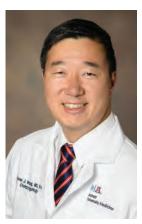
Department News

CHAIR'S WELCOME

I am pleased to welcome you to the inaugural newsletter for the University of Arizona Department of Otolaryngology – Head and Neck Surgery. We are the newest department at the University of Arizona College of Medicine with a growing academic and



Steven J. Wang, MD, FACS

clinical program. We offer advanced educational training for current and aspiring otolaryngologists, conduct ground-breaking research, and provide expert comprehensive otolaryngology care for patients throughout Arizona and the Southwest.

OUR HISTORY

This year, the College of Medicine at the University of Arizona is celebrating its 50th

students. In 1977, the Section of Otorhinolaryngology was established in the Department of Surgery under the direction of Dr. Stanley Coulthard. Dr. Coulthard started an accredited otolaryngology residency program in 1978 – the first and

anniversary. Fifty years ago, in 1967, the first medi-

only otolaryngology residency in the state at that time. Illustrious faculty included well-known individuals in the field of otolaryngology such as Dr. Walter Work and Dr. Charles Krause. Fourteen otolaryngology residents trained in the UA program between 1977 and 1988. The section of otorhinolaryngology would continue intermittently as a clinical service throughout the 1990s and early 2000s staffed by various community otolaryngologists, however, there would be no otolaryngology residency program at the UA for 25 years.

An Otolaryngology program was re-established 7 years ago with the recruitment of Dr. Alexander Chiu. Established as a Division within the Department of Surgery in 2010, the otolaryngology program grew rapidly. A new otolaryngology residency program at the University of Arizona received accreditation from the ACGME in 2013. In October 2014, the Arizona Board of Regents approved a new Department of Otolaryngology – Head and Neck Surgery within the College of Medicine, with Dr. Alex Chiu as the Founding Chair. Dr. Chiu's vision and leadership helped build a program with a nationwide reputation for excellence by the time he departed Tucson in June 2016.

It was the amazing success story of this special group of faculty, residents, and staff that attracted me to come to the University of Arizona last year. As I reflect on my first year here, it is clear that the past 12 months for this department have been marked by major achievements and the start of new initiatives with tremendous potential for even greater future success.

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University of Arizona Otolaryngology Residents (left to right): John Symms, Jonnae Barry, Saranya Reghunathan, Erynne Faucett, Tyson Nielsen

Welcome

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2016-2017: YEAR IN REVIEW

Education Mission

Our residency program, when it started in 2013, had two residents. In July, 2016 we achieved a full complement of 5 residents for our 5-year training program. This June marked a milestone as we held our first residency graduation event, celebrating the achievements of Dr. Erynne Faucett. During the past year, residents from our department gave presentations at every major national meeting. We were represented for the first time at the Resident Bowl during the Trio Sections meeting in New Orleans, in January, finishing in second place. In February, we held our 5th annual ENT in the Desert conference, with internationally renowned speakers and enthusiastic participation of otolaryngologists from across the U.S.

Research Mission

Current clinical and translational research programs in our department include study of cystic fibrosis-related sinus disease, mechanisms underlying chronic rhinosinusitis, the pathophysiology of mucin in respiratory epithelium, and mediators of epithelial-mesenchymal transition and metastasis in oral cancer. Through the combined hard work of our clinical and research faculty,



Alex Chiu, MD, Founding Chair, Department of Otolaryngology, University of Arizona

residents, students and others, it has been a prolific year for original manuscript publications - 33 peer-reviewed manuscripts from our department in the last year.

We have been continuously funded by the NIH and other sources. Recent funding successes include Dr. Eugene Chang, who received an Acclarent Young Investigator award to study microbiome changes in chronic rhinosinusitis and is the co-investigator for an RO1 study, "Early origins of chronic airflow limitation." Dr. Chang was one of 3 individuals awarded a travel grant from the American Academy of Otolaryngology to attend the 2016 Cochrane Scholars Program in Seoul, Korea. This past year, Dr. Christopher Le received a Banner Medical Staff grant, to develop protocols to improve the inpatient care of tracheostomy patients.

Clinical Mission

Our clinical mission is to provide superior otolaryngology care for southern Arizona and beyond. Dr. Stephen Goldstein, director of facial plastic surgery, is also the medical director of our otolaryngology and allergy clinics. Stephen leads planning for our move to a state-of-the-art clinic in the new North Campus Ambulatory Building next year. Dr. Eugene Chang and Dr. Chris Le lead the rhinology and anterior skull base surgery program, a true model of clinical translational research collaboration. Dr. Mindy Black is our director of Laryngology. Mindy started a new Multidisciplinary Voice clinic this year, in collaboration with speech therapists from the UA Dept. of Speech, Language, and Hearing Sciences. Dr. Bruce Stewart provides comprehensive otolaryngology services for adults and children at the Banner - UMC South campus hospital, whose service to its community was recognized last month by Banner Health, winning the Best of the Best Award for mid-sized hospitals for high performance in customer service, operations, and learning.

It has been a pleasure for me to work this past year with my outstanding partner, Dr. Audrey Erman, in Head and Neck Oncology. This year, the head and neck service added a new physician assistant, Chris Adams, as well as a new patient care navigator and clinical research coordinator. We provide cutting edge, personalized care and access to innovative clinical research trials in head and neck cancer, melanoma, endocrine surgery, and salivary gland disease.

The Southern Arizona VA serves the health care needs of Veterans throughout the region, while providing tremendous value to our department's educational mission. Our fabulous VA faculty team, led by section chief Dr. Michael Bays, includes Dr. Helena Yip, Dr. Mindy Black, and Dr. Bruce Stewart.

NEW FACULTY

I am pleased to announce new faculty joining us this summer. Dr. Helena Yip completed her residency training at UC Davis followed by a laryngology fellowship at Stanford University. Prior to coming to Arizona, Dr. Yip practiced at the Peninsula Medical Clinic in Burlingame, California. Dr. Yip sees patients at the Banner - University Medical Center-Tucson campus and the Southern Arizona VA Healthcare System. **Dr. Jonathan Young** completed his residency training at Virginia Commonwealth University followed by a pediatric otolaryngology fellowship at U of Colorado. Dr. Young will be our Dept.'s first director of pediatric otolaryngology, starting in September. Dr. Shethal Bearelly grew up in San Jose, CA, completed his residency training at UCSF followed by a head and neck surgery fellowship at Vanderbilt University. Dr. Bearelly will be joining our head and neck division in September.

Today, our clinical and research programs are thriving. I invite you to come learn with us, and join us as we continue our journey to become one of the premier Otolaryngology programs in the country.

Department of Otolaryngology Celebrates 2017 Otolaryngology Residency Program Graduation and Rhinology Fellowship Graduation

On June 10, 2017 the inaugural Otolaryngology Residency and Rhinology Fellowship graduation ceremony took place at the Westin La Paloma Resort. Dr. Erynne Faucett received her certificate as the first graduate from the University of Arizona Department of Otolaryngology Residency Program and Dr. Saurabh Sharma received his Rhinology Fellowship certificate.

The ceremony commenced with a research symposium that provided a venue for the 3 senior otolaryngology residents,



Marci Lesperance, MD and Steven Wang, MD



Stan Coulthard, MD and Steven Wang, MD

Erynne Faucett, MD, Saranya Reghunathan, MD, and Jonnae Barry, MD, to showcase their ongoing research projects. Eugene Chang, MD, and Amanda Jenkins, MA, of the Chang lab also presented their sinusitis related research projects. Distinguished Speaker, Marci Lesperance, MD, Professor, Otolaryngology from the University of Michigan and surgeon-scientist gave a lecture on familial pediatric hearing loss at the symposium.

The otolaryngology residency program at the University of Arizona received initial accreditation from the ACGME in 2013. The milestone inaugural residency graduation ceremony had several distinguished guests including

Dr. Stanley Coulthard, chief of the Section of Otorhinolarynology at the University of Arizona from 1977-1988. During the evening's event, remarks were given by Steven Wang, MD,

Professor and Chair, Department of Otolaryngology, Audrey Erman, MD, Residency Program Director and Alexander Chiu, MD, founding chair of the department and currently the chair of Otolaryngology at the University of Kansas.

The following awards were presented during the ceremony:

Affiliated Clinical Faculty Teaching Award: Presented to an affiliated faculty member within the Tucson community. The 2016-2017 awardee was Dr. Robert Cravens, of Tucson Ear, Nose & Throat.

Clinical Faculty Teaching Award:

Established to honor a faculty member who offered excellence in teaching the principles and practice of Otolarvngology. The 2016-2017 awardee was



Chris Le, MD, Saraubh Sharma, MD, and Eugene Chang, MD

Dr. Stephen Goldstein, Associate Professor, Otolaryngology.

Maureen Hannley Research Teaching Award: The Maureen Hannley Research Teaching Award was established to honor Dr. Hannley's contributions to the UA Department of Otolaryngology. Dr. Hannley was a dedicated advisor and mentor to the UA Otolaryngology residents and assisted them with all of their research related endeavors. The 2016-2017 awardee was Dr. Eugene Chang, Associate Professor, Otolaryngology.

Outstanding Research Presentation Award: The 2016-2017 awardee was Amanda Jenkins, MA for her presentation entitled "Genome - Virome Interactions in Chronic Rhinosinusitis" as the best presentation given at the research symposium.



Steven Wang, MD, Erynne Faucett, MD, and Audrey Erman, MD

Understanding the mechanism of chronic rhinosinusitis

By Dr. Eugene H. Chang

Chronic rhinosinusitis (CRS) is a common disorder affecting 10% of the adult population and resulting in health care costs of \$60 billion annually. Although medications and sinus surgery can help alleviate symptoms, approximately 25% of individuals do not show clinical improvement. The University of Arizona Sinus and Skull Base Center is a tertiary referral center, and therefore we often treat individuals with long-standing difficult to treat chronic sinusitis. Our goal has been to understand the mechanisms of sinonasal disease, so that we can improve outcomes for our patients and the global community.

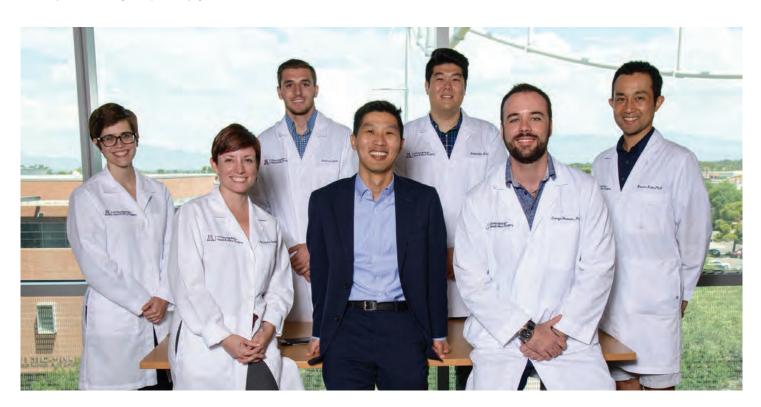
We have focused on determining genetic and environmental factors that are risk factors for the development of CRS, so that we can develop novel therapies that target disease before it becomes 'irreversible'. Our research team is currently divided into two areas: CFTR-mediated chronic rhinosinusitis, and genomevirome interactions in CRS.

A common genetic mutation associated with CRS: Nearly one in 30 Caucasians will have a single mutation in the cystic fibrosis transmembrane conductance regulator gene (CFTR). The general public is well aware of cystic fibrosis (CF), the most common lethal autosomal recessive disorder in the United States. However, our lab has recently determined that a single CFTR mutation increases the odds of developing chronic rhinosinusitis by four-fold compared to the general population. Dr. George Noutsios is a post-doc researcher leading efforts to determine the mechanism of partial loss of CFTR function and the role in sinonasal disease. Our goal is to identify at-risk individuals and provide targeted therapy to increase CFTR-function thereby addressing the primary genetic defect in CRS.

The cold that never goes away? Many of our patients first describe their symptoms beginning with a viral cold that others in their household are able to clear, but for them, lasts and progresses to CRS. New research led by Amanda Jenkins in the Chang laboratory, has discovered a genetic variant in the cadherin-related family member 3 (CDHR3) gene that is highly associated with adult CRS. The CDHR3 gene is a receptor for rhinovirus, responsible for the common cold, and this mutation increases the binding of the virus by 10-fold in cultured cells. Our current research is looking at how the common cold can result in prolonged inflammation and chronic sinusitis in susceptible individuals.

The NASAL / Chang laboratory. Over the past 3 years we have collected genetic, tissue, and blood samples from over 500 individuals with chronic sinusitis. We are incredibly grateful to our clinical patients for enrolling in our research studies. The success of our laboratory is truly a team effort. We are appreciative of the support we have received from the Department of Otolaryngology led by Dr. Steven Wang, the mentorship provided by Dr. Fernando Martinez, my colleague Dr. Chris Le and the countless hours spent by clinical and research personnel which have led to the discovery of novel risk factors for CRS and development of targeted therapies.

Chang Lab members (left to right): Dana Zack, Amanda Jenkins, Jaeden Calton, Eugene Chang, Alexander Kim, George Noutsios, Kosuke Kato





Mindy Black, MD performing in-office flexible laryngoscopy

Voice Doctor at Banner - University Medical Center Tucson

Dr. Mindy A. Black received her medical degree from the University of Toronto. She also completed her Otolaryngology residency training and Laryngology fellowship at the University of Toronto. Dr. Black practiced at McGill University in Montréal, Quebec, Canada for 5 years prior to moving to Tucson, Arizona. Currently, she is an Assistant Professor in the Department of Otolaryngology - Head and Neck Surgery at the University of Arizona College of Medicine and Director of the Laryngology program at Banner - University Medical Center Tucson. Dr. Black also sees patients at the Southern

Arizona VA Health Care System.

Dr. Black has established a multidisciplinary clinic for Voice and Swallowing Disorders. This clinic offers the combined expertise of laryngologists and speech-language pathology providers for comprehensive evaluation and efficient care of patients with voice and swallowing problems.

Dr. Black believes in empowering her patients and shares information with each patient to engage them in a higher level of personalized treatment. She is very enthusiastic about what she does and her patients benefit from her careful

> and thoughtful treatment management options.

> Services provided by the Voice and Swallowing Disorders Clinic include treatment of vocal cord paralysis, care of the professional voice, muscle tension dysphonia, spasmodic dysphonia, aging voice/vocal



Mindy Black, MD reviews videostrobe with colleagues Stephen Goldstein, MD (left) and Bruce Stewart, MD (right)

fold atrophy, and chronic cough.

Most treatments and procedures can be performed in clinic without requiring a trip to the operating room. In-office procedures include flexible and rigid videostroboscopy, TNE (transnasal esophagoscopy) and FEES (flexible endoscopic evaluation of swallowing), transnasal laryngeal procedures including Botox injections, vocal cord injections, and biopsies. Speech pathology services include acoustic, aerodynamic and perceptual voice assessments as well as comprehensive voice therapy.



Otolaryngology - Head and Neck Faculty

CLINICAL FACULTY



Steven Wang, MD, FACS Department Chair and Professor of Otolaryngology Director, Head and Neck Oncology Program Disease Team Leader, Head and Neck Oncology, **UA Cancer Center**

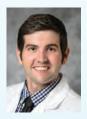
CLINICAL SPECIALTIES:

Head and neck cancer surgery, oral cavity and oropharynx malignancies, transoral robotic surgery, surgery for melanoma and advanced skin cancers of the head and neck, sentinel node biopsy, salivary gland tumors, benign and malignant thyroid lesions, and parathyroid surgery.

Shethal Bearelly, MD

Mindy A. Black, MD

Assistant Professor of Otolaryngology



Chris Adams Physician Assistant-C **CLINICAL SPECIALTIES:** Head and neck cancer, ear disease, general ENT



Assistant Professor of Otolaryngology **CLINICAL SPECIALTIES:** Head and neck cancer surgery, microvascular tissue-transfer for head and neck reconstruction, salivary gland disease, thyroid and parathyroid surgery



Director, Laryngology **CLINICAL SPECIALTIES:** Voice and swallowing disorders, care of professional voice, benign laryngeal lesions, vocal cord paralysis, laryngeal microsurgery.



Eugene H. Chang, MD, FACS Associate Professor of Otolaryngology Director, Rhinology and Skull Base Surgery **CLINICAL SPECIALTIES:** Primary and revision endoscopic sinus surgery, endoscopic cerebrospinal fluid (CSF) leak repair, and skull base tumor surgery.



Audrey B. Erman, MD Assistant Professor of Otolaryngology Director, Head & Neck Microvascular Reconstruction **CLINICAL SPECIALTIES:**

Head and neck malignancies, including melanoma and other skin cancers, salivary glands, oral cavity and larynx. Microvascular tissue-transfer for head and neck reconstruction.



Stephen A. Goldstein, MD, FACS Associate Professor of Otolaryngology Director, Facial Plastic and Reconstructive Surgery **CLINICAL SPECIALTIES:**

Cosmetic facial surgery, functional nasal surgery, facial and reconstructive surgery from skin cancer, revision rhinoplasty and voice disorders.



Christopher H. Le, MD Assistant Professor of Otolaryngology **CLINICAL SPECIALTIES:**

Clinical and surgical focus in primary and revision endoscopic sinus surgery, endoscopic benign and malignant sinonasal tumor surgery, endoscopic orbital surgery, endoscopic and open

skull base procedures, and maxillofacial trauma.



Brian Song, MD Clinical Instructor, Otolaryngology **CLINICAL SPECIALTIES:** Rhinology and skull base tumors



Bruce E. Stewart, MD Assistant Professor of Otolaryngology **CLINICAL SPECIALTIES:** General otolaryngology including pediatric tonsils and middle ear disease.



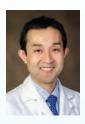
Helena Yip, MD, FACS Assistant Professor of Otolaryngology CLINICAL SPECIALTIES: Voice and swallowing disorders, thyroid and parathyroid disease, general otolaryngology

Jonathan Young, MD

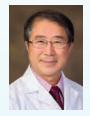


Assistant Professor of Otolaryngology Director, Pediatric Otolaryngology **CLINICAL SPECIALTIES:** Pediatric otolaryngology, congenital craniofacial abnormalities, pediatric airway disease

RESEARCH FACULTY



Kosuke Kato, PhD
Assistant Professor,
Otolaryngology – Research
RESEARCH INTERESTS:
Understanding the role
of mucin in the upper
respiratory tract and nasal
epithelial cells.



Kwang Chul Kim, PhD
Professor, Otolaryngology –
Research
Director, Respiratory Mucus
Research Program





Melania Mercado-Pimentel, PhD Assistant Professor, Otolaryngology – Research RESEARCH INTERESTS: Study of the molecular mechanisms of tumor

growth and metastasis in vestibular schwannomas and oral cancer.

Samuel Barber, MD



joined the department as our new incoming PGY I resident on July 1st. Dr. Barber grew up in the Finger Lakes area of New York State. Following undergraduate

studies at the University of Rochester, he spent a few years working as a surgical neurophysiologist for surgical procedures of the spine. While attending Tufts University School of Medicine in Boston for his medical training, Sam took dedicated years off to pursue Otolaryngology research. He was awarded the William Dameshek Research Award at Tufts for his academic contributions, and received his medical doctorate with research honors.

in the Desert 2018



The Symposium drew more than 120 participants from 24 states in 2017 and we expect a larger audience in 2018.

Nationally renowned speakers, faculty from the University of Arizona, and leading physicians from the State of Arizona will present lectures and participate in panel discussions.

Our Distinguished Faculty for ENTD 2018 are:

Steven Cheung, MD, University of California – San Francisco, California

Mark S. Courey, MD, Mount Sinai Health System, New York, New York

Peter H. Hwang, MD, Stanford University, Stanford, California

Brian Nussenbaum, MD, FACS, American Board of Otolaryngology, Houston. Texas

Soham Roy, MD, FACS, FAAP, University of Texas Medical School, Houston, Texas

Designed to appeal to Otolaryngologists in practice, allied health practitioners and physiciansin-training, the symposium will include the following topics:

- Head and Neck Surgery
- Laryngology
- Otology
- Pediatrics
- Rhinology/Allergy
- Sleep Surgery

A chance to meet and visit with Industry Sponsors/Exhibitors during this conference is always fun and informative.

For more information, visit our conference website at: www.entinthedesert.otolaryngology. medicine.arizona.edu

If you have other questions, or need assistance, please contact Jack Roberts, Conference Coordinator at 520-626-6673, or via email at jroberts@oto.arizona.edu





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