Department of Otolaryngology / Head and Neck Surgery

**Winter 2023** 

# MESSAGE FROM THE CHAIR: Creating a Culture for Research



We have been fortunate to have assembled a cadre of faculty here at UCSD who believe in the importance of establishing a culture of discovery science in our department. Not only does this support come from our clinician-scientists, but there is uniform support by all of our clinicians whose primary role is teaching and delivering high levels of clinical care.

Academic Otolaryngology is a surgical subspecialty with an emphasis on patient care, new and better operations to deliver that care, research discovery to understand disease processes and the training of future surgeons in the art and science of our craft. Wedged in between these goals

is research discovery. Having a culture that promotes and encourages research in our modern-day academic departments is integral not only for maintaining a focus on advancing our field, but supporting and encouraging our students, residents and junior faculty to become better equipped to compete in the real world for research funding. Recently I published a paper looking at the obstacles facing our trainees who desire a clinician scientist career path. In this article, I attempted to point out why this is important.

"Clinician-scientists, who combine an expertise in clinical care with the scientific training to undertake targeted research, are needed for investigating disease mechanisms and translating those discoveries into practical patient-care applications. Over the past several decades, however, there has been a decline in the number of clinician-scientists in the United States. 1,2 In 2014, just 1.5% of all practicing physicians reported research as their primary activity. 3" (Harris JP, Edstrom OE. Factors Influencing a Clinician-Scientist Career Path in Otolaryngology. Laryngoscope. 2022 Aug; 132(8): 1555-1560; doi: 10.1002/lary.29940.)

This has become a serious concern and focus of the NIH, the primary funding source for medical research in the U.S. The aforementioned publication was a survey of K awardees and residents enrolled in an institutional mentored training grants (T32 and R25); the conclusions of which were: 1) the need for role models within departments as mentors, 2) Departmental support for research, and 3) the issue of disparity in salary with their clinical peers.

When I look at the landscape of research being done in our department, it is very gratifying and encouraging. We recently were awarded an R25 mentored research training grant that converted our long running T32 grant to continue the support of our residents in 1-2 years of funded research in an established laboratory. The benefit of this program has translated into 13 resident research awards in the past 5 years that allow our residents to continue their research programs and ultimately result in publications and career development.

The value of mentors cannot be over emphasized. Having faculty who balance clinical care, their family life and a laboratory effort is of paramount importance. Role models such as Joseph Califano, M.D. with a broad ranging research effort in head and neck cancer, Rick Friedman, MD, PhD in the basic science of hearing loss, Quyen Nguyen, M.D., PhD, in molecular navigation in surgery, Philip Weissbrod, MD in laryngology, Carol Yan, MD, in olfaction, Jacqueline Greene MD, in facial nerve regeneration, Theresa Guo, MD, in head and neck cancer, Akihiro Matsuoka, MD, PhD on vestibular regeneration--all carry clinical loads yet carry on competitive, funded laboratory efforts.

In my mind, this is what constitutes the culture of research that not only translates into improvement in patient care and career trajectory, but as a side benefit has also resulted in UCSD Otolaryngology being in the top 10 of NIH funding. This is what makes UCSD Otolaryngology such an exciting place to work, and to serve patients. I would like to congratulate and thank all our faculty alumni, residents, and medical students who have contributed to such a rich legacy of investigation and patient care.

Sincerely,

# Jeffrey P. Harris, MD, PhD., FACS

Distinguished Professor of Otolaryngology and Neurological Surgery Chair, Department of Otolaryngology/Head and Neck Surgery

### **FEATURE STORY**

# Dr. Joseph Califano III Appointed Director of Moores Cancer Center at UC San Diego Health



We are pleased to announce that Joseph A. Califano III, MD, has accepted the position of director of Moores Cancer Center at UC San Diego Health, beginning immediately.

Following a comprehensive national search, Dr. Califano succeeds Scott Lippman, who announced in November 2021 that he would be stepping down as director to lead the PreCancer Genome Atlas (PCGA).

Dr. Califano brings immense experience and expertise to the new position, having served as physician-in-chief at Moores Cancer Center, director of the Hanna and Mark Glieberman Head and Neck Cancer Center and co-leader of the Structural and Functional Genomics Program. He will transition from these duties to focus on the directorship.

A board-certified otolaryngologist who specializes in head and neck surgical oncology and the integration of basic, molecular and biological research in that practice, Dr. Califano's clinical expertise includes minimally invasive treatment of tumors of the mouth, throat and head and neck.

Dr. Califano directs a National Institutes of Health funded laboratory investigating the molecular and biological basis of head and neck cancer and serves as principal investigator for multiple clinical trials. He has authored more than 300 peer-reviewed articles related to both the clinical and basic scientific aspects of cancer, serving on a variety of professional organizations and editorial boards, including the National Cancer Institute (NCI) Head and Neck Steering Committee, the National Comprehensive Cancer Network board of directors and the Council of the American Head and Neck Society.

Prior to joining UC San Diego Health in 2015, Califano was a professor in the Department of Otolaryngology-Head and Neck Surgery at Johns Hopkins School of Medicine in Baltimore. Dr. Califano completed a fellowship in head and neck surgical oncology at Memorial Sloan Kettering Cancer Center and a residency in otolaryngology-head and neck surgery at Johns Hopkins Hospital. He earned his medical degree from Harvard Medical School.

READ MORE ON DR. CALIFANO

### UC San Diego Health Ranks #1 Regionally by U.S. News & World Report





Our Otolaryngology/ENT care is ranked #21 in the nation by US News & World Report. According to 22-23

According to the 2022-2023 U.S. News & World Report "Best Hospitals" survey, UC San Diego Health has once again ranked #1 in San Diego and #5 in California, placing it among the nation's best health care providers. Designed to assist patients and physicians in making informed health care decisions, these annual rankings distinguish hospitals that excel in providing multidisciplinary, comprehensive care for the most challenging health conditions.

### WELCOME NEW FACULTY

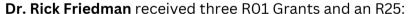


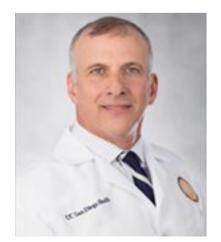
Akihiro J. Matsuoka, MD, DMSc, PhD, FACS is a double board-certified otolaryngologist and neurotologist who treats neurological disorders of the ear. He is a world-renowned expert in the treatment of vertigo and dizziness and leads the balance and vestibular program at UC San Diego Health. Dr. also treats tinnitus, hearing impairment, otosclerosis, Matsuoka cholesteatoma, superior canal dehiscence, and chronic ear infections. As an associate professor in the Department of Otolaryngology-Head and Neck Surgery, he trains medical students, otolaryngology residents, and neurotology fellows at the UC San Diego School of Medicine. He has received funding from the National Institutes of Health (NIH) and the Department of Defense (DOD) for his research on nanotechnological stemcell regeneration of the inner ear.

Before joining UC San Diego Health, Dr. Matsuoka served as the director of Audiology at Northwestern Medicine, where he developed new vestibular equipment, served as a beta site for industries, and taught students in the School of Communications Disorders at Northwestern University. Dr. Matsuoka completed his fellowship training in neurotology at the University of California San Diego and did his residency training and NIH-sponsored research training in the Otolaryngology Department at Indiana University School of Medicine. He holds a Ph.D. in auditory physiology/computational neuroscience from the University of Iowa.

Dr. Matsuoka has published more than 50 articles and book chapters in peer-reviewed publications such as Acta Biomaterialia, Stem Cell and Translational Medicine, Tissue Engineering, and Acta Otolaryngologica, among others. He is a member of several societies in his area of specialization, including the American Academy of Otolaryngology-Head and Neck Surgery, the Association for Research in Otolaryngology, and the International Society of Stem Cell Research. In his free time, Dr. Matsuoka enjoys spending time with his family and has an interest in computer programming and Star Trek.







Mechanisms of Protection from Noise-induced hearing loss https://reporter.nih.gov/search/0wv2aUTCdUeszAvm9f8H2w/projectdetails/10365558

Otolaryngology Training in Immunology, Virology and Molecular **Biology** 

https://reporter.nih.gov/search/0wv2aUTCdUeszAvm9f8H2w/projectdetails/10426896

The genetic basis for age-related hearing loss in outbred mice https://reporter.nih.gov/search/Owv2aUTCdUeszAvm9f8H2w/projectdetails/10468839

The genetics of functional decline in the aging vestibular system: A GWAS and gene expression analysis in aging mice and humans https://reporter.nih.gov/search/0wv2aUTCdUeszAvm9f8H2w/projectdetails/10471926



**Benjamin Ostrander, M.D. (PGY-4)**Received a grant award with Dr. Friedman's group

Congratulations to the team on becoming the recipient of an **ANA** research grant of \$25,000 for "Genetic and Molecular Characteristics of Latent versus Actively Growing Sporadic Vestibular Schwannoma."

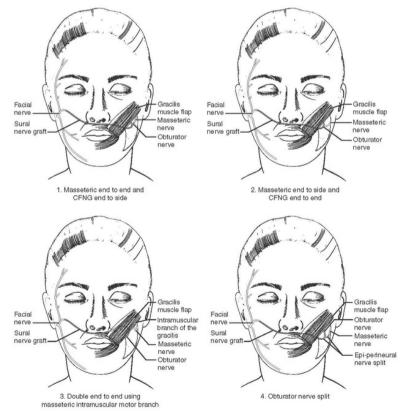


### Dr. Jacqueline Greene

Awarded a KL2 Career Development grant for a project entitled ""Advancing Long-Gap Facial Nerve Regeneration with 3D-Printed Multichannel Nerve Scaffolds" with mentors Mark Tuszynski, MD/PhD (Neuroscience) and Joseph Califano, MD

Dr. Greene's paper was listed as one of the most downloaded from Operative Techniques in Otolaryngology-Head and Neck Surgery in Mar 2022, "Advances and future directions in the care of patients with facial paralysis".

A figure from this publication depicts different techniques utilized in facial reanimation surgery (various coaptation patterns for dual innervation of free gracilis muscle transfer.)



### **CONFERENCE SPOTLIGHT**









Quyen Nguyen, MD, PhD

Rick Friedman, MD, PhD

Allan Ryan, PhD

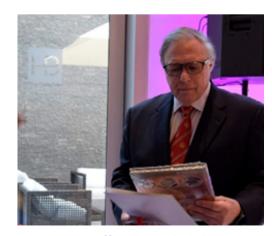
Dr. Rick Friedman and Dr. Jeffrey Harris presented their work, Successfully Characterized the Genetic Landscape of Ménière's disease.

Dr. Quyen Nguyen described her work on Intraoperative Real-time Florescence-Guided Nerve Visualization First-In-Human Clinical Trial.

Dr. Allen Ryan presented Gene Expression in the Various Cells of the Middle Ear During Otitis Media, in the Mouse and Human, with Implications for Novel Therapies and described his developmental work of a middle-ear-on-a-chip for experiments with human tissue and blood cells



From left: Cherie-Ann Nathan, Jeffrey Harris, Rick Friedman, Quyen Nguyen, Allen Ryan



Jeffrey P. Harris, MD



Dr. Kevin Brumund served as Course Director in the following:

- Thyroid, Parathyroid, and Neck Ultrasound Course at the American Head and Neck Society Annual Meeting, Dallas TX, April 2022
- Hands-On Thyroid Ultrasound Workshop: Advanced Course at the Endocrine Society Annual Meeting, Atlanta GA, June 2022
- Endocrine Neck Advanced Ultrasound Course at the American Thyroid Association Annual Meeting, Montreal Quebec Canada, Oct 2022
- Chair: Difficult Benign Thyroid Cases; Panel discussion at the Surgical Symposium at the American Thyroid Association Annual Meeting, Montreal Quebec Canada, Oct 2022

### Triological Society 2022 in Dallas



From left: Deborah Watson, MD and David Hom, MD

Dr. Deborah Watson and Dr. David Hom presented together at the Triological Society meeting on April 29, 2022 in Dallas. Their panel was entitled Facial Plastic Surgery: New Approaches in Our Practices.

# IN THE NEWS

Physicians with a 4.9+ star rating are considered among the top 10% in the country. At UC San Diego Health, we currently have 18 physicians with a 5-star rating and 166 physicians with a 4.9+ star rating." Log in with UC San Diego Pulse https://pulse.ucsd.edu/physician/pulse/Pages/November-09%2c2022.aspx



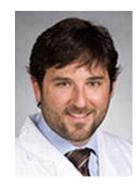
Dr. Jacqueline Greene



Dr. Charles Coffey



Dr. Rick Friedman



Dr. Philip Weissbrod



Dr. Ryan Orosco



**Dr. Deborah Watson**, our Residency Program Director and co-Director of our Department's Facial Plastic & Reconstructive Surgery, has been extending her expertise and academic reach to several national Boards. She serves on the American Board of Otolaryngology Exam Council, the Board of Directors for the Accreditation Council for Post-Residency Specialty Education, the American Board of Facial Plastic & Reconstructive Surgery Written Exam and Credentials Committees, and our own UCSD Health Sciences Board of Governors to name only a few. She recently accepted invitations on the Editorial Boards of the Bioengineering journal published by MDPI and the Facial Plastic Surgery journal published by Thieme and is a guest editor on a special issue, "Cartilage and Bone Tissue Engineering for Craniofacial Reconstruction" with Bioengineering



**Dr. David Hom** received the **2022 Excellence in Teaching Award** from the Residents at the UCSD Resident Graduation. He also became the **Clinical Medical Director in Hillcrest (Level 1 Trauma Center)**.

Dr. Hom presented at the Society of University Otolaryngology meeting on Nov 5, 2022, in Chicago regarding the "Ins and Outs of Running a Boot Camp" describing the successful 2022 Southwestern Boot Camp held at UCSD entitled Effective responses to Otolaryngology Emergencies.

This year, All 10 Southwest programs (UCLA, USC, Cedars Sinai, UC Irvine, Loma Linda, Mayo- Arizona, Univ of Arizona, Univ of Nevada at Las Vegas, US Naval Hospital and UCSD) sent their residents and with some of their faculty.

### **REGIONAL SOUTHWEST RESIDENT BOOT CAMP**





### **USNWR 2023 BEST HOSPITALS RANKINGS VOTING REGISTRATION**

Each year, board-certified physicians and registered members of Doximity are eligible to participate in voting for the best hospital in a range of specialties for the <u>U.S. News & World Report</u> rankings. Voting for this year's rankings will open in **February 2023.** 

When U.S. News & World Report "Best Hospitals" report comes in summer 2023, we want to be #1 in San Diego and elevate our specialty in the rankings. **In 2022**, our ENT program was ranked #21 nationwide, for USNWR. We can always do better.

We are deeply proud of our alumni, faculty and community, and recognize these achievements are a reflection of what we have built together in a tradition of excellence.

Please consider voting for **UC San Diego Health-La Jolla and Hillcrest Hospitals within the Otolaryngology specialty** in the annual U.S. News & World Report survey. Your votes help us to continue to be recognized as one of the best hospitals in the nation and allow us to share our ongoing commitment to high-quality patient care and forward-thinking research with the world.

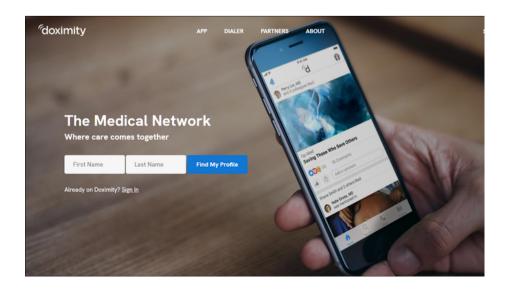
### **How to Vote:**

If you are not a Doximity member, you can register at any time between now and the end of the voting period in February.

- Registration only takes a few minutes and can be completed on your phone or computer.
- Once registered, ensure that your board specialty is noted correctly.

If you are a registered Doximity member, a survey link will be emailed to you later this February 2023.

• Even if you don't receive the email, you can still vote by logging in to **Doximity.com** with your username and password



### **PUBLICATIONS (NOVEMBER 2022-JANUARY 2023)**

<u>Archaea Microbiome Dysregulated Genes and Pathways as Molecular Targets for Lung Adenocarcinoma and Squamous Cell Carcinoma.</u>

Uzelac M, Li Y, Chakladar J, Li WT, **Ongkeko WM**. Int J Mol Sci. 2022 Sep 30;23(19):11566. doi: 10.3390/ijms231911566. PMID: 36232866 Free PMC article

<u>Assessing Efficacy Using Variations of Olfactory Training for COVID-19-Related Smell Loss-Would a Rose by Any Other Scent Smell as Strong?</u>

**Yan CH**. JAMA Otolaryngol Head Neck Surg. 2022 Dec 29. doi: 10.1001/jamaoto.2022.4113. Online ahead of print. PMID: 36580290 No abstract available.

Effects of Human Papilloma Virus E6/E7 Oncoproteins on Genomic Structure in Head and Neck Squamous Cell Carcinoma. Uzelac M, Barakchi A, Beldona V, John D, Chakladar J, Li WT, **Ongkeko WM**. Cancers (Basel). 2022 Dec 15;14(24):6190. doi: 10.3390/cancers14246190. PMID: 36551675 Free PMC article.

Hearing rehabilitation and microbial shift after middle ear surgery with Vibrant Soundbridge in patients with chronic otitis media. Bruchhage KL, Lupatsii M, Möllenkolk F, Leffers D, **Kurabi A**, Jürgens T, Graspeuntner S, Hollfelder D, Leichtle A. Eur Arch Otorhinolaryngol. 2023 Jan 20. doi: 10.1007/s00405-022-07795-9. Online ahead of print. PMID: 36662266

<u>A Young Man Presenting With Tongue Lesions.</u> Victor M, Vavinskaya V, **Guo T**. JAMA Otolaryngol Head Neck Surg. 2022 Nov 23. doi: 10.1001/jamaoto.2022.3799. Online ahead of print. PMID: 36416858

Seven cardinal questions for the patient with ear, nose or throat complaints: Review.

**Gilani S**. Medicine (Baltimore). 2022 Dec 16;101(50):e31852. doi: 10.1097/MD.000000000031852. PMID: 36550869 Free PMC article. Review.

Image analysis reveals differences in tumor multinucleations in Black and White patients with human papillomavirus-associated oropharyngeal squamous cell carcinoma.

Koyuncu CF, Nag R, Lu C, Corredor G, Viswanathan VS, Sandulache VC, Fu P, Yang K, Pan Q, Zhang Z, Xu J, Chute DJ, Thorstad WL, **Faraji F**, Bishop JA, Mehrad M, Castro PD, Sikora AG, Thompson LDR, Chernock RD, Lang Kuhs KA, Wasman JK, Luo JR, Adelstein DJ, Koyfman SA, Lewis JS Jr, Madabhushi A. Cancer. 2022 Nov 1;128(21):3831-3842. doi: 10.1002/cncr.34446. Epub 2022 Sep 6. PMID: 36066461

<u>International Pediatric Otolaryngology Group (IPOG) consensus recommendations: Evaluation and management of congenital tracheal stenosis.</u>

Sidell DR, Meister KD, de Alarcon A, Boudewyns A, **Brigger M,** Chun R, Fayoux P, Goudy S, Hart CK, Hewitt R, Hsu WC, Javia LR, Johnson RF, Messner AH, Moreddu E, Nicollas R, Prager JD, Rahbar R, Rickert S, Rossi ME, Russell J, Rutter M, Sandu K, Smith RJH, Soma M, Thierry B, Trozzi M, White DR, Balakrishnan K. Int J Pediatr Otorhinolaryngol. 2022 Oct;161:111251. doi: 10.1016/j.ijporl.2022.111251. Epub 2022 Aug 17. PMID: 35988373 Review.

<u>Persistent post-COVID-19 smell loss is associated with immune cell infiltration and altered gene</u> expression in olfactory epithelium.

John B. Finlay, **David H**. Brann, Ralph Abi Hachem, David W. Jang, Allison D. Oliva, Tiffany Ko, Rupali Gupta, Sebastian A., Wellford, E. Ashley Moseman, Sophie S. Jang, **Carol H. Yan**, Hiroaki Matsunami. Finlay et al., Sci. Transl. Med. 14, eadd0484 (2022) 21 December 2022

<u>Use of platelet-rich plasma for COVID-19 related olfactory loss, a randomized controlled trial.</u> **Yan CH**, Jang SS, Lin HC, Ma Y, Khanwalker AR, Thai A, Patel ZM. Int Forum Allergy Rhinol. 2022 Dec 12. doi: 10.1002/alr.23116. Online ahead of print. PMID: 36507615

### A fluorescent photoimmunoconjugate for imaging of cholesteatoma.

**Early S**, Saad MA, Mallidi S, Mansour A, Seist R, Hasan T, Stankovic KM. Sci Rep. 2022 Nov 19;12(1):19905. doi: 10.1038/s41598-022-22072-9. PMID: 36402793 Free PMC article.

<u>A Young Man Presenting With Tongue Lesions.</u> Victor M, Vavinskaya V, **Guo T**. JAMA Otolaryngol Head Neck Surg. 2022 Nov 23. doi: 10.1001/jamaoto.2022.3799. Online ahead of print. PMID: 36416858

<u>Ramlanivimab therapy for acute COVID-19 does not blunt SARS-CoV-2-specific memory T cell responses.</u> Ramirez SI, Grifoni A, Weiskopf D, Parikh UM, Heaps A, **Faraji F**, Sieg SF, Ritz J, Moser CB, Eron JJ, Currier JS, Klekotka P, Sette A, Wohl DA, Daar ES, Hughes MD, Chew KW, Smith DM, Crotty S. JCI Insight. 2022 Nov 15:e163471. doi: 10.1172/jci.insight.163471. Online ahead of print. PMID: 36378539

<u>High-risk HPV infection-associated hypermethylated genes in oropharyngeal squamous cell carcinomas.</u> Inokawa Y, Hayashi M, Begum S, Noordhuis MG, Sidransky D, **Califano J**, Koch W, Brait M, Westra WH, Hoque MO. BMC Cancer. 2022 Nov 7;22(1):1146. doi: 10.1186/s12885-022-10227-w. PMID: 36344942

### Incidence and Severity of Kawasaki Disease Among Vietnamese Children.

Doan NH, Sivilay N, Shimizu C, Nguyen H, Bainto E, **Nguyen Q**, Tremoulet AH, Burns JC. Pediatr Infect Dis J. 2022 Nov 1;41(11):e487-e489. doi: 10.1097/INF.000000000003654. Epub 2022 Aug 5. PMID: 36223235

<u>Perceptions of Pediatric Endocrinologists and Neurologists on the Drivers of Telehealth Use.</u> Schulson LB, Predmore Z, Sousa JL, McCullough CM, **Magit A**, Lerner C, Chinnock R, Barkley S, Marcin JP, McGuire T, Browne MA, Uscher-Pines L. Acad Pediatr. 2022 Aug 5:S1876-2859(22)00371-0. doi: 10.1016/j.acap.2022.07.021. Online ahead of print. PMID: 35940573

Quantitative prediction of aspiration risk in head and neck cancer patients treated with radiation therapy. Liu HC, Williamson CW, Zou J, Todd JR, Nelson TJ, Hill LM, Linnemeyer KE, Henderson G, Madgula P, Faung B, Sacco AG, Vitzthum LK, **Weissbrod PA**, Blumenfeld LS, Mell LK. Oral Oncol. 2022 Nov 19;136:106247. doi: 10.1016/j.oraloncology.2022.106247. Online ahead of print. PMID: 36410204

### Resolution of otitis media in a humanized mouse model.

Son YL, Pak K, Muradagha N, Heo KW, Leichtle A, **Kurabi A.** Front Genet. 2022 Nov 9;13:958540. doi: 10.3389/fgene.2022.958540. eCollection 2022. PMID: 36437913 Free PMC article.

The Intratumor Bacterial and Fungal Microbiome Is Characterized by HPV, Smoking, and Alcohol Consumption in Head and Neck Squamous Cell Carcinoma.

Chakladar J, John D, Magesh S, Uzelac M, Li WT, Dereschuk K, Apostol L, **Brumund KT**, Rodriguez JW, Ongkeko WM. Int J Mol Sci. 2022 Oct 31;23(21):13250. doi: 10.3390/ijms232113250. PMID: 36362038 Free PMC article.

### Use of a Novel Clinical Decision-Making Tool in Vestibular Schwannoma Treatment.

La Monte OA, Moshtaghi O, Tang E, Du EY, Swisher AR, Dixon PR, Nemati S, Djalilian HR, Schwartz MS, **Friedman RA**. Otol Neurotol. 2022 Dec 1;43(10):e1174-e1179. doi: 10.1097/MAO.0000000000003719. Epub 2022 Oct 14. PMID: 36240736