Associate Professor Edward Via College of Osteopathic Medicine Auburn Campus Auburn, AL wpearson01@auburn.vcom.edu

2

Department of Anatomy and Neurobiology2012Boston University School of MedicineThesis: A Two-Sling Mechanism of Hyolaryngeal Elevation in thePharyngeal Phase of SwallowingAdvisor: Ann C. Zumwalt, Ph.D.Certificate in Teaching in the Biomedical Sciences1986University of Georgia1986

Via College of Osteopathic Medicine, Auburn Campus (VCOM Auburn)		
2021-	Associate Professor, Department of Biomedical Sciences, Discipline of Anatomy	

Harvard University

2020-2021

	Quantitative Social Science	
2019-2020	Visiting Scholar, Human Flourishing Program at Quantitative Social Science	Institute for

Medical College of Georgia

2017-2019	Associate Professor, Cellular Biology & Anatomy, Medical College of Georgia,
	Augusta University

- 2017-2019 Associate Professor, Otolaryngology, Medical College of Georgia, Augusta University
- 2012-2017 Asst. Professor, Cellular Biology & Anatomy, Medical College of Georgia, Augusta University
- 2012-2017 Asst. Professor, Otolaryngology, Medical College of Georgia, Augusta University

Medical University of South Carolina

2013-2019 Adjunct Research Professor, Otolaryngology Head and Neck Surgery, Medical University of South Carolina

VCOM Auburn

July 2022- Discipline Chair of Anatomical Sciences

Augusta University, Medical College of Georgia

- 2017-2019 Director, Learning Community Pilot, Medical College of Georgia
- 2014-2016 Basic Science Faculty Lead for the Liaison Committee on Medical Education (LOME) accreditation site visit
- 2014-2019 Director, Phase 1 Head and Neck, Special Senses Module (MEDI 5169)
- 2014-2019 Director, Phase 1 Radiology Labs
- 2013-2018 Co-Director, Phase 1 Neuroscience Component Director 2
- 2013-2018 Director, Phase 1 Neuroanatomy Laboratory
- 2015-2019 Director, Neuroanatomy Course for Pre-matriculation Diversity Pipeline Progra
- 2012-2016 Director, Clinical Anatomy and Teaching Skills Elective (ANAT 5005)
- 2014-2019 Co-advisor, MCG Academic House System

Augusta University, College of Graduate Studies

2014-2018 Director of Neuroanatomy for Medical Illustrators (ANAT 7040)

6 12 106662 * 32 0012568 * 12 10012566 0 0 [(8)(3))(3)(3)(2) 0 0 12

- 2012-2018 Cardiopulmonary (MEDI 5158) Laboratory Instructor
- 2016-2019 Gastrointestinal System and Nutrition (MEDI 5163) Lecturer and Laboratory Instructor
- 2012-2015 Gastrointestinal and Urinary Systems Module (MEDI 5162) Lecturer and Laboratory Instructor
- 2016-2019 Genitourinary System Module (MEDI 5159) Lecturer and Laboratory Instructor
- 2012-2015 Endocrine and Reproductive Systems (MEDI 5164) Lecturer and Laboratory Instr
- 2012-2014 Nervous System and Special Senses (MEDI 5166) Lecturer and Laboratory Instruc
- 2015-2019 Head and Neck and Special Senses (MEDI 5166) Lecturer and Laboratory Instruct
- 2015-2019 Medical Neuroscience and Behavioral Health (MEDI 5174) Lecturer and Laboratory Instructor
- 2015-2019 Pre-matriculation Neuroanatomy Course Lecturer and Laboratory Instructor

Shez Tadavarthi, MCG Student, Medical Scholars Program, Topic: Dysphagia Etiologies Differentiate by Pharyngeal Swallowing Mechanics

Ana Anazco MCG student, Topic: Facilitating Neuroanatomy Learning for Pre-Matriculation Students

2016 Hutton Brandon, MCG Student, Medical Scholars Program, Topic: Dynamic 3D Modeling of Mechanical Efficacy Resulting from of Respiratory Swallowing Phase Training

Ryan Schwartzner, MCG Student, Medical Scholars Program, Topic: Computational Analysis of Swallowing Impairment in ALS patients

Duncan Dorris, Entering Medical Student, University of North Carolina, Topic: Sources of Variance in Computational Analysis of Swallowing Mechanics

Mark Ellis, MCG Student, Clinical Research, Topic: Patient Specific CASM Case Study of UPPP patients

Adam Jenks, MCG Student, Topic: Evaluating Muscles Underlying Tongue Base Retraction During Swallowing Using Ultrasound

Chijioke Ohamadike, MCG Student, Topic: Reliability of a Coordinate Mapping Method for Pediatric MBS Imaging

Benjamin Wilson, MCG Student, Topic: The Impact of Respiratory-Swallow Phase Cycle on Swallowing Mechanics in COPD Patients

Martin Halicek, MCG Student, Topic: Developing an Excel Macro as a Self-Study Tool to Focus Need Based Learning

Megan Lameka, MCG Student, Topic: Problem Sets Allow for Multiple Competency Acquisition in First Year Neuroscience Course (Co-mentor with Anna Edmondson)

Kishore Vedala, MCG Student, Topic: Facilitating Neuroscience Learning Through Near-Peer Led Reviews

Evodie Versulien MCG student, Topic: Facilitating Neuroanatomy Learning for Pre-Matriculation Students

2015 Rob Gassert, MCG Student, Medical Scholars Program, Topic: Evaluating Muscles Underlying Tongue Base Retraction in Deglutition Using Muscular Functional Magnetic Resonance Imaging (mfMRI)

> Tu Ahn Tran, MCG Student, Medical Scholars Program, Topic: Improvements from Post Respiratory-Swallow Phase Training Visualized in Patient Specific Computational Analysis of Swallowing Mechanics

Nelson May, MCG Student, Summer Research, Topic: Computational analysis of swallowing mechanics in dysphagia secondary to hemispheric stroke

Farres Oberlin, MCG Student,

- 2007-2011 Laboratory instructor and lecturer, Medical Gross Anatomy, Boston University School of Medicine
- 2008-2011 Course coordinator, Teaching in Anatomy elective for fourth year medical students, Boston University School of Medicine
- 2010-2012 Lecturer, Advanced Dysphagia Course, Sargent College, Boston University
- 2010-2012 Mentoring Students in Research

Keri Vasquez, PhD student, Topic: Effortful pitch glide: an exercise for potential swallowing rehabilitation evaluated by dynamic MRI

Natalie Witek, Medical Student, Topic: Assessment of Peer Teaching Model in Yemen

Carolee Estelle, Medical Student, Topic: International Collaboration to Develop Medical English Proficiency and Introduce Problem Based Learning into a Yemeni Medical School: A Case Study

Mason Schmutz, Medical Student, Topic: Longitudinal changes in professionalism attitudes of medical students

Lou Yu, Medical Student, Topic: Structural Analysis of Muscles Elevating the Hyolaryngeal Complex

Paul Yi, Medical Student, Topic: Architecture of suprahyoid muscles

Alisa Davidoff, SLP student, Topic: Reliability of coordinate mapping of hyolaryngeal mechanics of swallowing

Dorothy Adams, BU SLP student, Topic: Novel temporal measurements using videofluoroscopy

Zachary Smith, BU SLP student, Topic: Normalized Residue Ratio Scale

- 2007, 2010 Course Director and Instructor, Health Education Through English Conversation Course, Taiz University School of Medicine, Taiz, Yemen
- 1997-2007 Laboratory Instructor, Medical Gross Anatomy, Harvard Medical School

https://scholar.google.com/citations?user=8zfzZ0wAAAAJ&hl=en

- In Prep Pearson WG, Tucker J, Lee M. Human flourishing and medical education.
- Submitted Krekeler BN, Davidson KH, Kantargicil C, Pearson WG, Blair J, Martin-Harris B. Pharyngeal Swallowing Biomechanics underlying Modified Barium Swallowing

	Impairment Profile (MBSmP) scoring using Computational Analysis of Swallowing Mechanics (CASM)
Submitted	Barad J, Tucker J, Pearson WG. Clinical Shadowing Experience PIF Rubric. Clinical Teacher
Submitted	Garand KL, Beall J, Hill EG, Davidson KH, Blair J, Pearson WG, Martin-Harris B. Aging effects on oropharyngeal swallowing observed during modified barium swallow studies: a large cross-sectional study
2021	Tadavarthi Y, Hosseini P, Reyes SE, Garand KL, Pisegna JM, Pearson Jr WG. Pilot study of quantitative methods for differentiating pharyngeal swallowing mechanics by dysphagia etiology. Dysphagia. 2021 Apr;36(2):231.
2020	Vaizer R, Aslam S, Pearson WG Jr, Rockich-Winston N. What does it mean to be a physician? Exploring social imaginaries of first-year medical students. Int JMed Educ. 11:76-80.
2020	

2018	Wilmskoetter J, Martin-Harris B, Pearson Jr WG, Bonilha L, Elm JJ, Horn J, Bonilha HS. Differences in swallow physiology in patients with left and right hemispheric strokes. Physiology & Behavior. 194:144-152.
2018	Elis MA, Pate MB, Dorris HD, <u>Pearson WG</u> , Brown JJ Computational analysis of swallowing mechanics after surgery for obstructive sleep apnea. Ear Nose Throat J 97:122-127
2018	Garand KL, Schwertner R, Chen A, Pearson WG. Computational Analysis of Pharyngeal Swallowing Mechanics in Patients with Motor Neuron Disease: A Pilot Investigation. Dysphagia. 33(2):243-250.
2018	Tran TT, Martin Harris B, Pearson Jr WG. Improvements resulting from respiratory- swallow phase training visualized in patient-specific computational analysis of swallowing mechanics. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization. 6(5):532-538.
2017	Dietsch AM, Rowley CB, Solomon NP, Pearson WG. Swallowing mechanics associated with artificial airways, bolus properties, and penetration Aspiration status in trauma patients. Journal of Speech, Language, and Hearing Research. 60(9):2442-2451.
2017	May NH, Pisegna JM, Marchina S, Langmore SE, Kumar S, Pearson Jr WG. Pharyngeal swallowing mechanics secondary to hemispheric stroke. Journal of Stroke and Cerebrovascular Diseases. 26(5):952-961.
2016	Schwertner RW, Garand KL, Pearson WG. A Novel Imaging Analysis Method for Capturing Pharyngeal Constriction During Swallowing. Journal of Imaging Science. 1(1):1-6
2016	Pisegna JM, Kaneoka A, <u>Pearson WG,</u> Kumar S, Langmore SE. Effects of Non-Invasive Brain Stimulation on Post-Stroke Dysphagia: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Clinical Neurophysiology. 127:956-968.
2016	<u>Pearson WG</u> , Davidoff AA, Smith Z, Adams D, Langmore SE. Swallowing Mechanics of Post-Treatment Head and Neck Cancer Patients: A Retrospective Videofluoroscopic Study. World Journal of Radiology. 8(2): 192–199
2016	Gassert RB and <u>Pearson WG</u> . Evaluating Muscles Underlying Tongue Base Retraction in Deglutition Using Muscular Functional Magnetic Resonance Imaging (mfMRI). Magnetic Resonance Imaging. 34(2): 204-208.
2016	<u>Pearson WG</u> , Taylor K, Blair J, Martin-Harris B. Morphometric analysis of swallowing mechanics underlying epiglottic inversion. The Laryngoscope. 126(8):1854-1858.
2015	Krisciunas GP, Golan H, Marinko LN, <u>Pearson W</u> , Jalisi S, Langmore SE A novel manual therapy program during radiation therapy for head and neck cancer our dinical experience with 5 patients. Oin Otolaryngol. 41(4):425-431.
2015	Natarajan R, Stavness I, <u>Pearson WG</u> . Semi-Automatic Tracking of Hyolaryngeal Coordinates in Swallowing Videofluoroscopy. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization. 5(6): 379-389.

- 2014 Vasquez-Miloro K, Langmore SE, <u>Pearson WG</u>. Effortful Pitch Glide: A Potential New Exercise Evaluated by Dynamic MRI. Journal of Speech, Language, and Hearing Research. 57:1243-1250.
- 2014 Thompson ZT, Obeidin F, Davidoff AA, Hightower CL, Johnson CZ, Rice SL, Sokolove RL, Taylor BK, Tuck JM, <u>Pearson WG</u>. "Coordinate Mapping of Hyolaryngeal Mechanics in Swallowing." Journal of Visualized Experiments: Clinical and Translational Medicine. (87): e51476, doi:10.3791/51476.
- 2014 <u>Pearson WG</u> and Zumwalt AC. 2014. "Visualizing Hyolaryngeal Mechanics in Swallowing Using Dynamic MRI." Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization. 2:208-216.
- 2013 <u>Pearson Jr WG</u>, Hindson DF, Langmore SE, Zumwalt AC. Evaluating Swallowing Muscles Essential for Hyolaryngeal Bevation by Using Muscle Functional Magnetic Resonance

2016

2015 Pisegna JM, Kaneoka A, Pearson WG, Kumar S, Langmore SE

- 2014 Thompson TZ, Focht KL, Martin-Harris B, <u>Pearson WG</u>. Morphometric analysis of hyolaryngeal mechanics. Dysphagia Research Society, Nashville, TN, March 2014
- 2014 Blair J, Johnson CZ, Rice SL, Martin-Harris B, Pearson WG, Morphometric Analysis of Swallowing Structures Using MBS Imaging. Multidisciplinary Head and Neck Cancer Symposium, Scottsdale, AZ, Feb 2014
- 2013* <u>Pearson WG</u>, Zumwalt AC. Evaluating shape changes generated by a two-sling mechanism of hyolaryngeal elevation in swallowing using dynamic MRI. Dysphagia Research Society, Seattle, WA, March 2013
- 2013* <u>Pearson WG</u>, Davidoff AA, Langmore SE An Anatomical Landmark Coordinates Approach for Analyzing Hyolaryngeal Movement as Visualized in Videofluoroscopic Swallowing Studies. 1st International Workshop on Biomechanical and Parametric Modeling of Human Anatomy, Vancouver, CA, Jan 2013
- 2012 Vasquez Miloro, K, <u>Pearson, WG</u>, Langmore, SE Effortful Pitch Gide: New exercise that may improve the swallow. American Speech-Language-Hearing Association Annual Convention, Atlanta, GA, Nov 2012
- 2012 Ravichandiran M, Davies J, <u>Pearson W</u>, Agur, A. Architecture and functional characteristics of the supra- and infrahyoid muscles: a three-dimensional modeling study. American Association of Clinical Anatomists, Grenada, West Indies, July 2012
- 2012* <u>Pearson WG</u>, Davidoff AA, Langmore SE. Reliability of a New Approach to Videofluoroscopic Kinematic Analysis. Dysphagia Research Society, Toronto, CA, March 2012
- 2012 Vasquez-Miloro K, <u>Pearson WG</u>, Langmore SE. Effortful pitch glide: an exercise for potential swallow rehabilitation evaluated by dynamic MRI. Dysphagia Research Society, Toronto, CA, March 2012
- 2011** <u>Pearson WG</u>, Langmore SE, Yu LB, Zumwalt AC. Muscles Underlying the Elevation of the Hyolaryngeal Complex. American Association of Anatomists, Washington, DC, April 2011
- 2011* <u>Pearson WG</u>, Langmore SE, Yu LB, Zumwalt AC. Muscles elevating the hyolaryngeal complex. Dysphagia Research Society, San Antonio, TX, March 2011
- 2010* <u>Pearson WG</u>, Langmore SE, Zumwalt AC. Disambiguating muscular structure effecting hyoid movement in pharyngeal phase of deglutition. American Association of Anatomists, Anaheim, CA, April 2010
- 2010* * <u>Pearson B</u>, Promoting student scholarship: a web-based peer reviewed educational resource. American Association of Anatomists, Anaheim, CA, April 2010
- 2010* <u>Pearson WG</u>, Langmore SE, Zumwalt AC. Disambiguating muscular forces effecting hyoid movement in pharyngeal phase of deglutition. Dysphagia Research Society, San Diego, CA, March 2010
- 2009* * <u>Pearson B</u>, Hutchinson C, Noordzij JP, Comparing methods for transcutaneous access to the vocal folds. American Association of Anatomists, New Orleans, LA, April 2009

- 2017 Tadavarthi Y, Hosseini S, Reyes S, Pearson WG. Dysphagia Etiologies Differentiate By Pharyngeal Swallowing Mechanics. Medical Student Research Day; Augusta, GA. September 2017
- 2017 Hosseini S, Tadavarthi Y, Pearson WG. Modularity of Covariant Pharyngeal Swallowing Mechanics. Medical Student Research Day; Augusta, GA. September 2017
- 2016 Brandon H, Stavness I, Anderson P, Pearson WG. Modeling Swallowing Mechanics Resulting From Respiratory-Swallow Phase Training. Medical Student Research Day; Augusta, GA. September 2016
- 2016 Schwertner RW, Garand KL, Pearson WG. Impact Of Motor Neuron Disease On Pharyngeal Swallowing Mechanics. Medical Student Research Day; Augusta, GA. September 2016
- 2016 Wilson B, Newton W, Garand KL, Martin-Harris B, Strange C, Pearson WG. Mechanical Changes to Deglutition in COPD-Related Dysphagia. Medical Student Research Day; Augusta, GA. September 2016
- 2015 Gassert RB, Pearson WG. Evaluating Muscles Underlying Tongue Base Retraction in Deglutition

- 2019 Panelist. Bringing Together Different Perspectives on Establishing Healthier Learning Environment. MCG Health Sciences Education Day. Augusta, GA. March 2019
- 2018 Presenter. Charleston Swallowing Conference, Anatomic and Physiologic Targets for Intervention: Strategies for Assessment Driven Treatment, Evanston IL July 2018.
- 2017 Panelist. Re-enchanting Medicine through Re-imagined Monastic Living in a Contemporary Biomedical Academic Setting. Conference on Medicine and Religion, Houston, TX March 2017.
- 2016 Seminar. Boston University School of Medicine Department of Anatomy and Neurobiology. Uncovering the functional anatomy of dysphagia secondary to hemispheric stroke. Boston, MA. November 2016.
- 2016 Seminar. University of Indiana Department of Speech and Hearing Science Seminar. Uncovering the functional anatomy of swallowing impairment using common use diagnostic imaging. Bloomington, IN. October 2016.
- 2016 SLP Grand Rounds. Clinical insights through patient specific computational analysis of swallowing. GR Health Augusta, GA. November 2016.
- 2015 Seminar. Patient Specific Analysis of Swallowing Impairment. MCG Department of Cellular Biology and Anatomy Seminar, Augusta, GA. February 2015.
- 2014 Panelist. Dysphagia Research Society. Anatomical considerations in patient specific modeling. The Future for Dysphagia Research and Treatment Panel Predictive Analytical Models to Improve Long Term Care in Assessment, Treatment, and Recovery. Moderator: Art Miller, PhD. Nashville, TN. March 2014.
- 2013 Presenter. 70th Anniversary Workshop: Audiology and Speech Center, Walter Reed National Military Medical Center. Assessing the Biomechanics of Swallowing and Swallowing Impairment Using Videofluoroscopy. Bethesda, MD. November 2013.
- 2013 Presenter. Charleston Swallowing Conference, Functional Anatomy of Oropharyngeal Swallowing. Charleston, SC. October 2013.
- 2013 Seminar. MCG Department of Otolaryngology Seminar, Dysphagia Research Chalk Talk. Augusta, GA October 2013.
- 2013 Seminar. MCG Department of Cellular Biology and Anatomy Seminar, Translating the functional anatomy of hyolaryngeal elevation in the pharyngeal phase of swallowing. Augusta, GA. September 2013.

- 2012 Presenter. Cadaver Memorial Service. Invited by first year Medical College of Georgia students to bring remarks to the class. November 2012, 2013, 105, 2016, 2017, 2018, 2019.
- 2011 Seminar. American Association of Clinical Anatomists, translational research symposium; Investigating the functional anatomy of swallowing from cadaver lab to clinic. Columbus, OH. July 2011.
- 2011 Seminar. Boston University School of Medicine, Department of Anatomy and Neurobiology

2016-2019	Member, Curriculum Evaluation Team
2016-2017	Search Committee for Athens Partnership Associate Dean of Curriculum
2015-2019	Member, Curriculum Oversight Committee (COC)
2015-2019	Faculty Advisor, MCG Honor Council
2014-2019	Co-Advisor, Academic House
2014-2016	Member, LOME Steering Committee
2014-2016	Member, LOME Executive Committee
2014-2016	Consultant and Member, LOME Institutional Self-Study Committee for Academic and Learning Environments; Faculty Preparation, Productivity, Participation, and Policies; Educational Resources and Infrastructure
2014-2016	Consultant and Member, LOME Institutional Self-Study Committee for Competencies, Curricular Objectives, and Curricular Design; Curricular Content
2014-2016	Consultant and Member, LOME Institutional Self-Study Committee for Mission, Planning Organization and Integrity; Leadership and Administration
2014-2015	Member, COC Ad Hoc Committee Neuroscience Curriculum Review
2013-2019	
2013-2019	Member, Phase 1-2 Curriculum Committee
2012-2016	Class Advisor, MCG Class of 2016
2012-2016	Member, MCG Faculty Senate Student Affairs Committee

MCG Department of Cellular Biology and Anatomy

- 2016 Member, Annual Retreat Planning Committee
- 2015 Presenter, Annual Retreat
- 2014 Presenter, Annual Retreat
- 2014-2015 CBA Educator Search Committee

National

- 2016-2019 Dysphagia Research Society Membership Committee
- 2015, 2017 Faculty, Dysphagia Research Society Annual Meeting
- 2014-2016 Mentor on VA Career Scientist Award: Kendrea Garand, PhD
- 2014-2016 Dysphagia Research Society Multidisciplinary Scientific Advancement Ad Hoc Committee
- 2014 Textbook Reviewer: McFarland, David H. Netter's atlas of anatomy for speech, swallowing, and hearing. Elsevier Health Sciences

2013-2022