

*CURRICULUM VITAE ~ Matthew Lee Bush, MD, PhD, MBA, FACS*

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Date Updated: July 11, 2023

## ***CURRICULUM VITAE***

**Matthew Lee Bush, MD, PhD, MBA, FACS**

**Professor, *with Tenure***

**Special Title Series**

**University of Kentucky College of Medicine Endowed Chair  
in Rural Health Policy**

**Department of Otolaryngology – Head & Neck Surgery  
Division of Otology, Neurotology, and Cranial Base Surgery  
University of Kentucky College of Medicine  
UK HealthCare**



### **I. GENERAL INFORMATION**

Office Address            740 South Limestone, E300E  
Lexington, KY 40536-0284

Email                        [matthew.bush@uky.edu](mailto:matthew.bush@uky.edu)

Telephone                (859) 257-5097

Fax                            (859) 257-5096

### **Professional Licensure and Certification**

12/2010-present            **Kentucky Board of Medical Licensure**  
Active

11/2008-07/2019           **State Medical Board of Ohio**  
Expired

07/2004-present           **Drug Enforcement Agency Controlled Substance Registration**  
Active

### **Board Certification**

07/2004-present           **National Board of Medical Examiners**  
Diplomate

06/2009-present           **American Board of Otolaryngology**  
Diplomate, Otolaryngology  
06/2012-present           Diplomate, Neurotology

## **Research Certification**

06/2004-present      **University of Kentucky Collaborative Institutional Training Initiative**  
Completion Certificate

## **Other Certification**

**NBME: USMLE Step 1 (2001), 2 (2002), and 3 (2004)**  
**American Board of Otolaryngology Diplomate (#19963):**  
**Otolaryngology (2009)**  
**Neurotology (2012)**

## **II. EDUCATION**

### **Undergraduate**

8/1995-05/1999      **Bob Jones University**  
Greenville, South Carolina  
Bachelor of Science, Pre-Medicine, *Magna cum laude*

### **Professional/Graduate**

08/1999-05/2003      **Marshall University Joan C. Edwards School of Medicine**  
Huntington, West Virginia  
Doctor of Medicine

08/2012-05/2017      **University of Kentucky College of Medicine**  
Lexington, Kentucky  
Doctor of Philosophy (Clinical and Translational Science)

01/2018-08/2020      **University of Kentucky Gatton College of Business and Economics**  
Lexington, Kentucky  
Master of Business Administration

### **Post-Graduate**

07/2003-06/2004      **University of Kentucky Medical Center**  
Lexington, Kentucky  
General Surgery Internship

07/2004-06/2008      **University of Kentucky Medical Center**  
Lexington, Kentucky  
Otolaryngology – Head and Neck Surgery Residency

**The Ohio State University Medical Center and Nationwide Children's Hospital Research Institute**  
Columbus, Ohio  
07/2008-06/2009 Research Fellowship (D. Bradley Welling, M.D., Ph.D. – Mentor)

**The Ohio State University Medical Center**  
Columbus, Ohio  
07/2009-06/2011 Neurotology and Cranial Base Surgery Fellowship  
(D. Bradley Welling, M.D., Ph.D. – Fellowship Director)

**Continuing**

**Center of Image-Guided Neurosurgery, University of Pittsburgh**  
Pittsburgh, Pennsylvania  
09/2010-10/2010 Principles and Practice of Gamma Knife Radiosurgery

**The Ohio State University Medical Center**  
Columbus, Ohio  
07/2010-06/2011 Gamma Knife Radiosurgery Training (Mentor – John McGregor, M.D.)

**American Speech-Language-Hearing Association**  
Gaithersburg, Maryland  
04/2014 Lessons for Success (Research Scholar)

**National Institutes of Health (NHLBI)**  
Warrenton, Virginia  
07/2014-08/2014 Summer Institute on Randomized Behavioral Clinical Trials (Fellow)

**National Institutes of Health**  
Pasadena, California  
07/2015 Training Institute for Dissemination & Implementation Research (Fellow)

**University of Kentucky Gatton College of Business and Economics**  
Lexington, Kentucky  
12/2015-05/2016 Executive Healthcare Leadership Program

**University of Kentucky Medical Center**  
Lexington, Kentucky  
02/2017-01/2018 Talent Management Leadership Program

**T.H. Chan School of Public Health, Harvard University**  
Boston, Massachusetts  
10/2017 Leadership Development for Physicians in Academic Health Centers

### **III. PROFESSIONAL EXPERIENCES**

#### **Marshall University School of Medicine**

Huntington, West Virginia

05/2000-08/2001 Lab Assistant, Gross Anatomy Lab, Department of Anatomy and Cell and Molecular Biology, part-time  
(Mentor – Sasha Zill, PhD)

#### **University of Kentucky College of Medicine**

Lexington, Kentucky

07/2011-06/2016 Assistant Professor, Department of Otolaryngology – Head and Neck Surgery, full-time

07/2016-06/2021 Associate Professor *with tenure*, Department of Otolaryngology – Head and Neck Surgery, full-time

07/2021-present Professor *with tenure*, Department of Otolaryngology – Head and Neck Surgery, full-time

## IV. ACADEMIC APPOINTMENTS

### Faculty

#### University of Kentucky College of Medicine

Lexington, Kentucky

- 07/2011-06/2016 **Assistant Professor**, Department of Otolaryngology – Head and Neck Surgery, Special Title Series, Tenure-track
- 07/2016-06/2021 **Associate Professor**, Department of Otolaryngology – Head and Neck Surgery, Special Title Series, *With Tenure*
- 07/2017-present **Vice Chair for Research**, Department of Otolaryngology – Head and Neck Surgery
- 07/2018-present **University of Kentucky College of Medicine Endowed Chair in Rural Health Policy**
- 07/2021-present **Professor**, Department of Otolaryngology – Head and Neck Surgery, Special Title Series, *With Tenure*

#### University of Nairobi School of Medicine

Nairobi, Kenya

- 01/2016-present **Honorary Lecturer**, Department of Surgery, Division of Otorhinolaryngology – Head and Neck Surgery

### Visiting Professorships/Invited Presentations

#### University of Nairobi School of Medicine

Nairobi, Kenya

- 01/2012 **Grand Rounds Presentations:**
1. Neuroradiology of the Lateral Skull Base
  2. Vestibular Physiology and Testing
  3. Approaches to the Lateral Skull Base
  4. Temporal Bone Trauma
  5. **Kenyan ENT Society Meeting:** Vestibular Schwannomas: An Update and Future Options

#### University of Louisville, Division of Audiology

Louisville, KY

- 02/2012 **Grand Rounds Presentations:** Neuroradiology and Clinical Implications for the Audiologist.

#### University of Nairobi School of Medicine

Nairobi, Kenya

- 01/2013 **Grand Rounds Presentations:**
1. Mastoidectomy: Pearls and Pitfalls
  2. Tympanoplasty: The Science and the Art
  3. Management of Complications of Chronic Otitis Media
  4. Management of Lateral Skull Base CSF Leaks

**5. Kenyan ENT Society Meeting: Training Tomorrow's Cranial Base Surgeon**

**University of Nairobi School of Medicine**

Nairobi, Kenya

01/2014

**Grand Rounds Presentations:**

1. Auditory Anatomy, Embryology, and Physiology
2. The Vestibular System – Anatomy, Physiology, and Testing
3. Diagnosis and Management of Chronic Otitis Media
4. Cholesteatoma and the Art of Mastoidectomy
5. Temporal Bone Trauma and Associated Complications
6. Lesions of the Lateral Skull Base
7. Facial Nerve: Pathology and Management
8. Neuroradiology for the Hearing Specialist
9. **Kenyan ENT Society Meeting: Cartilage Tympanoplasty: The Science and the Art**

**Indiana University, Department of Otolaryngology – Head and Neck Surgery**

Indianapolis, IN

03/2014

**Devault Research Symposium Keynote Speaker:** Bridging the Gaps: Assessing and Addressing Rural Pediatric Hearing Health Disparities.

**University of Nairobi School of Medicine**

Nairobi, Kenya

10/2014

**Grand Rounds Presentation:** Research Design 101: An Otolaryngologists Intro to Clinical Research

**University of Nairobi School of Medicine**

Nairobi, Kenya

03/2015

**Grand Rounds Presentations:**

1. Auditory Anatomy and Physiology
2. Vestibular Anatomy and Physiology
3. Differential Diagnosis of the Dizzy Patient
4. Complications of Otitis Media
5. Tympanoplasty and Ossicular Chain Reconstruction
6. Radiographic Characteristics of Temporal Bone Lesions
7. Surgical Approaches in Chronic Otitis Media
8. **Kenyan ENT Society Meeting: Work Life Balance: Is that even possible?**
9. **University of Nairobi Department of Surgery Grand Rounds: The Deaf Will Hear the Words: The Art of Cochlear Implantation**

**University of Nairobi School of Medicine**  
Nairobi, Kenya  
10/2015 **Grand Rounds Presentations:** Mastoidectomy and Tympanoplasty with  
OCR

**University of Nairobi School of Medicine**  
Nairobi, Kenya  
03/2016 **Grand Rounds Presentations:**  
1. Otologic Anatomy and Physiology  
2. Clinical Evaluation of the Otological Patient  
3. Cholesteatoma and Chronic Otitis Media  
4. Neuroradiology for the Otologist  
5. Otology Oral Exam  
6. **Kenyan ENT Society Meeting:** Dealing with Suffering and  
Complications: A Moral Crisis for Clinicians  
7. **University of Nairobi Department of Surgery Grand Rounds:**  
Advancing Your Career and Expanding Your Practice Through Health  
Disparities Research

**Johns Hopkins University, Center for Hearing and Balance**  
Baltimore, Maryland  
01/2016 **Grand Rounds Presentations:** Bridging the Gaps: Assessing and  
Addressing Hearing Health Disparities.

**University of Nairobi School of Medicine**  
Nairobi, Kenya  
10/2016 **Grand Rounds Presentations:**  
1. Otologic Anatomy and Physiology  
2. Diagnosis and management of chronic otitis media  
3. Neuroradiology for the Otologist  
4. Examination of the Dizzy Patient  
5. Benign Pathology of the Lateral Skull Base  
6. Research Design 101 for the Otolaryngologist

**University of Nairobi School of Medicine**  
Nairobi, Kenya  
02/2018 **Grand Rounds Presentations:**  
1. Otologic Anatomy and Physiology  
2. Diagnosis and management of chronic otitis media  
3. Examination of the Dizzy Patient  
4. **Kenyan ENT Society Meeting:** Disruptive Behavioral Problems in  
Children with Hearing Loss

**University of Nairobi School of Medicine**  
Nairobi, Kenya  
01/2019 **Grand Rounds Presentations:**



1. Otologic Anatomy and Physiology
2. Diagnosis and management of chronic otitis media
3. Otology Oral Exam
4. Examination of the Dizzy Patient
4. **Kenyan ENT Society Meeting: Telemedicine: Opportunities and Challenges in Hearing Healthcare Delivery**

**Johns Hopkins University, Center for Hearing and Balance**  
Baltimore, Maryland

12/2019 **Grand Rounds Presentations:** Reaching the Unreachable: The Evidence for Telemedicine in Hearing Healthcare.

**Virginia Mason Medical Center, Temporal Bone Lab and Current Management Techniques in Otolaryngology**  
Seattle, Washington

11/2019 **Keynote Speaker:** Principles for the Practical Management of Meniere's Disease Patients

**University of Nairobi School of Medicine**  
Nairobi, Kenya

01/2020 **Grand Rounds Presentations:**

1. Otological Anatomy and Physiology
2. Management of Chronic Ear Disease
2. Differential Diagnosis of the Dizzy Patient
3. Research Design 101 for the Otolaryngologist

**University Hospitals Ear, Nose, and Throat Institute, Case Western Reserve University, 18<sup>th</sup> Annual Temporal Bone Surgical Course with Microsurgical and Endoscopic Approaches to Otologic Disease**  
Cleveland, OH (hybrid virtual meeting)

10/2020 **Guest Faculty:** Current Updates in Meniere's Disease

**University of Illinois Chicago School of Medicine, Department of Otolaryngology – Head and Neck Surgery 2022 Alumni Day Symposium**  
Chicago, IL (hybrid virtual meeting)

06/2022 **The 21<sup>st</sup> Burton J. Soboroff, MD Lectureship:** Promoting Equity in Otolaryngology through Pragmatic Research

**University of Michigan, Department of Otolaryngology – Head and Neck Surgery 168<sup>th</sup> Temporal Bone Course**  
Ann Arbor, MI

09/2022 **Guest Faculty**

**University of Nairobi School of Medicine**

Nairobi, Kenya

10/2022

**Neurotology Mini-Symposium:**

1. Temporal Bone Anatomy, Embryology, and Genetics
2. Neuroradiology for the Otologic Surgeon
3. An Update on the Practical Management of Meniere's Disease
4. Techniques of Cartilage Use in Chronic Ear Surgery
5. An Update on Cochlear Implants and Implantable Devices

**Icahn School of Medicine at Mount Sinai Medical Center**

New York, New York

12/2023

**Grand Rounds Presentations:** Promoting Health Equity in Otolaryngology.

## **V. HOSPITAL or CLINICAL APPOINTMENTS**

07/2011-07/2015	<b>Heuser Hearing Institute</b> Otology Clinic Louisville, KY Medical Director, part-time
07/2012-07/2015	<b>Norton Hospital System</b> Otolaryngology – Head and Neck Surgery Louisville, KY Attending Physician, part-time
07/2012-07/2015	<b>Kosair Children’s Hospital</b> Otolaryngology – Head and Neck Surgery Louisville, KY Attending Physician, part-time
07/2011-present	<b>University of Kentucky Chandler Medical Center</b> Department of Otolaryngology – Head and Neck Surgery Lexington, KY Attending Physician, full-time
07/2011-present 07/2011-07/2018	<b>Veterans Affairs Medical Center</b> Department of Surgery Lexington, KY Attending Physician, part-time (fee-basis) Chief, Division of Otolaryngology
07/2011-present	<b>University of Kentucky Good Samaritan Hospital</b> Department of Otolaryngology – Head and Neck Surgery Lexington, KY Attending Physician, full-time

## VI. CONSULTING ACTIVITIES

### State/Regional

2011-present      **Kentucky Labor Cabinet, Kentucky Department of Workers' Claim**  
Frankfort, KY  
Independent Evaluator for KDWC cases for hearing-related disability

### National/International

03/2014-2018      **Med El Corporation**  
Durham, NC  
Consultant, Surgical Advisory Board Member

05/2017-06/2017      **Oticon Medical**  
Copenhagen, Denmark  
Consultant, Key Opinion Leader Meeting

05/2017-12/2020      **Stryker Medical Education**  
Portage, MI  
Consultant, Co-Director of Annual Stryker Neurotology Fellows  
Bootcamp  
01/2021- 10/2021      Consultant, Faculty of Annual Stryker Neurotology Fellows Bootcamp

02/2023      **Advanced Bionics**  
Valencia, CA  
Consultant

## VII. TEACHING ACTIVITIES

### University Faculty (Fellow)

#### **The Ohio State University (Neurotology Fellow)**

Columbus, OH

- 07/2009-06/2010 Annual Temporal Bone Course [Residents]  
07/2009-06/2010 Otolaryngology/Neurology Resident Core Curriculum: Temporal Bone Trauma. [Residents]  
07/2009-06/2010 Clinical Otolaryngology: The Diagnosis and Management of Ear Disease. [3<sup>rd</sup> year Medical students].  
07/2010-06/2011 Annual Temporal Bone Course [Residents]  
07/2010-06/2011 Clinical Otolaryngology: The Diagnosis and Management of Ear Disease. [3<sup>rd</sup> year Medical students].  
07/2010-06/2011 Otolaryngology/Neurology Resident Core Curriculum: Surgical Approaches to the Skull Base. [Residents]  
07/2010-06/2011 Otolaryngology/Neurology Resident Core Curriculum: Otosclerosis. [Residents]  
07/2010-06/2011 Otolaryngology/Neurology Resident Core Curriculum: Facial Nerve: Anatomy and Pathology. [Residents]  
07/2011-06/2012 Annual Temporal Bone Course [Residents]  
07/2011-06/2012 Clinical Otolaryngology: The Diagnosis and Management of Ear Disease. [3<sup>rd</sup> year Medical students].

#### **The University of Kentucky (Faculty)**

Lexington, KY

- 07/2011-06/2012 Resident Core Curriculum: Otolaryngologic Manifestations of Systemic Disease. [Residents]  
07/2011-06/2012 Clinical Otolaryngology: The Diagnosis and Management of Ear Disease. [3<sup>rd</sup> year Medical students].  
07/2012-06/2013 Management of Hearing Loss and Facial Nerve Injury in the Trauma Patient. Inter-Disciplinary Trauma Conference. [Residents and Medical students].  
07/2012-06/2013 Clinical Otolaryngology: The Diagnosis and Management of Ear Disease. [3<sup>rd</sup> year Medical students].  
07/2012-06/2013 Resident Core Curriculum: Neurotology and Cranial Base Surgery: Approaches to the Skull Base. [Residents]  
07/2012-06/2013 Resident Core Curriculum: Neurotology and Cranial Base Surgery: Cochlear Implantation. [Residents]  
07/2012-06/2013 Resident Core Curriculum: Neurotology and Cranial Base Surgery: Lesions of the Lateral Skull Base. [Residents]  
07/2012-06/2013 Resident Core Curriculum: Neurotology and Cranial Base Surgery: Neurotology and Cranial Base Surgery: The Facial Nerve: The Mother of All Cranial Nerves. [Residents]

07/2012-06/2013	Neuroanatomy/Neurophysiology Course. Evaluation of the Vestibular Patient. [1 <sup>st</sup> year medical students]
07/2013-06/2014	Department of Otolaryngology Lecture Series. Research Design 101: A Dummies Guide to Clinical Research. [Residents].
07/2013-06/2014	Department of Otolaryngology Lecture Series. Research Design 102: Statistics for the Mathematically Challenged. [Residents].
07/2013-06/2014	Neuroanatomy/Neurophysiology Course. Congenital Hearing Loss. [1 <sup>st</sup> year medical students]
07/2013-06/2014	Resident Core Curriculum: Otolaryngologic Manifestations of Systemic Disease. [Residents]
07/2013-06/2014	Department of Otolaryngology Professionalism Lecture Series. Work-Life Balance: Is that even possible? [Residents].
07/2014-06/2015	Department of Neurology Resident Lecture Series. Physiology of Equilibrium and Hearing. University of Kentucky. [Neurology Residents]
07/2014-06/2015	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2015-06/2016	Department of Internal Medicine Resident Lecture Series. Evaluation of Dizziness in the Primary Care Setting. [Internal Medicine Residents]
07/2015-06/2016	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2016-06/2017	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2016-06/2017	Department of Family and Community Medicine, Rural Healthcare Track (Hazard, KY). Resident Lecture Series. Hearing Loss Overview. [Family Medicine Residents]
07/2016-06/2017	Resident Core Curriculum: Neurotology: Malignant Lesions of the Temporal Bone. [Residents]
07/2016-06/2017	Resident Core Curriculum: Neurotology: Tumors of the Lateral Skull Base. [Residents]
07/2016-06/2017	Resident Core Curriculum: Otology: Vestibular physiology and of the dizzy patient. [Residents]
07/2016-06/2017	Resident Core Curriculum: Otology: Vestibular physiology and of the dizzy patient. [Residents]
07/2017-06/2018	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2018-06/2019	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2018-06/2019	Resident Core Curriculum: Otology: Evaluation of the Dizzy Patient. [Residents]
07/2018-06/2019	Resident Core Curriculum: Otology: CPA Lesions. [Residents]

07/2018-06/2019	Resident Core Curriculum: Otology: Malignant Temporal Bone Lesions. [Residents]
07/2018-06/2019	Resident Core Curriculum: Otology: Benign Temporal Bone Lesions. [Residents]
07/2019-06/2020	Med 815 Introduction to Clinical Research. Do the Right Thing! Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
07/2020-06/2021	Med 815 Introduction to Clinical Research. Do the Right Thing! Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
11/2020-03/2021	Resident Core Curriculum: Otology [Residents] <ul style="list-style-type: none"> <li>• Temporal Bone Embryology, Anatomy and Physiology/Genetics</li> <li>• Cochlear Physiology and Pathology</li> <li>• Tympanoplasty and OCR</li> <li>• Facial Nerve Disorders</li> <li>• Cochlear Implantation</li> <li>• Malignant Lesions of the Temporal Bone</li> <li>• CPA Lesions</li> </ul>
04/05/2020	Med 840 Transitions to Residency. [4 <sup>th</sup> year medical student] Resident as Researcher
07/2021-06/2022	Med 815 Introduction to Clinical Research. Do the Right Thing! Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
04/05/2020	Med 840 Transitions to Residency. [4 <sup>th</sup> year medical student] Resident as Researcher
04/18/2022	Med 840 Transitions to Residency. [4 <sup>th</sup> year medical student] Resident as Researcher
07/2022-06/2023	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]
11/2022-03/2023	Resident Core Curriculum: Otology [Residents] <ul style="list-style-type: none"> <li>• Temporal Bone Embryology, Anatomy and Physiology/Genetics</li> <li>• Cochlear Physiology and Pathology</li> <li>• Tympanoplasty and OCR</li> <li>• Facial Nerve Disorders</li> <li>• CSF Leaks and Encephaloceles</li> </ul>
07/2023-06/2024	Med 815 Introduction to Clinical Research. Advancing Your Career and Expanding Your Practice through Health Disparities Research. [1 <sup>st</sup> year medical students]

**Professional Course/Program Faculty**

**Stryker Resident Temporal Bone Surgical Dissection Course**  
Cincinnati, OH  
03/2013 Co-Course Director

**Stryker ANS Annual Neurotology Fellow Bootcamp**

Salt Lake City, UT

05/2018

Co-Course Director

05/2019

Co-Course Director

05/2020

Co-Course Director (Course moved to virtual format)

10/2021

Course Faculty (*Director Emeritus*)



## VIII. ADVISING ACTIVITIES

### Student Advising

**University of Kentucky**  
Lexington, KY

#### *Undergraduate Student Mentorship*

07/2011-06/2012

**Brandon Fornwalt**

Projects:

- Hot or Cold: Is Monothermal Caloric Testing Useful and Cost-Effective? (Published)

07/2012-06/2013

**Chris Rayle**

Projects:

- Rural Barriers to Early Diagnosis and Treatment of Infant Hearing Loss in Appalachia (Published)

07/2016-06/2017

**Nicholas Laureano**

Projects:

- Systematic Review of Disruptive Behavioral Problems Among Hearing Impaired Children (Published)

12/2021-present

**Olivia Taylor**

Projects:

- The Appalachian STAR trial: qualitative analysis, in progress

#### *Medical Student Mentorship*

07/2011-06/2013

**Ashleigh Long**

Projects:

- The clinical utility of magnetic spectroscopy in cerebellopontine angle tumors
- The range of subjective symptoms in patients with normal pure tone audiometry (Published)
- The Effect Operating Room Noise on Auditory Processing (Published)

07/2011-06/2013

**William Dougherty**

Projects:

- Assessment of vestibular rehabilitation practice patterns and availability of care (Published)
- A case-series review of pediatric autoimmune inner ear disease (Published)

07/2011-06/2013

**Kristin Bianchi**

Projects:

- Investigation of diagnostic challenges for children with severe hearing loss in rural Kentucky (Published)

- 07/2011-06/2013

  - Geospatial Scan Statistical Analysis of Patterns of Pediatric Hearing Loss in Kentucky (Published)

**Maribel Osetinsky, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Investigation of delay of hearing healthcare for children with cochlear implants in Appalachia (Published)
- 07/2012-06/2013

**Ashley Loan**  
 Projects:

  - Investigation of hearing healthcare and rehabilitative services for children in Central Kentucky (Published)
- 07/2012-06/2013

**David Alexander**  
 Projects:

  - Physician attitudes regarding pediatric hearing loss in rural Kentucky (Published)
- 07/2012-06/2013

**Bryan Hardin**  
 Projects:

  - Rural Barriers to Early Diagnosis and Treatment of Infant Hearing Loss in Appalachia (Published)
- 07/2013-06/2014

**Julia Elpers, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Parental attitudes and experiences regarding pediatric hearing loss in rural Kentucky (Published)
- 07/2013-06/2015

**Bryce Noblitt, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Analysis of cochlear implant rehabilitation barriers for rural pediatric cochlear implant recipients (Published)
  - Physician attitudes regarding pediatric hearing loss in rural Kentucky (Published)
  - Promoting Early Diagnosis of Congenital Hearing Loss with Patient Navigation (Published)
- 07/2014-06/2015

**Stephen Chan, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Hearing health and healthcare disparities in adult patients (Published)
  - *Recipient of Frederick de Beer Medical Student Research Award*
- 07/2015-06/2017

**Stevie Maxwell**  
 Projects:

  - Assessment of long-term outcomes for glomus jugulare tumors treated with gamma knife radiation (Published)
- 07/2015-06/2018

**Vania Rashidi, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Assessment of disruptive behavioral problems in children with hearing loss (Published)
- 07/2015-06/2018

**Taylor Shackelford, *PSMRF Award Recipient (Mentor)***  
 Projects:

  - Systematic review of Patient Navigation for underserved and minority populations (Published)

- 07/2015-06/2018

  - Promoting Early Diagnosis of Congenital Hearing Loss with Patient Navigation (Published)

**Kristen Burke**  
Projects:

  - Systematic Review of Disruptive Behavioral Problems Among Hearing Impaired Children (Published)
  - Validation of Remote Cochlear Implantation Candidacy Evaluations
- 07/2015-06/2018

**Julie Johnson**  
Projects:

  - Current Trends in Evaluation and Management of Acoustic Neuromas
- 07/2016-06/2018

**Kayla Williams**  
Projects:

  - Understanding Adult Perspectives Regarding Hearing Healthcare
- 07/2016-06/2018

**Diana Bigler, *PSMRF Award Recipient (Mentor)***  
Projects:

  - Assessment of disruptive behavioral problems in children with hearing loss
  - Systematic Review of Disruptive Behavioral Problems Among Hearing Impaired Children (Published)
- 07/2016-06/2018

**Tianshi (“Mike”) Liu**  
Projects:

  - Systematic review of the Effects of Cochlear Implants and adjunctive rehabilitation therapy on language perception and performance among Infants with Congenital CMV infection (Published)
- 07/2016-06/2017

**Dasha Kenlan**  
Projects:

  - Assessment of an International Otology Collaboration: Educational and Patient Outcomes
- 07/2016-06/2017

**Erin Wolf-Horrell**  
Projects:

  - The Natural History and Rehabilitative Outcomes of Hearing Loss in Congenital Cytomegalovirus: A Systematic Review (Published)
- 07/2016-06/2020

**Whitney Powell, *PSMRF Award Recipient (Mentor)***  
Projects:

  - Understanding Adult Perspectives Regarding Hearing Healthcare (Published)
  - Outpatient Healthcare Access and Utilization for Neonatal Abstinence Syndrome Children: A Systematic Review (Published)
- 07/2016-06/2020

**Ashley Wicker**  
Projects:

  - Outpatient Healthcare Access and Utilization for Neonatal Abstinence Syndrome Children: A Systematic Review (Published)
- 07/2016-06/2020

**Anita Shanker, *PSMRF Award Recipient (Mentor)***  
Projects:

  - Assessment of Factors Involved in Non-Adherence to Infant Hearing Diagnostic Testing (Published)

- 07/2017-06/2020
  - No-show rates in a Pediatric Academic Audiology Practice**Weston Dicken, *PSMRF Award Recipient (Co-Mentor)***  
 Projects:
  - Validation of Remote Cochlear Implantation Candidacy Evaluations (Published)
- 07/2018-06/2020
  - Aberrant Facial Nerve Stimulation in Cochlear Implantation: A Systematic Review and Meta-Analysis (Published)**Christopher Hayden, *PSMRF Award Recipient (Mentor)***  
 Projects:
  - Neonatal Abstinence Syndrome and Infant Hearing Assessment: A Kids' Inpatient Database (KID) Review (Published)
- 07/2018-06/2020
  - Rural Disparities in Pediatric Chronic Suppurative Otitis Media (Published)
  - Impacts of the COVID-19 Pandemic on Communication and Healthcare Access for Adults with Hearing Loss (Published)**Alex Hines**  
 Projects:
  - Surgical Factors Associated with Cochlear Implant Wound Complications: A Systematic Review (Published)
  - Patient Factors Associated with Cochlear Implant Wound Complications: A Systematic Review (Published)
- 07/2019-present
  - CHHIRP: A Qualitative Analysis of Parent Perceptions on a Patient Navigation Program for Newborn Hearing Diagnostic Testing, in progress**Jacob Crouch, *PSMRF Award Recipient (Mentor)***  
 Projects:
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)
- 07/2019-present
  - The Relationship of Hemoglobin A1c and Hearing Loss in Diabetics: A Systematic Review and Meta-Analysis, in progress
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)**Jack Laureano, *PSMRF Award Recipient (Mentor)***  
 Projects:
  - Patient Factors Associated with Cochlear Implant Wound Complications: A Systematic Review (Published)
  - Surgical Factors Associated with Cochlear Implant Wound Complications: A Systematic Review (Published)
- 07/2019-present
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)**Brady Ekman, *PSMRF Award Recipient (Mentor)***  
 Projects:
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)
- 07/2020-present
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)**Gerek Meinhardt**  
 Projects:
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)
- 07/2020-present
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)**Christine Sharrer, *PSMRF Award Recipient (Mentor)***  
 Projects:
  - The Applications of Telemedicine for Dizziness Patients: A Systematic Review, submitted
  - Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)

07/2020-present	<p><b>Nicole Perez, <i>PSMRF Award Recipient (Mentor)</i></b>  Projects:</p> <ul style="list-style-type: none"> <li>• Racial and Ethnic Disparities in Infant Hearing Healthcare in Kentucky (submitted)</li> <li>• Reporting of Race and Ethnicity in Cochlear Implant Clinical Trials: A Systematic Review and Meta-Analysis (Published)</li> </ul>
05/2021-present	<p><b>Evan Nix, MD</b>  Projects:</p> <ul style="list-style-type: none"> <li>• Readability and Quality of English and Spanish Online Health Information about Cochlear Implants, accepted for publication (Published)</li> </ul>
05/2021-present	<p><b>Abbigayle Rawls</b>  Projects:</p> <ul style="list-style-type: none"> <li>• Quality and Readability of Hearing Aid-Related Websites in English &amp; Spanish, in progress</li> <li>• Readability and Quality of English and Spanish Online Health Information about Cochlear Implants (Published)</li> </ul>
05/2021-present	<p><b>Chase Rawls</b>  Projects:</p> <ul style="list-style-type: none"> <li>• Readability and Quality of English and Spanish Online Health Information about Cochlear Implants (Published)</li> <li>• Readability and Quality of English and Spanish Online Health Resources Regarding Tympanoplasty with Mastoidectomy, in progress</li> </ul>
08/2021-present	<p><b>Caroline Heltsley, <i>PSMRF Award Recipient (Mentor)</i></b>  Projects:</p> <ul style="list-style-type: none"> <li>• Physical activity and hearing loss scoping review, in progress</li> <li>• Hearing Health Assessment in Rural Communities (HHARC): qualitative analysis, in progress</li> </ul>
08/2021-present	<p><b>Jate Bernard, <i>PSMRF Award Recipient (Mentor)</i></b>  Projects:</p> <ul style="list-style-type: none"> <li>• Physical activity and hearing loss scoping review, in progress</li> </ul>
09/2021-present	<p><b>Emily Ranseen</b>  Projects:</p> <ul style="list-style-type: none"> <li>• CHHIRP: A Qualitative Analysis of Parent Perceptions on a Patient Navigation Program for Newborn Hearing Diagnostic Testing, in progress</li> </ul>
09/2021-present	<p><b>Margaux Danby</b>  Projects:</p> <ul style="list-style-type: none"> <li>• CHHIRP: A Qualitative Analysis of Parent Perceptions on a Patient Navigation Program for Newborn Hearing Diagnostic Testing, in progress</li> </ul>
10/2021-present	<p><b>Haseeb Jafary</b>  Projects:</p> <ul style="list-style-type: none"> <li>• Hearing Rehabilitation and the Progression of Cognitive Decline in the Elderly, in progress</li> </ul>
12/2021-present	<p><b>Alexandra Nwokedi-Ibewuike</b></p>

	Projects:
	<ul style="list-style-type: none"> <li>• Social Determinants of Health in Cochlear Implantation: A Systematic Review</li> </ul>
01/2022-present	<b>Mary Katherine Oberman, <i>PSMRF Award Recipient (Mentor)</i></b>
	Projects:
	<ul style="list-style-type: none"> <li>• The Appalachian STAR trial: qualitative analysis, in progress</li> </ul>
02/2022-present	<b>Olivia Henderson</b>
	Projects:
	<ul style="list-style-type: none"> <li>• The Appalachian STAR trial: qualitative analysis, in progress</li> </ul>
02/2022-present	<b>Tyler Howard</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Readability and Quality of English and Spanish Online Health Resources Regarding Noise Induced Hearing Loss, in progress</li> </ul>
09/2022-present	<b>Meena Pattabiraman</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Hearing Health Assessment in Rural Communities (HHARC): qualitative analysis, in progress</li> </ul>
02/2022-present	<b>Amina Anwar</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Rural Evaluation of Activity Correlation with Hearing (REACH) Study, in progress</li> </ul>
05/2023-present	<b>Lauren Masden, <i>PSMRF Award Recipient (Mentor)</i></b>
	Projects:
	<ul style="list-style-type: none"> <li>• Readability of Internet Health Information in Otolaryngology</li> </ul>
	<b><u>Otolaryngology Resident Mentorship</u></b>
07/2011-06/2012	<b>Christopher Bingcang, MD</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Hot or Cold: Is Monothermal Caloric Testing Useful and Cost-Effective? (Published)</li> </ul>
07/2011-06/2014	<b>Joshua Dixon, MD</b>
	Projects:
	<ul style="list-style-type: none"> <li>• The effect of middle ear effusion on cochlear implant function (Published)</li> </ul>
07/2012-06/2015	<b>German Fikhman, MD</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Preservation of low-frequency hearing in cochlear implantation</li> </ul>
07/2012-06/2013	<b>Justin Way, MD</b>
	Projects:
	<ul style="list-style-type: none"> <li>• Investigation of the effect of operating room noise on auditory processing (Published)</li> </ul>
07/2012-06/2013	<b>Deann Roberts, MD</b>
	Projects:
	<ul style="list-style-type: none"> <li>• The clinical utility and cost-effectiveness of pre-operative imaging studies in cochlear implantation (Published)</li> </ul>

- 07/2014-06/2017 **Brian Hixon, MD**  
Projects:
- Assessment of rural adult hearing healthcare disparities (Published)
  - Systematic review of barriers to hearing healthcare (Published)
- 07/2014-06/2017 **Caitlin Fiorillo, MD**  
Projects:
- Assessing and addressing disruptive behavioral problems in children with hearing loss (Published)
- 07/2014-06/2017 **Kristan Alfonso, MD**  
Projects:
- Systematic Review of Disruptive Behavioral Problems Among Hearing Impaired Children (Published)
- 07/2014-06/2017 **Mark Ringstrom, MD**  
Projects:
- Travel distance: Impact on stage of presentation and treatment choices in head and neck cancer (Published)
- 07/2014-06/2017 **Andrew Ebelhar, MD**  
Projects:
- Preoperative Assessment of Round Window Anatomy for Cochlear Implantation with Intention of Hearing Preservation via Round Window Insertion
- 07/2015-06/2019 **Kyle Fletcher, MD**  
Projects:
- Validation of Remote Cochlear Implantation Candidacy Evaluations (Published)
  - Systematic review of the Effects of Cochlear Implants and adjunctive rehabilitation therapy on language perception and performance among Infants with Congenital CMV infection (Published)
- 07/2015-06/2017 **Mitch Dobberpuhl, MD**  
Projects:
- Current Trends in Evaluation and Management of Acoustic Neuromas
  - Treatment Outcomes for Single Modality Management of Glomus Jugulare Tumors with Stereotactic Radiosurgery (Published)
- 07/2016-06/2017 **Mike Kaufman, MD**  
Projects:
- Systematic review of Patient Navigation for underserved and minority populations (Published)
- 07/2017-06/2019 **Nicole Colgrove, MD**  
Projects:
- Assessment of Physician Burnout in Otolaryngology Residents
- 07/2017-06/2020 **Adam Van Horn, MD**  
Projects:
- Neonatal abstinence syndrome (NAS) and Healthcare Utilization: A Systematic Review (Published)
  - The Effect of NAS on Early Pediatric Hearing Loss Diagnosis and Intervention (Published)

- 07/2017-06/2020 **Ryan Neff, MD**  
Projects:
- Prevalence of Long-term Opioid Usage follow Otologic Surgery (Published)
- 07/2020-current **William Ruffin, DO**  
Projects:
- Rural Disparities in Pediatric Chronic Suppurative Otitis Media (Published)
- 07/2020-current **Skylar Trott, MD**  
Projects:
- The Use of Ultrasound in Evaluation of Pediatric Neck Abscesses
- 05/2021-present **David Adkins, MD**  
Projects:
- Quality and Readability of Hearing Aid-Related Websites in English & Spanish, in progress
  - Quality and Readability of Tympanoplasty and Mastoidectomy Website Information in English & Spanish, in progress
  - Quality and Readability of Meniere’s Disease Information in English & Spanish, in progress
  - Quality and Readability of Chronic Cough Website Information in English & Spanish, in progress
  - Physical Activity and Hearing Loss: A Scoping Review, in progress
  - Rural Evaluation of Activity Correlation with Hearing (REACH) Study, in progress
  - Sociodemographic Factors influencing Pandemic-Era EHDI Utilization and Access. JEHD. *(in press)*
  - Tools for Telehealth: A Correlational Analysis of App-Based Hearing Testing. Laryngoscope Investigative Otolaryngology. 2022. *(under review)*
  - Quality and Readability of Websites regarding Noise-induced Hearing Loss. *(in preparation)*
  - Factor Associated with No-Show Rates in a Pediatric Audiology Clinic. *(in preparation)*
  - Association of Diabetes Mellitus and Hearing Loss: A Systematic Review. *(in preparation)*
  - Social Determinants of Health in Hearing Healthcare: A Scoping Review. *(in preparation)*
  - The Role of Telemedicine for Evaluation and Management of Dizzy Patients: A Systematic Review. Otology & Neurotology. *(published)*
- 05/2021-present **Brian Kinealy, MD**  
Projects:
- Quality and Readability of Hearing Aid-Related Websites in English & Spanish, in progress
  - Quality and Readability of Tympanoplasty and Mastoidectomy Website Information in English & Spanish, in progress



- Quality and Readability of Meniere’s Disease Information in English & Spanish, in progress
- Quality and Readability of Cochlear Implant-Related Websites in English & Spanish (published)
- Quality and Readability of Websites regarding Noise-induced Hearing Loss. (*in preparation*)
- Factor Associated with No-Show Rates in a Pediatric Audiology Clinic. (*in preparation*)

**University of Nairobi**  
Nairobi, Kenya

**Otolaryngology Resident Mentorship**

07/2015-06/2017

**Neville Okwiri**

Projects:

- Factors Involved in Access and Utilization of Adult Hearing Healthcare: A Systematic Review (Published)

07/2015-06/2017

**Maria Muthoka**

Projects:

- The Natural History and Rehabilitative Outcomes of Hearing Loss in Congenital Cytomegalovirus: A Systematic Review (Published)

**Graduate Student Mentorship**

07/2021-2022

**Marissa Schuh (PhD candidate)** – Dissertation committee

Projects:

- Impact of hearing loss on physical activity in older adults

05/2022-2023

**Hannah Speaks (PhD candidate)**

Projects:

- Hearing Rehabilitation and the Progression of Cognitive Decline in the Elderly, in progress
- Hearing Health Assessment in Rural Communities (HHARC): quantitative analysis, in progress

06/2022-06/2023

**Amanda Davis (AuD candidate)**

Projects:

- Cochlear Implant Surgical Disparities in Kentucky, in progress
- Social Determinants of Health in Cochlear Implantation: A Systematic Review, in progress

**Directed Student Learning**

None

**Thesis & Dissertation**

03/2021                      Doctoral Thesis External Examiner, Megan Barr, PhD candidate,  
University of Newcastle (Australia), “*An investigation of services for  
children with hearing loss and the National Disability Insurance Scheme  
(NDIS)*”

**Referee for Academic Appointment, Promotion or Tenure**

10/2016                      Philip Westgate, PhD, University of Kentucky  
10/2017                      Esther Vivas, MD, Emory University  
10/2017                      Brett Comer, MD, University of Kentucky  
05/2018                      Edward Dodson, MD, The Ohio State University  
08/2018                      John Ayugi, MBChB, MMED (ENT Surg), University of Nairobi  
02/2020                      Meredith Holcomb, AuD, University of Miami  
05/2020                      Justin Golub, MD, Columbia University  
12/2020                      Sam Spear, MD, F. Edward Hebert School of Medicine at the Uniformed  
Services University of the Health Sciences  
04/2021                      Carrie Nieman, MD, MPH, Johns Hopkins University  
06/2021                      Beth McNulty, MD, University of Kentucky  
06/2021                      Brian D’Anza, MD, Case Western Reserve University School of Medicine  
01/2022                      Esther Vivas, MD, Emory University  
08/2022                      Cameron Wick, MD, Washington University School of Medicine  
10/2022                      Heather Weinrich, MD, University of Illinois Chicago  
10/2022                      Michael Harris, MD, University of Wisconsin  
12/2022                      Jacob Hunter, MD, Thomas Jefferson University  
02/2023                      Nicholas Thompson, MD, University of North Carolina – Chapel Hill  
07/2023                      Amanda Davis, AuD, University of North Carolina – Chapel Hill

## **IX. ADMINISTRATIVE ACTIVITIES & UNIVERSITY SERVICE**

### **University**

**University of Kentucky**  
Lexington, KY

#### **Administration**

05/2019-present Member, Press Committee

#### **Education & Research**

07/2016-07/2019 Regular Member, Medical Institutional Review Board  
07/2018-present Founding Affiliate, University of Kentucky Center for Health Equity Transformation (CHET)

### **College**

**University of Kentucky College of Medicine**  
Lexington, KY

#### **Administration & Clinical Operations**

07/2018-07/2020 Member, International Committee  
03/2019-present Member, Conflict of Interest Committee  
06/2021-06/2024 Member, Promotion and Tenure Committee

#### **Education & Research**

01/2014-present Member, University of Kentucky CCTS TL1 Program Grant Review Committee  
01/2015-present Member, University of Kentucky CCTS KL2 Program Grant Review Committee  
07/2017-present Member, Taskforce on Mentoring in the College of Medicine  
01/2018-present Member, University of Kentucky Clinical Research Support Office (CRSO)/CTMS Implementation Steering Committee  
01/2018-08/2021 Member, University of Kentucky College of Medicine Strategic Planning, Community Engagement Pillar Committee  
01/2020-present Associate Director for Scholar Recruitment and Evaluation, University of Kentucky CCTS TL1 Program  
08/2021-present Chair, University of Kentucky College of Medicine Strategic Planning, Community Engagement Pillar Committee  
01/2023-present Co-Director, University of Kentucky CCTS, Dissemination and Implementation Core  
01/2023-present Member, University of Kentucky College of Medicine Taskforce for Clinician Scientist Compensation

**Medical Center**

**University of Kentucky Medical Center**  
Lexington, KY

**Administration & Clinical Operations**

03/2016-03/2017

Member, Associate Chief Medical Officer Search Committee

07/2017-07/2018

Member, University of Kentucky BEST Program Care Access & Practice Efficiency Implementation Team

**Education & Research**

02/2012-present

Faculty, Interdisciplinary Facial Trauma Conference

## **IX. ADMINISTRATIVE ACTIVITIES & UNIVERSITY SERVICE**

### **Department**

#### **University of Kentucky Medical Center**

Department of Otolaryngology – Head and Neck Surgery  
Lexington, KY

#### **Administration & Clinical Operations**

07/2017-present

Vice Chair for Research

#### **Education & Research**

07/2012-06/2015

Course Director. Resident Core Curriculum: Otolaryngologic Manifestations of Systemic Disease.

07/2012-06/2017

Course Director. Resident Core Curriculum: Oral Board Preparation.

07/2013-06/2018

Course Director. Resident Core Curriculum: Neurotology and Cranial Base Surgery.

07/2013-07/2018

Director, Audiology and Otology Conference

07/2014-present

Chair, Residency Research Committee

07/2015-06/2018

Course Director, Department Grand Rounds

05/2015

Chair and Organizer, University of Kentucky Department of Otolaryngology Inaugural Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Justin Antisdell, MD)

05/2016

Chair and Organizer, University of Kentucky Department of Otolaryngology 2nd Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Meredith Adams, MD)

05/2017

Chair and Organizer, University of Kentucky Department of Otolaryngology 3rd Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Nicholas Smith, MD)

05/2018

Chair and Organizer, University of Kentucky Department of Otolaryngology 4th Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Eben Rosenthal, MD)

05/2019

Chair and Organizer, University of Kentucky Department of Otolaryngology 5th Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Kevin Shumrick, MD)

02/2020

Chair and Organizer, University of Kentucky Department of Otolaryngology 6th Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Milan Amin, MD)

12/2020-03/2021

Course Director. Resident Core Curriculum: Otology, Neurotology and Cranial Base Surgery.

12/2022-03/2023

Course Co-Director. Resident Core Curriculum: Otology, Neurotology and Cranial Base Surgery.

02/2023

Chair and Organizer, University of Kentucky Department of Otolaryngology 7th Bluegrass Research Symposium: Annual event highlighting resident/department research and hosting a visiting professor (Edward McCoul, MD, MPH)

## **X. SPECIAL ASSIGNMENTS**

07/2018-present

Chairperson, University of Kentucky CCTS Non-Indemnification  
Non-Cancer Clinical Study Review Committee

## **XI. HONORS & AWARDS**

- 05/2000            **MS-I Academic Achievement Award**, Given to the first-year medical student with the highest GPA, Marshall University School of Medicine
- 05/2001            **MS-II Academic Achievement Award**, Given to the second-year medical student with the highest GPA, Marshall University School of Medicine
- 05/2001            **Joan C. Edwards Scholarship**, Financial award given for academic excellence in medical school, Marshall University School of Medicine
- 05/2002            **Alpha Omega Alpha**, Beta Chapter of West Virginia, Marshall University School of Medicine
- 06/2005            **University of Kentucky Temporal Bone Lab Resident Award**  
Given for excellence in resident temporal bone dissection, University of Kentucky, Division of Otolaryngology
- 05/2006            **Resident Research Award**, Kentucky Society of Otolaryngology
- 06/2007            **University of Kentucky Temporal Bone Lab Resident Award**, Given for excellence in resident temporal bone dissection, University of Kentucky, Division of Otolaryngology
- 05/2007            **University of Kentucky Department of Surgery Teaching Award**, Given by medical students to residents for excellence in teaching, University of Kentucky, Department of Surgery
- 01/2008            **The G. Slaughter Fitz-Hugh First Place Resident Research Award**, The Triological Society
- 05/2008            **Resident Research Award**, Kentucky Society of Otolaryngology
- 05/2011            **American Neurotology Society Fellow Research Award**, American Neurotology Society
- 04/2013            **Outstanding Poster Award (Cross-cultural Focus)**, Early Hearing Detection and Intervention Annual Meeting
- 04/2013            **Scholars Abstract Award**, Translational Science 2013
- 10/2014            **Songs for Sound Success Award**, Songs for Sound
- 05/2014            **Phi Kappa Phi**, University of Kentucky Chapter



- 01/2016-present      **Top Doctor**, Castle Connolly Medical LTD
- 06/2016                **Kentucky Colonel**, Commonwealth of Kentucky  
Admitted to the honorable order of Kentucky Colonels by Governor Matthew Bevin
- 03/2017                **Phi Kappa Phi Dissertation Fellowship Award**, Phi Kappa Phi
- 04/2017                ***With Distinction* Thesis Award for Clinical Research**, The Triological Society
- 01/2017                **Cochrane Conclave Scholarship Award**, American Academy of Otolaryngology – Head and Neck Surgery Foundation
- 07/2017                **Wethington Award**, University of Kentucky  
Research award provided for distinguished faculty with at least 30% extramurally funded effort
- 11/2017                **Cochrane Scholarship Award**, American Neurotology Society
- 04/2018                **University of Kentucky Department of Surgery Teaching Award**,  
Given by medical students to faculty for excellence in teaching, University of Kentucky, Department of Surgery
- 07/2018                **Wethington Award**, University of Kentucky  
Research award provided for distinguished faculty with at least 30% extramurally funded effort
- 07/2019                **Wethington Award**, University of Kentucky  
Research award provided for distinguished faculty with at least 30% extramurally funded effort
- 07/2020                **Wethington Award**, University of Kentucky  
Research award provided for distinguished faculty with at least 30% extramurally funded effort
- 06/2021                **Wethington Award**, University of Kentucky  
Research award provided for distinguished faculty with at least 30% extramurally funded effort
- 06/2021                **University of Kentucky Department of Otolaryngology Faculty Teaching Award**  
Given to faculty for excellence in teaching, University of Kentucky, Department of Otolaryngology
- 08/2022                **Wethington Award**, University of Kentucky

Research award provided for distinguished faculty with at least 30% extramurally funded effort

## **XII. PROFESSIONAL ACTIVITIES, PUBLIC SERVICE & PROFESSIONAL DEVELOPMENT**

### **Memberships**

07/2004-present	Kentucky Society of Otolaryngology, Member
07/2004-present	American Academy of Otolaryngology–Head and Neck Surgery, Member
07/2012-present	American Neurotology Society, <i>Fellow</i>
07/2013-present	Society of University Otolaryngologists, Member
03/2015-present	North American Skull Base Society, Member
04/2015-present	American Cochlear Implant Alliance, Member & Organizational Member
10/2015-present	American College of Surgeons, <i>Fellow</i>
05/2017-present	The Triological Society, <i>Fellow</i>
10/2019-present	American Otological Society, Member
03/2022-present	American Auditory Society, Member

### **Positions Held**

#### **Local**

07/2011-07/2016      **Lexington Hearing and Speech Center**  
Member, Board of Directors

03/2015-present      **Providence Community Church**  
Elder

#### **State/Regional**

05/2011-05/2012      **Kentucky Society of Otolaryngology**  
President-elect  
05/2012-05/2013      President  
07/2016-07/2019      Socioeconomic and Grassroots Efforts Representative (KY), AAO-HNS  
Board of Governors

07/2014-06/2020      **Kentucky Cabinet for Health and Family Services**  
Member, Office for Children with Special Healthcare Needs, Medical Advisory  
Committee  
07/2015-present      Member, Kentucky Early Hearing Detection and Intervention Program Advisory  
Board

03/2016-03/2019      **Kentucky Board of Speech Language Pathology and Audiology**  
Frankfort, KY  
Advisory Board Member

#### **National/International**

**American Neurotology Society**  
 07/2015-07/2019 Council Member, Young ANS Member Group  
 07/2017-07/2020 Member, Scientific Program Committee Member  
 07/2019-07/2022 Member, Education Committee Member  
 07/2019-07/2022 Chair, Socio-Economic Committee  
 05/2022-05/2025 Member, Diversity, Equity, and Inclusion Committee

**American Otological Society**  
 04/2021-04/2022 Nominating Committee, Committee Member  
 05/2022 COSM AOS Meeting Poster Judging Committee  
 08/2022-07/2023 Program Advisory Committee

**American Cochlear Implant Alliance**  
 04/2015-present University of Kentucky Cochlear Implant Program Director, ACI Alliance  
 Organizational Members  
 07/2016-present Kentucky State Champion, ACI Alliance  
 03/2017-03/2018 Member, Abstract Review Committee  
 03/2020-07/2023 Member, CI Conference Scientific Program Committee  
 05/2020-05/2021 Co-Chair, CI2022 Conference Scientific Program Committee  
 06/2023-06/2026 Member, Board of Directors

**American Academy of Otolaryngology – Head and Neck Surgery**  
 07/2007-07/2009 Member, Hearing Aid Subcommittee  
 07/2007-07/2012 Member, Credentials and Membership Committee  
 07/2014-07/2016 Consultant, Humanitarian Efforts Committee  
 07/2016-07/2018 Member, International Otolaryngology Committee  
 07/2016-07/2022 Member, Hearing Committee Member  
 07/2016-07/2019 Socioeconomic and Grassroots Efforts Representative (KY), AAO-HNS  
 Board of Governors  
 03/2017-present Member, Otology CORE Grant Review Study Section  
 03/2020-present Member, Telemedicine Committee

**The Triological Society**  
 07/2017-present Member, Systematic Review Committee  
 07/2018-present Member, Triological Best Practice Committee

## **XII. PROFESSIONAL ACTIVITIES, PUBLIC SERVICE & PROFESSIONAL DEVELOPMENT - *continued***

### **Advisory Groups**

	<b>American Academy of Otolaryngology – Head and Neck Surgery Foundation</b>
07/2018-02/2020	Member, Clinical Practice Guidelines Committee ( <i>Meniere’s Disease</i> )
09/2022-12/2023	Assistant Chair, Clinical Practice Guidelines Committee ( <i>Age-Related Hearing Loss</i> )

### **Review Panels**

	<b>Centers for Disease Control</b>
04/2018-05/2018	Grant Review Panelist (National Center on Birth Defects and Developmental Disabilities)
04/2019-05/2019	Grant Review Panelist (National Center on Birth Defects and Developmental Disabilities)
	<b>Veterans Affairs Scientific Merit Review Board</b>
08/2023	Grant Review Panelist (HSR1)

### **Editorial Boards**

07/2019-present	Editorial board member, <i>Otology &amp; Neurotology</i> (Wolters Kluwer)
01/2019-present	Assistant Editor, <i>Otology &amp; Neurotology</i> (Wolters Kluwer)
02/2022-present	Associate Editor, <i>Laryngoscope Investigative Otolaryngology</i> (Wiley)

### **Journal Peer-Reviewing**

07/2008-present	<i>Otolaryngology – Head and Neck Surgery</i> (Sage)
07/2010-present	<i>Clinical Anatomy</i> (Wiley)
07/2012-present	<i>Laryngoscope</i> (Wiley)
07/2013-present	<i>Otology &amp; Neurotology</i> (Wolters Kluwer)
01/2013-present	<i>American Journal of Emergency Medicine</i> (Elsevier)
01/2014-present	<i>Annals of Otolaryngology, Rhinology, and Laryngology</i> (Sage)
01/2015-present	<i>Ear and Hearing</i> (LWW)
01/2015-present	<i>American Journal of Public Health</i> (APHA)

### **Media Contributions**

	<b>BBC Radio</b>
05/2013	Radio Interview: “Noise in the Operating Room.”

### **Reuters Health News**

- 11/2013 “Rural children face delays in diagnosis of congenital hearing loss.”  
<http://www.thedoctorschannel.com/view/rural-children-face-delays-in-diagnosis-of-congenital-hearing-loss/>
- 11/2013 **Eastern Kentucky University**  
 Morning Edition, Radio Show: “Prescribing Patterns for Otitis Media in Children.”
- 11/2013 **American College of Surgeons**  
 Press Release: “Too Much Background Noise in the Operating Room Can Impair Communication Among Surgical Team Members.”  
[http://www.eurekalert.org/pub\\_releases/2013-05/acos-bni051013.php](http://www.eurekalert.org/pub_releases/2013-05/acos-bni051013.php)
- 04/2014 **Lane Report**  
 “Ear, nose, and throat doctor at UK aims to reduce state’s high rate of hearing loss among children”  
[http://www.lanereport.com/30997/2014/04/ear-nose-and-throat-doctor-at-uk-aims-to-reduce-states-high-rate-of-hearing-loss-among-children/?utm\\_source=Faster%20Lane%20Newsletter&utm\\_medium=Email&utm\\_campaign=april-15-2014](http://www.lanereport.com/30997/2014/04/ear-nose-and-throat-doctor-at-uk-aims-to-reduce-states-high-rate-of-hearing-loss-among-children/?utm_source=Faster%20Lane%20Newsletter&utm_medium=Email&utm_campaign=april-15-2014)
- 03/2019 “Foundation for a Healthy Kentucky Names New Endowed Chair for Rural Health Policy at UK.”  
<https://www.lanereport.com/111296/2019/03/foundation-for-a-healthy-kentucky-names-new-endowed-chair-for-rural-health-policy-at-uk/>
- 04/2014 **University of Kentucky**  
 UKnow News: “UK Otolaryngologist Works to Address Rural Disparities of Pediatric Hearing Loss.”  
<http://uknow.uky.edu/content/uk-otolaryngologist-works-address-rural-disparities-pediatric-hearing-loss>
- 02/2015 UKnow News: “Interdisciplinary Study of Behavioral Problems in Children with Hearing Loss Gains CCTS Funding”.  
<http://uknow.uky.edu/content/interdisciplinary-study-behavioral-problems-children-hearing-loss-gains-ccts-funding>
- 09/2015 “KL2 Program Fosters Collaborative Research on Hearing Loss, Behavioral Disorders in Appalachia”  
[http://reveal.uky.edu/bush\\_studts](http://reveal.uky.edu/bush_studts)
- 11/2015 “Music to their Ears: Musicians Join UK Patients and Faculty to Raise Awareness for Pediatric Cochlear Implant Program”  
<http://uknow.uky.edu/content/music-their-ears-musicians-join-uk-patients-and-faculty-raise-awareness-pediatric-cochlear-i>
- 11/2015 UK OnCall Magazine, Issue 6: “UK physician’s patient navigator program ensures follow-up hearing tests for infants”
- 07/2016 “UK Surgeon-Researcher Works to Extend Cochlear Implant Program to Appalachia.”

- <http://uknow.uky.edu/content/uk-surgeon-researcher-works-extend-cochlear-implant-program-appalachia>
- 10/2016 UK Healthcare Blog: “Dr. Matthew Bush: Giving the Gift of Hearing, Here and Around the World”
- 10/2016 UK Healthcare Blog: “Songs for Sound event benefits UK Cochlear Implant Program”
- <http://ukhealthcare.net/blog/making-the-rounds-with-dr-matthew-bush/>
- 04/2017 UKnow News: “Bush Awarded Phi Kappa Phi Dissertation Fellowship”
- <https://uknow.uky.edu/uk-healthcare/bush-awarded-phi-kappa-phi-dissertation-fellowship>
- 07/2019 UKnow News: “\$3.2 Million Grant Helps Families Access Diagnostic Hearing Tests for Infants.”
- [http://uknow.uky.edu/research/32-million-grant-helps-families-access-diagnostic-hearing-tests-infants?j=144973&sfmc\\_sub=122680030&l=19069\\_HTML&u=4343423&mid=10966798&jb=0](http://uknow.uky.edu/research/32-million-grant-helps-families-access-diagnostic-hearing-tests-infants?j=144973&sfmc_sub=122680030&l=19069_HTML&u=4343423&mid=10966798&jb=0)
- 07/2019 UK CCTS News: “\$3.2 Million Grant Helps Families Access Diagnostic Hearing Tests for Infants.”
- <https://www.cts.uky.edu/news/32-million-grant-helps-families-access-diagnostic-hearing-tests-infants>
- 04/2021 The Loop: “TRIPPPLe: ‘An Alliance of Alliances’ to Improve Health Care Practice, Populations, and Policy”
- <https://theloop.ukhc.org/Interact/Pages/Content/Document.aspx?id=5844>
- 08/2021 WUKY Radio Broadcast: Improving Access to and Delivery of Hearing Healthcare
- ENTtoday**
- 06/2016 “Call of Duty: Personal, Professional Merits of Humanitarian Work.”
- [http://www.enttoday.org/article/call-duty-personal-professional-merits-humanitarian-work/?elq\\_mid=10215&elq\\_cid=3437612](http://www.enttoday.org/article/call-duty-personal-professional-merits-humanitarian-work/?elq_mid=10215&elq_cid=3437612)
- 05/2021 “Challenges of Getting Otology Care in Socioeconomically Impacted Areas.” <https://www.enttoday.org/article/challenges-of-getting-otology-care-in-socioeconomically-impacted-areas/>
- KY Forward**
- 03/2019 “Chandler Medical Center Surgeon Matthew Bush Named Foundation for a Healthy KY Endowed Chair.”
- <https://www.kyforward.com/chandler-medical-center-surgeon-matthew-bush-named-foundation-for-a-healthy-ky-endowed-chair/>
- Spectrum News 1**
- 08/2019 “\$3.2 Million Grant Helps Families Access Diagnostic Hearing Tests for Infants.”
- <https://www.cts.uky.edu/news/32-million-grant-helps-families-access-diagnostic-hearing-tests-infants>

- 04/2021 **American Neurotology Society Diversity and Inclusion Newsletter**  
 “Health Equity in Neurotology: Where Do We Begin?”  
<https://ans.memberclicks.net/assets/Spring%202021%20ANS%20DI%20Newsletter.pdf>
- 08/2021 **All Ears at Child’s Voice: A Hearing Loss Podcast**  
 “Healthcare Disparities for Children with Hearing Loss.”  
<https://childsvoice.org/a-hearing-loss-podcast-episode-35-notes-and-transcript/>
- 10/2022 **“Doc Talk” by MedAudPro**  
 Cochlear Implant Podcast  
 “Addressing Disparities in Cochlear Implant Candidacy”  
<https://anchor.fm/medaudpro/episodes/12---Matt-Bush--MD--Cochlear-Implants-Series--available-but-not-accessible--talking-health-disparity--access--and-fixing-problems-together-e1p3r1v>
- 12/2022 **empowEar Audiology**  
 “Health Disparities in Hearing Health”  
<https://podcasts.apple.com/us/podcast/empowear-audiology/id1530082864?i=1000588479305>
- 01/2023 **UK College of Medicine (About the College)**  
 “Why Faculty Love Working at the University of Kentucky College of Medicine”  
<https://medicine.uky.edu/about-college>  
<https://www.youtube.com/watch?v=vefTygr095k>

### **Professional Development**

- 02/2013 **American Academy of Audiology**  
 eAudiology session: “Neuroradiology and Related Neuroanatomy for the Audiologist.” 1 hour CEU credit
- 04/2013 eAudiology session: “Hearing Preservation in Cochlear Implantation.” 1 hour CEU credit
- 02/2015 eAudiology session: “Bridging the Gaps: Assessment of Rural Pediatric Hearing Health Disparities.” 1 hour CEU credit
- 11/2022 **Audiology Online**  
 “Pragmatic Approaches to Overcoming Hearing Healthcare Disparities.” 1 hour CEU credit. <https://www.audiologyonline.com/audiology-ceus/course/pragmatic-approaches-to-overcoming-hearing-38133>
- 02/2022 “An Overview of Hearing Healthcare Disparities.” 1 hour CEU credit. <https://www.audiologyonline.com/audiology-ceus/course/overview-hearing-healthcare-disparities-38328>



### **XIII. INVITED SPEAKING ENGAGEMENTS**

#### **Local**

- Hearing Loss Association of America, Kentucky Chapter (Lexington)**  
Lexington, KY  
03/2012 HLAA Monthly Meeting: “Breaking the Silence: An Overview of Cochlear Implantation.”
- University of Kentucky, Department of Pediatrics**  
Lexington, KY  
05/2013 Contemporary Pediatrics Conference: “Pediatrician’s Guide to Healthy Ears.”
- University of Kentucky, Department of Otolaryngology – Head and Neck Surgery**  
Lexington, KY  
10/2013 University of Kentucky Department of Otolaryngology 25<sup>th</sup> Anniversary Alumni Symposium: “An Expanding Gap: Addressing Rural Hearing Healthcare Disparities and Delays.”
- University of Kentucky, Department of Family and Community Medicine**  
Lexington, KY  
11/2013 Family Medicine Review: “An Update on Infant Hearing Loss and Diagnostic Testing.”
- Hearing Loss Association of America, Kentucky Chapter (Lexington)**  
Lexington, KY  
05/2014 HLAA Monthly Meeting: “Why Can't I Hear? An Overview of Hearing Loss Causes.”
- University of Kentucky, Department of Family and Community Medicine**  
Lexington, KY  
05/2014 Family Medicine Review: “An Update on Infant Hearing Loss and Diagnostic Testing.”
- Lexington Hearing and Speech Center**  
Lexington, KY  
04/2015 Lexington Hearing and Speech Center Little Peeps Symposium: “Not a Second to Lose! The Race for Auditory Development.”
- University of Kentucky, Center for Clinical and Translational Science**  
Lexington, KY

- 05/2016 CCTS Clinical Research Update: “Interdisciplinary Research with Children: Examples from Biomedical and Behavioral Studies.”
- University of Kentucky, Global Health Leadership Symposium**  
Lexington, KY
- 09/2020 “Surgery in Low Resource Settings”
- University of Kentucky College of Nursing**  
DREAM Scholars Program
- 02/2022 “An Introduction to Dissemination and Implementation Research”
- University of Kentucky College of Medicine Department of Psychiatry**  
**Diversity and Inclusion Day**
- 04/2022 “COVID-19 Impacts on the Deaf and Hard of Hearing Population”
- State/Regional**
- Ohio Academy of Audiology**  
Columbus, OH
- 02/2011 Ohio Academy of Audiology Annual Meeting: “Neuroradiology and Related Neuroanatomy for the Audiologist.”
- Kentucky Society of Otolaryngology**  
Lexington, KY
- 05/2011 Kentucky Society of Otolaryngology Annual Meeting: “Vestibular Schwannoma: Update on Current Therapies and Potential Future Options.”
- Heuser Hearing Institute**  
Louisville, KY
- 05/2011 Heuser Hearing Institute Grand Rounds: “Pediatric Neuroradiology and Neuroanatomy for the Hearing Specialist.”
- Ohio School Speech Pathology Educational Audiology Coalition**  
Columbus, OH
- 10/2011 Ohio School Speech Pathology Educational Audiology Coalition Fall Conference: “Pediatric Neuroradiology and Clinical Implications for the Pediatric Hearing Specialist.”
- Kentucky Coalition of Nurse Practitioners and Nurse Midwives**  
Louisville, KY
- 04/2012 The Kentucky Coalition of Nurse Practitioners and Nurse Midwives 24<sup>th</sup> Annual Conference: “ENT Through the Lifespan: Caring for the Ear from Cradle to Grave.”

- Hearing Loss Association of America, Kentucky Chapter (Louisville)**  
Louisville, KY  
05/2012 HLAA Monthly Meeting: “Breaking the Silence: An Overview of Cochlear Implantation.”
- Heuser Hearing Institute**  
Louisville, KY  
06/2012 Heuser Hearing Institute Grand Rounds: “Horizon of Hope: Addressing Audiologic Barriers in East Africa.”
- Kentucky Academy of Physician Assistants**  
Lexington, KY  
10/2012 Kentucky Association of Physician Assistants Annual Meeting: “Evaluation of Dizziness in the Primary Care Setting.”
- Hearing Loss Association of America, Kentucky Chapter (Bardstown)**  
Bardstown, KY  
10/2012 HLAA Monthly Meeting: “Breaking the Silence: An Overview of Cochlear Implantation.”
- Kentucky Speech and Hearing Association**  
Lexington, KY  
02/2013 Kentucky Speech and Hearing Association Annual Meeting: “Diagnostic and Therapeutic Inequities in Appalachian Pediatric Congenital Hearing Loss.”
- Hearing Loss Association of America, Kentucky Chapter**  
Louisville, KY  
07/2013 HLAA Annual Meeting:  
#1: “Pediatric Congenital Hearing Loss in Appalachia: Assessing and Addressing Diagnostic Delays.”  
#2: “Hearing Preservation in Cochlear Implantation.”
- Kentucky Speech and Hearing Association**  
Lexington, KY  
02/2015 Kentucky Speech and Hearing Association Annual Meeting: “Hearing Preservation in Cochlear Implantation.”
- Kentucky Society of Otolaryngology**  
Lexington, KY  
04/2015 Kentucky Society of Otolaryngology Annual Meeting: “Resident Quiz Bowl.”
- Kentucky Academy of Audiology**  
Lexington, KY

- 07/2015 Kentucky Academy of Audiology Annual Meeting: “Bridging the Gaps: Assessing and Addressing Pediatric Rural Hearing Healthcare Disparities.”
- Hearing Loss Association of America, Kentucky Chapter**  
Louisville, KY
- 09/2015 HLAA Annual Meeting:  
#1: “Hearing Preservation in Cochlear Implantation.”  
#2: “Diseases of Balance and Equilibrium.”
- Kentucky Academy of Physician Assistants**  
Lexington, KY
- 11/2015 Kentucky Academy of Physician Assistants Annual Meeting: “Hearing Loss and Cochlear Implantation.”
- Kentucky Systems of Care Academy**  
Lexington, KY
- 05/2016 Annual Meeting: “Panel Discussion: ‘But He Wears Hearing Aids!’ – A Primer on Meeting the Holistic Needs of Children who are Hard of Hearing.”
- Kentucky Society of Otolaryngology**  
Lexington, KY
- 04/2019 Kentucky Society of Otolaryngology Annual Meeting: “Panel Moderator, Otology Case Studies.”
- Kentucky Primary Care Association**  
Lexington, KY
- 10/2021 “Hearing Healthcare Disparities”
- Kentucky Speech and Hearing Association**  
Lexington, KY
- 02/2022 Kentucky Speech and Hearing Association Annual Meeting: “An Update on Cochlear Implantation Research.”

**National/International**

- American Academy of Audiology**  
Dallas, TX
- 04/2009 Learning Lab at the American Academy of Audiology Annual Meeting: “Neuroradiology and Related 3D Neuroanatomy for the Audiologist.”
- American Academy of Audiology**  
San Diego, CA

- 04/2010      Featured Session at the American Academy of Audiology Annual Meeting: “Neuroradiology and Related 3D Neuroanatomy for the Audiologist.”
- American Academy of Audiology**  
Chicago, IL
- 04/2011      Featured Session at the American Academy of Audiology Annual Meeting: “Neuroradiology and Related 3D Neuroanatomy for the Audiologist.”
- Alabama Academy of Audiology**  
Sandestin, FL
- 10/2011      Featured Session at the Alabama Academy of Audiology Annual Meeting: “Neuroradiology and Related 3D Neuroanatomy for the Audiologist.”
- American Academy of Audiology**  
Anaheim, CA
- 04/2013      Featured Session at the American Academy of Audiology AudiologyNOW!: “Hearing Preservation in Cochlear Implantation.”
- National Center for Hearing Assessment and Management**
- 08/2015      Webinar: “Family Perceptions and Experiences with the Early Hearing Detection and Intervention System in Rural Communities.”  
[http://www.infanthearing.org/resources\\_home/events/family-perceptions.html](http://www.infanthearing.org/resources_home/events/family-perceptions.html)
- American Cochlear Implant Alliance**  
Toronto, Ontario, Canada
- 05/2016      CI2016 International Cochlear Implant Meeting. Session Moderator.
- American Neurotology Society**  
Chicago, IL
- 09/2017      American Neurotology Society, Fall Scientific Program: Session Co-moderator. “Technical Challenges in Cochlear Implantation”
- American Academy of Otolaryngology – Head Neck Surgery**  
Chicago, IL
- 09/2017      AAO-HNS Annual Meeting: Miniseminar Panelist. “I Hate My Hearing Aids: Other Options for Hearing Loss.”
- American Academy of Otolaryngology – Head Neck Surgery**  
Atlanta, GA
- 10/2018      AAO-HNS Annual Meeting: Miniseminar Moderator. “Policy and Practice: How Changing Policy Affects Hearing Healthcare Delivery.”  
American Academy of Otolaryngology – Head Neck Surgery  
Atlanta, GA

- 10/2018 AAO-HNS Annual Meeting: Miniseminar Panelist. “I Hate My Hearing Aids: Other Options for Hearing Loss.”
- American Academy of Audiology**  
Columbus, OH
- 03/2019 American Academy of Audiology Annual Meeting:  
#1: Adult Grand Rounds (Panelist)  
#2: “Neuroradiology for the Hearing Healthcare Provider.”
- The Triological Society**  
Austin, TX
- 03/2019 Triological Society Meeting at Combined Otolaryngology Society Meeting (COSM): Congenital Hearing Loss (Panelist)
- American Neurotology Society**  
New Orleans, LA
- 09/2019 ANS 54<sup>th</sup> Annual Fall Meeting: “Neurotology 2019: Extending Our Reach”
- American Academy of Otolaryngology – Head Neck Surgery**  
New Orleans, LA
- 09/2019 AAO-HNS Annual Meeting: Miniseminar Panelist. “Clinical Practice Guideline: Meniere’s Disease.”
- Vanderbilt University, Department of Otolaryngology – Head and Neck Surgery**  
Vail, CO
- 02/2020 42<sup>nd</sup> Annual Sisson-Ossoff International Workshop:  
#1: Acoustic Neuromas – Current Topics (Panelist)  
#2: Modern Diagnosis & Treatment of Vertiginous Syndromes  
#3: Cochlear Implant: Current Topics
- Kenya ENT Society (virtual meeting)**
- 06/2020 “Maximizing Outcomes in Middle Ear and Mastoid Surgery”
- American Auditory Society**
- 08/2020 Disparities in Hearing Health Care Seminar  
“Bridging the Gaps in Hearing Health Care”
- American Academy of Otolaryngology – Head Neck Surgery**  
Virtual Meeting
- 10/2020 AAO-HNS Annual Meeting: Moderator and Panelist. “Expanding Criteria for Cochlear Implantation.”
- American Academy of Audiology**  
Virtual Meeting

- 04/2021 AAA Annual Meeting: “Neuroradiology for the Audiologist.”
- American Cochlear Implant Alliance**  
Virtual Meeting
- 04/2021 CI2020 Session Moderator, “Social Justice and Hearing Healthcare: Addressing Equity in Cochlear Implantation.”
- Kenya ENT Society (virtual meeting)**  
09/2021 “COVID-19 Links to Hearing Loss, Tinnitus, and Vertigo”
- American Speech-Language-Hearing Association  
Washington, DC**  
11/19/2021 Annual Meeting: “Hearing Health Care Disparities in Children.”
- Coalition of Global Hearing Health (virtual meeting)  
Otitis Media Panel**  
01/22/2022 “Pediatric CSOM Disparities and the Social Determinants of Health”
- Cochlear Implant Innovation, Research, and Advancement (CIRCA)  
Workshop (virtual meeting)**  
02/1/2022 Panelist: “Cochlear Implant Disparities”
- American Speech-Language-Hearing Association, SIG 9, Pediatric  
Hearing and Hearing Disorders, Lunch and Learn (virtual)**  
02/16/2022 “Pediatric Hearing Healthcare Disparities”
- American Auditory Society  
Scottsdale, AZ**  
02/26/2022 Annual Meeting: Invited Lecturer for *Translational Research Lecture*  
“Pragmatic Approaches to Address Hearing Healthcare Disparities.”
- University of Minnesota**  
Department of Otolaryngology – Head & Neck Surgery Grand Rounds  
03/28/2022 “Pragmatic Approaches to Address Hearing Healthcare Disparities”
- Cook Children’s Hospital**  
Pediatric Grand Rounds  
04/26/2022 “Assessing and Addressing Pediatric Hearing Healthcare Disparities”
- American Society of Pediatric Otolaryngology  
Dallas, TX**  
04/30/2022 *Cotton-Fitton Lecture*: “Addressing Otolaryngology Disparities in Children: A Discussion of Multilevel Interventions.”

**George Washington University**  
**Washington, DC**  
Speech, Language, and Hearing Sciences Guest Speaker  
05/18/2022 “Assessing and Addressing Pediatric Hearing Healthcare Disparities”

**American Cochlear Implant Alliance**  
Washington, DC  
05/2022 CI2022 Cochlear Implant Meeting. Session Moderator.

**Hearing Across the Lifespan (HEAL) 2022**  
Lake Como, Italy  
06/19/2022 Improving EHDI. Session Moderator.

**University of North Carolina**  
Department of Otolaryngology – Head & Neck Surgery Grand Rounds  
06/22/2022 “Pragmatic Approaches to Address Hearing Healthcare Disparities”

**1<sup>st</sup> International Vestibular Course**  
Kenyan ENT Society  
10/13/2022 Invited Speaker, “Practical Vestibular Anatomy” and “Physiology of the Vestibular System”

**Fall CI 2022**  
11/07/2022 #1: Hearing Health Disparities  
#2: Hearing Health Care Disparities in Cochlear Implantation (Panelist)

**Florida Combined Otolaryngology Meeting 2022**  
11/11-13/2022 Guest Faculty  
#1: Radiology for the Hearing Healthcare Provider  
#2: Managing Auditory Processing Disorders in ENT

**Pennsylvania EHDI Meeting**  
12/02/2022 “Pediatric Hearing Healthcare Disparities”

**International Federation of Otorhinolaryngological Societies (IFOS)**  
01/18-19/2023 Invited Speaker, Humanitarian Track

**Albert Einstein College of Medicine/Montefiore Medical Center**  
Department of Otolaryngology – Head & Neck Surgery Grand Rounds  
02/03/2023 “An Update on Single Sided Deafness”

**Population Hearing Health Care**  
Scottsdale, AZ  
03/01/2023 Invited Speaker, “Community-based Pediatric Hearing Healthcare Research to Promote Equity”



- American Otological Society**  
**Annual Spring Meeting (COSM)**  
Boston, MA  
05/07/2023 **Moderator**, Featured Panel: “An Overview of Otologic Disparities Across the Lifespan”
- Nemours Children’s Hospital**  
Orlando, FL  
05/17/2023 2<sup>nd</sup> Annual Research Week, Keynote Lecture: “A Commitment to Equitable Healthcare: The Power of Pragmatic Research.”  
Surgery Grand Rounds: “The Role of a Surgeon in Addressing Health Disparities”
- American Cochlear Implant Alliance**  
Dallas, TX  
06/2023 CI2023 Cochlear Implant Meeting. Session Moderator.
- Boys Town National Research Hospital**  
Omaha, NE  
11/02/2023 Patrick E. Brookhouser Keynote Lecture: “Promoting Equity in Pediatric Hearing Healthcare”

## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS**

### **A. PUBLICATIONS**

#### **Peer-Reviewed Original Research in Professional, Scientific or Educational Journals**

- 1. Bush M, Gupta S.** Lilliputian Hallucinations and Marijuana Dependence in a Bipolar Patient. *The Jefferson Journal of Psychiatry.* 2002. 17(1): 68-72.
- 2. Bush M, Shinn J, Young AB, Jones R.** Long-term Hearing Results in Gamma Knife Radiosurgery for Acoustic Neuromas. *Laryngoscope.* 2008 Jun; 118(6): 1019-22. PMID: 18364592.
- 3. Bush M, Jones R, Shinn J.** Auditory Brainstem Response Threshold Differences in Patients with Vestibular Schwannoma: A New Diagnostic Index. *Ear, Nose, and Throat Journal.* 2008 Aug; 87(8):458-62. PMID: 18712694.
- 4. Bush M, Jones R, Givens C.** The value of CT venography in the diagnosis of jugular bulb diverticulum: A series of 3 cases. *Ear, Nose, and Throat Journal.* 2009 April; 88(4): E04. PMID: 19358118.
- 5. Shinn J, Bush M, Jones R.** Correlation of Central Auditory Processing Deficits and Vascular Loop Syndrome. *Ear, Nose, and Throat Journal.* 2009 Oct;88(10): E34-7. PMID: 19826989.
- 6. Bush M, Jones R, Shinn J.** The Clinical Reliability of Vestibular Evoked Myogenic Potentials. *Ear, Nose, and Throat Journal* 2010 Apr; 89(4): 170-6. PMID: 20397145.
- 7. Bush M, Pritchett C, Packer M, Ray-Chaudhury, A, Jacob A.** Hemangioblastoma of the Cerebellopontine Angle. *Archives of Otolaryngology – Head and Neck Surgery.* 2010 Jul; 136(7): 734-8. PMID: 20644074.
- 8. Bush M, Oblinger J, Brendel V, Santarelli G, Huang J, Akhmametyeva E, Burns S, Wheeler, Davis J, Yates C, Chaudhury A, Kulp S, Chen C, Chang L, Welling D, Jacob A.** AR42, A Novel Histone Deacetylase Inhibitor, as a Potential Therapy for Vestibular Schwannomas and Meningiomas. *Neuro Oncology* 2011 Sep. 13(9): 983-99. PMID: 21778190.
- 9. Jacob A, Oblinger J, Bush M, Brendel V, Santarelli G, Chaudhury AR, Kulp S, La Perle KMD, Chen CS, Chang LS, Welling DB.** Preclinical Validation of AR42, a Novel Histone Deacetylase Inhibitor, as Treatment for Vestibular Schwannomas. *Laryngoscope.* 2012 Jan; 122(1):174-89. PMID: 22109824.
- 10. Bush M, Oblinger J, Davletova S, Burns S, Chang LS, Welling DB, Jacob A.** Treatment of Vestibular Schwannoma Cells with ErbB Inhibitors. *Otology & Neurotology.* 2012 Feb; 33(2):244-57. PMID: 22222570
- 11. Cipolla MJ, Iyer P, Dome C, Welling DB, Bush M.** Modification and Comparison of Minimally-Invasive Cochleostomy Techniques: A Pilot Study. *Laryngoscope.* 2012 May; 122(5): 1142-7. PMID: 22447373.
- 12. Walz P, Bush M, Robinett Z, Kirsch C, Welling DB.** 3D Volumetric Conformal Analysis of Vestibular Schwannomas: Comparison of volumetric and linear measurements for estimation of sporadic vestibular schwannoma growth. *Otolaryngology – Head and Neck Surgery.* 2012 Oct; 147(4): 737-43. PMID: 22588731
- 13. Burns S, Akhmametyeva E, Oblinger J, Bush M, Huang J, Senner V, Chen CS, Jacob A, Welling DB, Chang LS.** AR-42, a Pan-Histone Deacetylase Inhibitor, Differentially Affects Cell-cycle Progression of Meningeal and Meningioma Cells and Potently Inhibits Tumor Growth in a

Quantifiable NF2-deficient Benign Meningioma Model. *Cancer Research*. Jan 15, 2013. 73(2): 792-803. PMID: 23151902

14. **Bush M**, Bingcang C, Chang E, Fornwalt B, Rayle C, Gal TJ, Jones R, Shinn J. Hot or Cold: Is Monothermal Caloric Testing Useful and Cost-Effective? *Annals of Otolaryngology, Rhinology, & Laryngology*. 2013. 122(6): 412-416. PMID: 23837395

15. Way J, Long A, Weighing J, Ritchie R, Jones R, **Bush M**, Shinn J. The Effect of Noise on Auditory Processing in the Operating Room. *Journal of the American College of Surgeons* 2013. 216(5):933-8. PMID: 23518255.

16. **Bush M**, Burton M, Loan A, Shinn J. Timing Discrepancies of Early Intervention Hearing Services in Urban and Rural Cochlear Implant Recipients. *Otology & Neurotology*. 2013. 34(9): 1630-5. PMID: 24136305 PMCID: PMC3830638

17. Roberts D, **Bush M**, Jones R. Adult Progressive Sensorineural Hearing Loss: Is pre-operative imaging necessary prior to cochlear implantation. *Otology & Neurotology* 2014 Feb;35(2):241-5. PMID: 24448283

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10. Sataloff RT, **Bush ML**, Chandra R, Chepeha D, Rotenberg B, Fisher EW, Goldenberg D, Hanna EY, Kerschner JE, Kraus DH, Krouse JH, Li D, Link M, Lustig LR, Selesnick SH, Sindwani R, Smith RJ, Tysome J, Weber PC, Welling DB. Systematic and Other Reviews: Criteria and Complexities. *J Neurol Surg B Skull Base*. 2021. 82(3):273-276. PMID:34026402.
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### **Work In-Progress**

1. Willgruber A, Kinealy B, Adkins D, Schuh M, Shinn J, Cline T, Board R, Hassan Z, **Bush ML**. Quality and Readability of Hearing Aid-Related Websites in English and Spanish. *JAAA.* 2023. (*under review*)

2. Adkins D, Shinn J, Cline T, Hyland J, Phuong A, Schuh M, **Bush ML**. Tools for Telehealth: A Correlational Analysis of App-Based Hearing Testing. *Laryngoscope Investigative Otolaryngology.* 2022. (*in preparation*)

3. Rawls C, Willgruber A, Kinealy B, Adkins D, **Bush ML**. Quality and Readability of Websites regarding Tympanoplasty and Mastoidectomy. (*in preparation – OTO-HNS*)

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5. Sharrer C, Meinhardt G, Perez N, Mahairas A, Adkins D, Burruss C, **Bush ML**. Association of Diabetes Mellitus and Hearing Loss: A Systematic Review. (*in preparation*)

6. Davis A, Nwokedi-Ibewuike A, Adkins D, **Bush ML**. Social Determinants of Health in Hearing Healthcare: A Scoping Review. (*in preparation*)

### **Books, Book Chapters, Monographs**

1. **Bush M**. *Diseases of the external and middle ear*, in Disorders of the Auditory System, Musiek F, Baran J, Shinn J, Jones R, eds. San Diego: Plural Pub. 2012.

2. **Bush M**. *Diseases of the cochlea*, in Disorders of the Auditory System, Musiek F, Baran J, Shinn J, Jones R, eds. San Diego: Plural Pub. 2012.

3. **Bush M**, Welling DB. *Neurofibromatosis Type 2*, in The Five-Minute Neurology Consult, 2<sup>nd</sup> ed. Lynn DJ, Newton HB, Rae-Grant AD, eds. Philadelphia: Lippincott Williams & Wilkins. 2012. ISBN: 9781451100129

4. **Bush M**, Welling DB. *Cerebellopontine Angle Tumors*, in Head and Neck Surgery – Otolaryngology, 5<sup>th</sup> Johnson JT and Rosen CA, eds. Philadelphia: Lippincott Williams & Wilkins. 2013. ISBN: 9781609136020.

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7. **Bush M.** *Outer and Middle Ear Disorders*, in Disorders of the Auditory System, 2<sup>nd</sup> ed. Musiek F, Baran J, Shinn J, Jones R, eds. San Diego: Plural Pub. 2020.
8. **Bush M.** *Inner Ear Disorders*, in Disorders of the Auditory System, 2<sup>nd</sup> ed. Musiek F, Baran J, Shinn J, Jones R, eds. San Diego: Plural Pub. 2020.
9. **Bush M**, Iverson K, McNulty B. *Myringoplasty*, in *Surgery of the Ear*, 7<sup>th</sup> ed. Haynes D, Minor L, Carlson M, Welling DB, eds. Raleigh: People's Medical Publishing House. (In Press)
10. Song Y, **Bush M**, Welling DB. *Cerebellopontine Angle Tumors*, in Head and Neck Surgery – Otolaryngology, 6<sup>th</sup> Johnson JT and Rosen CA, eds. Philadelphia: Lippincott Williams & Wilkins. (*in press*)

### **Books – In-Progress**

Neuroimaging of the Auditory and Vestibular Systems A Clinician's Guide. **Bush ML**, Zeitler D, Shinn J, Chapman M, eds. San Diego: Plural Pub. (*in preparation*)

### **Letters, Book Reviews, Lay Press**

None

### **PhD Dissertation**

**Bush, M.** "Promotion of Early Pediatric Hearing Detection Through Patient Navigation" (2017). *Theses and Dissertations—CTS*. 6. [https://uknowledge.uky.edu/cts\\_etds/6](https://uknowledge.uky.edu/cts_etds/6)

## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS - *continued***

### **B. ABSTRACT PRESENTATIONS**

#### **POSTER PRESENTATIONS**

##### **Local/State/Regional Meetings**

1. 04/2009 **Bush M**, Burns S, Kulp S, Chen CS, Jacob A, Welling DB, Chang LS. Mutation Analysis and *In Vitro* HDAC Inhibitor Treatment of Benign Human Meningioma Cells. The Ohio State University Medical Center Research Day, Columbus, OH.
2. 02/2010 Burns S, **Bush M**, Davis J, Welling DB, Chang LS. Intracranial Xenograft Models for Benign and Malignant *NF2*-Deficient Meningiomas. The Ohio State University Comprehensive Cancer Center Annual Conference. Columbus, OH.
3. 02/2010 Oblinger J, Lee T, Packer M, Huang J, **Bush M**, Kulp S, Chen CS, Giovannini M, Welling DB, Jacob A, Chang LS. HDAC42 and OSU-03012, Novel Small-Molecule Inhibitors for the Treatment of Vestibular Schwannomas. The Ohio State University Comprehensive Cancer Center Annual Conference. Columbus, OH.
4. 04/2010 Burns S, **Bush M**, Davis J, Welling DB, Chang LS. Intracranial Xenograft Models for Benign and Malignant *NF2*-Deficient Meningiomas. Nationwide Children's Hospital Research Institute Research Week. Columbus, OH.
5. 04/2010 Davis J, Burns S, **Bush M**, Welling DB, Chang LS. Establishment of Benign and Malignant *NF2*-Deficient Meningioma Mouse Models. The Ohio State University Annual Research Day, Columbus, OH.
6. 04/2010 Hull B, **Bush M**, Yates C, Miles-Markley B, Chang LS, Welling DB. Assessment of Color Vision and Developmental Anomalies in Neurofibromatosis type 2 Patients. The Ohio State University Annual Research Day, Columbus, OH.
7. 02/2011 Burns S, Akhmametyeva E, Oblinger J, **Bush M**, Huang J, Senner V, Giovannini M, Chen CS, Jacob A, Welling DB, Chang LS. AR-42 and AR-12 Potently Inhibit the Growth of *NF2*-deficient Human Meningiomas. The Ohio State University Comprehensive Cancer Center Annual Conference. Columbus, OH.
8. 04/2011 Burns S, Akhmametyeva E, Oblinger J, **Bush M**, Huang J, Senner V, Giovannini M, Chen CS, Jacob A, Welling DB, Chang LS. AR-42 and AR-12 Potently Inhibit the Growth of *NF2*-deficient Human Meningiomas. Nationwide Children's Hospital Research Institute Research Week, Columbus, OH.
9. 04/2011 **Bush, M**, Oblinger J, Brendel V, Santarelli G, Huang J, Akhmametyeva E, Burns S, Wheeler, Davis J, Yates C, Chaudhury A, Kulp S, Chen C, Chang L, Welling D, Jacob A. AR42, A Novel Histone Deacetylase Inhibitor, as a Potential Therapy for Vestibular Schwannomas and Meningiomas. Nationwide Children's Hospital Research Institute Research Week, Columbus, OH.
10. 04/2011 **Bush M**, Oblinger J, Davletova S, Burns S, Chang LS, Welling DB, Jacob A. Treatment of Vestibular Schwannoma Cells with ErbB Inhibitors. The Ohio State University Annual Research Day, Columbus, OH.
11. 04/2011 **Bush M**, Oblinger J, Brendel V, Santarelli G, Huang J, Akhmametyeva E, Burns S, Wheeler, Davis J, Yates C, Chaudhury A, Kulp S, Chen C, Chang L, Welling

- D, Jacob A. AR42, A Novel Histone Deacetylase Inhibitor, as a Potential Therapy for Vestibular Schwannomas and Meningiomas. The Ohio State University Annual Research Day, Columbus, Ohio.
12. 02/2012 Burns S, Akhmametyeva E, Oblinger Huang J, **Bush M**, Senner V, Chen CS, Jacob A, Welling DB, Chang LS. AR-42, a Novel Histone Deacetylase Inhibitor, Causes G2 Arrest in Meningioma Cells while Arresting Normal Meningeal Cells at G1 and Potently Inhibits Tumor Growth in a Quantifiable NF2-deficient Benign Meningioma Model. The 14<sup>th</sup> Ohio State University Comprehensive Cancer Center Annual Scientific Meeting, Columbus, OH.
  13. 04/2012 Burns, S.S., E.A. Akhmametyeva, J.L. Oblinger, **Bush M**, J. Huang, A. Qian, V. Senner, C.-S. Chen, A. Jacob, D.B. Welling, L.-S. Chang. AR-42, a Novel Histone Deacetylase Inhibitor, Differentially Affects Cell-Cycle Progression of Meningeal and Meningioma Cells and Potently Inhibits Tumor Growth in a Quantifiable NF2-deficient Benign Meningioma Model. The Research Institute at Nationwide Children's Hospital 2012 Research Week, Columbus, Ohio.
  14. 04/2012 Burns S, Akhmametyeva E, Oblinger J, Huang J, **Bush M**, Senner V, Chen CS, Jacob A, Welling DB, Chang LS. AR-42, a Novel Histone Deacetylase Inhibitor, Causes G2 Arrest in Meningioma Cells while Arresting Normal Meningeal Cells at G1 and Potently Inhibits Tumor Growth in a Quantifiable NF2-deficient Benign Meningioma Model. The Research Institute at Nationwide Children's Hospital 2012 Research Week, Columbus, OH.
  15. 02/2013 Osetinsky M, Shinn J, Fardo, Gal TJ, Schoenberg N, **Bush M**. Congenital Sensorineural Hearing Loss in Appalachia. AOA Groves Memorial MD/PhD Program Student Research Symposium, University of Kentucky, Lexington, Kentucky. February 20, 2013.
  16. 03/2014 **Bush M**, Hardin B, Rayle C, Lester C, Studts C, Shinn J. Rural Barriers to Early Diagnosis and Treatment of Infant Hearing Loss in Appalachia. 9th Annual CCTS Spring Conference University of Kentucky Center for Clinical and Translational Science, Lexington Convention Center, Lexington, Kentucky.
  17. 03/2014 Noblitt B, Alexander D, Lester C, Shinn J, **Bush M**. Rural Primary Care Provider Knowledge and Practice Patterns of Congenital Hearing Loss. 9th Annual CCTS Spring Conference University of Kentucky Center for Clinical and Translational Science, Lexington Convention Center, Lexington, Kentucky.

### *National/International Meetings*

1. 03/2006 **Bush M**, Jones R, Musiek F & Shinn J. Auditory Brainstem Response and Behavioral Testing in Acoustic Neuroma Detection. American Auditory Society Meeting, Scottsdale, AZ.
2. 03/2007 **Bush M**, Jones R, Shinn J. Test-Retest Reliability of VEMPS. American Auditory Society Meeting, Scottsdale, AZ.
3. 06/2009 **Bush M**, Oblinger J, Burns S, Kulp S, Chen CS, Senner V, Jacob A, Welling DB, Chang LS. Preclinical Evaluation of HDAC Inhibitors and an EGFR Inhibitor on Vestibular Schwannoma and Meningioma. Childrens Tumor Foundation NF Conference. Portland, OR.

4. 06/2011 **Bush M**, Bratasz A, Brendel V, Manning A, Oblinger J, Chang LS, Welling DB, Jacob A, Powell K. The Use of Magnetic Resonance Spectroscopy (MRS) in Monitoring Vestibular Schwannoma Growth and Treatment Effect. Childrens Tumor Foundation NF Conference. Jackson Hole, WY.
5. 06/2011 **Bush M**, Oblinger J, Brendel V, Santarelli G, Huang J, Akhmametyeva E, Burns S, Wheeler, Davis J, Yates C, Chaudhury A, Kulp S, Chen C, Chang L, Welling D, Jacob A. AR42, A Novel Histone Deacetylase Inhibitor, as a Potential Therapy for Vestibular Schwannomas and Meningiomas. Childrens Tumor Foundation NF Conference. Jackson Hole, WY.
6. 09/2011 Walz P, **Bush M**, Robinett Z, Kirsch C, Welling DB. 3D Volumetric Conformal Analysis of Vestibular Schwannomas: Comparison of volumetric and linear measurements for estimation of sporadic vestibular schwannoma growth. American Academy of Otolaryngology – Head and Neck Surgery Annual Meeting, San Francisco, CA.
7. 03/2012 Chang E, Bingcang C, Fornwalt B, **Bush M**, Gal T, Jones R, Shinn J. The Utility of Monothermal Caloric Testing in Screening for Vestibular Dysfunction. American Auditory Society Annual Meeting. Scottsdale, AZ.
8. 04/2013 **Bush M**, Burton M, Loan A, Shinn J. Timing Discrepancies of Early Intervention Hearing Services in Urban and Rural Cochlear Implant Recipients. American Otological Society Annual Meeting – COSM. Orlando, FL.
9. 04/2013 **Bush M**, Bianchi K, Osetinsky M, Shinn J. Rural Pediatric Hearing Healthcare Disparity: Factors in Delayed Congenital Hearing Loss Diagnosis and Intervention. Triological Society Annual Meeting – COSM. Orlando, FL.
10. 04/2013 Roberts D, **Bush M**, Jones R. Adult Progressive Sensorineural Hearing Loss: Is pre-operative imaging necessary prior to cochlear implantation. American Neurotology Society Annual Meeting – COSM. Orlando, FL.
11. 04/2013 **Bush M**, Bianchi K, Osetinsky M, Shinn J. Bridging the Gap: Assessment of Hearing Healthcare Barriers in Appalachia. Early Detection Hearing and Intervention Annual Meeting, Glendale, AZ. **Outstanding Poster Award (Cross-cultural Focus)**
12. 04/2013 **Bush M**, Bianchi K, Lester C, Shinn J, Gal TJ, Fardo D, Schoenberg N. Diagnostic Disparities of Pediatric Congenital Hearing Loss in Appalachia. Translational Science 2013, Washington, DC. **Scholars Abstract Award.**
13. 05/2014 Alexander D, Noblitt B, Lester C, Shinn J, **Bush M**. Rural Primary Care Provider Knowledge and Practice Patterns of Congenital Hearing Loss. Triological Society Annual Meeting - COSM. Las Vegas, NV.
14. 03/2015 **Bush M**, Christian J, Bianchi K, Lester C, Schoenberg N. Targeting Regional Pediatric Congenital Hearing Loss Using a Spatial Scan Statistic. National Early Hearing Detection and Intervention Meeting. Louisville, KY.
15. 01/2016 Hixon B, Chan S, Shinn J, **Bush M**. Impacts of Hearing Loss and Access to Hearing Healthcare in Rural Adult Cochlear Implant Recipients. Triological Society Combined Section Meeting. Miami, FL. **John E. Bordley, MD Resident Research Award (Southern Section).**
16. 03/2016 Noblitt B, **Bush M**. Barriers and Outcomes of Cochlear Implantation Rehabilitation in Rural Appalachia. 15<sup>th</sup> Annual Early Hearing Detection and Intervention Meeting. San Diego, CA.

17. 03/2016 Taylor Z, Anderson S, **Bush M**. Addressing Pediatric Hearing Loss Educational and Practice Gaps in Primary Care Providers. World Congress on Continuing Professional Development. San Diego, CA.
18. 05/2016 Chan S, Hixon B, Shinn J, **Bush M**. Hearing Loss in Rural Adults: A Geographic Comparison of Access to Care in Hearing Aid Recipients. American Otological Society Annual Meeting (COSM). Chicago, IL.
19. 05/2016 Ritchie R, Alfonso K, Cheriyan M, **Bush M**, Jones R, Weihing J, Shinn J. Effect of Noise on Anesthesiologist Auditory Processing in the Operating Room. International Anesthesia Research Society Annual Meeting and International Science Symposium. San Francisco, CA.
20. 01/2017 Fiorillo C, Hughes A, I-Chen C, Westgate P, Gal T, **Bush M**, Comer B. Factors Associated with Patient No-Show Rates in an Academic Otolaryngology Practice. Triological Society Combined Section Meeting. New Orleans, LA.
21. 04/2017 Trott S, Cline T, Weihing J, Beshear D, **Bush M**, Shinn J. Hormones and Hearing. American Academy of Audiology Annual Meeting, Indianapolis, Indiana.
22. 05/2017 Fiorillo C, Rashidi V, Westgate P, Jacobs J, Studts C, **Bush M**. Assessment of Behavioral Problems in Children with Hearing Loss. American Neurotology Society Annual Meeting (COSM). San Diego, CA. April 28-30, 2017. *President's Award, 1<sup>st</sup> Place, ANS Poster Sessions.*
23. 06/2017 Creel L, Jennings J, Lester C, **Bush M**. Impact of Hospital Scheduling on Follow-Up Appointments After a Failed Newborn Hearing Screen. Academy Health Annual Research Meeting, New Orleans, LA.
24. 07/2017 Bigler D, Pilar M, Merritt A, Jacobs J, **Bush M**, Studts C. Parental Psychosocial Barriers in Pediatric Hearing Healthcare: A Qualitative Analysis. 15th Symposium on Cochlear Implants in Children (CI2017). San Francisco, CA.
25. 07/2017 Fletcher KT, Liu T, Horrell Wolf EM, Muthoka M, **Bush M**. The Natural History and Rehabilitative Outcomes of Hearing Loss in Congenital Cytomegalovirus: A systematic review. 15th Symposium on Cochlear Implants in Children (CI2017). San Francisco, CA.
26. 04/2018 Trott S, Colgove N, Westgate P, **Bush M**, Iverson K. Nasal Endoscopy in Congenital Nasolacrimal Duct Obstruction: A Systematic Review. Annual American Society of Pediatric Otolaryngology Meeting (COSM). National Harbor, MD.
27. 04/2018 Alfonso KP, Dicken FW, Rojas Ramirez M, **Bush M**, Comer B. Factors Impacting Otolaryngology in Training (ITE) Scores. Triological Society Annual Meeting (COSM). National Harbor, MD.
28. 01/2019 Van Horn A, Creel L, Hines A, **Bush ML**. Neonatal Abstinence Syndrome and Infant Hearing Assessment: A Kid's Inpatient Database (KID) Review. Triological Society Combined Sections Meeting. Coronado, CA. *Frances E. LeJeune Sr., MD Resident Research Award (Southern Section)*
29. 03/2019 Shanker A, Rojas-Ramirez M, Jacobs J, Studts C, **Bush M**. Determining the Caregiver Demographic Factors Involved in Non-Adherence to Infant Hearing Diagnostic Testing. National Early Hearing Detection and Intervention Meeting. Chicago, IL.

30. 05/2019 Van Horn A, Fitzgerald C, **Bush M**, Iverson KC, Harmon T, Azbell C. Improved Delivery of Care after Hiring a Pediatric Cochlear Implant Coordinator. Annual American Society of Pediatric Otolaryngology Meeting (COSM). Austin, TX.
31. 10/2021 Trott S, Young R, Hayden C, Yessin O, **Bush ML**, Gupta N. Risk Factors for OR No-Show in an Academic Otolaryngology Practice. AAO-HNSF 2021 Annual Meeting. Los Angeles, CA.
32. 04/2022 Pappal R, Burress C, Witt M, Harryman C, Ali S, **Bush ML**, Fritz M. Risk Factors for the Development of Subglottic and Tracheal Stenosis from the Medical Intensive Care Unit. ABEA Annual Meeting. Dallas, TX.
33. 06/2022 Musalia J, Keck J, **Bush ML**, Razick R, Mohammadi S, Hamm J. Performance of Formal Smell Testing and Symptom Screening for Identifying SARS-CoV-2 Infection. Preventive Medicine 2022. Denver, CO.
34. 09/2022 Batey K, Thiel C, **Bush ML**, Gupta N. An Evaluation of Factors Influencing Clinician Time Spent with Patients. AAO-HNSF 2022 Annual Meeting. Philadelphia, PA.
35. 03/2023 Mahairas M, **Bush M**. A Qualitative Analysis of Parent Perceptions on a Patient Navigation Program for Newborn Hearing Diagnostic Testing. EHDI Annual Conference. Cincinnati, OH.

## **PODIUM PRESENTATIONS**

### **Local/State/Regional Meetings**

1. 05/2006 **Bush M**, Jones R, Musiek F & Shinn J. Auditory Brainstem Response and Behavioral Testing in Acoustic Neuroma Detection, Kentucky Society of Otolaryngology Annual Meeting, Dale Hollow Lake Resort, KY. ***Kentucky Society of Otolaryngology 1<sup>st</sup> Place Resident Research Award***
2. 05/2007 **Bush M**, Shinn J, Young B, Jones R. Long-term Hearing Results in Gamma Knife Radiosurgery for Acoustic Neuromas. Kentucky Society of Otolaryngology Annual Meeting, Louisville, KY.
3. 04/2008 **Bush M**, Jones R, Shinn J. Test-Retest Reliability of VEMPS. Kentucky Society of Otolaryngology Annual Meeting. Harrodsburg, KY ***Kentucky Society of Otolaryngology 1<sup>st</sup> Place Resident Research Award***
4. 06/2011 **Bush M**, AR42, A Novel Histone Deacetylase Inhibitor, as a Potential Therapy for Vestibular Schwannomas and Meningiomas. Nineteenth Annual Department of Otolaryngology Alumni Symposium. The Ohio State University, Columbus, OH.
5. 06/2012 **Bush M**. Bridging the Gaps: Assessment of Appalachian Pediatric Hearing Loss. 20<sup>th</sup> Annual Department of Otolaryngology Saunders Symposium. The Ohio State University, Columbus, OH.
6. 02/2013 Osetinsky M, Shinn J, Fardo, Gal TJ, Schoenberg N, **Bush M**. Congenital Sensorineural Hearing Loss in Appalachia. AOA Groves Memorial MD/PhD Program Student Research Symposium, University of Kentucky, Lexington, Kentucky.
7. 04/2013 **Bush M**. Pediatric Congenital Hearing Loss in Appalachia: Assessing and Addressing Diagnostic Delays. 8th Annual CCTS Spring Conference University

of Kentucky Center for Clinical and Translational Science, Lexington Convention Center, Lexington, Kentucky.

8. 04/2013 **Bush M.** Pediatric Congenital Hearing Loss in Appalachia: Assessing and Addressing Diagnostic Delays. Kentucky Society of Otolaryngology Annual Meeting, University of Kentucky, Lexington, Kentucky.

### *National/International Meetings*

1. 05/2006 Shinn J, **Bush M.** Current Trends in Electrophysiology. University of Connecticut 1<sup>st</sup> Annual Symposium on (C)APD. Storrs, CT.
2. 01/2008 **Bush M,** Shinn J, Young B, Jones R. Long-term Hearing Results in Gamma Knife Radiosurgery for Acoustic Neuromas. The Triological Society Southern Section Meeting, Naples, FL. *The G. Slaughter Fitz-Hugh First Place Resident Research Award*
3. 10/2009 Oblinger J, **Bush M,** Kulp S, Chen CS, Jacob A, Chang LS, Welling DB. Radiosensitization of Vestibular Schwannomas by HDAC42. American Academy of Otolaryngology – Head and Neck Surgery Annual Meeting. San Diego, CA.
4. 10/2009 **Bush M,** Oblinger J, Kulp S, Chen CS, Jacob A, Chang LS, Welling DB. Novel Inhibitors of Vestibular Schwannomas and Meningiomas. American Academy of Otolaryngology – Head and Neck Surgery Annual Meeting. San Diego, CA.
5. 06/2010 Oblinger J, Lee T, Packer M, Huang J, **Bush M,** Kulp S, Chen CS, Giovannini M, Welling DB, Jacob A, Chang LS. HDAC42 and OSU-03012, Novel Small-Molecule Inhibitors for the Treatment of Vestibular Schwannomas. Children’s Tumor Foundation NF Conference. Baltimore, MD.
6. 04/2011 **Bush M,** Oblinger J, Davletova S, Burns S, Chang LS, Welling DB, Jacob A. Treatment of Vestibular Schwannoma Cells with ErbB Inhibitors. Combined Otolaryngology Society Meeting (American Neurotology Society). Chicago, IL. *American Neurotology Society Fellow Research Award*
7. 06/2011 Burns S, Akhmametyeva E, Oblinger J, **Bush M,** Huang J, Senner V, Giovannini M, Chen CS, Jacob A, Welling DB, Chang LS. AR-42 and AR-12 Potently Inhibit the Growth of NF2-deficient Human Meningiomas. Childrens Tumor Foundation NF Conference. Jackson Hole, WY.
8. 01/2012 Cipolla M, Iyer P, Dome C, Welling DB, **Bush M.** Modification and Comparison of Minimally Invasive Cochleostomy Techniques: A Pilot Study. The Triological Society Combined Sections Meeting, Miami, FL. *Paul Holinger, MD Resident Research Award (Middle Section)*
9. 05/2014 **Bush M,** Hardin B, Rayle C, Lester C, Studts C, Shinn J. Rural Barriers to Early Diagnosis and Treatment of Infant Hearing Loss in Appalachia. American Otological Society Annual Meeting - COSM. Las Vegas, NV.
10. 12/2014 **Bush M.** Targeting Regional Pediatric Congenital Hearing Loss Using a Spatial Scan Statistic. 14<sup>th</sup> Annual Cochlear Implants in Children Conference. Nashville, TN.
11. 12/2014 Elpers J, **Bush M.** Family Perceptions and Experiences with the Early Hearing Detection and Intervention System in Rural Communities. 14<sup>th</sup> Annual Cochlear Implants in Children Conference. Nashville, TN.



12. 12/2014 **Bush M.** Surgical Survey on the Usability and Applicability of the HiFocus Mid Scala Electrode. 14<sup>th</sup> Annual Cochlear Implants in Children Conference. Nashville, TN.
13. 05/2015 **Bush M.** Family Perceptions and Experiences with the Early Hearing Detection and Intervention System in Rural Communities. National EHDI Conference. Louisville, KY.
14. 05/2016 Hixon B, Chan S, Shinn J, **Bush M.** Assessment of Rural Adult Hearing Health Disparities--Access to Care in Cochlear Implantation. ACIA 14<sup>th</sup> International Conference on Cochlear Implants. Toronto, CA.
15. 05/2016 **Bush M**, Noblitt B, Adkins M. Rehabilitation Barriers for Rural Pediatric Cochlear Implant Recipients. 14<sup>th</sup> International Conference on Cochlear Implants. Toronto, CA.
16. 02/2017 Creel L, Lester C, **Bush M.** Impact of Hospital Scheduling on Follow-Up Appointments After a Failed Newborn Hearing Screen. National EHDI Conference. Atlanta, GA.
17. 07/2017 Fletcher KT, Liu T, Horrell Wolf EM, Muthoka M, **Bush M.** The Natural History and Rehabilitative Outcomes of Hearing Loss in Congenital Cytomegalovirus: A systematic review. Poster Highlights Session. 15th Symposium on Cochlear Implants in Children (CI2017). San Francisco, CA. *ACIA Scholarship Award*
18. 10/2018 Fletcher KT, Dicken FW, Adkins M, Cline T, McNulty B, Shinn J, **Bush M.** Comparison of In-Person versus Telemedicine Cochlear Implant Evaluations: A Pilot Study. AAO-HNS Annual Meeting. Atlanta, GA.
19. 10/2018 Neff R, Jicha G, Shinn J, **Bush M**, McNulty B. Neuropathological Findings of Dementia Associated with Hearing Loss. AAO-HNS Annual Meeting. Atlanta, GA.
20. 09/2019 McNulty B, **Bush M**, Neff R. Association of Hearing Loss and ApoE4 Allele on Alzheimer Disease Prevalence. AAO-HNS Annual Meeting. New Orleans, LA.
21. 01/2022 Ruffin W, Couch J, Burrell C, **Bush M.** Sociodemographic Factors and Healthcare Utilization in Pediatric Chronic Suppurative Otitis Media. The Triological Society Combined Sections Meeting. Coronado, CA.
22. 03/2022 Perez N, **Bush M.** Factors Influencing Pandemic Era EHDI Utilization and Access. EHDI Annual Conference. Cincinnati, OH.
23. 05/2022 Nix E, Willgruber A, Rawls C, Kinealy B, Zeitler D, **Bush M.** Readability and Quality of English and Spanish Online Health Information about Cochlear Implants. CI2022 ACIA Annual Conference. Washington, DC.
24. 05/2022 Sharrer C, Meinhardt G, Perez N, Downes A, Davidowitz T, Schuh M, Robinson L, Lustig L, **Bush M.** Reporting of Race, Ethnicity, and Sociodemographics in Cochlear Implant Clinical Trials: A Systematic Review. CI2022 ACIA Annual Conference. Washington, DC.
25. 06/2022 **Bush M**, Van Horn A, Creel L. In-Utero Opioid Exposure, Neonatal Abstinence Syndrome, and Infant Hearing Loss: A KID'S Database Review. HEAL 2022. Lake Como, Italy.
26. 06/2022 **Bush M**, Shinn J, Creel L, Studts C. Improving EHDI Efficiency and Adherence Through Patient Navigation: A Randomized Controlled Trial. HEAL 2022. Lake Como, Italy.

27. 06/2023 Davis A, Creel L, **Bush ML**. Cochlear Implant Surgical Disparities in Kentucky. CI2023 Annual Meeting. Dallas, TX.

## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS - *continued***

### **C. SPONSORED RESEARCH PROJECTS, GRANT & CONTRACT ACTIVITIES**

#### **Active**

**Project Title:** Appalachian STAR Trial (AppSTAR)  
**Project Number:** U01 OD033247  
**Principal Investigator(s):** **Matthew Bush, MD, PhD, MBA and Susan Emmett, MD, MPH**  
**Role in Project:** Co-PI  
**Effort:** 20% (Y1-Y5)  
**Institution/University:** University of Arkansas (Subaward to the University of Kentucky)  
**Source of Funding:** NIH (OD/NIDCR) (U01) (Extramural)  
**Duration of Project:** 9/23/2021 – 9/24/2026  
**Total Award:** \$5,143,363  
**Grant Number:** TBD

**Project Title:** Hearing Healthcare Assessment in Rural Communities (HHARC)  
**Project Number:** R21 DC019602  
**Principal Investigator(s):** **Matthew Bush, MD, PhD, MBA**  
**Role in Project:** PI  
**Effort:** 15% (Y1-Y2), 20% (Y3-Y5)  
**Institution/University:** University of Kentucky  
**Source of Funding:** NIH (NIDCD) (R21/R33) (Extramural)  
**Duration of Project:** 7/1/2021 – 6/30/2026  
**Total Award:** \$1,908,067  
**Grant Number:** TBD

**Project Title:** Communities Helping the Hearing of Infants by Reaching Parents: The CHHIRP Navigator Trial  
**Project Number:** R01DC017770  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Effort:** 30%  
**Institution/University:** University of Kentucky  
**Source of Funding:** NIH (NIDCD and OD) (R01) (Extramural)  
**Duration of Project:** 04/2019-03/2024  
**Total Award:** \$3,172,743  
**Grant Number:** 3200002435

**Project Title:** Kentucky Center for Clinical and Translational Science  
**Project Number:** 5UL1TR001998  
**Principal Investigator(s):** Philip Kern, MD  
**Role in Project:** Co-Investigator (Director of Dissemination and Implementation Core, Associate Director of TL1 Grant Program)  
**Effort:** 5%

**Institution/University:** University of Kentucky  
**Source of Funding:** NIH (NCATS) (Extramural)  
**Duration of Project:** 09/2016-06/2026  
**Total Award:** \$ 3,632,713  
**Grant Number:** 3200002515

**Project Title:** Behavioral Parent Training for Families with Deaf and Hard of Hearing Preschoolers

**Project Number:** R01DC016957  
**Principal Investigator(s):** Christina Studts, PhD (Sub-award PI: Julie Jacobs, MPH)

**Role in Project:** Co-Investigator

**Effort:** 5%

**Institution/University:** University of Colorado (Sub-award to University of Kentucky)

**Source of Funding:** NIH (NIDCD) (Extramural)

**Duration of Project:** 06/2018-05/2023 (Currently in NCE Phase)

**Total Award:** \$3,932,390

**Grant Number:** 3200003140

## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS - *continued***

### **C. SPONSORED RESEARCH PROJECTS, GRANT & CONTRACT ACTIVITIES – *continued***

#### **Inactive**

**Project Title:** The University of Kentucky Translation of Research Interventions in Practice, Populations, and Policy Leadership (TRIPPPLe) Team Alliance  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**, Nancy Schoenberg, PhD, Hannah Knudsen, PhD  
**Role in Project:** Co-PI  
**Effort:** No funded effort  
**Institution/University:** University of Kentucky  
**Source of Funding:** University of Kentucky College of Medicine  
**Duration of Project:** 08/2020-07/2022  
**Total Award:** \$200,000  
**Grant Number:** TBD

**Project Title:** COVID-19 Effects on Children who are Deaf or Hard of Hearing and their Families: Rapid and Rigorous Mixed-Methods Research to Inform Care  
**Project Number:** 7R01 DC016975-03  
**Principal Investigator(s):** Christina Studts, PhD (Sub-award PI: Julie Jacobs, MPH)  
**Role in Project:** Co-Investigator  
**Effort:** 2.5%  
**Institution/University:** University of Colorado (Sub-award to University of Kentucky)  
**Source of Funding:** NIH (NIDCD) (Extramural)  
**Duration of Project:** 06/2020-05/2021  
**Total Award:** \$74,245  
**Grant Number:** TBD

**Project Title:** STINCKY: Smell Testing for Infection with Novel Coronavirus in Kentucky  
**Project Number:** N/A  
**Principal Investigator(s):** **Joel Hamm, MD**  
**Role in Project:** Co-Investigator  
**Effort:** No funded effort  
**Institution/University:** University of Kentucky  
**Source of Funding:** UK Cure Alliance Pilot Program  
**Duration of Project:** 7/1/2020 – 12/31/2020  
**Total Award:** \$16,915  
**Grant Number:** TBD

**Project Title:** *In vitro* and *in vivo* response to HDAC inhibitors by vestibular schwannomas  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Effort:** No salary support  
**Institution/University:** The Ohio State University  
**Source of Funding:** American Hearing Research Foundation Wiley H. Harrison Grant AAO-HNS CORE grant (Extramural)  
**Duration of Project:** 07/2009-12/2010  
**Total Award:** \$25,000

**Project Title:** Pediatric Hearing Loss in Rural Appalachia: Assessment of Successful Identification and Timely Intervention  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Effort:** No salary support  
**Institution/University:** University of Kentucky  
**Source of Funding:** NIH Health Disparities Loan Repayment Award (Extramural)  
**Duration of Project:** 10/2012-10/2014  
**Total Award:** Medical School Educational Loan Repayment

**Project Title:** Bridging the Gaps: Assessment of Pediatric Hearing Loss in Appalachia  
**Project Number:** 8KL2TR000116  
**Principal Investigator(s):** Philip Kern, MD  
**Role in Project:** KL2 Scholar  
**Effort:** 50%  
**Institution/University:** University of Kentucky  
**Source of Funding:** NIH (NCATS)  
**Duration of Project:** 07/2012-02/2015  
**Grant Number:** 3049025063

**Project Title:** Resources for Mentorship of Clinician Scientists in Hearing and Balance Disorders  
**Project Number:** 1U24DC012079  
**Principal Investigator(s):** Deb Tucci, MD  
**Role in Project:** Mentorship Program Mentee  
**Effort:** No Salary Support  
**Institution/University:** Duke University  
**Source of Funding:** NIH (NIDCD) (Extramural)  
**Duration of Project:** 11/2012-11/2015

**Project Title:** Promoting Early Diagnosis of Congenital Hearing Loss through Patient Navigation  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI

**Effort:** 8%  
**Institution/University:** University of Kentucky  
**Source of Funding:** AAO-HNSF/Triological Society Career Development Award (Extramural)  
**Duration of Project:** 08/2014-07/2016  
**Total Award:** \$40,000  
**Grant Number:** 3048111555

**Project Title:** Assessing and Addressing Disruptive Behavioral Problems in Children with Hearing Loss

**Project Number:** [UL1TR000117 \(PI: Kern\)](#)  
**Principal Investigator(s):** Tina Studts, PhD/**Matthew Bush, MD, PhD**  
**Role in Project:** Co-PI

**Effort:** No salary support  
**Institution/University:** University of Kentucky  
**Source of Funding:** University of Kentucky CCTS Junior Investigator Pilot Award (Intramural)

**Duration of Project:** 02/2015-08/2016  
**Total Award:** \$25,000  
**Grant Number:** 1012142740

**Project Title:** Promoting Early Diagnosis of Congenital Hearing Loss through Patient Navigation

**Project Number:** 1K23DC014074  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI

**Effort:** 50%  
**Institution/University:** University of Kentucky  
**Source of Funding:** NIH (NIDCD) (Extramural)

**Duration of Project:** 03/2015-03/2019  
**Total Award:** \$685,149  
**Grant Number:** 3048112341

**Project Title:** Hearing Rehabilitation and the Progression of Cognitive Decline in the Elderly

**Project Number:** [UL1TR000117 \(PI: Kern\)](#)

**Principal Investigator(s):** Beth McNulty, MD  
**Role in Project:** Co-Investigator

**Effort:** No salary support  
**Institution/University:** University of Kentucky  
**Source of Funding:** University of Kentucky CCTS Pilot Award (Intramural)

**Duration of Project:** 06/2017-06/2018  
**Total Award:** \$25,000

**Project Title:** 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

**Project Number:** CR0114  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** Study site PI  
**Effort:** No salary support  
**Institution/University:** University of Kentucky  
**Source of Funding:** Advanced Bionics (Extramural)  
**Duration of Project:** 02/2016-02/2018  
**Total Award:** \$97,939  
**Grant Number:** 3048112980

**Project Title:** Adaptation and Pilot Implementation of the Family Check-Up for Deaf and Hard of Hearing Children  
**Project Number:** UL1TR000117 (PI: Kern)  
**Principal Investigator(s):** Christina Studts, PhD/**Matthew Bush, MD, PhD**  
**Role in Project:** Co-PI  
**Effort:** No salary support  
**Institution/University:** University of Kentucky  
**Source of Funding:** University of Kentucky College of Medicine (VI<sup>2</sup>P Grant Program)  
**Duration of Project:** 08/2017-04/2019  
**Total Award:** \$100,000



## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS - *continued***

### **D. NON-SPONSORED RESEARCH PROJECTS**

**Project Title:** Pulmonary and Critical Care Biobank  
**Project Number:** IRB# 44204  
**Principal Investigator(s):** Jamie Sturgill, PhD  
**Role in Project:** Co-investigator  
**Date Started:** 04/2018  
**Date to be Completed:** 03/2023  
**Institution/University:** University of Kentucky

**Project Title:** Parental Readiness for Telehealth  
**Project Number:** IRB# 46395  
**Principal Investigator(s):** Julie Lowman, PhD  
**Role in Project:** Co-investigator  
**Date Started:** 08/2018  
**Date to be Completed:** 08/2020  
**Institution/University:** University of Kentucky

**Project Title:** Factors Affecting In-Training Examination Scores of Residents  
**Project Number:** IRB# 42735  
**Principal Investigator(s):** Brett Comer, MD  
**Role in Project:** Co-investigator  
**Date Started:** 12/2017  
**Date to be Completed:** 11/2020  
**Institution/University:** University of Kentucky

**Project Title:** Validity, Reliability, and Accuracy of Audiological iOS Applications as Screening Tools for Hearing Loss in the Primary Care Setting  
**Project Number:** IRB# 45467  
**Principal Investigator(s):** Jennifer Shinn, PhD  
**Role in Project:** Co-investigator  
**Date Started:** 09/2018  
**Date to be Completed:** 08/2020  
**Institution/University:** University of Kentucky

**Project Title:** Diagnosis of Noise-Induced Hidden Hearing Loss  
**Project Number:** IRB# 47746  
**Principal Investigator(s):** Jennifer Shinn, PhD  
**Role in Project:** Co-investigator  
**Date Started:** 12/2018  
**Date to be Completed:** 10/2020  
**Institution/University:** University of Kentucky

**Project Title:** Factors Affecting Clinical Compliance Rates in the Otolaryngology Academic Setting  
**Project Number:** IRB# 46381  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Date Started:** 08/2018  
**Date to be Completed:** 06/2021  
**Institution/University:** University of Kentucky

**Project Title:** Pediatric Otolaryngology Outcomes  
**Project Number:** IRB# 56428  
**Principal Investigator(s):** Chris Azbell, MD  
**Role in Project:** Co-investigator  
**Date Started:** 01/2020  
**Date to be Completed:** 01/2021  
**Institution/University:** University of Kentucky

**Project Title:** COVID-19 Impact on Adults Who are Hard of Hearing  
**Project Number:** IRB# 59581  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Date Started:** 05/2020  
**Date to be Completed:** 05/2026  
**Institution/University:** University of Kentucky

**Project Title:** COVID-19 Mucosal Prophylaxis Using Povidone-Iodine  
**Project Number:** IRB# 58748  
**Principal Investigator(s):** Alexandra Kejner, MD  
**Role in Project:** Co-investigator  
**Date Started:** 04/2020  
**Date to be Completed:** 04/2021  
**Institution/University:** University of Kentucky

**Project Title:** Assessment of International Collaboration on Education and Patient Outcomes: A Study of Neurotology in Kenya  
**Project Number:** IRB# 45313  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Date Started:** 06/2018  
**Date Completed:** 06/2019  
**Institution/University:** University of Kentucky/University of Nairobi (Kenya)

**Title:** Comparison of Patient & Provider Outcomes with In-Person versus Remote Cochlear Implant Candidacy Evaluations  
**Project Number:** IRB# 45754  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**

**Role in Project:** PI  
**Date Started:** 06/2018  
**Date Completed:** 06/2019  
**Institution/University:** University of Kentucky

**Title:** Understanding Adult Perspectives Regarding Hearing Healthcare  
**Project Number:** IRB# 43842  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Date Started:** 05/2018  
**Date Completed:** 02/2020  
**Institution/University:** University of Kentucky

**Title:** The Use of Magnetic Resonance Spectroscopy in Monitoring Benign Cerebellopontine Angle Tumor Growth and Treatment Effect  
**Project Number:** IRB# 46396  
**Principal Investigator(s):** **Matthew Bush, MD, PhD**  
**Role in Project:** PI  
**Date Started:** 08/2018  
**Date Completed:** 04/2020  
**Institution/University:** University of Kentucky

## **XIV. RESEARCH & INTELLECTUAL CONTRIBUTIONS - *continued***

### **E. OTHER CREATIVE ACTIVITIES**

- 07/2015-present      **University of Kentucky CE Central**  
Designer and Developer, **Online Center for Hearing Health** Educational program to provide providers and patients information regarding pediatric hearing loss. Currently being used to train patient navigators for NIH-funded intervention study.  
<https://www.cecentral.com/node/1559>
- 09/08/2018      **Commonwealth Colloquium on Hearing and Balance: Practice and Policy, Commonwealth Stadium, Lexington, KY**  
Co-organizer and Co-chair  
Multi-disciplinary conference focused on the following objectives:  
1) Discuss solutions for patients with hearing loss,  
2) Identify new hearing healthcare policies influencing practice  
3) Assess the impact of aging on hearing loss  
<https://www.cecentral.com/live/14299>

## **XV. OTHER ACTIVITIES**

- Project Ear, Inc**
- 01/2007 Surgical Team Member  
Team member on a humanitarian mission team to Dominican Republic. Participated in surgical management of patients with ear diseases.
- 10/2008 Surgical Team Member  
Team member on a humanitarian mission team to Dominican Republic. Participated in surgical management of patients with ear diseases.
- Hear the Music Event – Lexington Event, Songs for Sound**
- 10/2014 **Coordinator and Host**  
Coordinated a non-profit event in conjunction with Songs for Sound to support the pediatric cochlear implant program at the University of Kentucky
- Hear the Music Event – Lexington Event, Songs for Sound**
- 11/2015 **Coordinator and Host**  
Coordinated a non-profit event in conjunction with Songs for Sound to support the pediatric cochlear implant program at the University of Kentucky. <http://uknow.uky.edu/content/music-their-ears-musicians-join-uk-patients-and-faculty-raise-awareness-pediatric-cochlear-i>
- Hear the Music – Lexington Event, Songs for Sound**
- 11/2016 **Coordinator and Host**  
Coordinated a non-profit event in conjunction with Songs for Sound to support the pediatric cochlear implant program at the University of Kentucky. <http://ukhealthcare.net/blog/songs-for-sound-event-cochlear-implant/>
- Med El Surgical Advisory Board Meeting, Lexington, KY**
- 08/2019 **Host**  
Coordinating host for the annual North America surgical advisory board meeting for a major cochlear implant company, Med El Inc.
- Sikiza Society, Inc (501c3 Non-Profit Organization)**
- 02/2020-present **Founder and President of Board of Directors**  
Sikiza Society is a non-profit organization focused on developing international collaborations to promote global health through research, education and clinical care. This organization has a foundation from a long-term collaborative relationship between Otolaryngologists from the University of Kentucky and the University of Nairobi.

03/2022 **Hearing Healthcare Collaborative  
Collaborative Member**

06/2022 **Cochlear Implant: Pediatric Access to Hearing (CI:PATH)  
Collaborative Initiative Member**

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