

Arnaldo L. Rivera, M.D.

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Education

Northwestern University Hospital, Chicago, IL
Neurotology, 2006-2008
National Capital Consortium, Washington DC
Otolaryngology Residency, 2002-2006
National Naval Medical Center, Bethesda, MD
General Surgery Internship, 1999-2000
University of Puerto Rico, San Juan, PR
M.D., 1995-1999
Interamerican University of Puerto Rico, San Juan, PR
B.S., Biology, 1984-1988

Military Experience

United States Navy Commander
United States Navy 06/1999-11/2014 Honorable discharge
United States Navy Reserves 12/2014- Present

Employment history

Associate Professor Otolaryngology , University of Missouri, Nov 2014-Present
Associate Residency Program Director, National Capitol Consortium, 2012-2014
Assistant Professor of Clinical Otolaryngology, National Capitol Consortium, 2008-2014
Chief of Otolaryngology, USSN Comfort, Operation Continuous Promise, 2009
General Medical Officer, Naval Hospital Corpus Christi, 2000-2002

Medical Board Certification

Neurotology , Diplomate, June 2011
American Board of Otolaryngology, Diplomate, May 2007

State Medical Licensure

Missouri, October 2014 – Present
North Dakota, April 2013 – April 2015
Pennsylvania, August 2010 – December 2012
Illinois, June 2006 – Present
Indiana, September 2000 – Present

Professional Societies

Missouri State Medical Association, 2014
Missouri Society of Otolaryngology, 2014
Missouri Society of Otolaryngology, 2014
Alpha Omega Alpha, 1999
American Medical Association, 1999
American Academy of Otolaryngology- Head and Neck Surgery

Medical Service

Departmental:

Associate Residency Program Director, National Capitol Consortium, 2011-2014
Residency in Otolaryngology-Head and Neck Surgery,
Walter Reed National Military Medical Center, 2009-2014

University Physicians/Hospital:

Member Peer Review Committee 2014
School of medicine

National:

Medical Advisor for Read-2-Hear, LLC- Present
Consultant to the BOG Governance & Society Engagement Committee, American Academy of
Otolaryngology- Head and Neck Surgery, 10/2017 -09/2018
ENT PA Education Taskforce, 2016-present
Member FDA panel for ENT, 2015-present

Honors & Awards

Navy Achievement Medal, 2017
Joint Service Achievement Medal, 2014
Army Achievement Medal, 2012
Navy Commendation Medal, 2011
Navy Commendation Medal, 2009
Navy Achievement Medal, 2002
Alpha Omega Alpha, 1999

Peer-reviewed Publications

Hoang S., Ortiz M., **Rivera A.**, Litofsky N. Middle Cranial Fossa Approach to Repair Tegmen Defects with Autologous or Alloplastic Graft. *World Neurosurg.* 2018 Jun 2. pii: S1878-8750(18). Epub ahead of print.

Mierzwiński, Józef , Van Den Heuvel, Egwin, Fishman, Andrew J., **Rivera, Arnaldo L.**, Haber, Karolina , Skrivan, Jiri. Application of “banana cochleostomy” and looped electrode insertion for cochlear implantation in children with common cavity malformation and cystic forms of cochlear hypoplasia. *International Journal of Pediatric Otorhinolaryngology*, 2018 September

Bernstein, Joshua G. W.; Schuchman, Gerald I.; **Rivera, AL.** Head Shadow and Binaural Squelch for Unilaterally Deaf Cochlear Implantees. *Oto Neurotol.* 2017 Aug; 38(7): e195-e202.

Puricelli MD, Newby MD, Fishman AJ, **Rivera AL.** The Petrosquamous Stalactite: Anatomic Characterization and Mastoid Surgical Implications. *Otolaryngol Head Neck Surg.* 2017 mar; 156(3): 549-553.

Puricelli MD, Gilley DR, Coberly JS, **Rivera A**, Bien AG, Zitsch RP 3rd, Miller DC, Lin J. Malignant Peripheral Nerve Sheath Tumor of the Jugular Foramen. *Oto Neurotol.* 2016 Aug; 37(7):e247-9.

Newberry CI, Newby MD, Puricelli MD, **Rivera AL.** Delayed Surgical Intervention in the Management of Perilymphatic Fistula. *Flob J Oto.* 2016 June; 1(2) (ePub).

Bernstein J, Goupell M, Schuchman G, **Rivera AL**, Brungart D. Having Two Ears Facilitates the Perceptual Separation of Concurrent Talkers for Bilateral and Single-Sided Deaf Cochlear Implantees. *Ear Hear.* 2016 May-Jun; 37(3):289-302.

Erbele I, Bernstein J, Schuchman G, Brungart DS, **Rivera AL.** An initial experience of cochlear implantation for patients with single-sided deafness after prior osseointegrated hearing device. *Otol & Neurotol* 36(1):e24-e29, January 2015.

Mikals SJ, Schuchman GI, Bernstein JG, **Rivera AL.** Cochlear implant leading to successful stapedectomy in contralateral only hearing ear. *Ear Nose Throat J.* 2015 March;94(3):105-107.

Unilateral Ear and Temporomandibular Joint Discomfort

Lanigan A, Tompkins AJ, **Rivera AL**

JAMA Otolaryngol Head Neck Surg. 2014;140(9):873-874. doi:10.1001/jamaoto.2014.1472

Sridhara SK, **Rivera AL**, Littlefield P. Tympanoplasty for blast-induced perforations: the Walter Reed experience. Otolaryngol Head Neck Surg. 2013 Jan;148(1):103-7.

Fishman AJ, Moreno LE, **Rivera AL**, Richter CP. CO(2) laser fiber soft cochleostomy: development of a technique using human temporal bones and a guinea pig model. Lasers Surg Med. 2010 Mar;42(3):245-56. doi: 10.1002/lsm.20902.

Gutierrez HH, Nieves B, Chumley P, **Rivera AL**, Freeman BA. Nitric oxide regulation of superoxide-dependent lung injury: oxidant-protective actions of endogenously produced and exogenously administered nitric oxide. Free Radic Biol Med. 1996; 21(1): 43-52

Nieves-Cruz B, **Rivera AL**, Cifuentes J, Pataki G, Matalon S, Carlo WA, Tanswell AK, Freeman B. Clinical surfactant preparations mediate SOD and catalase uptake by type II cells and lung tissue. Am J Physiol. 1996; 270(4 pt 1): L659-67.

Tan S, Radi R, Gaudier F, Evans RA, **Rivera AL**, Kirk KA, Parks DA. Physiologic levels of uric acid inhibit xanthine oxidase in human plasma. Pediatr Res. 1993 Sep; 34(3):303-7.

Book Chapters

Chapter 12: Principles of Cochlear Implant Imaging. *Implantable Hearing Devices*. San Diego, CA: Plural Publishing. Mierzwinski J, Puricelli MD Mukach, MB, **Rivera, AL**. May 2017.

ENT chapter in 2015 Revised Medical Standards for employees of the New York City Transit Authority. December 2015.

Middle Ear Anatomy for the Encyclopedia of Otolaryngology, Head and Neck Surgery by Springer. Encyclopedia of Otolaryngology, Head and Neck Surgery. Springer-Verlag, Berlin 2013

Middle Ear Physiology for the Encyclopedia of Otolaryngology, Head and Neck Surgery by Springer. Encyclopedia of Otolaryngology, Head and Neck Surgery. Springer-Verlag, Berlin 2013

Otologic and Temporal Bone Injuries, Triage and Management, Atlas of Oral and Maxillofacial Surgery Clinics of North America. March 2013

Editorial Service

Biomed Research International

Presentations

National

Kennel C, Puricelli M, **Rivera A**. Surgical Anatomy of the Scutum and Implications for Stapedectomy, Atticotomy, and Endoscopic Ear Surgery. Poster Presentation, American Academy of Otolaryngology Annual Meeting, Atlanta, GA, October 2018

Abbott, CC, Erhardt, BF, **Rivera, AL**. Effect of a Novel Palatal Alternative Sensory Feedback Device on Postural Stability & Dynamic Balance: A Case Series. Poster Presentation, APTA CSM. New Orleans, LA. February 23, 2018

Tang H, Woodland M, Abbott C, **Rivera AL**. A Noninvasive Palatal Device for Vestibular Imbalance. Poster Presentation, AAO-HNS Annual Meeting, Chicago IL, September 12, 2017.

Erhardt, BF, Abbott, CC, **Rivera, AL**. Vestibular Rehabilitation Utilizing a Novel Palatal Alternative Sensory Feedback Device. Poster Presentation, COSM, San Diego CA, May 2017.

Bernstein, J.G.W., Schuchman, G., Stakhovskaya, O.A, **Rivera, A.L.**, and Brungart, D.S. The benefits of cochlear implants for single-sided deafness for sound localization with multiple concurrent sources. Lecture presentation. 5th Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan. Honolulu, Hawaii. November 29, 2016.

Puricelli MD, Newby MD. Fishman AJ, **Rivera AL**. The Stalactite of Fishman: Anatomic Characterization and Mastoid Surgical Implications. Podium presentation, AAO-HNS Annual Meeting, San Diego CA, September 21, 2016.

Wiet RJ, Battista R, Wiet MR, Byrne R, **Rivera AL**, Little J. Rare Metastatic Lesions of the Internal Auditory Canal. COSM Annual Meeting, Chicago IL. May 2016. Poster

Bernstein, J.G.W., Schuchman, G., **Rivera, A.L.**, and Brungart, D.S. (2014). Single-sided deafness: An initial examination of cochlear implants in the military. Podium presentation, 13th International Conference on Cochlear Implants and Other Implantable Auditory Technologies, Munich, Germany, 18-21 Jun.

Bernstein, J.G.W., Goupell, M.J., Iyer, N., Schuchman, G.I., **Rivera, A.L.**, and Brungart, D.S. (2013). Binaural speech stream segregation for single-sided deaf and bilateral cochlear implantees. Poster presentation, Conference on Implantable Auditory Prostheses, Tahoe City, CA, 15 Jul.

Bernstein, J.G.W., Schuchman, G., **Rivera, A.L.**, and Brungart, D.S. (2013). Benefits of cochlear implants for single-sided deafness in multisource environments. Poster presentation, American Cochlear Implant Alliance, Washington, DC, 25 Oct.

Jessica Kepchar¹, DO; Joshua Bernstein², PhD; **Arnaldo Rivera**, MD Improved Sound Localization Following Cochlear Implantation For Single-Sided Deafness: A Case Comparison, COSM spring meeting, Orlando, FL, 2013

Fishman AJ, Moreno LE, **Rivera A**, Richter CP, Lasers: A tool for Soft Cochleostomies SPIE Photonics, West 2010, January 24, San Francisco CA.

Fishman AJ, Moreno LE, **Rivera A**, Richter CP, CO₂Laser Fiber Soft Cochleostomy: Development of a Technique using Human Temporal Bones and a Guinea Pig Model, AAO-HNS Annual Meeting, San Diego CA, October 7, 2009.

Rivera A, Battista R, Kumar A: Brain Metastases Mimicking Bilateral Vestibular Schwannomas. AAO-HNS Annual Meeting, Washington DC, 2007.

Rivera A, Littlefield P, Otting M, Battista R, Richter C: Intratympanic Acyclovir in the Gerbil. AAO-HNS Annual Meeting, Washington DC, 2007.

Regional

Dornhoffer J, MD; Gardner W, MD, **Rivera AL, MD**; Cullen R, MD; Wick C, M. Panel on the Management of Difficult Ear Cases. The Arkansas/Missouri Otolaryngology- Head and Neck Surgery Conference. Ridgedale, Missouri. October 2017.

Rivera AL. Otolaryngology & Neurology CME. DuPage Hospital Department of Neuroscience. Invited faculty panel. Chicago IL. December 2017.

Fishman AJ, **Rivera AL**. Otolaryngologic and Neurological Causes of Common Complaints. Central DuPage Hospital Department of Neuroscience. Invited faculty panel. Chicago IL. December 2014.

Research

Principal Investigator, Middle fossa craniotomy for the repair of superior semicircular canal dehiscences. Active July 2018 – present

Principal Investigator, Pentoxifylline for the treatment of imbalance. University of Missouri Research Board, 2017 – present, **\$16,000**.

Principle Investigator, Intratympanic Steroid Injection for Treatment of Idiopathic Facial Nerve Paralysis. 2017 – present.

Principle Investigator, En Vivo Acoustics of Routine Aural Suctioning. 2016-present.

Principal Investigator, Hearing results and post surgical outcomes using amniotic membrane allograft versus fascia for tympanoplasty: A Randomized Prospective Trial. 2016 – present.

Co-Investigator, Hybrid Cochlear Implants: Potential Candidates and Barriers to Implementation. Chart review study. The Interdisciplinary Center on Aging. 2016 - Present

Principal Investigator, Efficacy and Safety of AM-111 as Acute Sudden Sensorineural Hearing Loss Treatment (ASSENT). Auris Medical, Inc. 2016 – present, **\$68,550**.

Principal Investigator, Implantation of the HiRes90K™ Advantage Cochlear Implant with HiFocus™ Mid-Scala and Development of a Combined Electric and Acoustic Stimulation Technology in Adults with Partial Deafness. Advanced Bionics, LLC. 2016 - present, **\$58,280**

Principal Investigator, A Prospective, Randomized, Double Blind, Placebo-Controlled, Multicenter, Phase 3 Efficacy and Safety Study of OTO-104 Given as a Single Intratympanic Injection in Subjects with Unilateral Meniere's Disease. Otonomy, Inc. 2016 - present, **\$63,340**

Principal Investigator, A 6-month, multicenter, Phase 3, Open-label extension safety study of OTO-104 given at 3-month intervals by intratympanic injection in subjects with Unilateral Meniere's disease. Otonomy, Inc. 2016 - present, **\$48,132**

Co-Investigator, Myringotomy punch for a more efficient, precise and safe eardrum perforation repair. Coulter. 2016 - present, **\$24,676**

Principal Investigator, Effect of Alternative Sensory Feedback on Balance. Innervo Technology, Inc. 2016, **\$32,197**