Speech Pathology & Audiology Program, A101 CPA, PO Box 5190, Kent, OH 44242-0001 ● abarikro@kent.edu ● (330)672-1906

#### **EDUCATION**

Ph.D. in Communication Sciences & Disorders	August 2017
University of Florida (UF)	Gainesville, FL

Dissertation title: Comparing the Effects of a Novel Versus Existing Transcutaneous Electrical Stimulation Protocol on Lingual Palatal Peak Pressure and Pressure Duration During Swallowing in Healthy Older Adults

Dissertation Chair: Dr. Michael Crary

Master of Science in Speech Language Pathology	July 2007
University of Social Welfare & Rehabilitation Sciences (USWR)	Tehran, Iran

Thesis title: Investigation of the Relationship Between Hand Gestures and Speech in Adults Who Stutter

Bachelor of Science in Speech Language Pathology	September 2004
Isfahan University of Medical Sciences (IUMS)	Isfahan, Iran

### PROFESSIONAL APPOINTMENTS

Assistant Professor, Speech Pathology & Audiology Program, Kent State University	9/2017- Present Kent, OH
Graduate Assistant, Department of Speech Language & Hearing Sciences, University of Florida	8/2012-8/2017 Gainesville, FL
Lecturer and Clinical Supervisor, Department of Speech Therapy, Isfahan University of Medical Sciences	7/2010-7/2012 Isfahan,Iran
HONORS & AWARDS	
Summer Research Appointment Award, Kent State University (\$10000)	2019
Graduate Student Council (GSC) travel award, University of Florida (\$350)	2016
ASHA International Graduate Student Scholarship (\$5000)	2015
Institute for Learning in Retirement (ILR) Award for Graduate Aging Research (\$1200)	2015
Springer Publishing Travel Scholarship, Dysphagia Research Society (\$500+ free one year membership of Dysphagia Research Society+ Free registration for 22nd Dysphagia Research Society annual meeting)	2014

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Student Travel Award, Office of Research, University of Florida (\$800)	2014,2016
Grinter Fellowship Award, Graduate School ,University of Florida (\$6000)	2012
Top Researcher, Rehabilitation Sciences School, Isfahan University of	2011
Medical Sciences, Isfahan, Iran	2011

#### **PUBLICATIONS**

#### Books:

Derakhshandeh F, **Barikroo A**, Yazdani Z: Translation of the Deglutition and its Disorders by Perlman AI and Schulze K to Farsi. Isfahan University of Medical Scieces, 2009. (Perlman AI and Schulze K. Deglutition and its Disorder. San Diego, London, Singular Publishing Group, 1997)

### **Peer reviewed Papers:**

**Barikroo A**, Hegland K, Carnaby G, Bolser D, Manini T, Crary M. (2019). The Effects of Electrical Stimulation Pulse Duration on Lingual Palatal Pressure Measures During Swallowing in Healthy Older Adults. *Dysphagia* In Press, 2019 (Impact factor:2.531)

**Barikroo A**, Carnaby G, Bolser D, Rozensky R. & Crary M. (2018). Transcutaneous Electrical Stimulation on the Anterior Neck Region: The Impact of Pulse Duration and Frequency on Maximum Amplitude Tolerance and Perceived Discomfort. *J Oral Rehabil*. doi:10.1111/joor.12625 (Impact factor: 2.051)

**Barikroo A**, Carnaby G, & Crary M. (2017). Electrical Stimulation Therapy for Dysphagia: A Follow-up Survey of US Dysphagia Clinicians. *Int J Rehabil Res.* 40(4), 360-365. (Impact factor: 1.432)

**Barikroo A**, Berretin-Felix G, Carnaby G., & Crary M. (2017) Effect of Transcutaneous Electrical Stimulation Amplitude on Timing of Swallow Pressure Peaks between Healthy Younger and Older Adults. *Gerodontology*. 34(1), 24-32. (Impact factor:1.439)

**Barikroo A**, Carnaby, G., & Crary M. (2015). Effects of Age and Bolus Volume on Velocity of Hyolaryngeal Excursion in Healthy Adults. *Dysphagia*, 30(5), 558-564. (Impact factor:2.531)

Berretin-Felix G, Sia I, **Barikroo A**, Carnaby GD, Crary MA (2016). Immediate Effects of Transcutaneous Electrical Stimulation on Physiological Swallowing Effort in Older Versus Young Adults. *Gerodontology*. 33(3), 348-355 (Impact factor:1.439)

Baijens L, **Barikroo A**, & Pilz W. (2013). Intrarater and Interrater Reliability for Measurements in Videofluoroscopy of Swallowing. *Eur J Radiol*, *82*(10), 1683-1695. (Impact factor: 2.843)

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**Barikroo A**, Tohidast A, Mansuri B, Yadegar far GH (2011). Comparing Phonological Working Memory in Preschool Children Who Do and Do Not Stutter. *Journal of Research in Rehabilitation Sciences*.7(3), 234-252.

**Barikroo A**, Hosseini SZ, Ansari Z. (2011). The Prevalence of Oropharyngeal Dysphagia among Nursing Home Residents in Isfahan. *Journal of Research in Rehabilitation Sciences*. 7(2), 155-161.

**Barikroo A**, Lam P.M. (2011) Comparing the Effects of Rehabilitation Swallowing Therapy vs. Functional Neuromuscular Electrical Stimulation Therapy in an encephalitis patient: a case study. *Dysphagia*. 26(4), 418-423. (Impact factor: 2.531)

**Barikroo A**, Rezaei N, Yadegari F, Rahgozar M. (2008). Investigation of the Relationship Between Hand Gestures and Speech in Adults Who Stutter. *Quarterly Journal of Rehabilitation*. 9(3 & 4), 16-21.

#### SUBMITTED MANUSCRIPTS

**Barikroo A**, Hegland K, Carnaby & Crary M. (2018). Transcutaneous Electrical Stimulation on the Submental Area: The Relations of Biopsychological Factors with Maximum Amplitude Tolerance and Perceived Discomfort Level (Under review)

### ADDITIONAL RESEARCH EXPERIENCES

Research Assistant 2013-2014

Swallow Function and Oral Morbidities in Radiation Therapy Treated Head/ Neck Cancer Survivors

Supervisors: Drs Michael Crary and Giselle Carnaby

Contributed in recruiting the subjects, collecting the data, measuring the data and entering the data into the system for statistical analysis.

Principal Investigator 2011-2012

The Incidence of Penetration and Aspiration among Patients with Glottal Isfahan, Iran Closure Insufficiency

Supervising the undergraduate final dissertation

Supervised developing of research proposal, collecting and analyzing the data.

#### **PRESENTATIONS**

**Barikroo Ali**, Hegland Karen, Carnaby Giselle, Crary Michael (2019). "Transcutaneous Electrical Stimulation on the Submental Area: The Relations of Biopsychological Factors with Maximum Amplitude Tolerance and Perceived Discomfort Level". Will be presented in the 27th Dysphagia Research Society annual meeting at San Diego, California, USA

Gainesville, FL

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**Barikroo Ali**, Hegland Karen, Carnaby Giselle, Bolser Donald, Manini Todd, Crary Michael (2018). "The Effects of Electrical Stimulation Pulse Duration on Lingual Palatal Pressure Measures During Swallowing in Healthy Older Adults" Presented as oral presentation in the American Speech Language & Hearing association annual convention at Boston, Massachusetts, USA.

**Barikroo Ali**, Hegland Karen, Carnaby Giselle, Bolser Donald, Manini Todd, Crary Michael (2018). "The Effects of Electrical Stimulation Pulse Duration on Lingual Palatal Pressure Measures During Swallowing in Healthy Older Adults" Presented in the 26<sup>th</sup> Dysphagia Research Society annual meeting at Baltimore, Maryland, USA

Crary Michael, LaGorio Lisa, Madhavan Aarthi, **Barikroo Ali**, Rogus-Pulia Nicole, Carnaby Giselle (2017). "Pre-Clinical Dysphagia & Community Dwelling Older Adults-An Emerging Population" Presented as seminar in the American Speech Language & Hearing association annual convention at Los Angeles, California, USA.

**Barikroo Ali**, Carnaby Giselle, Crary Michael (2017). "Electrical Stimulation Therapy for Dysphagia: A Follow-up Survey of US Dysphagia Clinicians" Presented in the Public Health and Health Professions Research Day at University of Florida, Florida, USA.

**Barikroo Ali,** Carnaby Giselle, Crary Michael (2016). "Electrical Stimulation Therapy for Dysphagia: A Follow-up Survey of US Dysphagia Clinicians". Presented in the American Speech Language & Hearing association annual convention at Philadelphia, Pennsylvania, USA.

**Barikroo Ali,** Carnaby Giselle, Crary Michael (2014). "Effects of Age and Bolus Volume on Velocity of Hyolaryngeal Excursion in Healthy Adults" Presented in the American Speech Language & Hearing association annual convention at Orlando, Florida, USA.

**Barikroo Ali**, Carnaby Giselle, Crary Michael (2014). "Effects of Age and Bolus Volume on Velocity of Hyolaryngeal Excursion in Healthy Adults" Presented in the 22<sup>nd</sup> Dysphagia Research Society annual meeting at Nashville, Tennessee, USA.

**Barikroo Ali,** Carnaby Giselle, Crary Michael (2014). "Effect of Transcutaneous Electrical Stimulation (TES) Amplitude on Timing of Swallow Pressure Peaks between Healthy Young and Older Adults" Presented in the 22<sup>nd</sup> Dysphagia Research Society annual meeting at Nashville, Tennessee, USA.

Baijens Laura, **Barikroo Ali**, Pilz Walmari (2013). "Reliability for Measurements in Videofluoroscopy of Swallowing: A Systematic Review" Presented in the 222nd general meeting of the Dutch Association of Otorhinolaryngology and Head & Neck Surgery at Nieuwegein, The Netherlands.

Baijens Lauren, **Barikroo Ali**, Pilz Walmari (2013). "Reliability for Measurements in Videofluoroscopy of Swallowing: A Systematic Review" Presented in the 20<sup>th</sup> Dysphagia research society annual meeting at Seattle, Washington, USA.

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**Barikroo Ali** (2012). "The Incidence of Penetration and Aspiration in Patients with Glottal Closure Insufficiency" Presented in the 11<sup>th</sup> congress of Iran speech therapy at Isfahan University of Medical Sciences, Isfahan, Iran.

**Barikroo Ali** (2011). "The prevalence of oropharyngeal dysphagia among nursing home residents" Presented in the 1st ESSD Congress. Leiden, Netherlands.

**Barikroo Ali** (2011). "Comparing Swallowing Therapy versus Functional Neuromuscular Electrical Stimulation Therapy in a Dysphagic Patient". Presented in the congress on neuromuscular and electrodiagnostic medicine at Isfahan University of Medical Sciences, Isfahan, Iran.

**Barikroo Ali** (2011). "Comparing Swallowing Therapy versus Functional Neuromuscular Electrical Stimulation Therapy in a Dysphagic Patient". Presented in the congress on New Approaches in Rehabilitation of Motor Disorders" at Isfahan University of Medical Sciences.

**Barikroo Ali** (2011). "Dysphagia in Elderly Population". Presented in the congress on "New approaches in rehabilitation of motor disorders" at Isfahan University of Medical Sciences, Isfahan, Iran.

**Barikroo Ali** (2011). "Comparing Phonological Working Memory in Preschool Children with and without Stuttering". Presented in the 10th congress of Iran speech therapy at Jondi Shapur University of Medical Sciences. Ahvaz, Iran.

**Barikroo Ali** (2007). "New window for Investigation Gesture-Speech Relationship in Adults who Stutter". Presented in the 8th congress of Iran speech therapy at Tehran University of Medical Sciences, Tehran, Iran.

**Barikroo Ali** (2006). "Language Development after Hemispherectomy". Presented in the congress on Language and Brain at Ferdosi University of Medical Sciences, Mashhad, Iran.

#### RESEARCH INTERESTS

Swallowing neurorehabilitation

Effects of aging on swallowing

Effects of transcutaneous electrical stimulation on different aspects of swallowing

Neurogenic dysphagia

#### **TEACHING EXPERIENCES**

Pediatric and Adult Dysphagia, Kent State University Primary instructor

Spring 2019

A 4-credit course for graduate class with 29 students in Speech Pathology and Audiology Program. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures,

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development of tests and launching lab activities. I also utilized educational movies, clicker technology, peer presentation, and hands-on activities to facilitate active learning.

Speech Anatomy and Physiology, Kent State University Primary instructor A 3-credit course for undergraduate class with 61 students in Speech Pathology and Audiology Program. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and other graded activities. I also will utilize educational movies and clicker technology to facilitate active learning.

Fall 2018

Voice Disorders, Kent State University Primary instructor

Summer III 2018

A 2-credit course for graduate class with 31 students in Speech Pathology and Audiology Program. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and launching lab activities. I also utilized educational movies, clicker technology, virtual patients, and hands-on activities to facilitate active learning.

Pediatric and Adult Dysphagia, Kent State University Primary instructor

Spring 2018

A 4-credit course for graduate class with 41 students in Speech Pathology and Audiology Program. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and launching lab activities. I also utilized educational movies, clicker technology, peer presentation, and hands-on activities to facilitate active learning.

Speech Anatomy and Physiology, Kent State University Primary instructor

Fall 2017

A 3-credit course for undergraduate class with 66 students in Speech Pathology and Audiology Program. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and other graded activities. I also utilized educational movies and clicker technology to facilitate active learning.

Speech Anatomy and Physiology (Online course), University of Florida Teaching assistant

Fall 2016

A 3-credit online course for undergraduate class with 36 students in Department of Speech, Language & Hearing Sciences. Responsibilities include two hours lecture review on laryngeal framework and muscles, coordinating extra credit projects, and grading.

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Neuroplasticity and Rehabilitation, University of Florida Guest lecturer	Fall 2016
A 3-credit course for undergraduate class with 62 students in Department of Speech, Language & Hearing Sciences. Responsibilities include one hour lecture on tDCS and its application in swallowing rehabilitation	
Neural Basis of Communication Teaching assistant	Spring 2015
A 3-credit course for undergraduate class with 78 students in Department of Speech, Language & Hearing Sciences. Responsibilities included holding office hours, coordinating extra credit projects, and grading.	
Introduction to Speech Disorders, University of Florida Teaching assistant	Fall 2015
A 3-credit course for undergraduate class with 60 students in Department of Speech, Language & Hearing Sciences. Responsibilities included three hours lecture on role of SLP in dysphagia and nutrition management; coordinating extra credit projects, and grading.	
Speech Anatomy and Physiology, University of Florida Primary instructor	Fall 2014
A 3-credit course for undergraduate class with 60 students in Department of Speech, Language & Hearing Sciences. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and other graded activities. I also utilized educational movies and soft wares to facilitate student learning.	
Speech Anatomy and Physiology, University of Florida Teaching assistant	Spring 2014
A 3-credit course for undergraduate class with 25 students in Department of Speech, Language & Hearing Sciences. Responsibilities included one hour lecture on Velopharyngeal anatomy and physiology; coordinating extra credit projects, and grading.	
Dysphagia, Isfahan University of Medical Sciences Primary instructor	Fall 2009-2011
A 1-credit course for undergraduate class with 25 students in Department of Speech Therapy. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and other graded activities.	
Phonological Sciences & Disorders, Isfahan University of Medical Sciences Primary instructor A 3-credit course for undergraduate class with 25 students in Department	Spring 2011- 2012
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of Speech Therapy. Full teaching responsibility of the course for the semester included designing the syllabus, teaching all lectures, development of tests and other graded activities.

### **TEACHING INTERESTS**

**Swallowing Disorders** 

Anatomy & Physiology of Speech

**Neural Basis of Communication** 

Introduction to Speech Disorders

Voice Disorders

**Motor Speech Disorders** 

Service	
Internal Service Serve on a search committee for one Speech-Language Pathology faculty position.	Fall 2018-Present
Serve on College of Education, Health and Human Services Diversity Committee	Fall 2018-Present
Serve on Speech Pathology & Audiology program Ph.D. Committee	Spring 2018-Present
Serve on Speech Pathology & Audiology program undergraduate students advisory committee	Fall 2018-Present
Serve on Speech Pathology & Audiology program graduate students advisory committee	Fall 2018-Present
External Service	
Serve as editorial consultant (nine reviews) for <i>Dysphagia</i>	Jul 2015- Present
Serve as editorial consultant (nine reviews) for the <i>Journal of Research in Rehabilitation Sciences</i>	Dec 2011- Present
Served as review committee member for student posters at annual meeting of the Ohio Speech Language and Hearing Association	March 2018

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Three times served as review committee member for swallowing
related presentations submitted for the annual Iranian Speech
Therapy Conference

Fall 2013- Present

	<b>EXPER</b>	

Clinician, Omid Speech Therapy Center, Private clinic Duties: Visiting patients with communicative and swallowing disorders	2008-2012 Isfahan, Iran
Clinician, Red Cross Rehabilitation Clinic, Public center Duties: Visiting patients with communicative and swallowing disorders	2007-2008 Isfahan, Iran
Clinician, Navid Rehabilitation Center, Private clinic Duties: Visiting pediatric patients with developmental communication disorders	2006-2007 Isfahan, Iran
Clinical Supervisor, University of Social Welfare & Rehabilitation Sciences Duties: Supervising students' clinical practice.	2005-2006 Tehran, Iran
Clinician, Milade Moud Rehabilitation Clinic, Private clinic Duties: Visiting pediatric patients with developmental communication disorders	2005-2006 Tehran, Iran
Clinician, Moien Rehabilitation Center, Private clinic Duties: Visiting patients with developmental communication disorders	2004-2005 Tehran, Iran

### **ASSOCIATION MEMBERSHIPS**

Dysphagia Research Society	2014-present
National Student Speech Language Hearing Association	2014-present
Swallowing and Voice Disorders Research Core	2010-2012
Musculoskeletal Research Center	2011- 2012

### **LANGUAGES**

Farsi: Native

English: Proficient in oral and written English

### **SKILLS AND CERTIFICATIONS**

Speech Pathology & Audiology Program, A101 CPA, PO Box 5190, Kent, OH 44242-0001● abarikro@kent.edu● (330)672-1906

Laboratory Skills: Use of Image J, Vital Stim, Manometery, sEMG, Endoscopic Evaluation of Swallowing

Certifications: The Modified Barium Swallow Study (Student version)

Technical Skills: Research methodology, Teaching methodology, Scientific writing,

SPSS & Excel