





2005-2013	Department of Otolaryngology, Vanderbilt University School of Medicine, Nashville, Tennessee	Assistant Professor of Otolaryngology (Tenure Track)
2009-2013	Department of Hearing and Speech Sciences, Vanderbilt University School of Medicine, Nashville, Tennessee	Assistant Professor of Hearing and Speech Sciences (Secondary appointment)
2013	Department of Mechanical Engineering, Vanderbilt University School of Engineering, Nashville, Tennessee	Assistant Professor of Mechanical Engineering (Secondary appointment)
2011-2017	Department of Speech, Language, and Hearing Sciences, Purdue University College of Health and Human Sciences, West Lafayette, Indiana	Adjunct Member of Graduate Faculty
<b>AFFILIATED:</b>		
2021-2022	Clinical and Translational Science Institute, University of Pittsburgh, Pittsburgh, PA.	Professor of Clinical and Translational Science (Secondary appointment)

2004-2018



## **Oversight of policies and best practices in recruitment and retention of academic diversity**

Responsible for working with





Service as an advocate for department faculty, staff, and students on school-wide task



STEM-related professions and access to mentorship and learning opportunities with students, researchers and faculty in the School of Health and Rehabilitation Sciences.

Development of faculty, staff and student led activities, events, and services, including summer camps and after-school programming for students at Pittsburgh Public Schools to increase access to and the creation of new pathways to University of Pittsburgh School of Health and Rehabilitation Sciences degree programs, research laboratories and world renowned clinical and research faculty.

Leadership of a school-wide strategic planning process for the Office of Equity, Inclusion, and Community Engagement; implementation of an SHRS DEI Framework for Action to leverage faculty, staff, and student engagement and support for school-wide DEI initiatives; development and implementation of SHRS OEI&CE Guiding Principles to align with the Plan for Pitt and Our People, Our Programs, and Our Purpose pillars.

### **As Department Chair, Communication Science and Disorders, University of Pittsburgh**

Created a senior executive leadership team with appointment of three new vice chair positions in the department: 1) Vice Chair for Academic Affairs, 2) Vice Chair for Clinical Education, and 3) Vice Chair for Research.

Led a successful department reorganization, including the establishment of three new offices to support faculty, staff, and students: 1) CSD Office of Research, 2) CSD Office of Clinical Education, and 3) CSD Office of Academic Affairs.

Led a successful reorganization of staff responsibilities to provide increased support to faculty involved in research; program directors providing oversight of degree programs; and faculty and staff supporting clinical education and network clinical placements across the UPMC and VAMC healthcare system.

Recruitment of 11 new faculty members in the department since FY18—including 5 tenure stream faculty positions and 6 appointment stream faculty positions.

Increased the number of administrative support staff in the department—from 4.53 FTE (FY18) to 20.75 FTE (FY21) to support our 3 new offices and department core missions.

Successful recruitment of 3 new program directors—including a new director of the Clinical Science Doctoral Program (CScD) in speech-language pathology; new director of the graduate program (MA/MS) in speech-language pathology; and a new director of the undergraduate program (BA) in Communication Science.

Successful recruitment of a new externship coordinator for the graduate program (AuD) in audiology to support growth in the audiology program and to secure externship placements.

Success in faculty recruitment and the recruitment of faculty at mid-career (e.g., Associate Professor) and senior academic ranks (e.g., Professor) provided a more optimal balance



accommodate up to 18 researchers and an additional 625 square feet of office and

opportunities, clinical training, adjunct teaching, summer camps and professional development, and high-quality research training experiences for students.

Negotiation of a clinical contract to provide speech and swallowing services at UPMC Passavant. Contract stipulated that UPMC Passavant provided per diem compensation to support the effort of a faculty member in the department to provide services and clinical education to students. Services were staffed by a faculty member in the Department of Communication Science and Disorders.

accountability; and the facilitation of conversations surrounding the alignment of incentives and department goals with institutional priorities.

**As Associate Vice Chair for Research, Otolaryngology, Vanderbilt Univ Medical Center**

Growth of department research laboratories and support for faculty research led to a 37% increase in federal funding and 23% increase in industry sponsored clinical trials in FY17.

Ranking improved from #7 to #4 ranked department in NIH sponsored research in FY17.

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**CERTIFICATION and LICENSURE**

**SPECIALTY CERTIFICATION:**

American Speech-Language-Hearing Association Speech Language Pathology Certificate of Clinical Competence License #12019218	2005-present
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**MEDICAL or OTHER PROFESSIONAL LICENSURE**

Department of Health, Board of Communication Sciences and Disorders Speech-Language Pathology State of Tennessee License License #3195	2005-2018
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Department of Commerce and Insurance Board of Pharmacy State of Tennessee Researcher License License #0000010743	2006-2018
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**MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES**

American Speech Language Hearing Association (ASHA)	2004-present
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ASHA Special Interest Group 3, Voice and Voice Disorders Co-Chair, Research Committee; Member, Steering Committee; Associate Editor, Perspectives on Voice and Voice Disorders; Editor, Perspectives on Voice and Voice Disorders	2004-2008
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The Voice Foundation	2004-2008
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Tennessee Association of Audiology and Speech Language Pathology	2004-2008
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(Mentorship of Graduate and/or Medical Students in the Research Setting).

**RESEARCH AWARDS and HONORS:**

Young Faculty/Practitioner Award, 2008  
American Laryngological Association  
Award for Continuing Education,  
American Speech-Language-Hearing Association.

Mentor, 2010  
Students Preparing for Academic and Research  
Careers Award from the American Speech-Language-  
Hearing Association

Mentor





5. Hirano S, Bless DM, **Rousseau B**

20. Ohno T, Hirano S, **Rousseau B**. Age-associated changes in the expression and deposition of collagen and hyaluronan in rat vocal folds. *Annals of Otology, Rhinology, and Laryngology*. 2009; 118(10): 735-741. PMC2782757. PMID:19894402
21. Suehiro A, Hirano S, Kishimoto Y, Tateya T., **Rousseau B**, Ito J. Effects of basic fibroblast growth factor on rat vocal fold fibroblasts. *Annals of Otology, Rhinology, and Laryngology*. 2010;119(10): 690-6. PMID:21049855
22. Suehiro A, Hirano S, Kishimoto Y, **Rousseau B**, Nakamura T, Ito J. Treatment of acute vocal fold scar with local injection of basic fibroblast growth factor: A canine study. *Acta Oto-Laryngologica*. 2010; 130(7):844-50. PMID:20082571
23. Singh V, Cohen SM, **Rousseau B**, Noordzij JP, Garrett CG, Ossoff RH. Acute dysphonia secondary to vocal fold hemorrhage after vardenafil use. *Ear, Nose, & Throat Journal*. 2010;89(6): E21-2. PMID:20556726
24. Swanson ER, Ohno T, Abdollahian D, Garrett CG, **Rousseau B**. Effects of raised intensity phonation on inflammatory mediator gene expression in normal rabbit vocal fold. *Otolaryngology-Head and Neck Surgery*. 2010;143(4): 567-72. PMC2923810. PMID:20879195
25. Suehiro A, Hirano S, Kishimoto Y, **Rousseau B**, Nakamura T, Ito J. Treatment of acute vocal fold scar with local injection of basic fibroblast growth factor: a canine study. *Acta Otolaryngol*. 2010;130(7): 844-50. PMID:20082571
26. Watts CR, Marler J, **Rousseau B**. Qualitative characterization of elastic fiber distribution in the mouse vocal fold: Further Development of an Animal Model. *Journal of Voice*. 2011; 25(1): e1-6. PMID:20137895
27. **Rousseau B**, Cohen SM, Zeller AS, Scarce L, Tritter AG, Garrett CG. Compliance and quality of life in patients on prescribed voice rest. *Otolaryngology-Head and Neck Surgery*. 2011;144(1): 104-107. PMID:21493397
28. **Rousseau B**, Suehiro A, Echemendia N, Sivasankar M. Raised intensity phonation compromises vocal fold epithelial barrier integrity. *Laryngoscope*. 2011; 121(2):346-351. NIHMS PMC – In Process. PMID:21271586
29. Suehiro A, Wright HV, **Rousseau B**. Optimal concentration of hepatocyte growth factor for treatment of the aged rat vocal fold. *Laryngoscope*. 2011; 121(8): 1726-34. PMID:21792961
30. Suehiro A, Bock JM, Hall JE, Garrett CG, **Rousseau B**. Feasibility and acute healing of vocal fold microflap incisions in a rabbit model. *Laryngoscope*. 2012;122(3): 600-5. PMC3387431. PMID:22253007
31. Hall JE, Suehiro A, Branski RC, Garrett CG, **Rousseau B**. Modulation of inflammatory and pro-fibrotic signaling in a rabbit model of acute phonotrauma using triamcinolone. *Otolaryngology-Head and Neck Surgery*. 2012; 147(2):302-7. PMID:22399283
32. Rohde SL, Wright CT, Muckala JC, Wiggleton J, **Rousseau B**, Netterville JL. Voice quality after RLN resection and immediate reconstruction. *Otolaryngology-Head and Neck Surgery*. 2012;May 22 PMID:22619256
33. **Rousseau B** & Watts CR. Slippery Elm, its Biochemistry, and use as a Complementary and Alternative Treatment for Laryngeal Irritation. *Journal of Investigational Biochemistry*. 2012;1(1):17-23.
34. Li Y, Pearce EC, Mainthia R, Athavale SM, Dang J, Ashmead DH, Garrett CG, **Rousseau B**, Billante CR, Zealear DL Comparison of ventilation and voice outcomes between unilateral laryngeal pacing and unilateral cordotomy for the treatment of



Wootten C, Francis D, Stratton C, Jenkins K, McGregor T, Gaddy J, Blackwell T, Drake W. Idiopathic Subglottic Stenosis is Associated with Activation of the Inflammatory IL-

61. Kimball EE, Sayce L, Xu C, Kruszka C, **Rousseau B** (2020) Protein substrate alters cell physiolog BDC q0fouv4rimaru BDCatufol epithelial cells. Cells, Tissues, Organs.
- 62.

on Advances in Quantitative Laryngology, Voice and Speech Research. June 3-4, 2013,  
Cincinnati, Ohio, USA.

### **Books**

- rousseau B.      1. **Rousseau B.** & Branski RB. (2018). Anatomy and Physiology of Speech and He.,4pe

9. **Rousseau B.,**







51. Kojima T, Mitchell JR, **Rousseau B.** (2012) Early versus Delayed vocal fold mobilization: High-speed videoendoscopic evaluation of vibration in an evoked rabbit phonation model. Presented at the Fall Voice Conference. New York, NY.
52. Johnson J, Gutmann M, Friedman J, Zeller A, De Riesthal M, Francis D, Garrett CG, Vinson K, **Rousseau B.**

- Phonotrauma. Presented at the 9<sup>th</sup> International Conference on Voice Physiology and Biomechanics. Salt Lake City, UT.
64. Valenzuela CV, Kojima T, Greene S, Dharamsi L, Novaleski C, Garrett CG, **Rousseau B** (2014) Characterizing the vocal fold epithelial response to recovery following phonation-induced trauma at the transcriptional level. Presented at the American Academy of Otolaryngology-Head and Neck Surgery Annual Meeting. Orlando, FL.
  65. Valenzuela CV, Novaleski C, **Rousseau B** (2014) Use of Alternative Communication Modalities during Postoperative Voice Rest. Presented at the Fall Voice Conference. San Antonio, TX.
  66. Chang S, Luo H, Novaleski C, **Rousseau B** (2014) Combining subject-specific and low-order modeling techniques to study fluid-structure interaction of rabbit phonation. Presented at the 67<sup>th</sup> Annual Meeting of the American Physical Society Division of Fluid Dynamics. San Francisco, CA.
  67. Novaleski C, Kojima T, Valenzuela CV, Chang S, Luo H **Rousseau B** (2014) In Vivo Suture Model to Elicit Rabbit Phonation. Presented at the Fall Voice Conference. San Antonio, TX.
  68. Kojima T, Mizuta M, Valenzuela CV, Novaleski CK, Garrett CG, **Rousseau B** (2015) Morphological Recovery of Rabbit Vocal Fold Epithelium After Acute Phonotrauma. Presented at the American Bronchoesophagological Association Spring Meeting, Boston, MA.
  69. Mizuta M, Novaleski CK, **Rousseau B** (2015) Isolation, Cell Culture, and Characterization of Vocal Fold Epithelial Cells of Rabbits. Presented at the American Bronchoesophagological Association Spring Meeting, Boston, MA.
  70. Novaleski CK, Mizuta M, **Rousseau B** (2015) Expression of Apoptosis along the Apical Surface of Vocal Fold Epithelium. Presented at the 11<sup>th</sup> International Conference on Advances in Quantitative Laryngology, Voice and Speech Research, London, UK.
  71. Mizuta M, Newcomb D, **Rousseau B**, Garrett CG, Netterville JL, Wooten CT, Francis DO, McGreggor TL, Blackwell TS, Gaddy JA, Drake WP, Gelbard A (2015) Human Large Airway Remodeling in Tracheal Stenosis is Differentially Shaped by the Host-Pathogen Interface. Presented at the Vanderbilt Infection and Immunology Conference.
  72. Novaleski CK, King R, **Rousseau B** (2015) Reflective Learning: A Model of Implementing Voice Instrumentation in Graduate Coursework. Presented at the American Speech-Language Hearing Association Annual Meeting. Denver, CO.
  73. **Rousseau B**, Craig J, Gherson S, Branski RC (2015) Assessment and Treatment of Vocal Fold Lesions: Pearls and Pitfalls. Presented at the American Speech-Language Hearing Association Annual Meeting. Denver, CO.
  74. Storkel H, **Rousseau B**, Yoder P, Smith A, Camarata S (2015) Writing Successful Research Grant Applications in Communication Sciences and Disorders: Advice from Experts. Presented at the American Speech-Language Hearing Association Annual Meeting. Denver, CO.
  75. King R, Novaleski CK, Cleveland TF, Garrett CG, **Rousseau B** (2015) Outcomes of Voice Rest after Microflap Surgery for Benign Vocal Fold Lesions. Presented at the Fall Voice Conference. Pittsburgh, PA.
  76. Kraja I, Bing R, Hiwatashi N, **Rousseau B**, Kirschenbaum K, Branski RC (2016) A novel delivery molecule for siRNA transfection in vocal fold fibroblasts. Presented at the American Laryngological Association Spring Meeting, Chicago, IL.



91. Xu C, Kimball EE, Sayce L, **Rousseau B** (2018) Characterization of acute exposure to glucocorticoid steroids in human and rabbit primary vocal fold epithelial cells. Accepted

104. Gartling G, Sayce L, Kimball E, Sueyoshi S, Brandley J, **Rousseau B** (2019) A comparison of the localization of integral membrane proteins in human and rabbit vocal folds. Presented at Fall Voice, Dallas, TX.
105. Wilson AW, Kimball EE, Sayce L, **Rousseau B** (2019) Feasibility of magnetic nanoparticle co-culture with vocal fold epithelial cells. Presented at Fall Voice, Dallas, TX.
106. Kimball EE, Sayce L, Gartling G, Powell ME, Brandley J, **Rousseau B** (2019) Effects of Vibratory Contact on Vocal Fold Structure and Physiology. Presented at Fall Voice, Dallas, TX.
107. Wilson AW, Kimball EE, Sayce L, **Rousseau B** (2019) The Magnetic Voice Project (MVP): Bringing Nanoscience to Voice Science. Presented at American Speech, Language, Hearing Association, Orlando, FL.
108. Sayce L, Kimball EE, Chen P, Wilson AW, Powell ME, **Rousseau B** (2019) Optimizing Anesthesia for Basic Voice Research in a Rabbit Model. Presented at American Speech, Language, Hearing Association, Orlando, FL.
109. Gartling G, Sayce L, Kimball EE, Sueyoshi S, Brandley J, **Rousseau B** (2019) A comparison of critical molecular components in rabbit and human vocal folds. Presented at American Speech, Language, Hearing Association, Orlando, FL.
110. Kimball EE, Sayce L, Powell ME, **Rousseau B** (2020) Laryngeal Changes in Acute Systemic Dehydration in a Rabbit Model.

118. Xu XC, Sayce L, Wilson A, **Rousseau B.** (2021) Glucocorticoid Steroid Effects on Proliferation and Barrier Repair in Rabbit Vocal Fold Epithelial Cells. Accepted for oral presentation at Fall Voice 2021, Miami, FL.
119. Zimmerman Z, Gartling G, Sayce L, Slater A, Branski R, **Rousseau B.** (2021) Long-term characterization of iatrogenic vocal fold wound healing in an in vivo rabbit model. Accepted for oral presentation at Fall Voice 2021, Miami, FL.
120. Gartling G, Sayce L, Zimmerman Z, Slater A, Wilson A, Branski R, **Rousseau B.** (2021) Investigating the Occurrence of Vocal Fold Atrophy Following Intracordal Glucocorticoid Injection in a Rabbit Model. Accepted for presentation as a poster at Fall Voice 2021, Miami, FL.
121. Sayce L, Wilson A, Gartling G, **Rousseau B.** (2021) Innovations in Modeling of Voice Disorders: Development of Surgical Approaches to Advance Preclinical Laryngology Research. Accepted for presentation as a poster at Fall Voice 2021, Miami, FL.
122. Wilson A, Sayce L, Li Z, Ahvad A, Luo H, **Rousseau B.** (2021) Comparison of two surgical methods to simulate unilateral vocal fold paralysis in an ex vivo rabbit model. Accepted for presentation as a poster at Fall Voice 2021, Miami, FL.
123. Li Z, Avhad A, Luo H, Wilson A, Sayce L, **Rousseau B.** (2021) Computational modelling of simulated unilateral vocal fold paralysis. Accepted for presentation at the 74<sup>th</sup> Annual Meeting of APS Division of Fluid Dynamics, Phoenix, Az.
124. Gartling G, Sayce L, Zimmerman Z, Slater A, Wilson A, Branski R, **Rousseau B.** (2022) Acute Effects of Dexamethasone Injection to the Thyroarytenoid Muscle in Preclinical Model. Accepted for presentation at COSM-ALA 2022 Meeting, Dallas, TX.
125. Sayce L, Zimmerman Z, Gartling G, Branski R, **Rousseau B.** (2022) Epithelial Responses to Vocal Fold Microflap Injury in a Preclinical Model. Accepted for presentation at COSM-ALA 2022 Meeting, Dallas, TX.

## **OTHER PUBLICATIONS:**

### **Practice Policy Documents**

ASHA's Practice Policy Documents, along with other cardinal documents of the Association, are written for and by ASHA members and approved by ASHA governance to promulgate best practices and standards in the professions of audiology and speech-language pathology.

Denton

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**TEACHING:**

**PROFESSIONAL ACTIVITIES**



biomedical research program. In 2014, I was the recipient of the Elaine-Sanders Bush Award for

Co-Director  
1-2 Medical Students  
Open to 4<sup>th</sup> year Medical Students  
from any Medical School

SLP 5369 Master's Thesis Research 2010-present  
Director, Developed standard curriculum  
1-2 Graduate Students  
Met weekly during fall, spring, and summer semesters  
One 2-hour conference  
One 1-hour laboratory interaction per week

SLP 5378 Advanced Voice Instrumentation & Lab 2011-present  
Course Director, Developed course and curriculum  
2 Graduate Students  
Met weekly during summer semester  
One 3-hour lecture per week

SLP 5301 Acoustics and Perception of Speech and Speech 2012-2013  
Disorders  
Course Director, Developed standard curriculum  
22 Graduate Students  
Met weekly during fall semester  
One 3-hour lecture and One 1-hour  
laboratory interaction per week

### **Graduate School Courses:**

#### **Vanderbilt University**

HRSP 344 Grants and Contracts 2010-2012  
Instructor  
6-7 Graduate Students  
Met weekly during summer semester  
One 3-hour lecture per week

### **Continuing Medical Education:**

1. Vanderbilt Videostroboscopy with Interpretation Workshop, Nashville, Tennessee, August 2005, Organizer and Invited Lecturer
2. Vanderbilt Videostroboscopy with Interpretation Workshop, Nashville, Tennessee, October 2006, Organizer and Invited Lecturer
3. Tennessee Association of Audiologist and Speech-Language Pathologists Convention. Nashville, Tennessee, October 2006, Invited Lecturer





Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Professor  
Department of Otolaryngology  
GuangDong Academy of Medical Sciences.

Tsunehisa Ohno, M.D., Ph.D. 2007-2009  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Clinical Fellow and Otolaryngology  
Head and Neck Surgeon  
Department of Otolaryngology  
Kokura Memorial Hospital, Kokura, Japan.

Atsushi Suehiro, M.D., Ph.D. 2009-2011  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Department (Head) Chief and Otolaryngology  
Head and Neck Surgeon  
Department of Otolaryngology  
Kusatsu General Hospital, Shiga, Japan.

Tsuyoshi Kojima, M.D., Ph.D. 2011-2014  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Clinical Fellow and Otolaryngology  
Head and Neck Surgeon,  
Department of Otolaryngology  
Tenri Hospital, Nara, Japan.

James Daniero, M.D. 2013-2014  
Laryngology Research Fellow  
Mentor  
Research Laboratory Training Experience  
Current position: Assistant Professor  
University of Virginia, Charlottesville, VA.

Masanobu Mizuta, M.D. 2014-2015  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Otolaryngologist

Reyna Gordon, Ph.D. 2014-2015  
Post-doctoral research fellow  
Primary Mentor  
Director of Fellowship Program  
Current position: Assistant Professor  
Vanderbilt University Medical Center.

Maria Powell, Ph.D., CCC-SLP 2015-2017  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Assistant Professor  
Vanderbilt University Medical Center.

Takashi Kurita, M.D. 2015-2017  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Otolaryngologist  
Kurume University Medical Center.

Shintaro Sueyoshi, M.D. 2017-2018  
Post-doctoral research fellow  
Primary Mentor  
Director of Post-doctoral Fellowship Program  
Current position: Otolaryngologist

### **Resident Research Fellows**

Lesley F. Childs, M.D. 2007-2008  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Assistant Professor,  
Department of Otolaryngology, University of Texas  
Southwestern Medical Center, Dallas, TX.

Erik R. Swanson, M.D. 2008-2009  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngology-Head and Neck Surgeon  
Charleston Ear, Nose, and Throat Associates, Charleston, SC.

Harry Wright, M.D. 2010-2011

Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngologist (Facial Plastic Surgery)  
Tampa, FL.

Joseph E. Hall, M.D. 2011-2012  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngology-Head and Neck Surgeon  
Ohio ENT, Dublin, OH.

Mark Van Deusen, M.D. 2011-2012  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngology-Head and Neck Surgeon  
Northwest ENT and Allergy Center, Marietta, GA.

Joshua Mitchell, M.D. 2012-2013  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngologist (Pediatric Otolaryngology)

Scott M. Greene, M.D. 2012-2013  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngologist

Latif M. Dharamsi, M.D. 2012-2013  
Resident Research Fellow (Otolaryngology)  
Primary Mentor, Director of Resident Research Rotation  
Current position: Otolaryngologist

Rachel Fee, M.D. 2014-2015  
Resident Research Fellow (General Surgery)  
Primary Mentor, Director of Laboratory Rotation  
Current position: Otolaryngologist

**Medical Students (M.D.)**

Davood Abdollahian, M.D. 2008-2009  
Medical Student  
Vanderbilt University School of Medicine  
Emphasis Program  
Primary Mentor, Director of Laboratory Rotation  
Current Position: Radiologist

Mi Jin Yoo, M.D. 2008-2009  
Medical Student  
Vanderbilt University School of Medicine  
Emphasis Program  
Primary Mentor, Director of Laboratory Rotation  
Current Position: Otolaryngologist  
Albert Einstein College of Medicine  
Montefiore Medical Center

Alexandra Schmidt, M.D. 2009-2010  
Medical Student  
Vanderbilt University School of Medicine  
Emphasis Program  
Primary Mentor, Director of Laboratory Rotation  
Current Position: Plastic and Reconstructive Surgeon

Nicholas Echemendia, M.D. 2009-2010  
Medical Student  
Case Western Reserve University School of Medicine  
Primary Mentor, Director of Laboratory Rotation  
Current Position: General Surgeon

Laurence James 2010-2011  
Medical Student  
Vanderbilt University School of Medicine  
Emphasis Program  
Primary Mentor, Director of Laboratory Rotation  
Current Position: Physician

Carla Valenzuela 2012-2014  
Medical Student  
Vanderbilt University School of Medicine  
Primary Mentor, Director of One Year Laboratory Rotation  
Mentor, NIH Diversity Research Supplement  
Current Position: Otolaryngologist

Rivka Chinyere Ihejirika 2014-2015  
Medical Student  
Vanderbilt University School of Medicine  
Mentor, Summer Research Month  
Current Position: Otolaryngologist

**Graduate Students (M.S.)**

Danielle Elder, M.S., CCC-SLP 2009-2010  
Graduate Student (M.S.)





Research Assistant  
Current Position: Speech



Vanderbilt University School of Medicine.

Gary Gartling 2017-2021  
Pre-doctoral (Ph.D.) Fellow  
Department of Communication Science and Disorders  
Primary Mentor, Director of Ph.D. Program  
University of Pittsburgh  
Current Position: Research Associate  
New York University School of Medicine.

Azure Wilson 2018-2022  
Pre-doctoral (Ph.D.) Fellow  
Department of Communication Science and Disorders  
University of Pittsburgh  
Primary Mentor, Director of Ph.D. Program  
Current Position: Pre-doctoral fellow  
University of Pittsburgh

Elizabeth Hary 2021-2022  
Pre-doctoral (Ph.D.) Fellow  
Department of Communication Science and Disorders  
University of Pittsburgh  
Primary Mentor, Director of Ph.D. Program  
Current Position: Pre-doctoral fellow  
University of Pittsburgh

Elizabeth F. Levendoski 2011-2013  
Pre-doctoral (Ph.D.) Fellow  
Department of Speech, Language & Hearing Sciences  
Purdue University  
Member of Committee, Ph.D. Dissertation Project  
Current Position: Assistant Professor  
Stanford University School of Medicine.

Robin M. Jones 2011-2013  
Pre-doctoral (Ph.D.) Fellow  
Department of Hearing and Speech Sciences  
Vanderbilt University School of Medicine  
Member of Committee, 2<sup>nd</sup> year Ph.D. Project  
Member of Committee, Ph.D. Dissertation Project  
Current Position: Assistant Professor  
Vanderbilt University School of Medicine.

Siyuan Chang 2011-2016  
Pre-doctoral (Ph.D.) Fellow  
Department of Mechanical Engineering



R01DC016236	Development of Patient Specific Planning Tool for Type I Laryngoplasty	Principal Investigator, 30% effort	12/01/2017-06/30/2022, NCE	NIH, \$2,903,271
R01DC017397	Multiple Mechanisms Underlying GR-Mediated Therapies for Fibroplasia	Co-Investigator (Subcontract PI), 10% effort	08/14/2019-07/31/2023	NIH, \$616,182

***Pending Grant Support:***

<b><i>Grant Number</i></b>	<b><i>Grant Title</i></b>	<b><i>Role, Effort</i></b>	<b><i>Years Inclusive</i></b>	<b><i>Source, Amount</i></b>
T32DC020144	Accelerating Translation in Communication Science and Disorders (Act-CSD)	Principal Investigator (MPI), 7.5% effort	07/01/2022 – 06/30/2027	NIH, \$2,067,639
NIH NRSA F31	Magnetic Nanoparticle-Induced Activation of Mechanosensitive Proteins in Vocal Fold Epithelium	Applicant Sponsor, 0% effort	07/01/2021 – 06/30/2024	NIH, \$136,560

***Prior Grant Support:***

<b><i>Grant Number</i></b>	<b><i>Grant Title</i></b>	<b><i>Role, Effort</i></b>	<b><i>Years</i></b>	<b><i>Source, Amount</i></b>
R01DC015405	Pre-Clinical Testing of the Safety and Efficacy of Treatments for Voice Disorders	Principal Investigator, 40% effort	07/01/2016-06/30/2022	NIH, \$3,318,645

R01DC016033	Functional Electrical Stimulation of the Bilaterally Paralyzed Larynx	Consultant, 0% effort	12/01/2017- 11/30/2022	NIH, \$3,763,990
T32EB021937	Training Program for Innovative Engineering Research in Surgery and Intervention	Training Grant Faculty/Preceptor, 0% effort/F5 12 Tf1		





Levels in the  
Acute Vocal  
Fold Wound

R21DC009873

Growth Factor  
Treatment for  
Aged Vocal  
Folds

Principal  
Investigator,  
20% effort

12/01/2008

***Grant Support: Training Grants/Invited Grant Consulting***

<b><i>Grant Number</i></b>	<b><i>Grant Title</i></b>	<b><i>Role, Effort</i></b>	<b><i>Years Inclusive</i></b>	<b><i>Source, Amount</i></b>
R01DC011338	Molecular Pathophysiology of Acute Phonotrauma: Research Supplement to Promote Diversity in Health-Related Research	PI Sponsor, 0% effort	08/01/2013 – 11/30/2015	NIH, \$62,306
F32DC015726	Vocal Fold Vibratory Function during Recovery from Phonotrauma	PI: Powell Role: Sponsor, 0% effort	08/01/2016-07/31/2018	NIH, \$176,142
T32EB021937	Training Program for Innovative Engineering Research in Surgery and Intervention	PI: Miga Role: Preceptor, 0% effort	07/01/2016-06/30/2021	NIH, \$189,470
F31 DC014621	Apoptosis Signaling in Vocal Fold Epithelium in Response to Acute Phonotrauma	PI: Novaleski Role: Sponsor, 0% effort	06/01/2015-05/30/2017	NIH, \$73,310
F31 DC012729	Characterization of immune response in vocal fold injury	PI: King Role: Sponsor, 0% effort	12/01/2012-11/30/2014	NIH, \$36,297

**SEMINARS AND INVITED LECTURESHIPS:**

1. 9<sup>th</sup> International Workshop on Laser Voice Surgery. “Scar Wars”. Paris, FRANCE, April 2004.

2. Shanghai Voice Conference. “The effects of phonation on vocal fold wound healing”. Shanghai, CHINA, November 2007.
3. The International Conference in GuangZhou. “Evaluation and Treatment of Voice Disorders”. GuangZhou, CHINA, September 2010.
4. The 8<sup>th</sup> International Conference on Voice Physiology and Biomechanics. “Effects of Increasing Phonation Time and Magnitude Dose on Vocal Fold Epithelial Morphology”. Erlangen, GERMANY, July 2012.
5. 21<sup>st</sup> International Workshop on Laser Voice Surgery. “Growth Factor Treatments for Vocal Fold Scar and Aging”. Paris, FRANCE, May 2019.
6. Shanghai International Voice Forum. “Behavioral Therapy and Speech Pathology of Voice Disease”. Shanghai, CHINA, May 2019.
7. Shanghai International Voice Forum. “Voice Therapy Panel”. Shanghai, CHINA, May 2019.

8. Mount Sinai School of Medicine, Grand Rounds in Otolaryngology. '6 Contemporary Laryngology: Capitalizing on Innovations and Unique Opportunities in Research, Education, and Global Outreach". New York, New York, USA, June 2013.

9. 13<sup>th</sup> Biennial Phonosurgery Symposium, "Voice Rest: Science and Practice". Madison, Wisconsin, USA, July 2014.

10. University of Florida, College of Public Health and Health Professions, "Pursuit of National Preeminence in Patient Care, Research, Education, and Outreach: The Vanderbilt Experience". Gainesville, Florida, USA, January 2015.

11. University of Central Florida, College of Health and Public Affairs, Department of Communication Sciences and Disorders, "Leading Teams and Building Strategic Partnerships in an Academic Health Care System: A 10-Year Experience at Vanderbilt School of Medicine". Orlando, Florida, USA, October 2015.

### **Invited Panelist/Moderator (National or International)**

Moderator of Annual Kay Pentax Lecture in Upper Airway Science (Susan L. Thibeault, Ph.D.). American Speech Language Hearing Association Annual Meeting, Philadelphia, Pennsylvania, USA, November 2010.

Moderator of Panel "Short term effects and management strategies for acute phonotrauma". University of California-San Francisco Voice Conference. San Francisco, California, USA, November 2011.

Moderator of Panel "Scientific Session III: Mucosa". American Laryngological Association. Las Vegas, Nevada, USA, May 2014.

Moderator of Panel, Fall Voice Conference. San Antonio, Texas, USA, October 2014.

Invited Panelist "Perioperative Voice Care" American Speech Language Hearing Association Live Online Chat in Celebration of World Voice Day, April 12<sup>th</sup>, 2016: [HYPERLINK http://www.asha.org/Events/live/04-12-2016-Voice-Care.htm](http://www.asha.org/Events/live/04-12-2016-Voice-Care.htm)

### **Invited Lectures (Keynote Speaker)**

1. NBASLH Awards Dinner Keynote Speaker. "Celebrate People: People are your most important asset". Nashville, Tennessee, USA, April 16-18, 2015.

### **Invited Lectures (School of Medicine)**

Vanderbilt Initiative in Surgery and Engineering (VISE), Spring Seminar Series. Vanderbilt University, Nashville, Tennessee, USA, March 2013.

**OTHER RESEARCH RELATED ACTIVITIES:**

**National Institutes of Health (Review Panels/Study Sections):**

Ad-hoc member, 2009-2011  
National Institutes of Health  
R01 Special Emphasis Panel/Scientific Review Group  
ZDC1 SRB-L (42).

Ad-hoc member 2011-2013  
NIDCD R03– Voice, Speech and Language  
National Institutes of Health  
Special Emphasis Panel/Scientific  
Review Group ZDC1 SRB-Y (56).

Ad-hoc member 2012-2013  
NIDCD R03

New Century Scholars Research Grant Competition  
American Speech-Language Hearing Foundation.

Reviewer, New Century Scholars Program 2011  
Scholarship Review Committee  
American Speech-Language Hearing Foundation.

Reviewer, New Century Scholars Program 2014  
New Century Scholars Research Grant Competition  
American Speech-Language Hearing Foundation.

**Editorial Appointments (Editor or Associate Editor)**

Associate Editor 2010-2012  
Perspectives on Voice and Voice Disorders

Guest Associate Editor

## Wound Repair and Regeneration

Ad-hoc reviewer  
Cells Tissues Organs 2010-present

Ad-hoc reviewer  
Acta Biomaterialia 2011-present

Ad-hoc reviewer  
Journal of The Royal Society Interface 2011

### **LIST of CURRENT RESEARCH INTERESTS:**

Optimal function of the vocal fold lamina propria is essential to human voice production. The lamina propria is an area of connective tissue that is uniquely different from tissues found elsewhere in the body. Histological and physiological comparisons can be made with other tissues such as skin and joints that undergo frequent trauma, repeated cycles of inflammation, and decreased function secondary to injury. However, no other tissue in the body undergoes mechanical forces similar to the vibration that the vocal folds experience during phonation. Our federally funded research program investigates the cellular and molecular events underlying phonotrauma and the identification of unique mechanisms involved in protection of the vocal fold from injury. We have developed a novel in-vivo phonation model to better understand the role of acute phonotrauma on repair of vocal fold tissues. Our laboratory was the first to report changes in the expression of key genes involved in extracellular matrix metabolism following acute phonotrauma. In addition to these more fundamental investigations, we are also deeply committed to the understanding of outcomes and the availability of health related services in the treatment of phonotrauma. Our laboratory is conducting translational investigations focusing on the role of treatment adherence in recovery from phonomicrosurgery, outcomes studies related to the assessment and management of patients with benign vocal fold disease, and multi-center randomized controlled clinical trials in voice disorders. Our research efforts are funded by the National Institutes of Health, National Institute on Deafness and Other Communication Disorders.

Our efforts addressed an important goal in understanding proper cell and extracellular matrix interactions, a process that is critical to maintaining functional homeostasis in tissues and organs. MODEL ENT investigators utilized a range of *in vitro*, *in vivo*, and computational models to provide a fundamental understanding of the biochemical and biophysical factors that influence tissue injury and repair. These efforts contributed to an improved understanding of extracellular matrix signaling and the mechanobiological responses of organs and tissues to environmental and chemical cues. These studies are essential to the development and testing of surgical and pharmacologic treatments for human disease. Support for these initiatives has the potential to lead to significant progress in how patients are managed in the next 10 years.

In our current R01 research program we use a unique combination of *in vitro*, *in vivo*, and computational models to provide a fundamental understanding of the biological characteristics of vocal fold tissue and the physiological factors that influence tissue response to treatment. Over the past 17 years, our research program has been deeply committed to the understanding of tissue



Over the past 18 years, I have served on editorial review boards as editor, associate editor, or reviewer for various journals. I have also regularly provided service to the professions and to federal agencies. I served a six-year term as a charter member of the Motor Function Speech

pathology; and a new director of the undergraduate program (BA) in Communication Science. **I led several** successful tenure and promotion cycles and recruitment at mid-career and above ranks resulting in a more optimal balance in the department across academic rank and appointment type. I increased the diversification of research personnel (e.g., post-docs) in the department from 0 (FY18) to 5 (FY21) and the number of advanced research trainees (e.g., post-docs) increased to 25% of the 21 research trainees during my tenure as chair. **Our Ph.D. advisory council** increased

of Audiology (AAA); increased engagement with alumni through the establishment of a Chair's Newsletter and external communications to provide regular updates on CSD accomplishments; and developed and implemented department academic, clinical, and research benchmarks; including the implementation of a department scientific review process to increase faculty publications, grant activity and success rates by 20%. During my service as chair, I led a significant improvement in [2021 U.S. News & World Report rankings](#), with Speech-Language Pathology realizing the largest climb in the Best Graduate Schools rankings up four spots from its previous # 7 ranking to the #3 ranked SLP program in the country. As chair, I provided leadership of a department-wide strategic planning process for the Department of Communication Science and Disorders and transitioned the department from a centralized allocation budget model from the provost to a responsibility center management (RCM) budget model.

**Prior to my service as Chair of the Department of Communication Science and Disorders at the**

Member, Resident Research Review Committee Vanderbilt University Department of Otolaryngology.	2008-2018
Member, Resident Applicant Review Committee Vanderbilt University Department of Otolaryngology	2008-2018
Member, Admissions Review Committee Vanderbilt University Department of Hearing and Speech Sciences	2008-2018
Member, Ad-Hoc Committee Response to Graduate Task Force Report on Ph.D. Program Vanderbilt University Department of Hearing and Speech Sciences.	2009-2010
Member, Ad-Hoc Committee Ph.D. Program Teaching Requirement, Vanderbilt University Department of Hearing and Speech Sciences.	2009-2010
Member, Ad-Hoc Committee Ph.D. Student Recruiting Vanderbilt University Department of Hearing and Speech Sciences.	2010-2011
Member, Junior Faculty Mentoring Committee Vanderbilt University Department of Hearing and Speech Sciences.	2010-2018
Member, Faculty Search Committee (Neurogenic Speech Disorders) Vanderbilt University Department of Hearing and Speech Sciences.	2011-2012
Member, Faculty Search Committee (Autism Spectrum Disorders) Vanderbilt University Department of Hearing and Speech Sciences.	2011-2012
Member, Faculty Search Committee (Chief of Rhinology) Vanderbilt University Department of Otolaryngology.	2013-2014

Member, Faculty Search Committee  
(Open rank search in Speech Science)  
Vanderbilt University  
Department of Hearing and Speech Sciences. 2013-2014

Chair, Faculty Search Committee  
(Open rank search in Neurogenic communication disorders)  
Vanderbilt University  
Department of Hearing and Speech Sciences. 2015-2016

As Chair of Search Committee  
successfully recruited 2 NIH funded  
research scientists, one from the University of Iowa  
and one from the University of Arizona.

Member, Faculty Search Committee (Laryngology)  
Vanderbilt University  
Department of Otolaryngology. 2017-2018

Chair of Search Committee  
Department of Communication Science and Disorders  
Director of MA/SLP Program  
University of Pittsburgh 2020

Chair of Search Committee  
Department of Communication Science and Disorders  
Director of Undergraduate Program  
University of Pittsburgh 2020

Chair of Search Committee  
Department of Occupational Therapy, Department Chair  
University of Pittsburgh 2021

### **Departmental Service Tenure and Promotion**

Promotion Review Committee  
(Dr. Melissa Duff), Vanderbilt University  
Department of Hearing and Speech Sciences

Member, Department Promotion Review Committee 2017-2018  
(Dr. Michael de Riesthal)  
Vanderbilt University  
Department of Hearing and Speech Sciences.

### **Major Committee Assignments**

Member, Ad-Hoc Committee on 2005-2006  
Research Integrity and Publication Practices  
Association of American Medical Colleges/  
American Speech Language Hearing Association.

Member, Scientific Program Committee 2008  
American Speech-Language Hearing Association

Co-chair, Research Committee 2008-2010  
American Speech-Language Hearing Association  
Special Interest Group-3, Voice and Voice Disorders.

Member, Scientific Program Committee 2013-2014  
American Laryngological Association

Steering Committee, 2013-2015  
American Speech-Language-Hearing Association  
Special Interest Group-3, Voice and Voice Disorders.

Member, Data Safety Monitoring Board (DSMB) 2013-2018  
“Assessment of Esophageal Epithelium  
Integrity with Mucosal Impedance”.

Member, Voice, Resonance, and Alaryngeal Committee 2014  
American Speech Language Hearing Association  
Orlando, Florida.

Member, ASHA Ad Hoc Committee on the Scope of Practice 2014-2018  
in Speech-Language Pathology.  
American-Speech-Language-Hearing Association.

Member, Mathematics Textbook Selection Committee 2014-2015  
Williamson County School System, Tennessee.

Site Visitor, Council on Academic 2015-2019

Accreditation in Audiology and Speech Pathology (CAA).  
The CAA accredits eligible clinical doctoral programs in

