**Patrizia Bonaventura, PhD**

Dr. Patrizia Bonaventura

Assistant Professor

Speech-Language-Hearing Sciences Department

Hofstra University

1000 Fulton Ave, Hempstead, NY 11549

Voice: (516) 463-5308 Email: patrizia.bonaventura@hofstra.edu

Website:<https://www.hofstra.edu/faculty-staff/faculty-profile.html?id=7381>

Voice Disorders and Technology Lab website: <https://www.bonaventuravoicelab.com/>

UN project on teletherapy for Ethiopian orphans website: https://patbonave.wixsite.com/speech-teletherapy

# **EDUCATION**

2003 PhD in Speech and Hearing Science, The Ohio State University, Columbus, OH. Advisor: Prof. Emeritus O. Fujimura. Title of the dissertation: “Invariant patterns in articulatory movements”.

1989 - 1990 M.A. (Diplôme d'Études Approfondies) in Cognitive Science, E.H.E.S.S. and Université Paris 6, Paris, France. Title of the thesis: "Vowels acquisition in French and Italian".

1984 M.A. (Laurea in Lettere) in Linguistics (major: Experimental Phonetics), University of Rome "La Sapienza", Rome, Italy. Title of the thesis: "The acoustic cues of vocalic and consonantal nasality". Final grade:110/110.

# **PROFESSIONAL EXPERIENCE**

August 2018 – present HOFSTRA UNIVERSITY, Hempstead, NY.

- Assistant Professor in the Speech-Language-Hearing-Sciences Department.

August 2014 – June 2018 MONMOUTH UNIVERSITY, West long Branch, NJ.

- Assistant Professor in the Speech –Language Pathology Department.

- Lead Representative at the United Nations Department of Public Information-NGO (DPI-NGO) for Monmouth University/ Institute of Global Understanding. UNAI (United Nations Academic Impact) initiative representative.

July 2005-July 2014 CASE WESTERN RESERVE UNIVERSITY, Cleveland, OH.

Assistant Professor at the Dept. of Psychological Sciences (Communication Sciences program), with secondary Assistant Professor appointment in the Dept. of Cognitive Science.

January – August 2005 UNIVERSITY OF BRITISH COLUMBIA, Dept. of Linguistics, Vancouver, BC. Teaching Post-Doctoral Fellow.

September 2001 - December 2003 THE OHIO STATE UNIVERSITY, Dept. of Speech and Hearing, Columbus, OH. Graduate Research Associate.

May 2000 – September 2001 CONVERSAY, Redmond, WA. Speech Engineer

April 1999 – March 2000 UNIVERSITY OF HAMBURG, Dept. of Computer Science, Workgroup NATS (Natural Language Processing), Hamburg, Germany. Researcher.

September 1997 - December 1998 CLUSTER Reply, Turin, Italy. Consultant.

March 1993 – August 1997 C.S.E.L.T., Turin, Italy. Consultant.

1989 - 1990 EXPERIMENTAL PSYCHOLOGY LAB, E.H.E.S.S. (École des Hautes Études en Sciences Sociales) AND C.N.R.S. (Centre Nationale pour la Recherche Scientifique), Paris, France. Researcher.

1986 - 1989 & 1990 - 1992 UNIVERSITY OF TEXAS AT AUSTIN Assistant Instructor at the Department of French and Italian. Graduate student in the Dept. of Linguistics.

1984 - 1986 FONDAZIONE UGO BORDONI, Rome, Italy. Researcher.

# **TEACHING EXPERIENCE**

August 2018 - present Three graduate courses (SPCH 249 Voice disorders, SPCH 206 Speech science: production and perception and SPCH 277 Seminar in cleft lip and palate speech disorders) and one undergraduate course (SPCH 103 Speech science) in the Speech-Language-Hearing-Sciences Department, Hofstra University. Guest lecture for LING 202, Phonetics and Phonology.

2014- June 2018 Three graduate courses (EDL 680–2 “Research Methods”, EDL 660, “Motor speech disorders” and EDL 655 “Voice and resonance disorders”) and four undergraduate courses (EDL 211, “Introduction to phonetics”, EDL 215, “Speech and Hearing Science”**,** EDL 214 “Anatomy and Physiology of Speech and Hearing” and EDL 213 “Neurological bases of speech communication”), in the Speech-Language Pathology Department, Monmouth University.

2005- 2014 Two graduate courses (COSI 453, “Articulatory and phonology disorders” and COSI 497, “Methods of research”), two undergraduate courses (COSI 211, “Phonology and phonetics” and COSI 355 Introduction to Linguistics), and two bivalent courses (COSI 321/421, “Speech and Hearing Science” and COSI 302/402, “Instrumental Measurements in Speech Sciences”) in the Department of Psychological Sciences (Communication Sciences program), Case Western Reserve University. Guest lectures for COGSCI 102, Cognitive Science.

2005 One graduate course (LING 507, “Formal Foundations of Phonetics & Phonology”, together with Prof. P. Shaw) and an advanced graduate seminar (LING 530A, “Linguistic Problems in a Special Area”, on linguistic/phonetic units used in speech processing and modeling) in the Department of Linguistics, University of British Columbia.

2002 - 2003 Lab session for “Advanced Speech Science” seminar (assisting Prof. O. Fujimura), Department of Speech and Hearing, The Ohio State University. Designed and administered the WebCT online section of two “Advanced Speech Science” seminars.

1987 - 1989 –

1990 - 1992 Twelve Italian courses (seven introductory and five advanced), Department of French and Italian, University of Texas at Austin.

**LANGUAGE PROFICIENCY**

Native speaker of Italian

Near native speaker proficiency in English and French

Reading and speaking proficiency in German and Portuguese

Reading proficiency in Finnish and Dutch

Beginner knowledge of Korean

**GRANTS AND FELLOWSHIPS**

2023 Innovation and Entrepreneurship Fellow Grant from the Institute of Innovation and Entrepreneurship, Zarb School of Business, Hofstra University, to support research project on robot therapy for autism ($33,400).

 2020 Application for NIH R15 grant: Research Enhancement Award Program (REAP) for Health Professional Schools and Graduate Schools (PAR-19-134), in collaboration with Dr. Pillaipakkamnatt, from the Department of Computer Science.

2020 Resubmission: Bonaventura, P., (as consultant) Grant, "Inner Voice : an App to train emotional expression in children with autism (NIH Phase II grant: https://grants.nih.gov/grants/guide/pa-files/PA-18-574.html )", National Institute for Child Health and Development.

2020 Application for Hofstra College of Liberal Arts and Sciences Research and Development Grant to purchase an electropalatograph and a nasometer (nasometer purchased : $3000)

2019 Hofstra College of Liberal Arts and Sciences Research and Development Grant to support project on “Global teletherapy: accessible speech pathology services for Ethiopia” ($1200)

2017 Center for Excellence in Teaching and Learning (CETL) funding, to organize a Workshop on “Creativity and Autism”, at Monmouth University (April 2017)

2017 Co-Principal Investigator in “Creativity and Research Grant” (joint grant in collaboration with Co-Principal Investigator Prof. Richard Scherl, formal recipient of the grant), to realize project: “Interaction with a robot to improve verbal communication skills of children with autism”.

2016 Transformative learning grant from the School of Education, to organize a Symposium on “Multicultural issues in early assessment of autism”, at Monmouth University (April 2017)

2016 Center for Excellence in Teaching and Learning (CETL) funding, to organize a Symposium on “Multicultural issues in early assessment of autism”, at Monmouth University (April 2017)

2016 “Creativity and Research Grant” to realize project: “Effects of prosody on coarticulation in Adult Apraxia of Speech: a comparison between Italian vs. English-speaking participants”.

2016 Funding from the Office of the Provost and from the Office of Global Education, Monmouth University, to sponsor organization of International Workshop on “Technological tools for treatment of autism”, (May 20th 2016)

2016 Research funding from the Italian Speech Pathology Clinic “Istituto di Ortofonologia”, Rome, for robots and autism project.

2016 Research funding from the Deans of the School of Education and the School of Computer Science, to support interdisciplinary research on autism.

2015 Grant by the United Nations Division for Sustainable Development (UN-DESA) to support a partnership between Monmouth University and Ranney School, to develop students projects to implement Sustainable Development Goals (<http://www.ranneymonmouthusdgpartnership.com/page> )

2015 Research funding from the Deans of the School of Education and the School of Computer Science, to support interdisciplinary research on autism.

2015 ‘International Scholars and Researchers Fellowship’ from the Institute for Global Understanding, Monmouth University, to organize the Symposium on “Autism perception through different cultures: perspectives on speech pathology treatment and educational approaches”, May 26 – 27, 2015, featuring Dr. Magda Di Renzo and Dr. Lidia Racinaro from SLP clinic “Istituto di Ortofonologia”, Rome, Italy, discussing innovative treatment of autism developed in Italy.

2015 Center for Excellence in Teaching and Learning (CETL) funding, to organize the Symposium on “Autism perception through different cultures: perspectives on speech pathology treatment and educational approaches”, May 26-27, 2015 at Monmouth University.

2012 “College of Arts and Sciences Development Fund”, through CWRU.

2011 “Nord” grant, from the University Center for Innovation in Teaching and Education (UCITE), College of Arts and Sciences, CWRU.

2011 “W. P. Jones Presidential Faculty Development Fund”, from the College of Arts and Sciences, CWRU.

2010 “College of Arts and Sciences Development Fund”, through CWRU.

2010 Scholarship from NECSI (New England Complex Systems Institute), MIT

2009 “W. P. Jones Presidential Faculty Development Fund”, from the College of Arts and Sciences, CWRU.

2009 “College of Arts and Sciences Stimulus Fund”, through CWRU.

2008 “Academic Careers in Sciences and Engineering program”, NSF grant through CWRU.

2006 “Experiential Learning Fellowship” from the College of Arts and Sciences, CWRU.

2006 “Library Opportunity Funds” from the College of Arts and Sciences and Kelvin Smith Library, CWRU.

2005 “W. P. Jones Presidential Faculty Development Fund” from the College of Arts and Sciences, CWRU.

2001 - 2003 “SHS Development Fund” fellowship from Dr. Aki Fujimura, for full support for my PhD studies, at the Department of Speech and Hearing, The Ohio State University.

1999 "Best-Paper-Reisen" award from the Department of Computer Science, University of Hamburg, Germany.

1991 Professional Development Award from the Department of Linguistics, University of Texas at Austin.

1989 - 1990 Fyssen Foundation grant for one year of research at the Experimental Psychology Lab, C.N.R.S. (National Center for Scientific Research), Paris, France.

1986 - 1987 Fulbright scholarship for first year of studies at the University of Texas at Austin.

1984 - 1985 Fellowship from the U. Bordoni Foundation.

1981 - 1983 Scholarship from ENPAS (Italian Social Security Administration).

1981 Scholarship from the Finnish Ministry of Culture for a Finnish language course at the University of Savonlinna, Finland.

**SELECTED PUBLICATIONS**

 **SUBMITTED**

**Bonaventura, P.** and Steel, C. “A Review of Robot Shapes and Their Use to Improve Verbal Skills in Children with Autism”

**Bonaventura, P.** and Di Renzo M. “Voice Quality in Italian-Speaking Children With Autism”

**IN PREPARATION**

**Bonaventura, P.** and Di Renzo, M. “An acoustic study of intonation patterns in Italian-speaking children with autism”

**Bonaventura, P.** and Xenakis, E. An acoustic study of voice quality in English-speaking children”

**PEER-REVIEWED JOURNALS AND PROCEEDINGS**

1. **Bonaventura, P.** (2023) “Acquisition of V-V Anticipatory Coarticulation in Italian-Speaking Children”, Proceedings of the International Conference of Child Language Acquisition, 16-17 February 2023, pp.80-95.
2. Pincus, D. and **Bonaventura, P.** “Words as things, words as meanings: the testing of a psychoanalytic principle.” Invited commentary on the target article: “Testing Freud’s hypothesis that word forms and word meaning are functionally distinct: subliminal primary process cognition and its link to personality” by Karen Klein Villa, Howard Shevrin, Michael Snodgrass, Ariane Bazan, and Linda A.W. Brakel; Neuro-Psychoanalysis, vol. 8, n. 1, 2006.

1. **Bonaventura, P.** , M. Gori, M. Maggini, F. Scarselli and J. Q. Sheng “A hybrid model for the prediction of the linguistic origin of surnames”, IEEE Transactions on Knowledge and Data Engineering, 15 (5), pp. 760-763, 2003.
2. Menzel W., Herron D., Morton R., Pezzotta D., **Bonaventura P.** and Howarth P. “Interactive pronunciation training”, ReCALL, 13 (1), pp. 67-78, 2001.
3. Atwell E., Baldo P., Bisiani R., **Bonaventura P.,** Herron D., Howarth P., Menzel W., Morton R. , Souter C. and Wick H. “User-Guided System Development in Interactive Spoken Language Education”, Natural Language Engineering, 6 (3/4), pp. 229-241, 2000.

1. **Bonaventura P.**, Tessiore L. and Giuliani F. “Letter-to-phone transcription rules for Brazilian and European Portuguese, with application to automatic speech recognition”, ‘Intercâmbio’, 9, 2000.

1. **Bonaventura P.** and Di Carlo A. “Grapheme-to-phoneme transcription rules for applications to speech synthesis of standard Italian”, Rivista Italiana di Acustica, 3, 1985, pp. 85-105.

**PEER-REVIEWED BOOK CHAPTERS**

1. **Bonaventura, P**. “Global health issues: United Nations resolutions and policies on autism spectrum disorders”, in: “Lo spettro autistico”, Italian Senator Paola Binetti Ed., I Magi, April 2016.

1. **Bonaventura, P.** and Fujimura, O. “Articulatory movements and phrase boundaries”, in: P. Beddor, J. Ohala and M. Solé (eds.), ‘Experimental Approaches to Phonology’, Oxford University Press, Oxford, 2007, pp. 209-227

**PEER-REVIEWED CONFERENCES**

1. Bonaventura, P. (2023) “Acquisition of Anticipatory Coarticulation in Italian-Speaking Children: An Acoustic Study”, poster presented at the International Conference of Child Language Acquisition, Virtual, 16-17 February 2023. Won ‘Best presentation Award’.
2. Bonaventura, P. (2022) “Voice Quality in Italian-speaking children with autism”, presented at the International Conference on Autism Research, on June 2-3, 2022.
3. Bonaventura, P. (2020)“Influence of prosody on acquisition of anticipatory coarticulation in Italian-speaking children”, presented at the 179th Meeting of the Acoustical Society of America “Acoustics Virtually Everywhere”, December 7-11, 2020.
4. Bonaventura, P., Di Renzo, M. and Collins, M. (2019) “Effects of Prosody on Acquisition of Anticipatory Coarticulation by Italian-speaking Children” accepted at the 178th Meeting of the Acoustical Society of America, San Diego, California, December 4-6, 2019.

1. Messina, S. and Bonaventura, P. (2016) “Effects of Multichannel Cochlear Implants of Speech Perception and Production: A Multilanguage Comparison”, presented at the American Speech and Hearing Association (ASHA) Convention, Philadelphia, 17-19 November, 2016.

1. Bonaventura, P. and Taylor, P. (2008) “Modeling stable articulatory patterns across subjects variability”, on: Proceedings of Meetings on Acoustics, vol. 4, 06004, 2008 (online at: http://scitation.aip.org/getpdf/servlet/GetPDFServlet?filetype=pdf&id=PMARCW000004000001060004000001&idtype=cvips ).

1. Bonaventura, P., Tomaiuoli D., Pasqua E., Calanca M., Lewis B. and Massini M. “Speech Production in Italian Versus English Children With Childhood Apraxia of Speech: An Acoustic Longitudinal Study”, presented at the American Speech-Language and Hearing Association Convention, Chicago, 20-22 November 2008.
2. Clopton, S. and Bonaventura, P. “Articulation errors in Childhood Apraxia of Speech (CAS)”, presented at the American Speech-Language and Hearing Association Convention, Chicago, 20-22 November 2008.
3. Bonaventura, P. and Taylor, P. “Cross- subject stability of models of articulatory movements”, presented at the Acoustical Society of America Meeting, Paris – 29 June-4 July 2008.
4. Bonaventura, P., Piecuch, T., Oaxley M., Iida J. and Prahl, J. “Assessment of speech production with dentures by electromagnetic articulography”, presented at the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13), Osaka, Japan, July 3-7, 2013.
5. Bonaventura, P., Varjao, F. and Sharma, V. “Compensatory articulatory strategies in speech with dentures”, presented at the 6th International Conference on Speech Motor Control, Groningen - Nijmegen, June 8-11 2011.

1. Bonaventura, P. , Tomaiuoli D., Pasqua E., Calanca M., Massini M., Miller, L., Owens, R. and Marulli M. “Word-internal coarticulation patterns in Italian children with Speech Sound Disorders of Unknown Origin: an acoustic study”, presented at the 28th IALP (International Association of Logopedics and Pediatrics) Congress, Athens, Greece, August 22-26 2010.
2. Bonaventura, P. and Brandt, P. A. “Sentence modes and prosodic phrasing”, presented to the Speech Prosody 2008 Conference, Sao Paulo, Brazil, May 6 – 9, 2008.
3. Bonaventura, P. and Clopton, S. "Patterns of internal syllable structuring in CAS”, presented at the American Speech-Language and Hearing Association Convention, Boston, 15-17 November 2007.

1. Bonaventura, P., Lewis B., Freebairn L. and Clopton S. "Intervocalic coarticulation across syllables in children with CAS”, presented at the American Speech-Language and Hearing Association Convention, Boston, 15-17 November 2007.

1. Bonaventura, P. and Brandt, P. A. "STEMMA: a new system for multilingual POS tagging/parsing for applications in synthetic speech prosodic stylization", presented at the Language, Culture and Mind Conference, Paris, July 17-20, 2006.

1. Bonaventura, P. "Prosodic effects on articulatory movements at phrase boundaries in spontaneous speech", presented at the 5th International Conference on Speech Motor Control, Nijmegen, The Netherlands, June 7 - 10, 2006.

1. Bonaventura, P. "Patterns of interarticulator coordination within the syllable", presented at the Acoustical Society of America 151st Meeting, Providence, Rhode Island, 5--9 June 2006.
2. Bonaventura, P. and Fujimura O. “Prosodic effects on articulatory movement patterns”, presented at the Conference on Methods in Phonology (in Honor of John J. Ohala), UC Berkeley, 21-23 May 2004.

1. Bonaventura, P. ``Invariant patterns in articulatory movements''. PhD dissertation, The Ohio State University, Columbus, OH, 2003. Dissertation abstract on: J. Acoust. Soc. Am., 115, p. 1383, 2004.

1. Bonaventura, P., Howarth P. and Menzel W. “Phonetic annotation of a non-native speech corpus”, InSTIL 2000 (Integrating Speech Technology in (Language) Learning), pp. 10-17, Dundee, UK, 29-30 August 2000.
2. Bonaventura, P., Herron D. and Menzel W. “Phonetic rules for diagnosis of pronunciation errors”, Konvens 2000 (Konferenz Verarbeitung natürlicher Sprache, or Conference on Natural Language Processing), pp. 225-230, Ilmenau, Germany, 9-12 October 2000.
3. Menzel W. , Atwell E., Herron D., Bonaventura P., Howarth P., Morton R. and Souter C.

“The ISLE corpus of non-native spoken English”, LREC2000 (2nd International Conference on Language Resources and Evaluation), pp. 957-963, Athens, Greece, 31 May-2 June 2000.

1. Menzel W., Herron D., Bonaventura P. and Morton R. “Automatic detection and correction of non-native English pronunciation”, InSTIL 2000 (Integrating Speech Technology in (Language) Learning), pp. 49-56, Dundee, UK, 29-30 August 2000.

1. Bonaventura P., Tessiore L. and Giuliani F. “Letter-to-phone transcription rules for Brazilian and European Portuguese, with application to automatic speech recognition”, InPLA 99, Computational Processing of Portuguese Symposium, São Paulo, 30 April-1 May 1999 (also published on ‘Intercâmbio’, 9, 2000).

1. Bonaventura P.**,** Gori M., Maggini M., Scarselli F. and Sheng J. Q. “A connectionist-based model for predicting the linguistic origin of surnames”, IEEE International Conference on Neural Networks, pp. 3040-3045, Washington DC, July 10-16, 1999.

1. Bonaventura P.**,** Tessiore L. and Giuliani F. “Letter-to-phone transcription rules for Brazilian and European Portuguese, with application to automatic speech recognition”, InPLA 99, Computational Processing of Portuguese Symposium, São Paulo, 30 April-1 May 1999.

1. Bonaventura P., Giuliani F., Garrido J. M. and Ortín I. “Grapheme-to-phoneme transcription rules for Spanish, with application to automatic speech recognition and synthesis”, COLING ’98 Workshop (Partially Automated Techniques For Transcribing Naturally Occurring, Continuous Speech), Montreal, 16 August 1998, pp. 33-39.

1. P. Bonaventura, A. Paoloni, P. Usai, F. Canavesio “A diagnostic test for the intelligibility of Italian synthetic speech.” Associazione Italiana di Acustica Symposium, Sorrento, 9-11 Aprile 1986.

**M.A. THESES AND PHD DISSERTATION**

**Bonaventura P.,** “Invariant patterns in articulatory movements”. PhD dissertation, The Ohio State University, Columbus, OH, 2003.

**Bonaventura P**., “Vowels acquisition in French and Italian”. Master thesis (D.E.A.) in Cognitive Science, École des Hautes Études en Sciences Sociales and Université Paris VII, Paris, France, 1990.

**Bonaventura P.**, “Gli indici acustici della nasalita' (The acoustic cues of vocalic and consonantal nasality)”. Master thesis (Laurea) in Historical Linguistics and Experimental Phonetics, University of Rome "La Sapienza", Rome, Italy, 1984. (in Italian)

**PATENTS AND TECHNOLOGICAL DEVELOPMENT**

2022- current Director of the Voice Disorders and Technology Lab, Hofstra University

2022 Provisional patent obtained, submitted by Hofstra, as sponsor of my research on Robots applied to Linguistic Pragmatic Therapy for autism

2021 Provisional Patent obtained for my App (VoiceCheck) for acoustic analysis and assessment of voice

2021-current Head of Speech Science, Talk2MeMore company, Ireland, responsible for the development of the voice analysis component in the Voice Check App (patent pending), developed to analyze acoustic parameters of voice, to use as a component of the standard assessment protocol for voice disorders (Beta version)

**INVITED PRESENTATIONS**

2021 “Global Health Disparities with a Focus on Administration of SLP Care”, Presented at the 2021 Spring Research Seminar, Hofstra University.

2018 “Creativity and autism: communication through art”, presented at the workshop “Risorse e vulnerabilità del soggetto autistico” (Resources and vulnerability of the autistic individual), organized by the Department of Social Medicine, University of Rome “La Sapienza”, 14 June 2018.

2018 Invited talk “Robot therapy for autism”, presented at the Workshop “Robots applications for autism”, organized by the Department of Robotics, PSG College of Technology, Coimbatore, India, 9 March 2018. News about the Workshop have been published on the Times of India on 15 March 2018.

2016 Talk at Ranney High School, Tinton falls, New Jersey, on: “Strategies for implementation of Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages“.

2014 Invited talk on “Disparities in health care and educational opportunities for children with communication disorders” at the panel on *Integrated Approaches to Global Health*, to celebrate the IV Anniversary of the United Nations Academic Impact (UN UNAI) Initiative, UN Headquarters, New York, 18 November 2014.

**HONORS AND AWARDS**

2023 Best presentation Award for poster presented at the International Child Language Acquisition Conference, Barcelona and virtual, 16-17 February 2023 (see publications).

2020 Appointed member of the Scientific Committee of the MITE Foundation, Rome, Italy, for protection and advocacy of children’s rights

2019 Appointed Main United Nations ECOSOC representative for the International Arts Movement NGO.

2016 Appointed Lead United Nations DPI representative for Monmouth University/Institute of Global Understanding.

2015 ‘Certificate of Excellence’ from the Institute of Global Understanding, Monmouth University, in appreciation for organization of poster session on “Intercultural issues in Communication Sciences and Disorders” at the 14th Annual Global Understanding Convention, 13-17 April 2015, Monmouth University.

2015 Nominated Member of Faculty Row

2011 ‘Achievement Award’ for extraordinary effort as Area Coordinator in the Technical Program Committee of the INTERSPEECH 2011 Conference (in charge of the ‘Phonology and Phonetics’ areas)

2011 Nominated for the Carl F. Wittke Award for Excellence in Undergraduate Teaching (CWRU)

2012 Elevated to Full Member of the Acoustical Society of America (ASA)

2007 Elevated to Senior Member of Institute of Electrical and Electronics Engineers (IEEE)

**ADVISED M.A, M.S. and PhD THESES**

- 2011-2013 Member of the PhD committee for Biomedical Engineering (BME) student Aaron Hadley. Title of the dissertation: “A Functional Electrical Stimulation System to control Swallowing Patterns in Dysphagia”.

- 2011 - 2012 - Primary advisor for Electrical Engineering (EECS) MS student Anthony Yanick (graduated January 2012). Title of the MS Thesis: “Investigation of prosodic parameters for control of a robot wheelchair”.

- 2008 – Primary advisor for Sara Clopton (COSI) MA Thesis: “Articulation Errors In Childhood Apraxia of Speech”; resulting poster: Clopton, S., Bonaventura, P., Freebairn, L., Hansen, A., Iyengar, B., Lewis, B, and Taylor, G. (2008) "Articulation Errors In Childhood Apraxia of Speech (CAS)", was presented at the 'American Speech and Hearing Association' Convention, Chicago, November 20-22 2008.

- 2006 - Primary advisor for Nancy Heinblockel (COSI) MA Thesis: “An acoustic study of coarticulation in articulatory disorders”

**STUDENTS CAPSTONE PROJECTS, PRESENTATIONS AND GRANTS**

- 2022 Lopez, J. and Bonaventura, P. (2023) “Normative Values for Pediatric Voice Assessment”, poster presented at the Hofstra Undergraduate Research Day, 12 December 2022.

- 2020 Mentored student Lorenzo Gerro for a Capstone project in Forensic linguistics (on acoustic measurements of speech for forensic applications)

- 2020 – Steel C. and Lyu J. “Implementation of a robot prototype for therapy for children with ASD”, presented at the Hofstra Students Research and Creativity Forum, Spring 2020.

- 2020 – Capstone senior project in Computer Science of Jianfeng Lyu. Title of the project: “Robots as therapy for autism” (primary advisor, with Dr. Pillaipakkamnatt)

- 2017 - Mallojula, S. “A speaking robot to improve pragmatic and verbal skills of children with autism”, presented at the Student Scholarship Week, Monmouth University, April 19th 2017.

- 2016 – Messina, S. and Bonaventura, P. “Effects of Multichannel Cochlear Implants of Speech Perception and Production: A Multilanguage Comparison”, presented at the ASHA Convention, Philadelphia, 17-19 November 2016.

- 2016 – Stillwell, S. “Effectiveness of social avatar software on emotion recognition and expression skills in children with Autism Spectrum Disorder”, presented at the ASHA Convention, Philadelphia, 17-19 November 2016.

- 2016 – Gopi T., Gopisetti S., Kalathingal R., Saha M., and Yalamanchili H. “A robot to improve verbal communication skills of children with autism”, presented at the Student Scholarship Week, Monmouth University, April 19th 2016.

- 2015 - Arce, R. “Prosody in children with autism spectrum disorders: Is there a relationship between perception and production?”, Project developed for my course EDL 680-2, Research methods, Presented at the American Speech-Language-Hearing Association Convention, Denver, Colorado, 12-14 November, 2015.

- 2015 - Newman, C. “Complementary and alternative medicine for persons with aphasia: a literature review”, Project developed for my course EDL 680-2, Research methods, Presented at the American Speech-Language-Hearing Association Convention, Denver, Colorado, 12-14 November, 2015.

- 2014 - Capstone senior project in Mechanical Engineering (EMAE 398) of Rob Ahlman. Title of the project: “Synchronization of Vocal Folds and Articulatory Gestures in Production of Sentences with Differing Prosody” (as primary advisor).

- 2013 - Capstone senior project in Mechanical Engineering (EMAE 398) of Jun Iida. Title of the project: “Acoustic and kinematic analysis of speech errors in dental consonants, with conventional and implant dentures” (as primary advisor). Presented as poster at the SOURCE Undergraduate Research Symposium, CWRU, April 19, 2013.

- 2012 - Capstone senior project in Mechanical Engineering (EMAE 398) of Madeleine Oxley and Trevor Piecuch, resulted in a paper titled: “Effects of Conventional Dentures on Tongue and Jaw Movement in Speech Production”, accepted and to be presented at the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC ’13, Osaka, July 3-7 2013) (see above, publications). (as primary advisor)

- 2012 - Arleen Truitt and Patrizia Bonaventura (2012) “Evolution of vowels from babbling to speech: a study on two AAE speaking children”, developed during my COSI 390, “Independent studies” course (Fall 2012): resulted in a poster presented by Arleen Truitt at the 2012 CWRU SOURCE symposium on 12/7/12.

- 2009 - Laura Dickerson (2009) “Differences in production and processing of prosody in AS vs. HFA children”, Capstone project presentation. (as primary advisor)

- 2009 - Capstone project in Communication Sciences (COSI): Laura Germann (2009) “Acoustic cues for identification of prosodic contours expressing syntactic, semantic, and emotional information content”, presented as poster at SOURCE Undergraduate Symposium, CWRU, April 16, 2009. (as primary advisor)

- 2008 “Experiential Learning Fellowship” from the College of Arts and Sciences, CWRU, for UG students Lauren Miller and Brady Boccucci, for professional experience abroad, at the CRC speech pathology clinic, in Rome, Italy.

- 2005 - Li, Rui (2005) "Phonetic Substitution as a Foreign Accent Phenomenon in Native Mandarin Speakers’ Pronunciation of English", Project developed for my course COSI 211, Phonology and phonetics, Presented at CWRU Research ShowCASE Symposium, 2005.

**ORGANIZED CONFERENCES, SYMPOSIA AND WORKSHOPS**

2021 Organized the Speech-Language and Hearing Department Spring Research Seminar, Hofstra University.

2019 Organized workshop on “Transgender voice clinical management”, featuring Dr. David Rosenthal, PhD, Medical director of the Center for Transgender Care at Northwell Health, Long Island, NY and Dr. Silverman, PhD, laryngeal surgeon specialist in glottoplasty, about cultural competency for speech-language pathologists treating transgender population and on surgical techniques for pitch feminization.

2017 Organized workshop on “Creativity and autism”, featuring world renown painter in the spectrum Seth Chwast and his mother Debra Chwast, DSW, talking about Seth's development as a person and as a painter, and the changes in his personality and life since he could express himself in art. Also, a software analysis of Seth’s paintings revealed some recurrent mathematical patterns and ratios, providing an insight into his vision of world (Monmouth University, April 28th 2017).

2017 Organized a session at the Scholarship Week, Monmouth University, 21st April 2017, on ”United Nations and the Sustainable Development Goals: activities to support the SDG's at Monmouth University”, where Ranney School and Monmouth University students presented their research on selected Sustainable Development Goals.

2016 Organized international workshop on “Technological tools for treatment of autism”, featuring Italian scholar and psychotherapist Dr. Paolo Cardoso, talking on use of robots for autism therapy (Monmouth University, May 20th 2016).

2015 Organized a session at the “14th Annual Global Understanding Convention”, Monmouth University, 13-17 April 2015, on “Intercultural issues in Communication Disorders”, where my students from EDL 680-2 ‘Research Methods’ course, presented their posters (see Students Presentations above)

2015 Organized Symposium on “Autism perception through different cultures: perspectives on speech pathology treatment and educational approaches”, May 26 – 27, 2015, at Monmouth University, featuring Dr. Magda Di Renzo and Dr. Lidia Racinaro from SLP clinic “Istituto di Ortofonologia”, Rome, Italy, talk about their innovative treatments for autism, developed in Italy (covered on the press by major Italian newspaper “La Repubblica” and 3 other Italian magazines)

2011 Area Coordinator in Technical Program Committee of the INTERSPEECH 2011 Conference, August 27-31, 2011. In charge of the reviews in the following areas: Phonology and phonetics; First Language acquisition; Second language acquisition, development and learning; Prosody (production, perception, prosodic structure, modeling)

**UNITED NATIONS REPRESENTATIVE ACTIVITIES**

2019-current United Nations Economic and Social Council (UN-ECOSOC) Main representative for the International Arts Movement NGO.

2016- 2018 Lead United Nations Department of Public Information (DPI)-NGO representative for Monmouth University/Institute for Global Understanding.

- Attended 5 United Nations DPI briefings at the UN Headquarters, NY.

- Created and leading a UN-DESA partnership on “Intercultural dialogues through beauty as a language of peace” (#SDGAction12285)

2015- 2016 United Nations DPI-NGO representative for Monmouth University/Institute for Global Understanding.

2020 Attended 12 United Nations DPI briefings at the UN Headquarters, NY.

2021 Created and leading a UN-DESA partnership on “Youth involvement in SDG's implementation: a partnership between Ranney school and Monmouth university” (#SDGAction10869)

2014-2015 United Nations DPI-NGO representative for Monmouth University/Institute for Global Understanding. Attended 18 United Nations DPI briefings at the UN Headquarters, NY. Gave invited talk on “Disparities in health care and educational opportunities for children with communication disorders” at the UNAI panel on *Integrated Approaches to Global Health*, UN Headquarters, New York, 18 November 2014.

**PROFESSIONAL MEMBERSHIPS**

Senior Member (since 1999) Institute of Electrical and Electronics Engineers (IEEE)

Member (since 2001) Acoustical Society of America (ASA)

Member (since 2003) American Speech-Language-Hearing Association (ASHA)

Member (since 2019) Long-Island Speech and Hearing Association (LISHA)

**EDITORIAL AND REVIEW ACTIVITIES**

 2022 Reviewer for a special issue of ‘Applied sciences’ on "AI-Based Biomedical Signal Processing"

2020 Reviewer Languages (international, multidisciplinary, peer-reviewed open access journal, published by MDPI)

2020 Judged Graduate Students posters for the Speech Communication Session of the 179th Meeting of the Acoustical Society of America “Acoustics Virtually Everywhere”, December 7-11 2020

2019-2020 Reviewer for the Journal of Acoustical Society of America

2018-19 Reviewer for “Perspectives in Teletherapy”, publication of the ASHA SIG 18 “Teletherapy”

2012-15 Invited to review submitted articles for the Interspeech Conference

1995-2005 Reviewer for Neurocomputing and for Neuro-psychoanalysis

**SERVICE**

September 2018 – current

At the Department level:

- Member of the Admissions Committee

- Worked in preparation for the ASHA reaccreditation visit (November 2020)

- Advised undergraduate students and graduate students

 - Co-Chair of the Committee for the organization of the Spring Graduate Students Research event (April 2019 and 2020)

- Chairman of the Global Education Committee, SLHS Department, Hofstra University.

- Member of the Awards Committee, SLHS Department, Hofstra University

- Member of the Undergraduate Curriculum Committee, SLHS Department, Hofstra University

- Member of the Committee for creation of a “Craniofacial anomalies” course, Hofstra University

- Member of the Faculty Search Committee, SLHS Department, Hofstra University

- Organized Study abroad initiative to observe new autism therapies at the Istituto di Ortofonologia in Rome, Italy

At the School level:

- Member of the HPHS Global Health Education Task Force to create Study Abroad initiatives at the HSHS level

- Chair of the HPHS Task force to affiliate Hofstra with the UN

- Member of the University and HSPS Committee for the Contact Tracing Campaign

At the national level:

February 2023 Served as a Senior Membership application reviewer in the IEEE the Senior Member Application Review Panel Meeting, Sheraton, New York, 18 Feb, 2023.

At the international level:

- Main UN-ECOSOC representative for International Arts Movement NGO

- Member of the Scientific Committee of the MITE Foundation, Rome, Italy, for protection and advocacy of children’s rights, directed by Italian Senator Paola Binetti, Member of the Italian Parliamentary Committee on Childhood and Adolescence.

September 2014 – August 2018

- Lead representative at the United Nations Department of Public Information (DPI-NGO) for Monmouth University/Institute of Global Understanding; member of UNAI (United Nations Academic Impact) initiative.

- Chair of the School of Education International Committee, Monmouth University.

- Chair of the General Education Oversight Committee (GEOC), Area IV (First Year Seminar), Monmouth University.

- Member of the Institute for Global Understanding, Monmouth University

- Member of the Global Education Committee, Monmouth University

- “Media Coordinator” for the Speech and Language Pathology Department, Monmouth University.

- ‘Library Liaison” for the Speech-Language Pathology Department

- Member of the Transformative Learning Grants Review Committee, School of Education, Monmouth University.

 - Member of Faculty Search Committee for the Speech-Pathology Program.

2005 – June 2014:

- Member - Case IRB Committee, CWRU

- Member - Center for Cognition and Culture, CWRU

- Member - Women in Science and Engineering Roundtable (WISER), CWRU

- Member - International Autism Research Center, CWRU

- Faculty Associate Schubert Center for Child Studies, CWRU.

**OTHER**

 2018-current Leading the project, in collaboration with the UN-DESA, to bring speech pathology care to children in the Ethiopian orphanage Sele Enat Mahiber, by telepractice.

2018-current Consultant as forensic linguistics expert (on acoustic voice and speech analysis) in collaboration with the Forensic Linguistics Department (Prof. Leonard)

2018 Member of the UN-affiliated NGO World Merit Organization

2015-current Member and United Nations-ECOSOC representative for the NGO International Arts Movement

2012 –13 Advisor - CWRU Fencing Club

**CLINICAL SERVICE DELIVERY AND PROFESSIONAL DEVELOPMENT**

2023 Invited by the IEEE Admission and Advancement Committee to serve as a Senior Membership application reviewer in the IEEE Senior Member Application Review Panel Meeting, Sheraton, New York, 18 Feb. 2023.

2020 Completed the following courses on the ASHA Online Learning center:

-Autism spectrum disorders: intervention for communication and learning

-A language-based approach to manage echolalia

-Adolescents and Adults With ASD: Communication Challenges and Intervention Strategies

-Autism Spectrum Disorders: Interventions for Communication and Learning

-Adolescents and Adults With ASD: Enhancing Social Skills

-Augmentative and Alternative Communication for Preschoolers With Autism Spectrum Disorder

-Advances in Autism Research

-Clinical and Research Topics in Voice

-Alaryngeal Speech Options for Laryngectomy Patients

-Assessment and Treatment of Age-Related Voice Disorders

-Apps and Web-Based Materials for Telepractice

-Clinical Considerations in Telepractice Service Delivery

-Efficacy and Innovations in Telepractice

-Preparing To Offer Quality Services Through Telepractice: An Introduction

-On-Site and Telepractice Service Delivery Models: Working Together To Benefit Students

and Improve Caseloads

-Serving Students With Autism Using Telepractice

2020 Completed the Online Teaching Workshop, organized by ITS EdTech at Hofstra (Summer 2020)

2020 Attended the ASHA Online Conference “Voice Evaluation and Treatment: Improving Outcomes for Children and Adults”, 4/22/20 – 5/4/20

2020 Completed ESTILL course in Vocal training (April 17-19 2020)

2019 Attended the Long Island Speech-Language-Hearing Association Fall Conference

2018 Attended American Speech-Language Hearing Association Convention, Boston, November 15-17.

Completed the Lee Silverman Voice Treatment (LSVT) course, with final certification

June 2015 - present Speech pathology clinical internships to obtain American Speech and Hearing Association Certificate of Clinical Competence (CCC-SLP). Clinical speech pathology internships at Riverview Medical Center, Red Bank, NJ; Speech Start practice, Hazlet, NJ; Abilities in Action, Wall, NJ; Universal Rehab Institute, Livingstone, NJ, and Hawkswood School, Eatontown, NJ. (120 clinical therapy hours obtained so far)

2010 Summer school at the New England Complex Systems Institute, MIT, Cambridge, MA on June 7-18, 2010. Completed courses:

CX201: Complex Physical, Biological, and Social Systems

CX102: Computer Programming and Complex Systems

CX202: Complex Systems Modeling and Networks

Final paper on “A dynamic network model of resonant leadership”