Even if a consult seems unwarranted, there is usually a reason we need to be involved, and these can be surprisingly complex clinical situations.

Jon-Paul Pepper, M.D., joined our residency program in 2007 following completion of his medical degree at the University of California, Irvine. His contributions are numerous; he received several awards, including the Paul H. Holinger resident research award from the Triological Society and is published in 16 articles with several more in press. Dr. Pepper is pursuing a Facial Plastic and Reconstructive Surgery Fellowship here at U-M.

Favorite Residency Memory: making the R5 show with Matt, Kelly and Nadeem

Advice for Current and Future Residents: Be a good teammate to your fellow residents.

K. Kelly Gallagher, M.D., began her residency in 2007 following her graduation from Baylor College of Medicine. Dr. Gallagher made her mark on the department, securing multiple awards, including the Resident Travel Award for Best Research Paper from the American Academy of Facial Plastic and Reconstructive Surgery and two Resident Leadership Grants from the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS). She is also published in six articles. Dr. Gallagher is pursuing a Skull Base Surgery Fellowship here at U-M.

Favorite Residency Memory: A.O. plating course in Chicago with classmates

Advice for Current and Future Residents: Residency is short, so make the most of it. Take care of your co-residents and be there for one another.

Matthew E. Spector, M.D., began his residency in 2007 after graduating from the Loyola University Stritch School of Medicine. Dr. Spector saw great success during residency, including the Michigan Otolaryngological Society Resident Recognition Award, multiple Resident Leadership Grants from the AAO-HNS and 11 published articles. Dr. Spector is pursuing a Head and Neck Oncology Fellowship here at U-M.

Favorite Residency Memory: otolaryngology/neurosurgery football game

Advice for Current and Future Residents: Dr. Wolf Axiom #1: Listen to your patients; they will tell you the diagnosis.

From left to right, Dr. Akbar, Dr. Spector, Dr. Gallagher and Dr. Pepper. Photo credit: Chris Postma

CONGRATULATIONS GRADUATING FELLOWS

Gregory J. Basura, M.D., Ph.D., completed his Otolaryngology and post-doctoral research fellowships. He is now on faculty with our department, holding a 50 percent clinical appointment with the Division of Otolaryngology and a 50 percent research appointment with the KHRI.

Cameron L. Budenz, M.D., completed her T-32 Research Fellowship with the KHRI. She is now a fellow in our Division of Otolaryngology.

Ilaaf Darratt, M.D., completed her Pediatric Otolaryngology Fellowship. She is beginning her practice at the Henry Ford Hospital.

Garrett R. Griffin, M.D., completed his post-doctoral T-32 Research Fellowship this year. He is pursuing a Facial Plastic Fellowship in private practice at Cedars Sinai Hospital.

Ericka F. King, M.D., completed her Pediatric Otolaryngology Fellowship. Dr. King is joining the team at Oregon Health & Science University as their third pediatric otolaryngologist.

Judy W. Lee, M.D., completed our Facial Plastic and Reconstructive Surgery Fellowship. She is going to New York University’s Department of Otolaryngology to join the Division of Facial Plastic and Reconstructive Surgery.

Syed Naweed Raza, M.D., completed his Head and Neck Oncology Fellowship. He will practice at Wayne State University.

Joseph Q. Ta, M.D., completed his Skullbase Facial Plastic Fellowship. Dr. Ta accepted a faculty position with the University of Nevada’s Division of Otolaryngology.
**Welcome New Fellows**

Cameron L. Budenz, M.D., joins the Division of Neurotology/Otology as their fellow. Already a familiar face around our department, Dr. Budenz spent the last two years as a T-32 Research Fellow at the KHRI. She worked in Dr. Raphael’s otopathology lab, focusing on the use of neurotrophins in the deafened inner ear to induce regrowth of peripheral auditory fibers. Dr. Budenz also worked in collaboration with a group of U-M mechanical engineers to develop a novel cochlear implant device using piezoelectric technology. She hopes to continue her involvement in both of these research projects as she transitions to her clinical fellowship. Dr. Budenz completed medical school here at U-M and her residency at New York University. Outside of work, she enjoys time with her husband, newborn son and black lab.

**Welcome New Residents**

Andrew C. Birkeland, M.D., completed his B.A. at the University of California, Berkeley, graduating with honors. He earned his M.D. at the Weill Cornell Medical College. During his medical education, Dr. Birkeland spent one year as a Doris Duke Clinical Research Fellow, studying the genetics of cleft lip and palate in a Honduran population. This work received a research grant from the American Society of Pediatric Otalaryngology. Dr. Birkeland is an author or co-author on nine papers. In his spare time, he enjoys volleyball, playing guitar, snowboarding and surfing.

Andrew J. Rosko, M.D., received his B.A. from Kalamazoo College, spending six months abroad in Kenya. Before attending medical school, Dr. Rosko took three years to play music in a traveling pop-rock project. He went on to complete his M.D. at the U-M Medical School, earning the Dean’s Award for Excellence in Clinical Skills and the Art of Medicine, the Academic Achievement Award for highest academic status and membership in AOA. He also participated in several peer-reviewed journal articles, two of which were published. When he’s not working, Dr. Rosko enjoys playing guitar, hiking, traveling and watching college sports.

Aileen P. (Butera) Wertz, M.D., earned her B.S. from the University of Pittsburgh, holding her place on the Dean’s list throughout her entire undergraduate education. She graduated with her M.D. from the Jefferson Medical College of Thomas Jefferson University, where she was secretary of AOA and president of the Hobart Amory Hare Honor Society. Dr. Wertz also volunteered with several university organizations, among them JeffHEALTH, an organization that provides medical care and support to a village in Rwanda. In her free time, she enjoys running, cooking, reading and spending time with her dog.

Kyle K. VanKoeveing, M.D., completed his B.S. at U-M, where he was recognized as a James B. Angel Scholar. He completed his M.D. at the University of Virginia School of Medicine, earning membership in both AOA and the Gold Humanism Honor Society. He is published as a first or second author on several peer-reviewed articles. In addition to his academic activities, Dr. VanKoeveing volunteered for a handful of organizations, including the Virginia Medical Fly Fishing Club. As evidenced by his volunteer work, Dr. VanKoeveing enjoys outdoor sports and activities, including fishing, hiking, tennis and golf.

Three of our four graduating residents will remain with us as they pursue their fellowships.

K. Kelly Gallagher, M.D., is pursuing our Skull Base Fellowship. Jon-Paul Pepper, M.D., our Facial Plastic and Reconstructive Surgery Fellowship and Matthew E. Spector, M.D., our Head and Neck Oncology Fellowship.
U-M Otolaryngology-Head and Neck Surgery Collaborates with Ghana Teaching Hospital

Senior resident Susannah E. Hills, M.D., has always been interested in people and the way they interact. As an anthropology college student, Dr. Hills traveled to Ecuador to work on a public health campaign. Following graduation, she spent a year-long fellowship working in the labor and delivery unit of a hospital in Equatorial Guinea. She then returned to the United States to work in public health, addressing policy and administration issues. Dr. Hills soon missed the patient care experiences she enjoyed while in Africa, so she went to medical school, graduating in 2008. We were lucky enough to match her to our residency program. She will graduate this year.

Our residents spend six months in research during their third year of residency. Dr. Hills envisioned a meaningful research project that would be both informative and foster long-term collaboration between our department and an institution abroad. Carol R. Bradford, M.D., FACS, department chair, and Mark E. Prince, M.D., residency program director, supported her endeavor.

The first step was to choose an international institution. Because U-M has been working toward developing relationships with the Komfo Anokye Teaching Hospital (KATH) in Kumasi, Ghana, Dr. Hills pursued this institution to learn if otolaryngology opportunities might exist, as well. KATH was open to her vision, and in January 2012, Dr. Hills spent six weeks at the institution.

Ghana is a country with a historical commitment to education and learning. Their medical practitioners are well-educated and motivated to provide the best patient care. KATH’s practitioners are extremely resourceful. “I found their use of basic medical techniques to be quite sophisticated. For example, they use x-rays and the basic physical examination incredibly well because they cannot rely on some of the modern medical technologies available to us here at the University,” says Hills.

In addition to practicing with and observing KATH’s otolaryngology practitioners, Dr. Hills also reviewed their patients’ medical records to quantify areas where our department can both provide and gain the most insight, allowing for an educated approach to addressing the needs.

The project is still early in development. Dr. Hills’ future goals include teleconferenced case presentations between our residents and KATH’s, facilitating academic conversations between both institutions. She also envisions a shared rotation of residents between U-M and KATH. “The best education comes from actually practicing in a new environment. It’s one thing to talk about it but another thing to do it. Both institutions would benefit from this collaboration, which hopefully will grow to incorporate shared training experiences and clinical rotations,” says Hills.

Dr. Hills returned to Ghana in May 2012 to continue this initial work. Her next step is to apply for grant funding. She looks forward to moving the needle forward on this project, strengthening and expanding our global outreach efforts.

**METRO-DETROIT OUTREACH EFFORTS**

**World Voice Day**
Patients and staff throughout the health system could enjoy a free vocal concert on World Voice Day, April 16, thanks to the collaborative efforts of Dr. Hogikyan and the University of Michigan-Flint Department of Theatre and Dance.

**Hope Clinic**
We held a Hope Clinic at the Taubman Center in April. Thanks to dozens of volunteers, we saw 19 otolaryngology patients. Plastic surgery and dermatology each saw several patients, as well. This was the first time dermatology held a Hope Clinic, joining us in our space as a pilot. Things went well, and we are tentatively planning for the next multispecialty UMHS Hope Clinic to be held in July.

**Throat Cancer Screening Clinic**
We held our 17th annual Free Community Throat Cancer Screening Clinic in April, providing important services to people in our region. We saw close to 50 individuals for screening exams or smoking cessation counseling. Many thanks to the dozens of volunteers who helped make this event possible; special thanks to Dr. Hogikyan for his leadership and commitment to this cause.

Charles J. Krause, M.D., Endowment

Throughout our training and career, we interact with and learn from several clinicians. Dr. Krause is someone who sticks with you no matter where you go or how long you have practiced. Whether you are a graduate of his residency training program, a professional colleague from one of his many leadership roles, a grateful patient or trusted friend, you understand his legacy.

To recognize the great impact Dr. Krause has had on so many of us, our department established the Charles J. Krause Collegiate Professorship, which will support the department chair to pursue educational, clinical and discovery initiatives in perpetuity. It is our hope that through this professorship, Dr. Krause’s legacy will continue to make its mark on our department.

Thanks to approximately 80 individuals and/or families who acted on this opportunity, we have reached the level of funding required to begin the professorship process. We hope to install the professorship this fall. That being said, it is not too late to give. If you wish to honor Dr. Krause with a donation, please contact Amanda Thatcher, communications specialist, for details.

Be a Part of Our Progress

Philanthropy is a vital resource that allows the Department of Otolaryngology – Head and Neck Surgery to do more teaching and learning and to transfer ground-breaking research into life-saving clinical applications. We rely on private support to help us with this vital work. If you would like to make a gift online or learn about the many opportunities for giving, please visit www.med.umich.edu/oto/giving/.

Or contact:
Amanda Thatcher
Communications Specialist
Department of Otolaryngology – Head and Neck Surgery
1500 East Medical Center Drive
1904 Taubman Center
Ann Arbor, MI 48109-5312
734-936-8003
athatche@med.umich.edu

Thank you for your confidence in us and for supporting our work. There is no more gratifying gift than one that improves the health and health care of our patients.
Family Ties

We think of past and present members of our department as part of our family. For father and son Michael M.E. Johns II, M.D., FACS, and Michael M. Johns III, M.D., these family ties are thick as blood.

Michael M.E. Johns II, M.D.

Dr. Johns II grew up in Detroit, Michigan. He originally planned to be a priest and attended seminary through his senior year of high school but left to attend Wayne State University. There he chose to pursue a career in medicine.

Dr. Johns II applied to two medical schools: Wayne State University and the University of Michigan. “Michigan accepted me, followed by Wayne. But Michigan accepted me first, so I thought, ‘Alright, I’ll go to Ann Arbor. It sounds like a fun place to be,’” Dr. Johns II says.

It wasn’t until his senior year of medical school that Dr. Johns II chose to pursue otolaryngology. “Dr. Frank Ritter gave me a chance to work in his research lab,” says Dr. Johns II. “I learned a lot about otolaryngology and was able to meet everyone. It was an exciting specialty, and everyone seemed to enjoy themselves. But most importantly, the department had spectacular teachers and role models.”

When applying for residency, Dr. Johns II and his wife considered programs across the country. “When it came down to it, we thought, ‘None are better than Michigan, so let’s just stay home,’” Dr. Johns II says. And they did. Dr. Johns II reflects fondly on his residency training. “We had great clinical experiences and great teachers. It was just the best.”

Following residency, Dr. Johns II served as assistant chief of the Otolaryngology Service at Walter Reed Army Medical Center. In 1977, he joined the Department of Otolaryngology and Maxillofacial Surgery at the University of Virginia Medical Center. In 1984, Dr. Johns was recruited to Johns Hopkins as professor and chair of Otolaryngology-Head and Neck Surgery, a department he built into one of the country’s largest and most prestigious. As Associate Dean for Clinical Practice, he reorganized the faculty practice plan and planned and developed the Johns Hopkins Outpatient Center. He is internationally recognized for his work and his studies of head and neck cancer treatment outcomes. Today Dr. Johns is Chancellor at Emory University.

“I can look back now, and I know what good is. And Michigan wasn’t good – it was spectacular,” Dr. Johns II says.

Michael M. Johns III, M.D.

“It comes down to role modeling,” Dr. Johns III says, when asked how his father’s career impacted his own. “He was very happy and engaged. He enjoyed his work.”

It took a few economic classes and a college job with Continental Bank before Dr. Johns III decided to go into the family business. He attended the Johns Hopkins University School of Medicine, where his father was dean and his sister was also a student.

“I went into medical school with an open mind. I was engaged with each specialty I encountered, but at the end, I went with my gut and chose otolaryngology,” Dr. Johns III says.

Like his father, Dr. Johns III hoped to complete his residency training at U-M. “Michigan is, in my opinion, the most outstanding otolaryngology program in the county,” Dr. Johns III says. He was thrilled to match here. “I was ecstatic, jumping up and down!”

Dr. Johns III graduated from medical school in 1996. His father, who was dean at that time, hooded him at his graduation ceremony.

Like his father, Dr. Johns III is confident that he received superlative training during his residency at U-M. He chose to sub-specialize in laryngology and care of the professional voice, thanks in part to the mentorship he received from Dr. Hogikyan. “I watched him do amazing things,” Dr. Johns III says. “I was fascinated by his ability to restore function to his patients.”

Dr. Johns III completed his residency in 2002 and went on to complete a laryngology fellowship at Vanderbilt Medical Center in 2003. Today, Dr. Johns III is the founder and director of the Emory Voice Center, a multidisciplinary center for comprehensive care of patients with voice disorders.

When Drs. Johns II and Johns III aren’t working, they enjoy golfing and spending time with Dr. Johns’ III three young children.

Dr. Johns II and Dr. Johns III at Emory Healthcare
Save the Date: Michigan Work Society Meeting

Mark your calendar for the 2012 Michigan Work Society Meeting, scheduled for Nov. 8-10. Reconnect with colleagues and friends while enjoying a reception and tours on Nov. 8 at the new C.S. Mott Children’s Hospital Pediatric Otolaryngology Clinic, professional lectures and a gala dinner on Nov. 9 and football festivities on Nov. 10. Event information and registration details were mailed this month and will be available on our department website.

This year’s meeting will center on the theme of “Laryngology, Rhinology, Sleep Medicine and General Otolaryngology.” The Walter P. Work Lecturer, Michael M. Johns III, M.D., will draw from this theme, as will several other presentations.

We will also give special recognition to those classes marking 10, 20 or 30 years since graduating from our programs. Class “Champions” have been identified from each of these classes to connect with classmates. If you fall into one of these classes, expect to hear from your Champion soon!

Call for Presentation Abstracts

If you are interested in presenting during the Nov. 9 Michigan Work Society Meeting, please submit a presentation abstract no later than Aug. 31. All presentation topics are welcome, including those focusing on topics other than laryngology, rhinology, sleep medicine or general otolaryngology. To submit your abstract, please contact Amanda Thatcher, communications specialist, at 734-936-8003 or athatche@med.umich.edu.

EVENT CALENDAR

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>8th International Conference on Head and Neck Cancer</td>
<td>July 21-25</td>
<td>Toronto, ON</td>
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<tr>
<td>Otolaryngology Simulation Day</td>
<td>Saturday, July 28</td>
<td>8 a.m.-4 p.m.</td>
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<tr>
<td>American Academy of Otolaryngology – Head and Neck Surgery Annual Meeting and OTO Expo</td>
<td>Sept. 11-14</td>
<td>Washington, D.C.</td>
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<tr>
<td>Somatic Voicework™ The LoVetri Method: An Innovative Pedagogical Approach for Contemporary Vocal Styles – Level 1 Certification Workshop</td>
<td>Oct. 5-7</td>
<td>500 S. State Street, Ann Arbor, MI, 48109</td>
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<tr>
<td>Presented by the University of Michigan Vocal Health Center &amp; Department of Speech Language Pathology</td>
<td>For more information, contact Marci Rosenberg, M.S., CCC, at <a href="mailto:marcied@umich.edu">marcied@umich.edu</a>.</td>
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<td>Michigan Work Society Meeting</td>
<td>Nov. 8-10</td>
<td>Various times and locations Ann Arbor, MI</td>
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<td>2012 Kemink Memorial Lecture</td>
<td>Nov. 16-17</td>
<td>Biomedical Sciences Research Building Auditorium Ann Arbor, MI</td>
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UPCOMING EVENTS

As of 2011, there were 500,000 active Facebook users. That’s equal to approximately one in every 13 people on Earth! Are you one of them? If so, visit our department’s Facebook page, where you can keep up-to-date on the latest department news. We will also feature alumni updates here. Content will include publications, media appearances, etc. We encourage you to begin using our Facebook page as an additional way to stay connected.

LinkedIn is the world’s largest professional network with over 120 million members and growing rapidly. Connect with fellow U-M alumni by joining our “University of Michigan Otolaryngology-Head and Neck Surgery Alumni” group! This is a brand new group, so help us grow this group into a dynamic network by joining today!
University of Michigan Department of Otolaryngology-Head and Neck Surgery Faculty

Carol R. Bradford, M.D., FACS, Department Chair

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Jennifer C. Kim, M.D.
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Yehoash Raphael, Ph.D.
Susan E. Shore, Ph.D.

*Active Emeritus