# Soren Y. Lowell, Ph.D., CCC-SLP Telephone: 315-443-9648

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### EDUCATION

Ph.D.	Speech and Hearing Sciences, <b>Minor:</b> Neuroscience <u>University of Arizona,</u> Department of Speech, Language and Hearing Sciences, Tucson, Arizona	2005
M.S.	Doctoral Dissertation Director: Julie Barkmeier-Kraemer Speech-Language Pathology <u>University of Arizona,</u> Department of Speech, Language and	1994
B.A.	Hearing Sciences, Tucson, Arizona Psychology <u>Columbia University</u> , New York, New York	1989

#### WORK EXPERIENCE

Professor, Communication Sciences and Disorders Dept.,	2020 – present
Syracuse University, Syracuse, NY	
Associate Chair, Communication Sciences and Disorders Dept.,	2017 – 2020
Syracuse University, Syracuse, NY	
Associate Professor, Communication Sciences and Disorders Dept.,	2014 – 2020
Syracuse University, Syracuse, NY	
Assistant Professor, Communication Sciences and Disorders Dept.,	2008 – 2014
Syracuse University, Syracuse, NY	
Adjunct Assistant Professor, Dept. of Otolaryngology and Comm.	2009 – present
Sciences, SUNY Upstate Medical University, Syracuse, NY	
Postdoctoral Research Fellow, National Institutes of Health,	2005 – 2008
Laryngeal and Speech Section, Bethesda, MD	
Adjunct Instructor for Voice Disorders class, George Washington	2006
University, Washington, DC	
Graduate Teaching Associate, Instructor for Voice Disorders class,	2004
University of Arizona, Tucson, AZ	
Speech-Language Pathologist, Carondelet St. Joseph's Hospital,	2001 – 2005
Tucson, AZ	
Speech-Language Pathologist, Robert Wood Johnson University	1998 – 2001
Hospital, New Brunswick, NJ	
Speech-Language Pathologist, Healthcare Providers Incorporated,	1997 – 1998
multiple locations	
Speech-Language Pathologist, Children's National Medical Center,	1996 – 1997
Washington, D.C.	
Speech-Language Pathologist, Carondelet St. Joseph's and St. Mary's	1994 – 1996
Hospitals, Tucson, AZ	
Graduate Research Assistant, University of Arizona, Tucson, AZ	1991 – 1994

#### COMPETITIVE FELLOWSHIPS, HONORS AND AWARDS

<ul> <li>Laryngoscope, on journal website, and in in ENT Today.</li> <li>The College of Arts and Sciences Award for Excellence in Master's 2014</li> <li>Level Teaching. Nominated and competitively selected award for excellence in graduate, Master's level teaching.</li> </ul>	
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Conference Fellow for ASHA's Clinical Practice Research Institute.     Peer-reviewed, competitively selected trainee award for grant writing in     clinically focused research.	
Conference Fellow for ASHA's Lessons for Success workshop. 2010	
Peer-reviewed, competitively selected trainee award for grant writing skills.	
• ASHA Leadership Development Program. Peer-reviewed, competitively 2008	
selected award for a leadership training program.	
<ul> <li>Grunewald-Blitz Fellowship through the Speech and Hearing 2002 – 2005</li> </ul>	,
Sciences Department, University of Arizona	
<ul> <li>Dissertation proposal selected for the New Investigator's Research 2004</li> </ul>	
Forum, The Voice Foundation's 33 <sup>rd</sup> Annual Symposium, Philadelphia, PA	
<ul> <li>Predoctoral Traineeship through the National Center for 2001</li> </ul>	
Neurogenic Communication Disorders, University of Arizona	
<ul> <li>Outstanding Student in Speech-Language Pathology, 1994</li> </ul>	
awarded upon completion of M.S. program, University of Arizona	
<ul> <li>Jacob Jacoby Scholar, Columbia University</li> <li>1987</li> </ul>	
<ul> <li>Herbert Hawkes Scholar, Columbia University</li> <li>1986</li> </ul>	

### **RESEARCH TRAINING / EXPERIENCE**

**Post-Doctoral Training**, Mentor: Christy Ludlow, Ph.D.

- Acquired and analyzed functional and anatomical MRI to assess cortical swallowing networks and sensory stimulation effects
- Implemented peripheral and cortical stimulation techniques for swallowing, including tDCS, air pulse and vibrotactile stimulation
- Analyzed temporal and biomechanical swallowing parameters from videofluoroscopy
- Differentially diagnosed neurologic voice disorders such as spasmodic dysphonia and vocal tremor in team assessments

Doctoral Training and Dissertation, Mentor: Julie Barkmeier-Kraemer, Ph.D.

Committee Members: Jeanette Hoit, Ph.D., Brad Story, Ph.D., Leslie Tolbert, Ph.D.

- Conducted videostroboscopic examinations and electroglottography (EGG) analysis to determine laryngeal kinematics in voice disorders
- Measured and analyzed respiratory kinematic signals to determine respiratory features of voice disorders

**Doctoral Research Rotation,** Mentor: Brad Story, Ph.D., Speech and Hearing Sciences Department

 Implemented a three-mass model of vocal fold vibration (Titze & Story, 2002) to determine acoustic, aerodynamic and mechanical consequences of increasing laryngeal muscle activation, using customized MatLab and Praat scripts for data analysis

**Doctoral Research Rotation,** Mentor: Andrew Fuglevand, Ph.D., Physiology/Neuroscience Department

- Conducted electromyographic, intramuscular single motor unit recordings of hand muscles in humans
- Analyzed resulting action potential recordings, including cross-correlation analysis of synchronous motor unit firing to determine degree of common input to motor nuclei in functionally related and non-related hand muscles

## PEER-REVIEWED PUBLICATIONS

\* Denotes authorship of PhD students and \*\* denotes Bachelor's or Master's students for whom I was the primary mentor.

- 1. **Lowell, SY**, Kelley, RT, \*\*Dischinat, N, Monahan, M, \*Hosbach-Cannon, CJ, Colton, RH, & Mihaila, D (in press). Clinical features of essential voice tremor and associations with tremor severity and response to octanoic acid treatment. *Laryngoscope*.
- Lowell, SY, Colton, RH, Kelley, RT, \*\*Auld, M, & \*\*Schmitz, H (Online ahead of print). Isolated and combined respiratory training for muscle tension dysphonia: preliminary findings. *Journal of Voice*.
- 3. \*Mendes, MB & Lowell, SY (2020). A systematic review of the physiological effects of the effortful swallow maneuver in adults with normal and disordered swallowing. *American Journal of Speech-Language Pathology*, 29(3), 1655-1673.
- 4. \*Hosbach-Cannon, CJ, **Lowell, SY**, Colton, RH, Kelley, RT, & \*\*Bao, X (2020). Assessment of tongue position and laryngeal height in two professional voice populations. *Journal of Speech, Language & Hearing Research, 63(1),* 109-124.
- 5. \*\*Mercer, E & Lowell, SY (2020). The Low Mandible Maneuver: preliminary study of its effects on aerodynamic and acoustic measures. *Journal of Voice*, *34(4)*, 645.e1-645.e9. EPub release Jan, 2019.
- Lowell, SY, Kelley, RT, Monahan, M, \*Hosbach-Cannon, CJ, Colton, RH, & Mihaila, D (2019). The effect of octanoic acid on essential voice tremor: a double-blind, placebo-controlled study. *Laryngoscope*, 129(8), 1882-1890.
- Lowell, SY, Vigil DC, Abdelaziz M, Edmonds K, Goel-Sakhalkar P, Guiberson M, Fleming Hamilton A, Hung P, Lee-Wilkerson D, Miller C, Rivera Perez J, Ramkissoon I, Scott D (2018). Pathways to cultural competence: diversity backgrounds and their influence on career path and clinical care. *Perspectives of the ASHA Special Interest Groups, SIG 14, 3(Part 2),* 30-39.
- Lowell, SY, Kelley, RT, Busekroos, L, Voleti, RV, \*Hosbach-Cannon, CJ, Colton, RH, & Mihaila, D (2017). The effect of anchors on reliability of endoscopic tremor ratings. *Laryngoscope*, 127(2), 411-416.
- 9. Lowell, SY & \*\*Hylkema, JA (2016). The effect of speaking context on spectral- and cepstralbased acoustic features of normal voice. *Clinical Linguistics & Phonetics, 30(1),* 1-11.
- \*Hosbach-Cannon, CJ, Lowell, SY, Kelley, RT, & Colton, RH (2016). A preliminary quantitative comparison of vibratory amplitude using rigid and flexible stroboscopic assessment. *Journal of Voice*, 30(4), 485-492. EPub release May, 2015.

- 11. \*\*Rosenthal, AL, **Lowell, SY**, & Colton, RH (2014). Aerodynamic and acoustic features of vocal effort. *Journal of Voice, 28(2),* 144-153.
- 12. Lowell, SY, Colton, RH, Kelley, R, & \*\*Mizia, SA (2013). Predictive value and discriminant capacity of cepstral and spectral-based measures during continuous speech. *Journal of Voice*, *27(4)*, 393-400.
- 13. Lowell, SY, Kelley, RT, Awan, SN, Colton, RH & \*\*Chan, NH (2012). Spectral and cepstralbased acoustic features of dysphonic, strained voice quality. *Annals of Otology, Rhinology & Laryngology, 121(8)*, 539-548.
- 14. **Lowell, SY**, Reynolds, RC, Chen, G, Horwitz, B & Ludlow, CL (2012). Functional connectivity and laterality of the motor and sensory components within the volitional swallowing network. *Experimental Brain Research, 219(1),* 85-96.
- 15. Lowell, SY, Kelley, RT, Colton, RH, Smith, PB & Portnoy, JE (2012). Position of the hyoid and larynx in people with muscle tension dysphonia. *Laryngoscope*, *122(2)*, 370-377.
- 16. Lowell, SY, Colton, RH, Kelley, R, & \*\*Hahn, YC (2011). Spectral and cepstral-based measures during continuous speech: capacity to distinguish dysphonia and consistency within a speaker. *Journal of Voice, 25(5),* e223-232.
- Lowell, SY, Poletto, CJ, Knorr-Chung, BR, Reynolds, RC, Simonyan, K, & Ludlow, CL (2008). Sensory stimulation activates both motor and sensory components of the swallowing system. NeuroImage, 42(1), 285-295.
- 18. Lowell, SY, Barkmeier-Kraemer, JM, Hoit, JD & Story, BH (2008). Respiratory and laryngeal function during spontaneous speaking in teachers with voice disorders. *Journal of Speech, Language and Hearing Research, 51(2),* 333-349.
- 19. Lowell, SY, & Story, BH (2006). Simulated effects of cricothyroid and thyroarytenoid muscle activation on adult-male vocal fold vibration. *Journal of the Acoustical Society of America. Jul, 120(1),* 386-97.
- 20. Hockensmith, GB, **Lowell, SY,** & Fuglevand, AJ (2005). Common input across motor nuclei mediating precision grip in humans. *Journal of Neuroscience, 25(18),* 4560-4564.
- 21. Lowell, S, Beeson, P, & Holland, A (1995). The efficacy of a semantic cueing procedure on naming performance in adults with aphasia. *American Journal of Speech-Language Pathology, 4*, 109-114.
- 22. Swisher, L, Restrepo, MA, Plante, E, & **Lowell, S** (1995). Effects of implicit and explicit "rule" presentation on bound morpheme generalization in specific language impairment. *Journal of Speech and Hearing Research, 38*, 168-173.
- 23. Swisher, L, Plante, E, & **Lowell, S** (1994). Nonlinguistic deficits of children with specific language disorders complicate the interpretation of their non-verbal IQ scores. *Language, Speech and Hearing Services in Schools, 25*, 235-240.

## INVITED MANUSCRIPTS AND BOOK CHAPTERS

- 24. Lowell, SY (2019). Muscle tension dysphonia. In J.S. Damico & M.J. Ball (Eds.), *SAGE Encyclopedia of Human Communication Sciences and Disorders*. Thousand Oaks, CA: SAGE Publications, Inc.
- 25. Lowell, SY (2012). The acoustic assessment of voice in continuous speech. *Perspectives on Voice and Voice Disorders*, 22 (2), 57-63.
- 26. Ludlow, CL, Loucks, T, Simonyan, K, & Lowell, SY (2008). Brain imaging of voice, swallow, and other upper airway functions. In R. Ingham (Ed.), *Neuroimaging in Communication Sciences and Disorders* (pp. 87-128). San Diego: Plural Publishing.

#### PEER REVIEWED AND PROFESSIONAL PRESENTATIONS

- 1. Lowell, SY, Kelley, RT, Monahan, M, Hosbach-Cannon, CJ, Colton, RH, Mihaila, D. (October 2019). Octanoic Acid for the Treatment of Essential Voice Tremor: A Double-Blind, Randomized Controlled Trial. Podium presentation, Fall Voice Conference, Dallas, TX.
- 2. Lowell, SY. (Accepted for upcoming presentation October 2019). *Instrumentation to Augment Assessment and Treatment of MTD.* Podium presentation, Fall Voice Conference, Dallas, TX.
- Ramkissoon, I, Abdelaziz, M, Edmonds, K, Goel, P, Guiberson, M, Hamilton, A, Hung, PF, Lee-Wilkerson, D, Lowell, S, Miller, C, Perez, JR, Scott, D, & Vigil, D (November 2018). Building a resume that tells YOUR story. Oral seminar, American Speech-Language-Hearing Association Convention, Boston, MA.
- Boyce, S, Lowell, S, McAllister, T & Parham, D (November 2018). Theory to practice: strategies for communicating speech science concepts with clients & students. Short course, American Speech-Language-Hearing Association Convention, Boston, MA.
- \*Hosbach-Cannon, CJ, Lowell, S, Colton, R, Kelley, R & \*\*Bao, X (May, 2018). Assessment of tongue position and laryngeal height in two professional voice populations. Poster presentation, 2018 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- \*\*Mercer, E & Lowell, S (November 2017). The low mandible maneuver: effects on aerodynamic & acoustic measures. Poster presentation, American Speech-Language-Hearing Association Convention, Los Angeles, CA.
- 7. Neel, A, **Lowell, S**, & McAllister Byun, T (November 2017). *Acoustic technology for clinical assessment & treatment of speech and voice disorders.* Short course, American Speech-Language-Hearing Association Convention, Los Angeles, CA.
- 8. Edmonds, K, Gerrard, E, Green, T, Guiberson, M, Hamilton, A, Harmon, A, Hung, PF, Johnson, K, **Lowell, S**, Ramkissoon, I, Scott, D, & Vigil, D (November 2017). *How do I look? A cultural competence "selfie".* Oral seminar, American Speech-Language-Hearing Association Convention, Los Angeles, CA.
- Griffer, M, Sumida, Y, Scott, D, Abreu, R, Cornish, N, Edmonds, K, Gerrard, E, Green, T, Harmon, A, Johnson, K, Lowell, S, & Vigil, D (November, 2016). *Mentoring cultural competence: academic-clinician partnerships.* Oral seminar, American Speech-Language-Hearing Association Convention, Philadelphia, PA.
- 10. Lowell, SY (October, 2015). *Essential voice tremor: Characteristics and treatment.* Invited speaker for a Philadelphia essential tremor support group. Philadelphia, PA.
- Lowell, SY, Kelley, RT, Busekroos, L, Voleti, RV, \*Hosbach-Cannon, CJ, Colton, RH (May, 2015). Effects of training on visual-perceptual nasolaryngoscopy ratings of tremor. Oral platform presentation, 2015 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- \*Hosbach-Cannon, CJ, Lowell, SY, Kelley, RT, Colton, RH, \*\*Garrison, H (June, 2014). *Amplitude of vibration in normal speakers: A preliminary quantitative analysis*. Poster presentation, 2014 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- 13. Lowell, SY (May, 2014). Essential Voice Tremor: Characteristics, treatment and current research. Invited speaker for a congressional briefing, organized by a patient support group for people affected by essential tremor. Washington, D.C.
- 14. Lowell, SY (October, 2013). *Voice therapy: Current methods and evidence.* Invited speaker for a continuing education seminar presented at Syracuse University. Attendees received ASHA

CEU's and represented clinicians from Syracuse and the central NY region. Syracuse University, Syracuse, NY.

- Lowell, SY, Colton, RC, Kelley, RT & \*\*Mizia, SA (May, 2013). Predictive value and discriminant capacity of cepstral and spectral-based measures during continuous speech. Oral platform presentation, 2013 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- Lowell, SY (February, 2013). Evidence based practice. Invited speaker for a continuing education seminar presented to the Central New York Speech, Language and Hearing Association, Syracuse, NY. Attendees received ASHA CEU's and represented clinicians from the central NY region.
- 17. **Lowell, SY**, Kelley, RT, Colton, RC, Smith, PB & Portnoy, JE (June, 2012). *Hyoid and laryngeal position in people with muscle tension dysphonia.* Oral platform presentation, 2012 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- Lowell, SY, Kelley, R, Awan, S, Colton, RH & \*\*Chan, N (June, 2012). Spectral and cepstralbased features of dysphonic, strained voice quality. Oral platform presentation, 2012 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- French, CC, Kelley, R, Lowell, SY, Colton, RH (June, 2012). Calcium hydroxylapatite vocal fold medialization for unilateral vocal fold paralysis: Comparing cepstral measures with CAPE-V and videostroboscopic ratings. Poster presentation, 2012 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA. Presented by C. French (first author).
- 20. Lowell, SY, Kelley, RT, Colton, RC, Smith, PB & Portnoy, JE (November, 2011). *Hyoid and laryngeal position in people with muscle tension dysphonia*. Oral platform presentation, American Speech-Language-Hearing Association Convention, San Diego, CA.
- 21. Lowell, SY, Colton, RC, Kelley, R, & \*\*Hahn, YC (November, 2010). *Predictive value and discriminant capacity of cepstral and spectral measures*. Poster presentation, American Speech-Language-Hearing Association Convention, Philadelphia, PA.
- Lowell, SY, Colton, RC, Kelley, R, & \*\*Hahn, YC (June, 2010). Spectral and cepstral-based measures during continuous speech: capacity to distinguish dysphonia and consistency within a speaker. Oral platform presentation, 2010 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- 23. Lowell, SY (May, 2010). *Voice evaluation: Perceptual ratings and current methods.* Invited speaker for a continuing education seminar presented to the Central New York Speech, Language and Hearing Association, Syracuse, NY. Attendees received ASHA CEU's and represented clinicians from the central NY region.
- Kelley, R, Portnoy, JE, Colton, R., Paseman, A, Lowell, SY (June, 2009). Efficient stroboscopic evaluation. Oral platform presentation, 2009 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.
- 25. Lowell, SY, Dietrich-Burns, K, \*\*Griffith, C, Knorr-Chung, BR, & Ludlow, CL (March, 2008). *Effects of oral-sensory and vibrotactile stimulation on swallowing in humans*. Oral platform presentation, Dysphagia Research Society, Isle of Palms, SC.
- 26. Lowell, SY, Poletto, CJ, \*\*Graybeal, C, Simonyan, K & Ludlow, CL (March, 2007). *Cerebral activation patterns during swallowing and related tasks using functional magnetic resonance imaging*. Poster presentation, Dysphagia Research Society, Vancouver, BC.
- 27. Ludlow, CL, Sonies, BC, Humbert, IA, Crujido, L, Martin, SB, & Lowell, SY (March, 2007). Validity and reliability of the swallowing safety scale. Poster presentation, Dysphagia Research Society, Vancouver, BC.
- Lowell, SY, Barkmeier-Kraemer, JM, Hoit, JD & Story, BH (June, 2006). Respiratory and laryngeal function during spontaneous speaking in teachers with a voice disorder. Oral platform presentation, 2006 Voice Foundation's Annual Symposium for Care of the Professional Voice, Philadelphia, PA.

- 29. Lowell, SY, Hoit, JD, Barkmeier-Kraemer, JM (November, 2004). Speech breathing behavior in muscle tension dysphonia: Preliminary findings. Poster presentation, American Speech-Language-Hearing Association Convention, Philadelphia, PA.
- 30. Lowell, SY (June, 2004). Respiratory and laryngeal behavior during speech in teachers with vocal fatigue. Dissertation proposal presented to a panel of voice experts in the New Investigator's Research Forum, The Voice Foundation's 33<sup>rd</sup> Annual Symposium, Philadelphia, PA.
- 31. Lowell, S, Kiernan, B, Winter, S, & Barkmeier, J (November, 2002). Can we train children to use healthy vocal habits? A project proposal. Tucson Continuing Education Forum for Speech-Language Pathologists, University of Arizona, Tucson, AZ.
- 32. Lowell, S. Beeson, P. & Holland, A (June, 1995). The efficacy of a semantic cueing procedure on naming performance of adults with aphasia. Oral platform presentation of thesis, Clinical Aphasia Conference, Sunriver, OR.

## **RESEARCH SUPPORT**

## National Institute on Deafness and Other Communication Disorders (NIH/NIDCD) 2020 – 2023 Academic Research Enhancement Award (AREA)

R15 DC018132 The Effects of Respiratory-Based Treatment for Muscle Tension Dysphonia: a Randomized Controlled Trial

The purpose of this project is to determine the respiratory and acoustic effects of respiratory-based treatment of muscle tension dysphonia.

Role: Principal Investigator, Direct Costs: \$300,000.

## SU Women in Science & Engineering (WISE)

### **Faculty Leadership Development Grant**

Mentoring Training for Diversity Related Programmatic Leadership

The purpose of this grant is to support and promote leadership development for women faculty in STEM departments.

Role: Principal Investigator, Award: \$1,000.

#### National Spasmodic Dysphonia Association National Spasmodic Association Travel Grant for Fall Voice Conference

This travel grant was awarded for meritorious research presentations at the Fall Voice Conference through funding provided by a foundation that is dedicated to improving research and clinical care for neurological voice disorders.

Role: Principal Investigator, Award: \$500.

## SU ADVANCE, Syracuse University

## **External Mentors and Collaborators Program**

Mentored Training in the Use of Ultrasound Imaging for Tracking Hyoid Movement

The purpose of this project was to obtain mentored training from an international expert in the area of ultrasound for laryngeal imaging and measurement.

Role: Principal Investigator, Direct Costs: \$4,000.

#### 2020

2019

2015

## National Institute on Deafness and Other Communication Disorders (NIH/NIDCD) 2013 – 2016 R03 NIH Small Grant Program

R03DC012429 Effects of Octanoic Acid for Treatment of Essential Voice Tremor

The purpose of this project is to determine the acoustic, perceptual and functional effects of octanoic acid for treatment of essential voice tremor.

Role: Principal Investigator, Direct Costs: \$300,000.

#### American Speech-Language-Hearing Foundation Research Grant for New Investigators

<u>Hyoid and Laryngeal Position in Individuals With and Without Muscle Tension Dysphonia</u> The purpose of this project was to determine radiographically measured differences in hyoid and laryngeal position during phonation for people with muscle tension dysphonia as compared to people

with normal voice.

Role: Principal Investigator, Total Costs: \$5,000.

#### University of Arizona Intramural Funding

AD020079-002 Program Enhancement for School-Age Child Care Grant Program, for Wings on Words child language disorders program. *Role: Collaborator (PI: Barbara Kiernan),* Total Costs: \$14,880

### PATENTS

Ludlow, CL, Morgan, N, Dold, G, **Lowell, S,** Dietrich-Burns. Systems and Methods for Recovery from Motor Control via Stimulation to a Substituted Site to an Affected Area. 03/5/2013. Patent # 8388561

 This patent encompasses methods, devices and systems for facilitating recovery of motor function in dysphagia associated with neurological disorders. Sensory or motor stimulation devices such as vibrotactile and electrical stimulation are volitionally applied to alternative regions to facilitate improved motor skills in the affected region.

Ludlow, CL, Morgan, N, Dold, G & **Lowell, S**. Device for Volitional Swallowing with a Substitute Sensory System. 05/28/2013. Patent # 8449445

 This patent addresses a device for laryngeal sensory stimulation, movement recordings and visual feedback of laryngeal movement for facilitating motor recovery in people with dysphagia associated with neurological disorders. The device includes vibrotactile sensory stimulation and piezo-electric sensors for registering and displaying laryngeal movement that occurs during swallowing.

### **TEACHING EXPERIENCE**

#### Complete Courses

 First Year Forum (undergraduate course) Role: Associate Professor, Syracuse University

#### 2001 – 2003

2009 - 2011

•	Anatomy & Physiology of the Speech & Hearing Mechanisms (undergraduate/graduate course) <i>Role: Assistant/Associate Professor</i> , Syracuse University	2009 – present 2017 – present
•	Dysphagia (graduate course) Role: Assistant/Associate/Full Professor, Syracuse University	2009 – present
•	Voice Disorders (graduate course) Role: Assistant/Associate/Full Professor, Syracuse University	2008 – present
•	Fundamentals of Speech Science (undergrad/graduate course) Role: Assistant Professor, Syracuse University	2010 – 2013
•	Voice, Articulation and Phonology (graduate course) Role: Adjunct Instructor, George Washington University	2006
•	Voice and Voice Disorders (graduate course) Role: Course Instructor, University of Arizona	2003 – 2004
	<u>dividual or Series Lectures</u> Clinical/Classroom Practicum (undergraduate & graduate course, 50-55 students). <b>Cultivating Cultural Competence</b> lecture.	September 2019 April 2019
•	Role: Guest Lecturer Survey of Human Communication Disorders (undergraduate course) Management of Voice Disorders lecture. Role: Guest Lecturer	2004
•	Anatomy and Physiology of the Speech Mechanism (undergraduate course, 70 students). <b>Phonatory Anatomy:</b> 3 lecture series. <i>Role: Guest Lecturer</i>	2003
•	Anatomy and Physiology of the Speech Mechanism (undergraduate course, 70 students). <b>Phonatory Physiology:</b> 3 lecture series. <i>Role: Guest Lecturer</i>	2003
•	Survey of Human Communication Disorders (undergraduate course, 60 students). <b>Introduction to Dysphagia</b> lecture. <i>Role: Guest Lecturer</i>	2002 – 2003
•	Counseling in Communication Disorders (graduate course, 30 students). <b>Multicultural Issues in Counseling</b> lecture. <i>Role: Guest Lecturer</i>	2002

## STUDENT MENTORING FOR THESES & DISSERTATIONS

#### **Undergraduate Theses**

<ul> <li>Eve Mercer, Bachelor's Speech-Language Pathology student Communication Sciences &amp; Disorders, Syracuse University         <ul> <li>Role: Primary advisor for Honor's Capstone thesis project. Thesis title: The Low Mandible Maneuver: Effects on Aerodynamic and Acoustic Measures.</li> </ul> </li> </ul>	2016 – 2018
<ul> <li>Master's Theses</li> <li>Amelia Kelly, Master's Speech Language Pathology student Communication Sciences &amp; Disorders, Syracuse University         <ul> <li>Role: Committee Member (project discontinued)</li> </ul> </li> </ul>	2015

<ul> <li>Allison Rosenthal, Master's Speech Language Communication Sciences &amp; Disorders, Syrace</li> <li><i>Role: Thesis advisor/Primary mentor</i>. Tand Acoustic Features of Vocal Effort.</li> </ul>	use University
<ul> <li>Ashley Cukier, Master's Speech Language Pa Communication Sciences &amp; Disorders, Syraci <i>Role: Committee Member</i></li> </ul>	
<ul> <li>Brooke Butler, Master's Speech Language Pa Communication Sciences &amp; Disorders, Syrace</li> <li><i>Role: Committee Member</i></li> </ul>	
Doctoral Dissertations	
<ul> <li>Nina Benway, Doctoral Speech Pathology stu Communication Sciences &amp; Disorders, Syracu <i>Role: Committee Member</i></li> </ul>	•
<ul> <li>Katharina Winiker, Doctoral Candidate in Con University of Canterbury, Christchurch, New Z</li> <li>Role: External reviewer for PhD dissen Dissertation title: Assessment and Beh the Upper Oesophageal Sphincter in H</li> </ul>	Zealand tation and oral exam avioural Modulation of
<ul> <li>Mariana Mendes Bahia, Doctoral Speech Pat Communication Sciences &amp; Disorders, Syract</li> <li><i>Role: Primary mentor/Dissertation advi</i></li> </ul>	hology student <b>2018 – present</b> use University
<ul> <li>Carly Maldonado, Doctoral Audiology student Communication Sciences &amp; Disorders, Syract</li> <li><i>Role: Committee Member</i></li> </ul>	2015 – 2018
<ul> <li>Hammam AlMakadma, Doctoral Audiology stu Communication Sciences &amp; Disorders, Syracu <i>Role: Committee Member</i></li> </ul>	
<ul> <li>Carly Jo Hosbach-Cannon, Doctoral Speech Communication Sciences &amp; Disorders, Syract <i>o</i> Role: Primary mentor/Dissertation advi Assessment of Tongue Position and La Professional Voice Populations.     </li> </ul>	use University isor, Dissertation title:

### INVITED PROFESSIONAL SERVICE AND TRAINING

### Department of Communication Sciences and Disorders (CSD):

- Chair, CSD P&T Committee for Dr. Vander Werff, promotion review, 2020
- Chair, CSD NTT Promotion Review Committee for Ms. Lightburn, 2020
- Member, CSD P&T Committee for Dr. Tumonova, promotion with tenure review, 2020
- Member, CSD NTT Promotion Review Committee for Ms. Voleti, 2020
- Member, CSD NTT Promotion Review Committee for Dr. Pellegrino, 2020
- Chair, CSD Graduate Admissions Committee, 2017-2020
- Chair, CSD P&T Committee for Dr. Riley, promotion with tenure review, 2019-2020
- Co-Chair, Department Search Committee for Gebbie Clinic Director, 2019-2020
- Chair, CSD Chair Selection Committee, 2019

- Chair, Department Search Committee for Assistant Professor, 2018-2019
- Chair, CSD Student Diversity & Success Committee, 2017-present
  - Developed and launched the CSD ALIGN program (Academic Skill Building and Networking) in 2020, geared toward enhancing the retention and success of underrepresented graduate CSD students. ALIGN program components include academic skill building through academic coaching sessions and facilitated study groups, professional skill building, and peer and professional mentoring.
- Associate Chair, Department of CSD, 2018-2020
- Chair, CSD P&T Committee for Dr. Preston, 2016
- Member, CSD Graduate Scholarships Committee, 2016
- Chair, CSD Graduate Curriculum Committee, 2015-present
- Faculty Mentor for Ms. Ramani Voleti, Assistant Teaching Professor in CSD, 2015-present
  - Awards and recognition that I have provided support and information for include 2019 Distinguished Clinician Award (New York Student Speech-Language-Hearing Association), and Board Certification for the Academy of Neurologic Communication Disorders & Sciences, 2014.
- Member, Department Search Committee for Gebbie Clinical Supervisor, 2014
- Faculty Mentor for Ms. Anita Lightburn, Assistant Teaching Professor in CSD, 2014-present
  - Awards and recognition that I have provided support and information for include International Teaching English to Speakers of Other Languages Certification, 2016
- Member, CSD Graduate Admissions Committee, 2013-2016.
- Faculty Mentor for Dr. Victoria Tumanova, Assistant Professor in CSD, 2013-present
  - Mentoring has included writing feedback for grants, publications, and all academic TT faculty reporting and review processes, as well as guidance in research, teaching and service elements of her professorate responsibilities.
- Member, Department Search Committee for Assistant Professor, 2013-2014
- Member, Department Search Committee for Assistant Professor, 2012-2013
- Member, Department Search Committee for Assistant Professor, 2011-2012
- Member, Department Curriculum Committee, 2008-2015
- College of Arts and Sciences/Syracuse University:
- Member, Syracuse University First Year Seminar (FYS) Faculty Advisory Committee, 2020
  - Committee work included curriculum content and syllabus planning for FYS course, determining links of FYS to subsequent higher-level diversity and inclusion related courses, and advocating for successful university-level course approval.
- Member, A&S Committee on Social Justice/Social Differences Curriculum Implementation for SEM 100, 2019-present
  - Committee work has included review of A&S courses to determine those which may address inclusion, diversity, equity and access content.
- Member, Search Committee for Neuroscience Professor of Practice, 2019
- Reviewer, Graduate School Summer Dissertation Competition, 2019
- Member, Search Committee for Assistant Professor in Psychology (School Psychology specialty), 2018-2019
- Member, A&S First Year Forum Curriculum Revision Committee, 2018
- Member, A&S First Year Experience Seminar Curriculum Development Committee, 2018
- Primary Teaching Mentor (2020-21) and Mentoring Committee Member for Dr. Jennifer Cook, Assistant Teaching Professor of Neuroscience, 2019-present
  - Mentoring includes teaching observations and feedback, individual mentoring meetings, and general committee meetings to review and discuss Dr. Cook's progress

- Member, Faculty Mentoring Committee for Dr. Robin Jones, Associate Teaching Professor of Neuroscience, 2018-present
  - Awards and recognition that I have provided support and information for include the SU Meredith Teaching Award, 2019
- Member, Search Committee for Neuroscience Professor of Practice, 2016
- Member, Selection Committee for College of Arts & Sciences Teaching Awards, 2016
- Member, Selection Committee for College of Arts & Sciences Teaching Awards, 2015
- Member, Search Committee for Neuroscience Professor of Practice, 2014-2015
- Member, Neuroscience Program Governance Committee, 2013
- Member, Committee for CSD Chair Search/Review, 2013
- Member, Search Committee for endowed Neurosciences Professorship, 2009-2010

#### National and International Committees and Boards

- Member, International Working Group for Utility of Ultrasound for Swallowing and Upper Airway Assessment, 2020-present
- Chair, Multicultural Issues Board, American Speech-Language-Hearing Association, 2018
- Member, Multicultural Issues Board, American Speech-Language-Hearing Association, 2016-2017
- Member, Voice and Alaryngeal Communication Convention Committee, American Speech-Language-Hearing Association, 2014 & 2015
- Member, Advisory Committee on Evidence-Based Practice, American Speech-Language-Hearing Association, 2010-2012
- Member, Women in Science and Engineering (WISE), 2008-present

#### Reviewer Roles, National and International

- Ad hoc grant reviewer: Health Research Council of New Zealand, 2020
- Reviewer for New Investigator Research Grant (NIRG), American Speech-Language-Hearing Foundation, 2019
- Reviewer for Grant Program for Projects on Multicultural Activities, American Speech-Language-Hearing Association, 2017
- Ad hoc grant reviewer: Health Research Council of New Zealand, 2016 2017
- Ad hoc grant reviewer: Veteran's Administration Scientific Review Group, 2016
- Reviewer for Advancing Academic-Research Careers Award (AARC), American Speech-Language-Hearing Association, 2015
- Reviewer for Mentored Grant Reviewer Program, American Speech-Language-Hearing Association, 2007, 2013, 2015
- Reviewer for Students Preparing for Academic-Research Careers (SPARC) Award, American Speech-Language-Hearing Association, 2013
- Ad hoc reviewer for the following journals:
  - Journal of Voice
  - o Journal of Speech, Language, & Hearing Research
  - o American Journal of Speech-Language Pathology
  - Journal of the Acoustical Society of America
  - o Transactions on Neural Systems and Rehabilitation Engineering
  - Journal of Laryngology & Otology
  - International Journal of Neuroscience
  - o International Journal of Speech-Language Pathology
  - Neurobiology of Aging
  - Journal of Alzheimer's Disease
  - Journal of Communication Disorders

- Folia Phoniatrica et Logopaedica
- Logopedics, Phoniatrics & Vocology
- Computers in Biology & Medicine
- Clinical Medicine Insights: Ear, Nose and Throat
- Logopedics, Phoniatrics & Vocology
- PLOS ONE
- Frontiers in Human Neuroscience

#### **OTHER SKILLS AND SERVICE**

•	Initiated and led aphasia communication group for adults with aphasia,	2000 – 2001
	Robert Wood Johnson University Hospital, New Brunswick, NJ Provided bilingual Spanish-English speech-language services in clinical	1994 – 2005
	job positions (bilingual Spanish-English speaking)	1004 - 2000
•	Provided tutoring services to individuals enrolled in the	1993 – 1994
	American Indian Training Program in the Speech and Hearing	
	Department, University of Arizona	

#### **PROFESSIONAL LICENSURES AND CERTIFICATIONS**

•	Certificate in progress for Preparing Mentors and Advisors at Xavier (P-MAX) program. This program trains mentoring and advising skills for academicians, with a focus on culturally responsive mentoring of underrepresented students.	2020 – present
۰	New York Licensure, The University of the State of New York, Education Department, License # 019508	2009 – present
•	Maryland Licensure, The Maryland State Board of Audiology, HAD, and Speech-Language Pathologists, License # 03661	2005 – 2009
	Clinical Credentials, National Institutes of Health, Clinical Center	2005 – 2008
	Certificate in College Teaching, University of Arizona Certificate of Clinical Competence in Speech-Language Pathology, American Speech, Language and Hearing Association, ASHA # 01116958	2003 1994

#### **PROFESSIONAL MEMBERSHIPS**

- American Speech, Language and Hearing Association (ASHA)
- Special Interest Group 3: Voice and Voice Disorders, ASHA
- Special Interest Group 13: Swallowing and Swallowing Disorders, ASHA
- National Honor Society in Neuroscience (Nu Rho Psi) Faculty Member