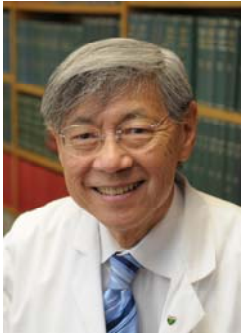




## *Note from the Chief...*

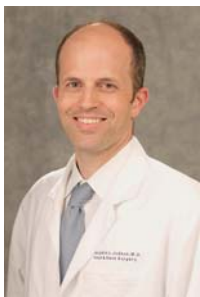


The Department continues to excel in patient care, research, and education. Alison Davis, RN, now serves as our new Nurse Manager. Two new medical assistants have joined us and we look forward to the addition of Mark Bianchi, MD (Rhinology) and Ben Judson, MD (H&N Surgery) to our full time faculty. Our current Chief Residents have each secured prestigious fellowship positions: Stella Lee, MD, at Johns Hopkins in Rhinology and Natalya Chernichenko, MD, in Head and Neck Surgery at Memorial Sloan Kettering. We are blessed to be surrounded by such talent in such a prestigious institution.

### **Clarence T. Sasaki, MD**

The Charles W. Ohse Professor of Surgery  
Chief, Section of Otolaryngology  
Director, H&N Unit, Yale Comprehensive Cancer Center

## **BENJAMIN JUDSON, MD H&N CANCER SURGEON**



**Dr. Benjamin Judson** returns to Yale (as he was born at Yale-New Haven Hospital) as the new Assistant Professor of Surgery specializing in Head and Neck Cancer January 1, 2010. Dr. Judson grew up in Pennsylvania, attended Middlebury College, and obtained a Masters Degree at the University of Pennsylvania before matriculating at Jefferson

Medical College in Philadelphia. Before pursuing a career in medicine he worked in the Peace Corps and as an Assistant Deputy Mayor for the City of Philadelphia. He completed a residency at Georgetown University Hospital in Otolaryngology - Head and Neck Surgery and a fellowship at Memorial Sloan-Kettering Cancer Center in Head & Neck Surgical Oncology.

Dr. Judson's clinical interest is in the treatment of benign and malignant tumors of the head and neck. He has a broad spectrum of interests including cancers of the oral cavity and larynx, salivary tumors, thyroid malignancies, skin cancers, and sinonasal tumors. His research interests parallel his clinical focus. Dr. Judson has an interest in tailoring minimally invasive approaches to the surgical treatment of each patient's disease in order to minimize the aesthetic and functional side-effects. This includes the use of endoscopic laser resections of upper aerodigestive tumors as well as investigating new techniques using robotic surgery. He also conducts translational clinical trials to improve our understanding of head and neck cancers.

## *The Graduates '10*

On June 30, 2009, the Section of Otolaryngology will say farewell to Chief Residents Natalya Chernichenko, MD and Stella Lee, MD.

Dr. Chernichenko is a graduate of SUNY Downstate Medical Center. Her plan after graduation is to continue on with a Head & Neck Fellowship at Memorial Sloan Kettering.

Dr. Lee, a graduate of Chicago Medical School, has accepted a Rhinology Fellowship at Johns Hopkins University in Baltimore, MD starting in July 2010.

***We wish our graduates the very best!***



Dr. Chernichenko



Dr. Lee

## Hearing & Balance Center



Elias Michaelides, MD  
Director

The Yale Hearing and Balance Center continues to provide state-of-the-art diagnostic testing and treatment of both hearing and balance disorders.

In addition to providing comprehensive audiologic services at the Yale Physicians Building, we provide audiologic care at Hill Health Center and Yale-New Haven Hospital including the Pediatric Specialty Care Unit and the Newborn Hearing Screening Program. The Hearing and Balance Center offers the latest in digital hearing aid technology for patients with hearing loss. Additionally, our cochlear implant and bone-anchored hearing device (Baha) programs are able to offer treatment options for virtually every type of auditory problem. Our balance assessment program, which includes audiology, otology, and neurology services to evaluation patients with complex balance problems, continues to grow.

At Hearing and Balance Center, our educational commitment to students, patients and healthcare providers remains. We currently have a full-time audiology resident from the University of Buffalo and have ongoing audiology students from the University of Connecticut. This past year we hosted a two-day cochlear implant conference and are finalizing a second conference for this spring. Similarly, our interest in research continues with interests in patulous Eustachian tube dysfunction, vestibular function of cochlear implant patients and vestibular evoked myogenic potentials.

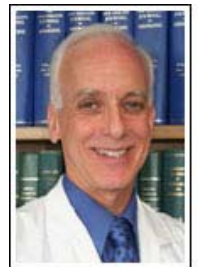
### CHRISTOPHER MCFADDEN

#### RESIDENT RESEARCH DAY

The annual Christopher McFadden Resident Research Day in Otolaryngology will be held on Friday, June 25th, at 1:00 pm, in Brady Auditorium of the School of Medicine. As always, we expect a very good turn out in support of presentations provided by our guest speaker, faculty, residents, and fellows. Our Visiting Professor is from the University of Paris, France, Professor Daniel Brasnu.

## EPIDEMIOLOGIC STUDY ON AGING AND DYSPHAGIA

**Steven B. Leder, Ph.D.**, Professor of Surgery, with co-researcher Dr. Debra M. Suiter of the University of Memphis, recently published an article entitled "An Epidemiologic Study on Aging and Dysphagia in the Acute Care Hospitalized Population: 2000-2007 in Gerontology (2009;55:714-718). This study was the culmination of a decade of research describing total and yearly demographic trends relative to aging, dysphagia referral rates, and oral feeding status. A total of 4,038 participants were prospectively included. Overall dysphagia referral rates doubled between 2000 and 2007, with specific referrals for 80-89 year old patients doubling and referrals for patients over 90 years more than tripling. This increase parallels the US Census Bureaus' projections for aging in America and will necessitate additional trained dysphagia specialists at least through 2050 and probably longer.

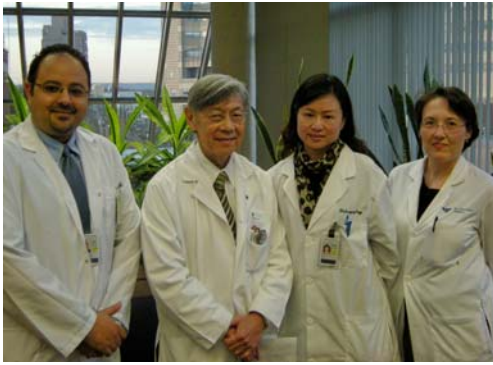


Dr. Leder is also participating in a multi-center trial investigating the BLOM tracheotomy tube. This unique tracheotomy tube is designed to allow patients who are ventilator dependent with an inflated tracheotomy tube cuff to speak. As more patients are surviving devastating traumatic spine injuries, progressive neurological diseases, and intractable respiratory failure the ability to communicate verbally while ventilator dependent via a tracheotomy becomes ever more important.

### ***The John K. Joe, MD Memorial Head & Neck Cancer Awareness Screening***

On Friday, May 8, 2009, the Section of Otolaryngology held their fourth annual John K. Joe, MD, Head and Neck Cancer Awareness Screening in collaboration with Yale-new Haven Hospital, Smilow Cancer Center and with the City of New Haven, Department of Public Health. It proved to be a very successful event with approximately 220 screenings performed, suspected neoplasm were identified. Next year's event is expected to be held on May 1, 2009.

# ***Yale Laryngeal Physiology Lab***



Left to right: Michael Wadie, MD, Clarence T. Sasaki, MD, Juan Li, MD, Natalya Chernichenko, MD

**Dr. Clarence Sasaki** assumed Directorship of this renowned laboratory in 1973 encouraging the participation of post-docs from far reaches of the world including many from Japan, Korea, India, PR China and Egypt. Over the years the laboratory has received the Triological Society's Edmund Prince Fowler Award, American Laryngological Association's Casselberry Award, and American Broncho-Esophagological Association's Broyles-Maloney Award. Current trainees include doctors Natalya Chernichenko, Chief Resident, David Hohuan, PGY-3, Michael Wadie of Cairo University and Juan Li of FuDan University the Fifth People's Hospital, Shanghai. Recent publications:

Sasaki CT, Hundal JS, Kim YH: Protective Glottic Closure: The Biomechanical Effects of Selective Laryngeal Denervation. *Ann Otol Rhinol Laryngol* 114:271-275, 2005.

Sasaki CT, Leder SB, Acton L, Maune S: A Comparison of the Glottic Closure Reflex in Traditional "Open" vs. Endoscopic Laser Supraglottic Laryngectomy. *Ann Otol Rhinol Laryngol* 115:93-96, 2006.

Sasaki CT: Anatomy and Development and Physiology of the Larynx. In: Goyal and Shaker's *GI Motility Online*: Edited by Goyal RK and Shaker R. Nature Publishing Group: New York, 2006. doi:10.1038/gimo 7.

Woo JS, Hundal JS, Sasaki CT, Ahdel Messih MW, Kelleher S: Reflex Vocal Cord Adduction in the Porcine Model: The Effects of Stimuli Delivered to Various Sensory Nerves, accepted *Ann Otol Rhinol Laryngol*, 2008

Sasaki CT, Hundal JS, Wadie M, Woo JS, Rosenblatt W: The Modulating Effects of Hypoxia and Hypercarbia on glottic closing force, accepted *Ann Otol Rhinol Laryngol*

Sasaki CT: *Laryngeal Physiology for the Surgeon*, San Diego, CA, Plural Publishing, Inc., 2008

## *New Staff of ENT*



**Ruth Martinez** joined ENT in October 2009 as a Front Desk Receptionist to the Yale ENT clinics. In her spare time, Ruth is a community service volunteer and enjoys singing in her church choir.



**LaTisha Clinepeat, MA**, is the newest member of Yale Otolaryngology starting in November 2009 as a Medical Assistant. LaTisha enjoys reading, shopping and volunteering for community service.

## **THE NEW CHIEFS**

On July 1, 2010, **Michael Fattal, MD** and **Jeffrey Ulis, MD** will assume responsibility as Chief Residents of the Section of Otolaryngology. Dr. Fattal received his MD from State University of New York at Syracuse College of Medicine. Dr. Ulis is a graduate of the University of Southern California, Keck School of Medicine.

Dr. Fattal



Dr. Ulis

# THE YALE OTOLARYNGOLOGY NEW SPEECH AND SWALLOW CENTER



**Dr. Nwanmegha Young**, Director, has established the new Yale Center for Speech and Swallowing Disorders. The Center will specialize in the diagnosis and management of individuals with disorders in speech, swallowing and/or breathing.

The larynx has three major functions phonation, respiration and deglutition states Dr. Young. All three of these functions are not only interrelated, they are interdependent. A center with providers from multiple disciplines specializing in all aspects these disorders allows for improved outcomes and better care.

Services provided by the Center include digital videostroboscopy, laryngeal electromyography, fiberoptic endoscopic evaluation of swallowing and rehabilitation, aphasia diagnosis and treatment. Specialized in office services include vocal cord augmentation, laser ablative surgery, botulinum toxin injection as well as transnasal esophagoscopy.

Joint research projects with the Yale Schools of Music and Drama as well as the Haskins Laboratory have been established. Through these collaborations says Dr. Young this center will be at the national forefront for innovation and development in this field.

## THE YALE EAR LAB



Professor, Dept. of Surgery-  
Otolaryngology,  
Neurobiology &  
Cellular and Molecular  
Physiology

**Dr. Joseph Santos-Sacchi's** lab works on the peripheral auditory system, particularly sensory hair cells. The lab is supported by three R01s from NIH-NIDCD. One grant focuses on the characterization of membrane properties of the outer hair cell, especially those properties that relate to electromotility. Electromotility is a fast voltage dependent cell movement that boosts our auditory system's frequency selectivity and sensitivity. Another R01 is a collaborative effort with Dr. Dhasakumar Navaratnam in Neurology to study the molecular underpinnings of electromotility, namely how the protein, prestin, responsible for fast OHC movements works. His third R01 is in collaboration with Dr. Anthony Ricci at Stanford University, Dept. of Otolaryngology. This project is concerned with understanding how hair cells communicate with the nervous system via the hair cell's chemical synapse. Special capacitance measuring techniques developed by Dr. Santos-Sacchi allow the evaluation of synaptic vesicle release during electrical stimulation of the hair cell. All projects are aimed at understanding normal function in order to better deal with the scourge of deafness. This year successful competing

renewals of these grants extend his NIH support out until the year 2015. Dr. Santos-Sacchi will serve as a member of the AUD study section to evaluate NIH auditory grants for a six year term starting in Oct. 2010. He had already served a four year term in the 1990's, as well as a four year term on the CDRC of NIDCD prior to that. Serving on NIH committees is an important way to help the NIH promote research and fight deafness. Ten presentations at national/international meetings and seminars at Universities around the world were made. Publications this year include:

Song L, Santos-Sacchi J. Conformational state-dependent anion binding in prestin: evidence for allosteric modulation  
Biophysical Journal (in press)

Santos-Sacchi J. Cochlear amplifier done. Hearing Research (in press).

Bai, J.-P. Navaratnam D, Surguchev A, Montoya S, Aronson PS, Santos-Sacchi J. Prestin's anion transport and voltage sensing capabilities are independent: implications for the cochlear amplifier. Biophysical Journal 2009, 96(8):3179-86

Santos-Sacchi J, Navarrete E, Song L. Fast electromechanical amplification in the lateral membrane of the outer hair cell. Biophys J. 2009 Jan; 96(2):739-47.

Santos-Sacchi J, Song L, Li X. Firing Up The Amplifier: Temperature, Pressure And Voltage Jump Studies On OHC Motor Capacitance. In Concepts And Challenges In The Biophysics Of Hearing, Mechanics of Hearing Proceedings, Keele University, eds. N.P. Cooper and D.T. Kemp, 2009

## DUFFEY LABORATORY

NIH supported studies in HNSCC cells confirm that resistance to cisplatin can be altered through manipulation of the transcription factor ATF2. These results have been submitted for publication and are the source data of research grant applications submitted this past year by **Dr. Dianne Duffey**.

The laboratory has studied the effects of bile acids on human oral keratinocyte cell lines. Effects on proinflammatory cytokine Interleukin-6 expression were evaluated after brief exposures with bile acids. The data demonstrate that there was a significant reduction in pro-inflammatory cytokine detection in this HPV-16 immortalized keratinocyte cell line following exposure to chenodeoxycholic acid and taurocholic acid at pH 7.4 and pH 5.0. Future studies will focus on manipulation of experimental conditions of bile acid concentrations. Correlations with immunohistochemical staining of laryngeal biopsy specimens will be made through collaboration with Dr. Diane Kowalski, Director of Yale's Head and Neck Pathology.

With the recent addition of research fellow, Panos Gouveris MD, PhD, the laboratory is also studying the expression of p16 in HNSCC and its association with survival mechanisms. The immediate focus is on protein expression of p16 in cell lines compared to its expression on tissue microarray cores. Comparisons are made to HPV positive and HPV negative cell lines. These findings will be utilized in microarrays that contain tissue spots from HNSCC surgical specimens. Additional microarray studies in collaboration with Dr. Amanda Psyrri concentrate on the role of Notch protein in mechanisms of HPV-associated head and neck squamous cell cancers.

Dr. Duffey continues to act as Residency Program Director and was named to America's Best Doctors 2009-2010



Left to right:  
Dr. Clarence Sasaki  
Dr. Panagiotis Gouveris  
Dr. Dianne Duffey

## LIZARDI LAB

Advanced methods to determine the methylation status of the genome designed by the team of Professor Paul Lizardi have enabled a multidisciplinary team of researchers to determine how methylation changes found in head and neck tumors differ from the patterns found in adjacent tissues and also from cells obtained from normal subjects.

These results recently published will serve as the basis for work in early detection and also for unraveling the relationship of Human Papilloma Viruses to head and neck cancer. – José Costa, MD

Sebastian Szpakowski, Xueguang Sun, Jose M. Lage, Andrew Dyer, Jill Rubinstein, Diane Kowalski, Clarence Sasaki, Jose Costa, Paul Lizardi: The Loss of Epigenetic Silencing in Tumors Preferentially Affects Primate-specific Retroelements, GENE, 36611, April 1990.



Clarence Sasaki, MD Diane Kowalski, MD



Yale Otolaryngology is located in the heart of New Haven at the Yale Physicians Building, 800 Howard Ave, 4<sup>th</sup> Floor, New Haven, CT 06519. To reach us by phone please call 203-785-2593 or by fax at 203-785-3970.