



C. Kwang Sung, MD, MS

Associate Professor of Otolaryngology - Head & Neck Surgery (OHNS) and, by courtesy, of Music

Otolaryngology (Head and Neck Surgery)

CLINICAL OFFICE (PRIMARY)

- **Stanford Dept of Otolaryngology, Head and Neck Surgery**

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ACADEMIC CONTACT INFORMATION

- **Alternate Contact**

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Bio

BIO

Dr. Sung is a laryngologist in the Department of Otolaryngology — Head & Neck Surgery who specializes in voice, swallowing and airway disorders, and is also the Residency Program Director.

Dr. Sung graduated from Harvey Mudd College in Claremont, CA with a bachelor's of science degree in chemistry with a minor in music. He earned a master's of science degree in organic chemistry from the University of Pennsylvania. He attended the State University of New York – Downstate Medical Center and obtained his MD in 2004.

He completed his internship in general surgery at Mt. Sinai School of Medicine in New York City in 2005. He continued at Mt. Sinai to finish his residency in otolaryngology – head & neck surgery in 2009. Following residency, he completed a fellowship in laryngology at Harvard Medical School – Massachusetts Eye and Ear Infirmary with Ramon A. Franco, Jr., MD in 2010.

Dr. Sung joined the Stanford faculty in 2010 as Assistant Professor. He is also a staff physician at the Veteran's Administration Palo Alto Health Care System.

In addition to his medical training, Dr. Sung worked extensively as a professional singer and actor for several years. He attended drama academy in New York City and performed in productions off-Broadway, in regional theaters, and in national and international tours. He has also performed with the Stanford University Symphonic Choir. He regularly lectures to voice and vocal pedagogy students in the Department of Music, in which he holds a courtesy appointment.

His clinical interests include the care of professional voice users; phonosurgery; treatment of vocal fold paralysis with laryngeal framework surgery and injection techniques; diagnosis and Botox treatment of spasmodic dysphonia; office-based laser surgery; treatment of recurrent laryngeal papilloma; treatment of essential laryngeal tremor; and treatment of laryngeal cancer.

CLINICAL FOCUS

- Otolaryngology
- Laryngology
- Voice Disorders
- Hoarseness
- Singers
- Vocal Cord Paralysis
- Spasmodic Dysphonia
- Laryngeal Cancer
- Laryngeal Laser Therapy
- Swallowing Disorders
- Airway Disorders

ACADEMIC APPOINTMENTS

- Associate Professor - University Medical Line, Otolaryngology (Head and Neck Surgery)
- Associate Professor - University Medical Line (By courtesy), Music

ADMINISTRATIVE APPOINTMENTS

- Residency Program Director, Stanford University School of Medicine, Dept. of Otolaryngology - Head & Neck Surgery, (2019- present)
- Director of Otolaryngology Medical Student Clerkship, Stanford University School of Medicine, Dept. of Otolaryngology - Head & Neck Surgery, (2011-2017)
- Medical Student Admissions Reviewer, Stanford University School of Medicine, (2012-2013)
- Laryngology & Bronchoesophagology Education Committee, American Academy of Otolaryngology – Head and Neck Surgery, (2011-2017)
- Home Study Course Laryngology & Bronchoesophagology Working Group, American Academy of Otolaryngology – Head and Neck Surgery, (2011-2017)
- Course Director of Otolaryngology - Head & Neck Surgery Grand Rounds, Stanford University School of Medicine, Dept. of Otolaryngology, (2011-2015)

HONORS AND AWARDS

- Bay Area Top Doctors, San Francisco Magazine (2017-2024)
- Honor Award, American Academy of Otolaryngology - Head & Neck Surgery (2023)
- Patient-Centeredness Honoree, Stanford Health Care (2018-2019)
- J. Arthur Campbell Award for Chemistry, Harvey Mudd College (1989)
- Phi Lambda Upsilon, University of Pennsylvania (1989)
- Outstanding Teaching Award, Department of Chemistry, University of Pennsylvania (1990)
- Alpha Omega Alpha, SUNY Downstate Medical Center (2003)
- Award for Outstanding Academic Achievement, Department of Otolaryngology, SUNY Downstate Medical Center (2004)
- Magna Cum Laude, SUNY Downstate Medical Center (2004)
- Third Prize, Metropolitan New York Resident Research Day Symposium (2007)
- Travel Award, Triological Society (2007, 2009)
- First Prize Proffered Paper Session, New York Head and Neck Society (2008)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Academy of Otolaryngology - Head & Neck Surgery (2005 - present)

- Diplomate, American Board of Otolaryngology (2010 - present)
- Member, Society of University Otolaryngologists (2012 - present)
- Member, American Broncho-Esophagological Association (ABEA) (2013 - present)
- Member, Otolaryngology Program Directors Organization (2019 - present)

PROFESSIONAL EDUCATION

- Internship: Icahn School of Medicine at Mount Sinai Department of Surgery-Division of General Surgery (2005) NY
- Fellowship: Massachusetts Eye and Ear Infirmary Dept of Otolaryngology (2010) MA
- Residency: Icahn School of Medicine at Mount Sinai Dept of Otolaryngology (2009) NY
- Board Certification: Otolaryngology, American Board of Otolaryngology (2010)
- Fellowship, Harvard Medical School - Massachusetts Eye & Ear Infirmary , Laryngology (2010)
- Residency, Mt. Sinai School of Medicine , Otolaryngology (2009)
- Internship, Mt. Sinai School of Medicine , General Surgery (2005)
- MD, State University of New York - Downstate Medical Center , Medicine (2004)
- MS, University of Pennsylvania , Organic Chemistry (1992)
- BS, Harvey Mudd College , Chemistry (1989)

LINKS

- Stanford Voice & Swallowing Center: <https://stanfordhealthcare.org/medical-clinics/voice-swallowing-center.html>
- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

- Development of office-based laryngeal surgical methods and instrumentation.
- Clinical outcomes after treatment of glottic insufficiency.
- Clinical outcomes after treatment of benign vocal fold pathology.
- Medical student and resident training curriculum development.

Teaching

COURSES

2023-24

- Introduction to Otolaryngology-Head and Neck Surgery: OTOHNS 200 (Win)

2022-23

- Introduction to Otolaryngology-Head and Neck Surgery: OTOHNS 200 (Win)

2021-22

- Introduction to Otolaryngology-Head and Neck Surgery: OTOHNS 200 (Win)

2020-21

- Introduction to Otolaryngology-Head and Neck Surgery: OTOHNS 200 (Win)

Publications

PUBLICATIONS

- **Impact of Obesity on Timing of Tracheotomy: A Multi-institutional Retrospective Study.** *The Laryngoscope*
Yousef, A., Soliman, S. I., Solomon, I., Panuganti, B. A., Francis, D. O., Pang, J., Klebaner, D., Asturias, A., Alattar, A., Wood, S., Terry, M., Bryson, P. C., Tipton, et al
2024
- **A Scoping Review of Artificial Intelligence Detection of Voice Pathology: Challenges and Opportunities.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
Liu, G. S., Jovanovic, N., Sung, C. K., Doyle, P. C.
2024
- **Parosteal Lipoma Overlying an Osteochondroma of the Hyoid Bone: A Case Report and Literature Review.** *The Laryngoscope*
Green, A., Wei, E. X., Chang-Graham, A., Holmes, B., Smith, A., Sung, C. K.
2023
- **Factors Associated With Otolaryngologists Performing Tracheotomy.** *JAMA otolaryngology-- head & neck surgery*
Soliman, S. I., Panuganti, B. A., Francis, D. O., Pang, J., Klebaner, D., Asturias, A., Alattar, A., Wood, S., Terry, M., Bryson, P. C., Tipton, C. B., Zhao, E. E., O'Rourke, et al
2023
- **End-to-end deep learning classification of vocal pathology using stacked vowels.** *Laryngoscope investigative otolaryngology*
Liu, G. S., Hodges, J. M., Yu, J., Sung, C. K., Erickson-DiRenzo, E., Doyle, P. C.
2023; 8 (5): 1312-1318
- **Tracheal stenosis and airway complications in the Coronavirus Disease-19 era.** *Annals of thoracic surgery short reports*
Krishnan, A., Guenthart, B. A., Choi, A., Trope, W., Berry, G. J., Pinezich, M. R., Vunjak-Novakovic, G., Shaller, B., Sung, C. K., Liou, D. Z., Damrose, E. J., Lui, N. S.
2023
- **Safety and Utility of Transnasal Humidified Rapid-Insufflation Ventilatory Exchange (THRIVE) for Laser Laryngeal Surgery.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
Khan, N. C., Vukkadala, N., Saxena, A., Damrose, E. J., Nekhendzy, V., Sung, C. K.
2023
- **Diagnosis and Management of Vocal Complications after Chondrolaryngoplasty.** *The Laryngoscope*
Nuyen, B., Qian, Z. J., Rakkar, M., Thomas, J. P., Erickson-DiRenzo, E., Sung, C. K.
2022
- **Social Perception of External Laryngeal Anatomy Related to Gender Expression in a Web-based Survey.** *The Laryngoscope*
Kiessling, P., Balakrishnan, K., Fauer, A., Sanan, A., McDonald, D., Thomas, J., Erickson-Direnzo, E., Sung, C. K., Nuyen, B.
2022
- **Clinicodemographic Predictors of Tracheotomy Tube Size and Decannulation: A Multiinstitutional Retrospective Cohort Study on Tracheotomy.** *Annals of surgery*
Panuganti, B. A., Pang, J., Francis, D. O., Klebaner, D., Asturias, A., Alattar, A., Wood, S., Terry, M., Bryson, P. C., Tipton, C. B., Zhao, E. E., O'Rourke, A., Maria, et al
1800
- **Feminization Laryngoplasty: 17-Year Review on Long-Term Outcomes, Safety, and Technique.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
Nuyen, B. A., Qian, Z. J., Campbell, R. D., Erickson-DiRenzo, E., Thomas, J., Sung, C. K.
2021: 1945998211036870
- **Mainstream Cigarette Smoke Impacts the Mouse Vocal Fold Epithelium and Mucus Barrier.** *The Laryngoscope*
Erickson-DiRenzo, E., Easwaran, M., Martinez, J. D., Dewan, K., Sung, C. K.
2021

- **Operative and Conservative Management of Laryngeal Contact Granuloma: A Network Analysis and Systematic Review** *JOURNAL OF VOICE*
Tsai, S., Ma, Y., Shih, L., Tsou, Y., Sung, C.
2021; 35 (2): 300–306
- **Otolaryngology Residency Interviews in a Socially Distanced World: Strategies to Recruit and Assess Applicants.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
Chou, D. W., Pletcher, S. D., Bruss, D., Sung, C. K., Diaz, R. C., Liang, J., Durr, M. L.
2020: 194599820957961
- **A Preliminary Study of Vocal Health Among Collegiate A Cappella Singers** *JOURNAL OF VOICE*
Baird, B. J., Mokhtari, T. E., Sung, C., Erickson-DiRenzo, E.
2020; 34 (3)
- **The Clinical Course of Idiopathic Bilateral Vocal Fold Motion Impairment in Adults: Case Series and Review of the Literature** *JOURNAL OF VOICE*
Abu Ghanem, S., Junlapan, A., Tsai, S., Shih, L., Sung, C., Damrose, E. J.
2020; 34 (3): 465–70
- **Vocal Hygiene in Collegiate Singers-Does Formal Training Relate to Practices?** *Journal of voice : official journal of the Voice Foundation*
Santa Maria, C., Sung, C., Baird, B. J., Erickson-DiRenzo, E.
2020
- **Intraoperative Evaluation of Essential Vocal Tremor in Deep Brain Stimulation Surgery.** *American journal of speech-language pathology*
Erickson-DiRenzo, E., Sung, C. K., Ho, A. L., Halpern, C. H.
2020: 1–13
- **Early Injection Laryngoplasty After Surgery: 30 Cases and Proposed Aspiration Assessment Protocol** *JOURNAL OF VOICE*
Abu-Ghanem, S., Rudy, S., Deane, S., Tsai, S., Shih, L., Damrose, E. J., Sung, C.
2020; 34 (1): 121–26
- **Multiparametric laryngeal assessment of the effect of thalamic deep brain stimulation on essential vocal tremor.** *Parkinsonism & related disorders*
Erickson-DiRenzo, E. n., Kuijper, F. M., Barbosa, D. A., Lim, E. A., Lin, P. T., Lising, M. A., Huang, Y. n., Sung, C. K., Halpern, C. H.
2020; 81: 106–12
- **Coronavirus Disease 2019: Challenges Associated with the Treatment of Head and Neck Oncology and Laryngology Patients in the Coronavirus Disease 2019 Era.** *Otolaryngologic clinics of North America*
Baird, B. J., Sung, C. K.
2020
- **Autologous fibroblasts for vocal scars and age-related atrophy: A randomized clinical trial.** *The Laryngoscope*
Ma, Y., Long, J., Amin, M. R., Branski, R. C., Damrose, E. J., Sung, C., Achlatis, S., Kearney, A., Chhetri, D. K.
2019
- **Operative and Conservative Management of Laryngeal Contact Granuloma: A Network Analysis and Systematic Review.** *Journal of voice : official journal of the Voice Foundation*
Tsai, S. W., Ma, Y. F., Shih, L. C., Tsou, Y. A., Sung, C.
2019
- **Type I thyroplasty: A safe outpatient procedure**
Junlapan, A., Sung, C., Damrose, E. J.
WILEY.2019: 1640–46
- **Outcomes in modified transoral resection of diverticula for Zenker's diverticulum** *EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY*
Junlapan, A., Abu-Ghanem, S., Sung, C., Damrose, E. J.
2019; 276 (5): 1423–29
- **Treatment of early-stage laryngeal cancer: A comparison of treatment options** *ORAL ONCOLOGY*
Baird, B., Sung, C., Beadle, B. M., Divi, V.
2018; 87: 8–16
- **Improvement in the Reflux Symptom Index Following Surgery for Cricopharyngeal Dysfunction** *JOURNAL OF VOICE*

-
- Jiang, N., Sung, C. K., Damrose, E. J.
2017; 31 (1): 86-89
- **Surgical Management of Supraglottic Stenosis Using Intubationless Optiflow.** *The Annals of otology, rhinology, and laryngology*
Tam, K. n., Jeffery, C. n., Sung, C. K.
2017; 126 (9): 669-72
 - **Phonomicrosurgery simulation: A low-cost teaching model using easily accessible materials.** *Laryngoscope*
Zambricki, E. A., Bergeron, J. L., DiRenzo, E. E., Sung, C. K.
2016; 126 (11): 2528-2533
 - **Consultation via telemedicine and access to operative care for patients with head and neck cancer in a Veterans Health Administration population** *HEAD AND NECK-JOURNAL FOR THE SCIENCES AND SPECIALTIES OF THE HEAD AND NECK*
Beswick, D. M., Vashi, A., Song, Y., Pham, R., Holsinger, F. C., Rayl, J. D., Walker, B., Chardos, J., Yuan, A., Benadam-Lenrow, E., Davis, D., Sung, C. K., Divi, et al
2016; 38 (6): 925-929
 - **Tracheal Stenosis Because of Wegener Granulomatosis Misdiagnosed as Asthma. A & A case reports**
O'Hear, K. E., Ingrande, J., Brodsky, J. B., Morton, J. M., Sung, C.
2016; 6 (10): 311-312
 - **Symptomatic Anterior Cervical Osteophyte Causing Dysphagia: Case Report, Imaging, and Review of the Literature.** *Cureus*
Chen, Y., Sung, K., Tharin, S.
2016; 8 (2)
 - **Deep brain stimulation for vocal tremor: a comprehensive, multidisciplinary methodology.** *Neurosurgical focus*
Ho, A. L., Erickson-DiRenzo, E., Pendharkar, A. V., Sung, C., Halpern, C. H.
2015; 38 (6): E6-?
 - **Deep brain stimulation for vocal tremor: a comprehensive, multidisciplinary methodology** *NEUROSURGICAL FOCUS*
Ho, A. L., Erickson-DiRenzo, E., Pendharkar, A. V., Sung, C., Halpern, C. H.
2015; 38 (6)
 - **Endoscopic suture retriever for endolaryngeal keel placement in treatment of anterior glottic webs.** *The Annals of otology, rhinology, and laryngology*
Beswick, D. M., Clark, A. K., Bergeron, J., Sung, C. K.
2015; 124 (3): 240-243
 - **Deep Brain Stimulation for Essential Vocal Tremor: A Technical Report.** *Cureus*
Ho, A. L., Choudhri, O., Sung, C. K., DiRenzo, E. E., Halpern, C. H.
2015; 7 (3)
 - **Single-Operator Flexible Nasolaryngoscopy-Guided Transthyroid Vocal Fold Injections** *Meeting of the American-Broncho-Esophagological-Association*
Sung, C. K., Tsao, G. J.
ANNALS PUBL CO.2013: 9-14
 - **Office-Based Laser Laryngeal Surgery** *Op Tech in Otolaryngol*
Sung CK
2012; 23 (2): 102-105
 - **Management of Recurrent Laryngeal Nerve Paralysis** *Surgery of the Thyroid and Parathyroid Glands*
Sung CK, Franco RA Jr.
2011
 - **Airway and respiratory interventions: Tracheostomies.** *Spinal Cord Injury: Rehabilitation Medicine Quick Reference*
Altman KW, Sung CK
2010
 - **Airway and respiratory complications: Tracheal Stenosis** *Spinal Cord Injury: Rehabilitation Medicine Quick Reference*
Altman KW, Sung CK
2010

- **TRANSORAL ROBOTIC SURGERY FOR THE MANAGEMENT OF HEAD AND NECK CANCER: A PRELIMINARY EXPERIENCE** *HEAD AND NECK-JOURNAL FOR THE SCIENCES AND SPECIALTIES OF THE HEAD AND NECK*
Genden, E. M., Desai, S., Sung, C.
2009; 31 (3): 283-289
- **Transoral robotic assisted free flap reconstruction** *OTOLARYNGOLOGY-HEAD AND NECK SURGERY*
Mukhija, V. K., Sung, C., Desai, S. C., Wana, G., Genden, E. M.
2009; 140 (1): 124-125
- **Transoral Robotic Surgery Using a Carbon Dioxide Flexible Laser for Tumors of the Upper Aerodigestive Tract** *LARYNGOSCOPE*
Desai, S. C., Sung, C., Jang, D. W., Genden, E. M.
2008; 118 (12): 2187-2189
- **Transoral Robotic Surgery Using an Image Guidance System** *LARYNGOSCOPE*
Desai, S. C., Sung, C., Genden, E. M.
2008; 118 (11): 2003-2005
- **The administration of IL-12/GM-CSF and Ig-4-1BB ligand markedly decreases murine floor of mouth squamous cell cancer** *OTOLARYNGOLOGY-HEAD AND NECK SURGERY*
Adappa, N. D., Sung, C., Choi, B., Huang, T., Genden, E. M., Shin, E. J.
2008; 139 (3): 442-448
- **Combined VSV Oncolytic Virus and Chemotherapy for Squamous Cell Carcinoma** *110th Annual Meeting of the Triological-Society*
Sung, C., Choi, B., Wana, G., Genden, E. M., Woo, S. L., Shin, E. J.
WILEY-BLACKWELL.2008: 237-42