Stanford

John S. Oghalai, MD

Professor of Otolaryngology - Head and Neck Surgery (Otology and Neurotology) and, by courtesy, of Pediatrics and of Neurosurgery

Otolaryngology - Head & Neck Surgery Divisions

Curriculum Vitae available Online

CLINICAL OFFICES

- **Stanford Ear Institute**

  2452 Watson Ct Ste 1700 MC 5841

  Palo Alto, CA 94303

  Tel (650) 723-5281 **Fax** (650) 497-7849

Bio

BIO

Otolaryngology – Head and Neck Surgery is a surgical specialty and I consider the care of the patient in front of me to be of paramount importance. My ultimate goal is to improve human health not only by caring for my patients expertly, but also by advancing our scientific knowledge base so that all physicians can treat disease more effectively. I am following a clinician-scientist pathway and have found basic and translational research to be synergistic with my clinical activities. In particular, treating patients helps me to develop a meaningful research agenda. I believe that developing and maintaining a university-based medical practice requires a tertiary level of care based upon providing clinical excellence, incorporating the latest research, and delivering patient-centered service. Personally, I have developed a nationwide referral practice in the subspecialty care of patients with diseases of the ear and skull base. My adult practice focuses on the management of skull base tumors such as vestibular schwannoma (acoustic neuroma) and meningioma. I work closely with the Departments of Neurosurgery, Radiation Oncology, and Neuroradiology as part of the skull base team. My pediatric practice focuses on the evaluation and management of children with hearing loss, in particular, I am the Director of the Stanford Children's Hearing Center and its pediatric cochlear implant team.

CLINICAL FOCUS

- Skull Base Surgery
- Cochlear Implantation
- Schwannomas, Vestibular
- Brain Tumor
- Otosclerosis
- Cholesteatoma
- Otology
- Neurotology
- Facial Nerve Diseases
- Hearing Loss
- Otolaryngology

ACADEMIC APPOINTMENTS

- Professor, Otolaryngology - Head & Neck Surgery Divisions
- Professor (By courtesy), Pediatrics - Operations
- Professor (By courtesy), Neurosurgery
- Member, Bio-X
- Member, Stanford Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Program Director, Clinician-Scientist Training Program in Otolaryngology, (2016- present)
- Director, The Stanford Children's Hearing Center, (2010- present)

HONORS AND AWARDS

- Fellow, American College of Surgeons (2007)
- Neurotology Trainee Award, American Neurotology Scociety (2002)
- Administrative Chief Resident, Baylor College of Medicine (2000)
- Member, Alpha Omega Alpha (1994)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Associate Editor, Otology Section, The Laryngoscope (2015 - present)
- Chair, Research Committee, American Neurotology Society (2014 - present)
- Study Section Member, CDRC, National Institutes of Health - NIDCD (2014 - present)

PROFESSIONAL EDUCATION

- Residency: Baylor College of Medicine Registrar (2001) TX
- Internship: Baylor College of Medicine Registrar (1995) TX
- Board Certification: Otolaryngology, American Board of Otolaryngology (2010)
- Fellowship: Univ of California San Francisco (2003) CA
- Medical Education: University of Wisconsin SOM and Public Health (1994) WI
- Board Certification: Neurotology, American Board of Otolaryngology (2010)
- Board Certification, American Board of Otolaryngology - Head and Neck Surgery , Neurotology (2010)
- Board Certification, American Board of Otolaryngology - Head and Neck Surgery , Otolaryngology-HNS (2002)
- Clinical Fellowship, University of California, San Francisco , Neurotology & Skull Base Surgery (2003)
- Residency, Baylor College of Medicine , Otolaryngology Head & Neck Surg. (2001)
- Post-Doctoral Fellowship, Baylor College of Medicine , Auditory Neuroscience (1998)
- Internship, Baylor College of Medicine , General Surgery (1995)
- M.D., University of Wisconsin - Madison , Medicine (1994)
- B.S., University of Wisconsin - Madison , Electrical Engineering (1990)

LINKS

- Patient Resources and Research Information: http://oghalailab.stanford.edu/
- The Children's Hearing Center: http://hearingcenter.lpch.org

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The Oghalai lab has two major thrusts. Our basic science/translational research efforts are designed to better understand the mechanisms of hearing loss and our clinical research approaches are targeted to directly and rapidly improve the care of patients with hearing loss.

Translational Research

A common clinical scenario is that a child is initially identified with a partial hearing loss, which then progresses to profound hearing loss over a period of months to years. Genetic defects are responsible for over half of these cases, however the specific mechanisms of how many of these mutations cause progressive sensorineural hearing loss is unclear. Right now, all we typically can tell a patient with hearing loss is that we know they have hearing loss, and that it is because of a problem in the cochlea. There are no more detailed tests available.

Because of the difficulty in performing auditory research in humans, we study normal and transgenic mice that have hearing loss. We strive to perform comprehensive evaluation of the pathophysiology that creates the hearing loss. For example, cochlear function is monitored with measurements of the compound action potential, the auditory evoked brainstem response, distortion product otoacoustic emissions, the cochlear microphonic, and the olivocochlear reflex. Basilar membrane motion is measured using laser doppler vibrometry. Histological study of the inner ear is performed using immunohistochemistry. We also use the patch-clamp technique with to study hair cell and spiral ganglion cell physiology. Recently, we have begun using fluorescent-activated cell sorting (FACS) to isolate outer hair cells from the adult cochlea after noise or blast exposure to study the regulation of genes after cellular injury.

We are, however, working to develop techniques that will allow us to perform research in humans. For example, we are in the process of developing novel optical techniques for in vivo imaging using optical coherence tomography (OCT). The level of detail within the cochlea that we can now image is roughly two orders of magnitude better than what is currently available with the latest MRI or CT techniques. Our goal is to be able to identify why any given patient that comes to clinic has hearing loss, and use this information to guide management using regenerative strategies that are in active development.

Clinical Research:

Our clinical research is focused on improving what we are currently doing to help children with deafness. Cochlear implants (CI) are the most common treatment for deafness. While many factors influence the ability of a deaf child who is hearing through a CI to develop speech and language skills, an important factor is to properly program the CI. However, implementing the optimal CI program is a challenging, individualized, and iterative process with variable success.
NIRS Headset

One difficulty in CI programming is obtaining behavioral measurements from the young children in which CIs are usually implanted. Therefore, we are developing the technique of near-infrared spectroscopy (NIRS) to functionally image activity within the auditory cortex of children hearing through a cochlear implant.

As well, we are running a multi-site, prospective randomized clinical trial of deaf children with special needs. The goal of the study is to determine the best treatment options for children that require such complex and individualized care. This trial is actively enrolling participants at Lucile Packard Children’s Hospital in Palo Alto, CA and at Texas Children’s Hospital in Houston, TX.

CLINICAL TRIALS

- Outcomes In Children With Developmental Delay And Deafness, Not Recruiting

Teaching

COURSES

2016-17

- Can you Hear Me Now? The Biology, Comparative Behavior and Engineering of Sound: OSPGEN 40 (Sum)

STANFORD ADVISEES

Med Scholar Project Advisor

George Liu

Postdoctoral Faculty Sponsor

James Dewey

Doctoral Dissertation Reader (AC)

Peter Gottlieb

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Bioengineering (Phd Program)
- Neurosciences (Phd Program)
- Neurotology (Fellowship Program)
- Pediatric Otolaryngology (Fellowship Program)

Publications

PUBLICATIONS

- **PHOEBE: a method for real time mapping of optodes-scalp coupling in functional near-infrared spectroscopy** *BIOMEDICAL OPTICS EXPRESS*
  Pollonini, L., Bortfeld, H., Oghalai, J. S.
  2016; 7 (12): 5104-5119
- **Hair cell force generation does not amplify or tune vibrations within the chicken basilar papilla.** *Nature communications*
  Xia, A., Liu, X., Raphael, P. D., Applegate, B. E., Oghalai, J. S.
  2016; 7: 13133-?
- **Neuroplastin Isoform Np55 Is Expressed in the Stereocilia of Outer Hair Cells and Required for Normal Outer Hair Cell Function.** *journal of neuroscience*
  Zeng, W., Grillet, N., Dewey, J. B., Trouillet, A., Krey, J. F., Barr-Gillespie, P. G., Oghalai, J. S., Müller, U.
  2016; 36 (35): 9201-9216
- **Two-Dimensional Cochlear Micromechanics Measured In Vivo Demonstrate Radial Tuning within the Mouse Organ of Corti.** *journal of neuroscience*
  Lee, H. Y., Raphael, P. D., Xia, A., Kim, J., Grillet, N., Applegate, B. E., Ellerbee Bowden, A. K., Oghalai, J. S.
  2016; 36 (31): 8160-8173
- **Functional near-infrared spectroscopy for neuroimaging in cochlear implant recipients.** *Hearing research*
  Saliba, J., Bortfeld, H., Levitin, D. J., Oghalai, J. S.
  2016; 338: 64-75
- **Facial Nerve Outcome and Tumor Control Rate as a Function of Degree of Resection in Treatment of Large Acoustic Neuromas: Preliminary Report of the Acoustic Neuroma Subtotal Resection Study (ANSRS)** *NEUROSURGERY*
  Monfared, A., Corrales, C. E., Theodosopoulos, P. V., Blevins, N. H., Oghalai, J. S., Selesnick, S. H., Lee, H., Gurgel, R. K., Hansen, M. R., Nelson, R. F., Gantz, B. J., Kutz, J. W., Isaacson, et al
  2016; 79 (2): 194-200
- **Bilirubin-Induced Audiologic Injury in Preterm Infants** *CLINICS IN PERINATOLOGY*
  Olds, C., Oghalai, J. S.
  2016; 43 (2): 313-?
- **Cortical Activation Patterns Correlate with Speech Understanding After Cochlear Implantation** *EAR AND HEARING*
  Olds, C., Pollonini, L., Abaya, H., Larky, J., Loy, M., Bortfeld, H., Beauchamp, M. S., Oghalai, J. S.
  2016; 37 (3): E160-E172

- **High-speed spectral calibration by complex FIR filter in phase-sensitive optical coherence tomography** *BIOMEDICAL OPTICS EXPRESS*
  Kim, S., Raphael, P. D., Oghalai, J. S., Applegate, B. E.
  2016; 7 (4): 1430-1444

- **New Web-Based Tool for Generating Scattergrams to Report Hearing Results.** *Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology-Head and Neck Surgery*
  Oghalai, J. S., Jackler, R. K.
  2016; 154 (6): 981

- **Optical Coherence Tomography to Measure Sound-Induced Motions Within the Mouse Organ of Corti In Vivo.** *Methods in molecular biology (Clifton, N.J.)*
  Jawadi, Z., Applegate, B. E., Oghalai, J. S.
  2016; 1427: 449-462

- **New Web-based tool for generating scattergrams to report hearing results.** *The Laryngoscope*
  Oghalai, J. S., Jackler, R. K.
  2016; 126 (6): 1267

- **New Web-based Tool for Generating Scattergrams to Report Hearing Results.** *Otology & neurotology : official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*
  Oghalai, J. S., Jackler, R. K.
  2016; 37 (5): 419

- **Modality use in joint attention between hearing parents and deaf children** *FRONTIERS IN PSYCHOLOGY*
  Depowski, N., Abaya, H., Oghalai, J., Bortfeld, H.
  2015; 6

- **Activity-dependent regulation of prestin expression in mouse outer hair cells.** *Journal of neurophysiology*
  Song, Y., Xia, A., Lee, H. Y., Wang, R., Ricci, A. J., Oghalai, J. S.
  2015; 113 (10): 3531-3542

- **Miniature, minimally invasive, tunable endoscope for investigation of the middle ear** *BIOMEDICAL OPTICS EXPRESS*
  Pawlowski, M. E., Shrestha, S., Park, J., Applegate, B. E., Oghalai, J. S., Tkaczyk, T. S.
  2015; 6 (6): 2246-2257

- **Should Pediatric Tympanomastoidectomy and Cochlear Implantation Routinely Be Performed as Outpatient Surgery?** *LARYNGOSCOPE*
  Alyono, J. C., Oghalai, J. S.
  2015; 125 (5): 1041-1042

- **Changes in the regulation of the Notch signaling pathway are temporally correlated with regenerative failure in the mouse cochlea** *FRONTIERS IN CELLULAR NEUROSCIENCE*
  Maass, J. C., Gu, R., Basch, M. L., Waldhaus, J., Lopez, E. M., Xia, A., Oghalai, J. S., Heller, S., Groves, A. K.
  2015; 9

- **Noninvasive in vivo imaging reveals differences between tectorial membrane and basilar membrane traveling waves in the mouse cochlea.** *Proceedings of the National Academy of Sciences of the United States of America*
  Lee, H. Y., Raphael, P. D., Park, J., Ellerbee, A. K., Applegate, B. E., Oghalai, J. S.
  2015; 112 (10): 3128-3133

- **Audiologic impairment associated with bilirubin-induced neurologic damage.** *Seminars in fetal & neonatal medicine*
  Olds, C., Oghalai, J. S.
  2015; 20 (1): 42-46

- **The Combined Subtemporal-Transfacial Approach for the Resection of Juvenile Nasopharyngeal Angiofibromas With Intracranial Extension** *OTOLOGY & NEUROTOLOGY*
  Kumar, A. R., Nayak, J. V., Janisiewicz, A. M., Li, G., Oghalai, J. S.
  2015; 36 (1): 151-155

- **Changes in the regulation of the Notch signaling pathway are temporally correlated with regenerative failure in the mouse cochlea.** *Frontiers in cellular neuroscience*
  Maass, J. C., Gu, R., Basch, M. L., Waldhaus, J., Lopez, E. M., Xia, A., Oghalai, J. S., Heller, S., Groves, A. K.

2015; 9: 110-?

- **DNA sequence analysis and genotype-phenotype assessment in 71 patients with syndromic hearing loss or auditory neuropathy.** *BMJ open*
  Tang, H., Fang, P., Lin, J. W., Darilek, S., Osborne, B. T., Haymond, J. A., Manolidis, S., Roa, B. B., Oghalai, J. S., Alford, R. L.
  2015; 5 (5)
- **Exome sequencing and genome-wide copy number variant mapping reveal novel associations with sensorineural hereditary hearing loss** *BMC GENOMICS*
  Haraksingh, R. R., Jahanbani, F., Rodriguez-Paris, J., Gelernter, J., Nadeau, K. C., Oghalai, J. S., Schrijver, I., Snyder, M. P.
  2014; 15
- **Phase-sensitive optical coherence tomography using an Vernier-tuned distributed Bragg reflector swept laser in the mouse middle ear** *OPTICS LETTERS*
  Park, J., Carbajal, E. F., Chen, X., Oghalai, J. S., Applegate, B. E.
  2014; 39 (21): 6233-6236
- **Vibration of the organ of Corti within the cochlear apex in mice** *JOURNAL OF NEUROPHYSIOLOGY*
  Gao, S. S., Wang, R., Raphael, P. D., Moayedi, Y., Groves, A. K., Zuo, J., Applegate, B. E., Oghalai, J. S.
  2014; 112 (5): 1192-1204
- **Auditory cortex activation to natural speech and simulated cochlear implant speech measured with functional near-infrared spectroscopy.** *Hearing research*
  Pollonini, L., Olds, C., Abaya, H., Bortfeld, H., Beauchamp, M. S., Oghalai, J. S.
  2014; 309: 84-93
- **Nonverbal cognitive development in children with cochlear implants: relationship between the mullen scales of early learning and later performance on the leiter international performance scales-revised.** *Assessment*
  Caudle, S. E., Katzenstein, J. M., Oghalai, J. S., Lin, J., Caudle, D. D.
  2014; 21 (1): 119-128
- **The Candidate Splicing Factor Sfswap Regulates Growth and Patterning of Inner Ear Sensory Organs** *PLOS GENETICS*
  Moayedi, Y., Basch, M. L., Pacheco, N. L., Gao, S. S., Wang, R., Harrison, W., Xiao, N., Oghalai, J. S., Overbeek, P. A., Mardon, G., Groves, A. K.
  2014; 10 (1)
- **Exome sequencing and genome-wide copy number variant mapping reveal novel associations with sensorineural hereditary hearing loss.** *BMC genomics*
  Haraksingh, R. R., Jahanbani, F., Rodriguez-Paris, J., Gelernter, J., Nadeau, K. C., Oghalai, J. S., Schrijver, I., Snyder, M. P.
  2014; 15: 1155-?
- **Prestin Regulation and Function in Residual Outer Hair Cells after Noise-Induced Hearing Loss** *PLOS ONE*
  Xia, A., Song, Y., Wang, R., Gao, S. S., Clifton, W., Raphael, P., Chao, S., Pereira, F. A., Groves, A. K., Oghalai, J. S.
  2013; 8 (12)
- **A Point Mutation in the Gene for Asparagine-Linked Glycosylation 10B (Alg10b) Causes Nonsyndromic Hearing Impairment in Mice (Mus musculus)** *PLOS ONE*
  Probst, F. J., Corrigan, R. R., del Gaudio, D., Salinger, A. P., Lorenzo, I., Gao, S. S., Chiu, I., Xia, A., Oghalai, J. S., Justice, M. J.
  2013; 8 (11)
- **Mechanisms of Hearing Loss after Blast Injury to the Ear** *PLOS ONE*
  Cho, S., Gao, S. S., Xia, A., Wang, R., Salles, F. T., Raphael, P. D., Abaya, H., Wachtel, J., Baek, J., Jacobs, D., Rasband, M. N., Oghalai, J. S.
  2013; 8 (7)
- **Cochlear implant considerations in children with additional disabilities.** *Current otorhinolaryngology reports*
  Corrales, C. E., Oghalai, J. S.
  2013; 1 (2): 61-68
- **Cochlear implant electrode misplacement: Incidence, evaluation, and management** *LARYNGOSCOPE*
  Ying, Y. M., Lin, J. W., Oghalai, J. S., Williamson, R. A.
  2013; 123 (3): 757-766
- **An Allelic Series of Mice Reveals a Role for RERE in the Development of Multiple Organs Affected in Chromosome 1p36 Deletions** *PLOS ONE*
  Kim, B. J., Zaveri, H. P., Shchelochkov, O. A., Yu, Z., Hernandez-Garcia, A., Seymour, M. L., Oghalai, J. S., Pereira, F. A., Stockton, D. W., Justice, M. J., Lee, B., Scott, D. A.
  2013; 8 (2)

- **In vivo vibrometry inside the apex of the mouse cochlea using spectral domain optical coherence tomography** *BIOMEDICAL OPTICS EXPRESS*
  Gao, S. S., Raphael, P. D., Wang, R., Park, J., Xia, A., Applegate, B. E., Oghalai, J. S.
  2013; 4 (2): 230-240

- **Mechanisms of hearing loss after blast injury to the ear.** *PloS one*
  Cho, S., Gao, S. S., Xia, A., Wang, R., Salles, F. T., Raphael, P. D., Abaya, H., Wachtel, J., Baek, J., Jacobs, D., Rasband, M. N., Oghalai, J. S.
  2013; 8 (7)

- **Cognitive Outcomes and Familial Stress After Cochlear Implantation in Deaf Children With and Without Developmental Delays** *OTOLOGY & NEUROTOLOGY*
  Oghalai, J. S., Caudle, S. E., Bentley, B., Abaya, H., Lin, J., Baker, D., Emery, C., Bortfeld, H., Winzelberg, J.
  2012; 33 (6): 947-956

- **Is It Valid to Calculate the 3-Kilohertz Threshold by Averaging 2 and 4 Kilohertz?** *OTOLARYNGOLOGY-HEAD AND NECK SURGERY*
  Gurgel, R. K., Popelka, G. R., Oghalai, J. S., Blevins, N. H., Chang, K. W., Jackler, R. K.
  2012; 147 (1): 102-104

- **Head Bobber: An Insertional Mutation Causes Inner Ear Defects, Hyperactive Circling, and Deafness** *JARO-JOURNAL OF THE ASSOCIATION FOR RESEARCH IN OTOLARYNGOLOGY*
  Somma, G., Alger, H. M., McGuire, R. M., Kretlow, J. D., Ruiz, F. R., Yatsenko, S. A., Stankiewicz, P., Harrison, W., Funk, E., Bergamaschi, A., Oghalai, J. S., Mikos, A. G., Overbeek, et al
  2012; 13 (3): 335-349

- **Wnt signaling induces proliferation of sensory precursors in the postnatal mouse cochlea** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Chai, R., Kuo, B., Wang, T., Liaw, E. J., Xia, A., Jan, T. A., Liu, Z., Taketo, M. M., Oghalai, J. S., Nusse, R., Zuo, J., Cheng, A. G.
  2012; 109 (21): 8167-8172

- **Are mastoid pressure dressings necessary after otologic surgery to prevent postoperative hematomas?** *LARYNGOSCOPE*
  Gurgel, R. K., Oghalai, J. S.
  2012; 122 (3): 485-486

- **Methodology for Assessment of Structural Vibrations by Spectral Domain Optical Coherence Tomography** *Conference on Photonic Therapeutics and Diagnostics VIII*
  Gao, S. S., Raphael, P., Xia, A., Park, J., Carbajal, E., Applegate, B. E., Oghalai, J. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2012

- **Measuring the vibrational response of the mouse ear using coherently interleaved optical coherence tomography** *Conference on Optical Coherence Tomography and Coherence Domain Optical Methods in Biomedicine XVI/SPIE Photonics West Symposia*
  Shelton, R., Gao, S., Oghalai, J. S., Applegate, B. E.
  SPIE-INT SOC OPTICAL ENGINEERING.2012

- **Imaging high-frequency periodic motion in the mouse ear with coherently interleaved optical coherence tomography** *OPTICS LETTERS*
  Applegate, B. E., Shelton, R. L., Gao, S. S., Oghalai, J. S.
  2011; 36 (23): 4716-4718

- **Biophysical Mechanisms Underlying Outer Hair Cell Loss Associated with a Shortened Tectorial Membrane** *JARO-JOURNAL OF THE ASSOCIATION FOR RESEARCH IN OTOLARYNGOLOGY*
  Liu, C. C., Gao, S. S., Yuan, T., Steele, C., Puria, S., Oghalai, J. S.
  2011; 12 (5): 577-594

- **The Developmental Trajectory of Brain-Scalp Distance from Birth through Childhood: Implications for Functional Neuroimaging** *PLOS ONE*
  Beauchamp, M. S., Beurlot, M. R., Fava, E., Nath, A. R., Parikh, N. A., Saad, Z. S., Bortfeld, H., Oghalai, J. S.
  2011; 6 (9)

- **Quantitative imaging of cochlear soft tissues in wild-type and hearing-impaired transgenic mice by spectral domain optical coherence tomography** *OPTICS EXPRESS*
  Gao, S. S., Xia, A., Yuan, T., Raphael, P. D., Shelton, R. L., Applegate, B. E., Oghalai, J. S.
  2011; 19 (16): 15415-15428

- **Middle ear volume as an adjunct measure in congenital aural atresia** *INTERNATIONAL JOURNAL OF PEDIATRIC OTORHINOLARYNGOLOGY*

Osborn, A. J., Oghalai, J. S., Vrabec, J. T.
2011; 75 (7): 910-914

- **Structural and Mechanical Analysis of Tectorial Membrane Tecta Mutants** *BIOPHYSICAL JOURNAL*
  Gueta, R., Levitt, J., Xia, A., Katz, O., Oghalai, J. S., Rousso, I.
  2011; 100 (10): 2530-2538

- **Comprehensive Diagnostic Battery for Evaluating Sensorineural Hearing Loss in Children** *OTOLOGY & NEUROTOLOGY*
  Lin, J. W., Chowdhury, N., Mody, A., Tonini, R., Emery, C., Haymond, J., Oghalai, J. S.
  2011; 32 (2): 259-264

- **Towards an etiologic diagnosis: assessing the patient with hearing loss.** *Advances in oto-rhino-laryngology*
  Jerry, J., Oghalai, J. S.
  2011; 70: 28-36

- **Three-Dimensional Imaging of the Mouse Organ of Corti Cytoarchitecture for Mechanical Modeling** *11th International Workshop on the Mechanics of Hearing*
  Puria, S., Hartman, B., Kim, J., Oghalai, J. S., Ricci, A. J., Liberman, M. C.
  AMER INST PHYSICS.2011

- **Imaging of the intact mouse cochlea by spectral domain optical coherence tomography** *Conference on Optical Coherence Tomography and Coherence Domain Optical Methods in Biomedicine XV*
  Gao, S. S., Yuan, T., Xia, A., Raphael, P., Shelton, R. L., Applegate, B. E., Oghalai, J. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2011

- **Biophysical Mechanisms Underlying Hearing Loss Associated with a Shortened Tectorial Membrane** *11th International Workshop on the Mechanics of Hearing*
  Oghalai, J. S., Xia, A., Liu, C. C., Gao, S. S., Applegate, B. E., Puria, S., Rousso, I., Steele, C.
  AMER INST PHYSICS.2011

- **Stimulus Frequency Otoacoustic Emissions in Wild-Type and TECTA Mice** *11th International Workshop on the Mechanics of Hearing*
  Pikhart, K. N., Popelka, G. R., Moleti, A., Sisto, R., Oghalai, J. S., Xia, A., Puria, S.
  AMER INST PHYSICS.2011

- **Can Radiologic Imaging Replace Second-Look Procedures for Cholesteatoma?** *LARYNGOSCOPE*
  Lin, J. W., Oghalai, J. S.
  2011; 121 (1): 4-5

- **Neuroimaging with near-infrared spectroscopy demonstrates speech-evoked activity in the auditory cortex of deaf children following cochlear implantation** *HEARING RESEARCH*
  Sevy, A. B., Bortfeld, H., Huppert, T. J., Beauchamp, M. S., Tonini, R. E., Oghalai, J. S.
  2010; 270 (1-2): 39-47

- **In Response to Advanced Pediatric Mastoiditis With and Without Intracranial Complications** *LARYNGOSCOPE*
  Zevallos, J. P., Vrabec, J. T., Williamson, R. A., Giannoni, C., Larrier, D., Sulek, M., Friedman, E. M., Oghalai, J. S.
  2010; 120 (7): 1494-1494

- **Deficient forward transduction and enhanced reverse transduction in the alpha tectorin C1509G human hearing loss mutation** *DISEASE MODELS & MECHANISMS*
  Xia, A., Gao, S. S., Yuan, T., Osborn, A., Bress, A., Pfister, M., Maricich, S. M., Pereira, F. A., Oghalai, J. S.
  2010; 3 (3-4): 209-223

- **Characteristics of Malfunctioning Channels in Pediatric Cochlear Implants** *LARYNGOSCOPE*
  Lin, J. W., Mody, A., Tonini, R., Emery, C., Haymond, J., Vrabec, J. T., Oghalai, J. S.
  2010; 120 (2): 399-404

- **Calcium imaging of inner ear hair cells within the cochlear epithelium of mice using two-photon microscopy** *JOURNAL OF BIOMEDICAL OPTICS*
  Yuan, T., Gao, S. S., Saggau, P., Oghalai, J. S.
  2010; 15 (1)

- **Auditory Performance After Cochlear Implantation in Late Septuagenarians and Octogenarians** *OTOLOGY & NEUROTOLOGY*

Williamson, R. A., Pytynia, K., Oghalai, J. S., Vrabec, J. T.
2009; 30 (7): 916-920

- **Atoh1-Lineal Neurons Are Required for Hearing and for the Survival of Neurons in the Spiral Ganglion and Brainstem Accessory Auditory Nuclei** *JOURNAL OF NEUROSCIENCE*
  Maricich, S. M., Xia, A., Mathes, E. L., Wang, V. Y., Oghalai, J. S., Fritzsch, B., Zoghbi, H. Y.
  2009; 29 (36): 11123-11133

- **Advanced Pediatric Mastoiditis With and Without Intracranial Complications** *Annual Meeting of the Triological-Society/Combined Otolaryngological Spring Meeting*
  Zevallos, J. P., Vrabee, J. T., Williamson, R. A., Giannoni, C., Larrier, D., Sulek, M., Friedman, E. M., Oghalai, J. S.
  JOHN WILEY & SONS INC.2009: 1610–15

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