



Richmond Ear, Nose & Throat
8700 Stony Point Parkway, Suite 110
Richmond, VA 23235

804-330-5501
www.RichmondENT.com

Michael Armstrong, Jr., M.D.

Work History

Advanced Otolaryngology, P.C.
Doing business as “Richmond ENT”
Richmond, VA, January 2001 to present
Surgeon and President

Richmond Hearing Aids, Inc.
Richmond, VA, June 2009 to present
Medical Director and President

Virginia Ear, Nose, & Throat Associates, P.C.
Richmond, VA, July 1995 to December 2000

Education

Internship, Residency, Fellowship: Johns Hopkins Hospital
Baltimore, MD
1989 -1995: Otolaryngology-Head and Neck Surgery
Awarded state and national resident research awards

Medical School: Duke University
Durham, NC
1985 -1989: Doctor of Medicine
Benenson Merit Scholarship
Duke Eye Center Research Scholarship

Undergraduate: Princeton University
Princeton, NJ
1981 -1985: BA Biology
National Merit Scholarship
Highest Academic Average in Biology
Summa cum Laude

High School: The Collegiate Schools
Richmond, VA
1977-1981
Highest Academic Average

Current Hospital Affiliations

- Active Staff:
 - Medarva Healthcare Surgery Center
 - HCA Henrico Doctor's Hospital
- Courtesy Staff
 - Bon Secours Memorial Regional Medical Center
 - Bon Secours St. Francis Medical Center
 - Bon Secours St. Mary's Hospital
 - HCA Chippenham Medical Center
 - HCA Johnston-Willis Hospital

Licensure and Certification

- American Board of Otolaryngology: 06/1995, lifetime certificate
- American Board of Facial Plastic and Reconstructive Surgery: 6/23/2001, recertified 2011
- American Academy of Otolaryngic Allergy Fellowship Examination: 9/14/2007
- Commonwealth of Virginia Hearing Aid Specialist 4/14/08 to present
- Commonwealth of Virginia medical license: 1995 to present
- State of Maryland medical license: 1990 to 1996
- National Board of Medical Examiners: 1990

Honors and Awards

- "Patient Choice Award" from Medarva Healthcare 2019, 2020, 2021
- "Best Bedside Manner," [Our Health Richmond](#), 2015-2019
- "Top Doctor," [Virginia Living](#) magazine 2018
- "Patients' Choice Award" [Vitals.com](#) 2011, 2012, 2014, 2016
- "Compassionate Doctor Award" [Vitals.com](#) 2011, 2015, 2016
- "On-Time Doctor Award" [Vitals.com](#) 2014, 2015, 2016
- "Top Doctors for Kids" [Richmond Magazine](#) 2002
- "Top Doctors" [Richmond Magazine](#) 2000, 2004
- Chesterfield Family Practice Outstanding Educator in Otolaryngology 1999-2002
- AAO-HNS Resident Clinical Research Award 1993
- Maryland Society for OHNS Resident Research Award 1993
- Alpha Omega Alpha 1989
- Duke Eye Center Research Scholarship 1987
- Edward H. Benenson Merit Scholarship 1985
- Highest Academic Average in Biology Department 1985
- Phi Beta Kappa 1985
- Sigma Xi Book Award 1985
- National Merit Scholarship 1981

Civic Engagement

- Virginia Commonwealth University - Medical College of Virginia
 - Assistant Clinical Professor in Otolaryngology 2003-present
 - Assistant Clinical Professor in Nursing 2014-present
- Medarva Stony Point Surgery Center
 - Chief of Staff 2008-2009
 - Vice Chief of Staff 2006-2007
 - Executive Committee 2005-2011
 - Patient Care Committee - Chairman 2004-2009
 - Operating Room Committee 2002-2009
 - Infection Control Committee 2002-2003
 - Credentials Committee 2013-2014
- Medarva Foundation
 - Board of Directors 2014-present
 - Research Committee 2001-present (president)
- American Academy of Facial Plastic and Reconstructive Surgery 1992-Present
 - Public Information Committee 2007-2012
 - Patient Safety Committee 2007-2012
- American Academy of Otolaryngology-HNS 1991-Present
 - Ethics Committee 2020-2022
 - Young Physicians Committee 1995-2005
- American Academy of Otolaryngic Allergy 1994-Present
- American Medical Association 1985-Present
 - Alternate Delegate for State of Maryland 1993-1995
- American Rhinologic Society 1998-Present
 - Young Physician Mentor 2013-2018
- American Board of Facial Plastic and Reconstructive Surgery
 - Written Examination Development Committee 2001
 - Oral Examiner 2014-2015
- Commonwealth of Virginia Board for Hearing Aid Specialists and Opticians 2021-present
- Elite Hearing Network, ENT Advisory Board 2020-present
- Int'l Forum of Allergy and Rhinology Editorial Review Board 2015-present
- Third Church - a Covenant Order of Evangelical Presbyterians
 - Governing Elder 2017-2019
 - Missions Committee 2016-2020
 - Personnel Committee 2017-present
 - 5th and 6th grade Sunday school teacher 2007-2017
- Virginia Society of Otolaryngology 1997-Present
- Medical Society of Virginia 1995-Present
- Richmond Academy of Medicine 1995-Present
- Christian Medical and Dental Society 2006-Present
- Surgeons' Outcomes Research Cooperative in Otorhinolaryngology
 - Board of Directors 1997-2003
 - President 1998-1999
 - Treasurer 1997-1998
- Tuckahoe Family YMCA Board of Management 1999-2002
 - Annual Giving - Division Manager 2001
 - Indian Program Nation Chief 2000-2002 2004-2005
- Director of Clinical Research - Virginia ENT Assoc. 1999-2000
- Chippenham Residency Education Committee 1998-2000
- Program Director - Johnston Willis Hospital
 - Head and Neck Tumor Board 1996-1997
- Credentials Committee - Stuart Circle Hospital 1997
- Credentials Committee - PruCare 1997-1999
- Otolaryngology- HNS Editorial Review Board 1994-1996

- Sigma Xi Scientific Research Society 1985-1999
- Medical and Chirurgical Faculty of Maryland 1989-1995 (State Medical Society)
 - President: Resident Physicians 1992-1994
 - Vice President: Resident Physicians 1991-1992
 - Member of Council 1992-1994
 - House of Delegates 1992-1995
- North Carolina Medical Society 1985-1989
- Durham-Orange County Medical Society 1985-1989
- Christian Medical Society 1985-1989
- Duke University Medical School Student Government 1985-1988
- Princeton University Honor Council 1983-1985
- The Collegiate Schools Honor Council 1977-1981

Missionary and Charitable Work

- Haiti Outreach Ministries, Cite Soleil, Port au Prince, Haiti (general medicine) July 11-19, 2015
- Hospital Escuela, Tegucigalpa, Honduras (teaching plastic surgery residents) Nov 3-9, 2013
- World Medical Missions, Kijabe, Kenya (cleft lip and palate team) June 13-28, 2009, July 2-17, 2011
- Mission of Hope, Santa Cruz, Bolivia (microtia and general ENT) March 23-31, 2007
- Church Hill Activities and Tutoring (inner city youth) 2007-2010
- Access Now (accepting pro bono referrals) 2007-present
- Crossover Ministries (accepting pro bono referrals) 2001-present
- Face-to-Face Domestic Violence (accepting pro bono referrals) 2001-present

Surgical Innovations Introduced to Richmond, VA

- 1995 Chisel Tip suction cautery device for tonsillectomy
- 1996 Medialization thyroplasty
- 1996 Endoscopic orbital decompression for Graves disease
- 1997 Image-guided sinus surgery
- 1997 Frontal sinus drill-out
- 1998 Powered office sinus surgery
- 1998 Endoscopic ligation of the sphenoidal artery
- 1999 Endoscopic laser tear duct surgery
- 2000 "Scarless" parotid surgery
- 2001 Cautery assisted palatal stiffening operation
- 2001 Trained ENT nurse practitioner
- 2003 Coblation tonsillectomy
- 2003 Transnasal esophagoscopy
- 2004 Injection snoreplasty
- 2006 Repose genioglossus advancement and hyoid myotomy
- 2007 AcclarENT Balloon Sinuplasty
- 2008 In-office balloon sinuplasty
- 2009 Entellus FinESS balloon sinus dilation
- 2010 Entellus XprESS balloon sinus dilation
- 2012 In-office cone beam sinus CT
- 2014 Propel drug-eluting sinus stent
- 2015 Radiesse hand rejuvenation
- 2015 Phoenix CO2 laser Swiftscan for hand rejuvenation
- 2017 Latera lateral nasal wall implant
- 2017 Medicated thermosensitive sinus gel
- 2019 Vivaer nasal valve remodeling

- 2019 Clarifix ablation of posterior nasal nerve
- 2020 RhinAer ablation of posterior nasal nerve

Clinical Research Experience as Site Principal Investigator

1. GSK ANCHOR (Phase 3 RCT, depemokimab in chronic rhinosinusitis): starting in 2022
2. Regeneron AROMA (long-term outcomes with Dupixent for nasal polyps): 2021
3. Frequency Therapeutics FX-322-208 (Phase 2a RCT, FX-322 for sensory hearing loss): 2021
4. Otonomy OTO-313-201 (Phase 2 RCT, gacyclidine for tinnitus): 2021
5. AstraZeneca D3252C00002 ORCHID (Phase 3 RCT, benralizumab for recurrent nasal polyps): 2021
6. Astellas 0598-CL-0101 (Phase 1/2 RCT, epidermal growth factor for eardrum perforations): 2021
7. SaNOtize (Phase 2 RCT, nitric oxide releasing solution vs saline for COVID-19): 2020
8. AstraZeneca D3252C00004 OXALIS (Phase 3 RCT, benralizumab for recurrent nasal polyps): 2020
9. Frequency Therapeutics FX-322-202 (Phase 2a RCT, FX-322 for sensory hearing loss): 2020
10. Frequency Therapeutics FX-322-111 (Phase 2a RCT, FX-322 for sensory hearing loss): 2020-2021
11. Gossamer Bio TITAN GB001-2101 (Phase 2a RCT, a PG2 inhibitor for nasal polyps): 2019
12. Impel Neuropharma INP104-301 (Phase 2 drug-device combination study for migraine): 2018-2019
13. GlaxoSmithKline SYNAPSE 205687 (Phase 3 RCT, mepolizumab for nasal polyps): 2018-2019
14. AstraZeneca OSTRO D3252C00001 (Phase 3 RCT, benralizumab for nasal polyps): 2018-2019
15. Parexel CIFLOT3-16IA01 (Phase 3 RCT, ciprofloxacin plus fluocinolone for otitis externa): 2017-2018
16. Otonomy OTO-201-201607 (Phase 3 RCT, ciprofloxacin gel for acute otitis externa): 2016
17. Lannett Coca4vs10-002 (Phase 3 RCT comparing 4% to 10% cocaine for topical anesthesia): 2015-2016
18. Lannett Coca4vs10-001 (Phase 3 RCT comparing 4% to 10% cocaine for topical anesthesia): 2014-2015
19. Otonomy OTO-201 (Phase 3 RCT, ciprofloxacin gel for post-tympanostomy tube otorrhea): 2013-2014
20. Entellus Medical REMODEL study (RCT comparing antrostomy to FinESS): 2011-2014
21. Entellus Medical XprESS registry : 2010-2011
22. Entellus Medical RELIEF study (office based antrostomy): 2010-2011
23. Entellus Medical FinESS registry (transantral balloon dilation): 2009-2010
24. AcclarENT radiation exposure study: 2007
25. Bayer 10779 (Avelox for sinusitis): 2003
26. Bristol-Myers Squibb AI420-078 (Tequin for otitis media): 2001-2002
27. Aventis HMR 3647A/3014 (Ketek for sinusitis): 2001-2002
28. Viropharma VP63843 (Pleconaril for common cold): 2000
29. SmithKline Beecham 265805/009 (Augmentin for sinusitis): 1999-2000
30. Armstrong: ChiselTip Suction Cautery Device / Tonsillectomy: 1999
31. SOURCE Pediatric Quality of Life Study: 1999
32. Hoescht Marion-Roussel 3647 (Sinusitis): 1999
33. SOURCE Sudden Sensorineural Hearing Loss (valcyclovir): 1998 - 2000
34. SOURCE Ceftin and Flonase for Sinusitis: 1998 - 2000
35. Bayer D96-023 (Phase 3, ciprofloxacin for sinusitis): 1998
36. SmithKline Beecham BRL-25000/510 (Augmentin for sinusitis): 1998 - 1999
37. SOURCE Adult Quality of Life Study: 1997
38. Armstrong: Functional Endoscopic Sinus Surgery Outcomes study: 1997 - 2001
39. Lilly B9U-MC-AZCX (Phase 3 co-investigator for sinusitis): 1995 – 1996

Peer-reviewed Manuscripts

- Armstrong M, Strack GB. Recognition and documentation of strangulation crimes: a review. JAMA Otolaryngol Head Neck Surg 142(9):1-8. Published online June 16, 2016.
- Armstrong M, Christian D. What's new in sinus surgery? Balloon Sinuplasty. OR Nurse 8(3):36-46, 2014.
- Bikhazi N, Light J, Truitt T, et al. Standalone balloon dilation versus sinus surgery for chronic rhinosinusitis: A prospective, multicenter, randomized, controlled trial with 1-year follow-up. Am J Rhinol Allergy 28:1-8, 2014. (Role: site Principal Investigator and surgeon)
- Cutler J, Bikhazi N, Light J, et al. Standalone balloon dilation versus sinus surgery for chronic rhinosinusitis: A prospective, multicenter, randomized, controlled trial. Am J Rhinol Allergy 27:416-422, 2013. (Role: site Principal Investigator and surgeon)
- Brodner D, Nachlas N, Mock P, Truitt T, Armstrong M, Pasha R, Jung C, and Atkins J: Safety and outcomes following hybrid balloon and balloon-only procedures using a multifunction, multisinus balloon dilation tool. Int Forum of Allergy & Rhinology 3:652-658, 2013.
- Levine SB, Truitt T, Schwartz M, Atkins J: In-Office Stand-Alone Balloon Dilation of Maxillary Sinus Ostia and Ethmoid infundibula in Adults with Chronic or Recurrent Acute Rhinosinusitis: A Prospective, Multi-institutional Study with 1-Year Follow-Up. Ann Otol Rhinol Laryngol 122(11):665-671, 2013. (Role: site Principal Investigator and surgeon)
- Albritton FD et al. Surgeon radiation exposure in ESS with balloon catheters. Otolaryngol Head Neck Surg 140:834-840, 2009.
- Armstrong, M. Office-based Procedures in Rhinosinusitis. Otolaryngol Clin N Am 38:1327-1338, 2005.
- ATBS Clinical Consensus Panel: Acute Bacterial Rhinosinusitis: Patient Assessment, Risk Stratification, Referral Strategies, and Outcome-Effective Antibiotic Selection. Hospital Medicine Consensus Reports May 1, 2004.
- Hayden FG, Herrington DT, Coats TL et al.: Efficacy and Safety of Oral Pleconaril for Treatment of Colds Due to Picornaviruses in Adults: Results of 2 Double-Blind, Randomized, Placebo-Controlled Trials. Clin Infect Dis 36:1523-32, 2003.
- Dolor RJ, Witsell DL, Hellkamp AS et al.: Comparison of Cefuroxime With or Without Intranasal Fluticasone for the Treatment of Rhinosinusitis. JAMA 286:3097-3105, 2001.
- Armstrong M: Chisel Tip Suction Cautery Device for Tonsillectomy. Otolaryngol Head Neck Surgery 121:119-121, 1999.
- Armstrong M, Mark LJ, Snyder DS, Parker SD: Safety of Direct Laryngoscopy as an Outpatient Procedure. Laryngoscope 107:1060-1065;1997
- Armstrong M, Shikani AH: Nasal Septal Necrosis Mimicking Wegener's granulomatosis in a cocaine abuser. ENT Journal 75(9): 623-626, 1996.
- Armstrong M, Efros PL: Speaking tubes for bedside use. Otolaryngol Head Neck Surg 112:624-5, 1995.
- Armstrong M. Stabilizing Foot Means for Cap of Needle Assembly and Method Thereof. U.S. Patent No. 08/041,489, 1994.
- Armstrong M, Kunar DR, Cummings CW: Effect of pentoxifylline on myocutaneous flaps in pigs. Otolaryngol Head Neck Surg. 109:668-675, 1993.
- Armstrong M, Efros PL: Speaking tubes for office use. Otolaryngol Head Neck Surg. 108:771-2, 1993.
- Armstrong M, McArthur JC, Zinreich SJ: Radiographic imaging of sinusitis in HIV infection. Otolaryngol Head Neck Surg. 108:36-43, 1993.
- Godofsky EW, Zinreich SJ, Armstrong M, Leslie J, Weikel CS: Sinusitis in HIV-infected patients: A clinical and radiographic review. Am. J. Med. 93:163-170, 1992.
- Armstrong M, Price JC: Tumor implantation in a tracheotomy. Otolaryngol Head Neck Surg. 106:400-403, 1992.
- Needham D, Armstrong M, Hatchell DL, Nunn RS: Rapid deformation of "passive" polymorphonuclear leukocytes: the effects of pentoxifylline. J. Cell. Physiol. 140(3) 549-557, 1990.
- Armstrong M, Needham D, Hatchell DL, Nunn RS: Effect of pentoxifylline on the flow of polymorphonuclear

leukocytes through a model capillary. *Angiology* 41(4): 253-262,1990.

- Lisk RD, Huck UW, Gore AC, Armstrong M: Mate choice, mate guarding and other mating tactics in golden hamsters maintained under seminatural conditions. *Behaviour* 109: 58-75, 1989.
- Armstrong M: Mechanisms of female mate choice among golden hamsters in a semi-natural environment. Senior thesis submitted to Princeton University, April 1985.

Abstracts, short papers and selected presentations

- DelGaudio J, Armstrong M, Payne S, Citardi M, Setzen M. Panel Discussion: "Would you do this in your office?" at the American Rhinologic Society Summer Sinus Symposium, Washington, DC July 14, 2017.
- Armstrong M, Major MS, Kennedy D, Setzen M, Singh A. Panel discussion: an update on topical local anesthetics. Panel moderator at the American Academy of Otolaryngology – Head and Neck Surgery Foundation Annual Meeting, Product Theater. San Diego, CA, Sept. 20, 2016.
- Armstrong M, Major MS, Christman LA, Topical nasal anesthesia using cocaine hydrochloride 4%, 10% or placebo: safety results from a phase 3 randomized clinical trial. Poster presented at the American Rhinologic Society 62nd Annual Meeting, San Diego, CA, Sept. 16-17, 2016.
- Armstrong M, Strack GB. Recognition and documentation of strangulation crimes. Pre-recorded and presented at the Virginia Society of Otolaryngology Annual Meeting, Tysons Corner, VA June 4, 2016.
- Armstrong, M. Breakthrough treatment relieves sinus problems. *Boomer* 30-31 June 2014.
- Armstrong, M. Balloon Dilation of the Sinuses in the Office. Poster presentation at Virginia Society of Otolaryngology Annual Meeting. Norfolk, VA 5/3/11.
- Armstrong, M. Do's and Don'ts: Print Advertising, Use of Academy Logo. *Facial Plastic Times*. 29(5):10-11, 2008.
- Armstrong, M. The No. 1 Boomer Cancer. Skin cancer: recognize it, prevent it. *Boomer Life* 77-78 June 2008.
- "Pathologic Vignettes: The Role of Balloon Catheter Dilation in Fungus, Headaches and Polyps." Invited panelist at The Sinus Forum 2008, Chicago, IL, 7/25/8.
- "Balloon Sinuplasty Cadaver Training Course," Portsmouth Naval Hospital 9/26/7 and Baltimore, MD 10/19/7 and 5/9/8.
- "Diagnosis and Evidence-Based Management of Outpatients with Acute Bacterial Rhinosinusitis" American Academy of Family Physicians Annual Meeting, Washington, DC 9/29/6, Dallas, TX 9/30/6, Miami, FL 10/28/6.
- "Acute Bacterial Rhinosinusitis: Patient Assessment, Risk Stratification, Referral Strategies, and Outcome-Effective Antibiotic Selection:" Clinical Consensus Panelist: Miami, FL 12/12-13/03.
- Presented at the Allergy, Asthma, and Sinus Disease Update: Washington, DC 4/18/04, San Francisco, CA 9/18/04, San Diego, CA 9/19/04.
- "New Technologies for Tonsillectomy" Invited faculty speaker at the Virginia Society of Otolaryngology Annual Meeting. Williamsburg, VA 4/17/04. Reprinted at the SPSC Pediatric Symposium 6/9/8.
- "Endoscopic Dacryocystorhinostomy" Presented at the 15th Annual Endoscopic Sinus Lectures and Laboratory. Medical College of Virginia, Richmond, VA 4/27/03
- "Current antimicrobial therapy for upper respiratory tract infections." Presented at the Virginia Academy of Family Physicians Annual Meeting. Virginia Beach Convention Center, Virginia Beach, VA 6/22/01.
- "21st Century Treatments for Sinusitis." Presented at the Virginia Academy of Family Physicians Annual Meeting. Virginia Beach Convention Center, Virginia Beach, VA 6/21/00.
- Armstrong, M: Sphenopalatine Artery Ligation for Epistaxis. Presented at the 12th Annual Endoscopic Sinus Lectures and Laboratory, Medical College of Virginia, Richmond, VA. May 6, 2000.
- Armstrong, M: Office Endoscopic Sinus Surgery. Presented at the American Rhinologic Society, Palm Desert, CA, April 26, 1999.

- Armstrong, M: Local Anesthesia for Endoscopic Sinus Surgery. Presented at the 11th Annual Endoscopic Sinus Lectures and Laboratory, Medical College of Virginia, Richmond, VA, May 15, 1999.
- Armstrong M: Chisel Tip Suction Cautery Device for Tonsillectomy, presented at the American Academy of Otolaryngology-Head and Neck Surgery, San Antonio, TX, September 14, 1998, and at the Virginia Society of Otolaryngology, Roanoke, VA,, April 25, 1998.
- Armstrong M: Image Guided Endoscopic Surgery. Presented at the 10th Annual Endoscopic Sinus Lectures and Laboratory, Medical College of Virginia, Richmond, Virginia, May 30, 1998.
- Armstrong M: An Update on Endoscopic Sinus Surgery. Presented at Stuart Circle Hospital Medical Staff Conference on September 27, 1997 and at Chippenham Medical Center/Johnston Willis Hospital Annual Meeting on October 10, 1997.
- Armstrong M: ChiselTip Suction Cautery Tonsillectomy, presented at the Virginia Society of Otolaryngology, Roanoke, Virginia, April 25, 1997.
- Armstrong M, Mark LJ, Snyder DS, Parker SD: Safety of Direct Laryngoscopy as an Outpatient Procedure, presented at the Southern Section of the Triological Society, Naples, FL, January 5-6, 1996.
- Armstrong M: Atlas of Head and Neck Pathology, by Bruce Wenig (book review). Otolaryngol Head Neck Surg 112(6):786.
- Armstrong, M: Negligent sanitation practices in Baltimore barber shops (letter). Maryland Med J 43(2):25-6, 1994.
- Armstrong M, Kunar DR, Cummings CW: Effect of pentoxifylline on myocutaneous flaps in pigs. Otolaryngology Head Neck Surg, 109:235, 1993. Presented at the AAOHNS, Minneapolis, MN, October 4, 1993.
- Godofsky E, Zinreich SJ, Armstrong M, Leslie J, Weikel CS: Sinusitis in HIV positive patients. Presented at the 31st International Congress of Antimicrobial Agents and Chemotherapy: Chicago, September 1991.
- Armstrong M, Needham D, Hatchell DL: Pentoxifylline induces structural defects in neutrophil cytoskeleton: a video demonstration. J Cell Biol 107: 59a, 1988.
- Armstrong M, Nunn RS, Needham D, Hatchell DL: Pentoxifylline increases deformability of neutrophils in a model capillary. J Cell Biol 107: 59a, 1988.
- Armstrong M, Gore AC: Mechanisms of female mate choice among golden hamsters in a semi-natural environment. Department of Biology Research Symposium, Princeton University, Princeton, NJ, May 1985.

Conflict of Interest Statement

I do not have a significant financial interest in the sale of products or services of any medical or pharmaceutical corporation. Within the past 5 years, however, I have received compensation for performing clinical research sponsored by Astra Zeneca, Frequency, Glaxo, Gossamer, Impel, Salvat, SaNOTize, Lannett and Otonomy.

I have received consulting or speaking honoraria from Genentech, Amplifon, Thermo Fisher and Lannett, and I have presented data on behalf of Entellus.



Michael Armstrong Jr., MD