

## Rupal Patel, Ph.D. (CCC-SLP)

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### EDUCATION

2000-2001	Massachusetts Institute of Technology	Postdoctoral Research Associate	Acoustics & Speech Science
1996-2000	University of Toronto	Ph.D.	Speech Language Pathology
1993-1995	University of Toronto	M.H.Sc.	Speech Language Pathology
1989-1993	University of Calgary	B.Sc.	Neuropsychology

### ACADEMIC APPOINTMENTS

2003-present	Professor, with joint appointments in the Department of Speech Language Pathology and Audiology & College of Computer and Information Sciences Founder & Director of the Communication Analysis and Design Laboratory Co-founder & Core Faculty of the interdisciplinary doctoral program in Personal Health Informatics Northeastern University, Boston, MA Associate Professor (2008-2014) Assistant Professor (2003-2008)
2009 - present	Adjunct Professor Department of Electrical and Computer Engineering Northeastern University, Boston, MA
2007 – present	Affiliated Faculty Harvard / MIT, Division of Health Science and Technology Boston, MA
2013-present	Research Scientist Haskins Laboratories, Yale University New Haven, CT
2012- present	Adjunct Associate Professor Massachusetts General Hospital, Institute of Health Professions Boston, MA
2011-present	Adjunct Associate Professor Department of Psychiatry

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	University of Massachusetts Medical School, Worcester, MA
2000-present	Research Affiliate MIT Research Lab of Electronics, Cambridge, MA
2009-2010	Visiting Research Scientist Research Lab of Electronics, MIT, Cambridge, MA
2009-2010	Visiting Research Fellow Center of Cognitive Neural Systems, Boston University, Boston, MA
2000-2003	Visiting Assistant Professor MIT Media Laboratory, Cambridge, MA
2001–2003	Assistant Professor of Speech Language Pathology Teachers College Columbia University, New York, NY

#### CONSULTANT AND CLINICAL POSITIONS

2009 - present	Research Consultant Praxis Learning Inc., Waltham, MA
2007 - 2011	Research Consultant BAE Systems, Burlington, MA
1996 – 2000	Speech Language Pathologist (Part-time) Surrey Place Centre, Toronto, Ontario
1997 - 1998	Speech Language Pathologist (Part-time) Columbia Neuro-Rehabilitation Centre, Toronto, Ontario
1995 – 1996	Speech Language Pathologist (Full-time) Oakville Trafalgar Memorial Hospital, Oakville, Ontario

#### RESEARCH & SCHOLARSHIP

##### PEER-REVIEWED JOURNAL PUBLICATIONS (\* Denotes student co-author)

- Patel, R.** & Connaghan, K.P. (2014). The Playground Scene: A Picture Description Task for the Assessment of Childhood Motor Speech Disorders. International Journal of Speech-Language Pathology. (In Press).
- Mills, T., Bunnell, T.H., & **Patel, R.** (2014). Towards Personalized Speech Synthesis for Assistive Communication. Augmentative and Alternative Communication (in Press).
- Patel, R.**, Connaghan, K.P. & \*Campellone, P.J. (2014). The Effect of Rate Reduction on Signaling Prosodic Contrasts in Dysarthria. Folia Phoniatica et Logopaedica, 65, 109-116.
- Patel, R.**, Connaghan, K., \*Franco, D., \*Edsall, E., \*Forgit, D., \*Olsen, L., \*Ramage, L., \*Tyler, E. & Russell, S. (2013). The Caterpillar: A Novel Reading Passage for Assessment of Motor Speech Disorders. American Journal of Speech Language Pathology, 22, 1-9.
- Patel, R.**, Hustad, K. Connaghan, K.P. & \*Furr, W. (2013). Relationship Between Prosody and Intelligibility in Children with Dysarthria. Journal of Medical Speech Language Pathology, 20(4), 95-99.
- Connaghan, K. P. & **Patel, R.** (2013). Impact of Prosodic Strategies on Vowel Intelligibility in Childhood Motor Speech Impairment. Journal of Medical Speech Language Pathology, 20(4), 133-139.
- Patel, R.**, \*Niziolek, C., Reilly, K. & Guenther, F. (2011). Prosodic Adaptations to Pitch Perturbation in Running Speech. Journal of Speech Language and Hearing Research, 54, 1051-1059.

- Patel, R., & \*McNab, C.** (2011). Displaying Prosodic Text to Enhance Expressive Oral Reading. Speech Communication, 53, 431-441.
- Patel, R., & \*Alexander, K.** (2010). Effect of Speaking Rate on Comprehension of Prosodic Intent in Dysarthria. Journal of Medical Speech Language Pathology, 18(4), 109-114.
- \*DiCicco, T., & Patel, R.** (2010). Machine Classification of Prosodic Control in Dysarthria. Journal of Medical Speech Language Pathology, 18(4), 35-39.
- Russell, S., Laures-Gore, J., **Patel, R.** (2010). Treating Expressive Apraxia: A Case Study. Journal of Medical Speech Language Pathology, 18(4), 115-119.
- Grigos, M. & **Patel, R.** (2010). Acquisition of Articulatory Control for Sentential Focus in Children. Journal of Phonetics, 38(4), 706-715.
- Patel, R., & \*Brayton, J.** (2009). Identifying Prosodic Contrasts in Utterances Produced by 4, 7, and 11 Year Old Children, Journal of Speech Language and Hearing Research, 52(3), 790-802.
- Patel, R., & \*Campellone, P.** (2009). Acoustic and Perceptual Cues to Contrastive Stress in Dysarthria. Journal of Speech Language and Hearing Research, 52, 206-222.
- \*DiCicco, T. & Patel, R.** (2008). Automatic Landmark Analysis of Dysarthric Speech. Journal of Medical Speech Language Pathology, 16(4), 213-221.
- Patel, R. & \*Roden, A.** (2008). Intelligibility and Attitudes toward a Speech Synthesizer Vocoder Using Dysarthric Vocalizations. Journal of Medical Speech Language Pathology, 16(4), 243-251.
- Whitehill, T., **Patel, R., \*Lai, J.** (2008). The Use of Prosody by Children with Severe Dysarthria: A Cantonese Extension Study. Journal of Medical Speech Language Pathology, 16(4), 293-301.
- Patel, R., & \*Schell, K.** (2008). The Influence of Linguistic Content on the Lombard Effect. Journal of Speech Language and Hearing Research, 51, 209-220.
- Grigos, M. & **Patel, R.** (2007). Articulator Movement Associated with the Development of Prosodic Control in Children. Journal of Speech Language & Hearing Research, 50, 119-130.
- Patel, R. & \*Schroeder, B.** (2007). Influence of Familiarity on Identifying Prosodic Vocalizations Produced by Children with Severe Dysarthria. Clinical Linguistics and Phonetics, 21, 833-848.
- Patel, R., & \*Watkins, C.** (2007). Stress Identification in Speakers with Dysarthria Due to Cerebral Palsy: An Initial Report. Journal of Medical Speech Language Pathology, 15(2), 149-160.
- Patel, R. & \*Radhakrishnan, R.** (2007). Enhancing Access to Situational Vocabulary by Leveraging Geographic Context. Assistive Technology Outcomes and Benefits, 4, 99-114.
- Patel, R., \*Schooley, K., & \*Wilner, J.** (2007). Visual Principles for Convey Meaning in Graphic Symbols: A Comparison of PCS and Artists' Depictions. Assistive Technology Outcomes and Benefits, 4(1), 62-80.
- Patel, R.** Dysarthria Interventions That Address Self-monitoring of Respiratory and Phonatory Physiology Seem to Facilitate Use of Speech Recognition Software [abstract]. Evidence Based Communication Assessment and Intervention (2007). Abstract of Hird, K. & Hennessey N.W. (2007). Facilitating use of speech recognition software for people with disabilities: A comparison of three treatments. Clinical Linguistics & Phonetics, 21(3): 211-226.
- Patel, R., \*Schooley, K. & \*Radhakrishnan, R.** (2006). Comparison of Semantic versus Syntactic Message Formulation: A Pilot Study. Assistive Technology Outcomes and Benefits, 3, 96-110.

- Patel, R.** & Grigos, M. (2006). Acoustic Characterization of the Question-Statement Contrast in 4, 7, and 11-year old Children. Speech Communication, 48(10), 1308-1318.
- Patel, R.**, & \*Salata, A. (2006). Using Computer Games to Mediate Caregiver-child Communication for Children with Severe Dysarthria. Journal of Medical Speech Language Pathology, 14(4), 279-284.
- Patel, R.**, & \*Khamis-Dakwar, R. (2005). An AAC Training Model for Special Education Teachers: A Case Study of Arab Teachers in Israel. Augmentative and Alternative Communication, 21(3), 205-217.
- Patel, R.** (2004). The Acoustics of Contrastive Prosody in Adults with Cerebral Palsy. Journal of Medical Speech Language Pathology, 12(4), 189-193.
- Patel, R.**, Pilato, S., & Roy, D. (2004). Beyond Linear Syntax: An Image-orientation Communication Aid. Assistive Technology Outcomes and Benefits, 1(1), 57-66.
- Patel, R.** (2003). Acoustic Characteristics of the Question-statement Contrast in Severe Dysarthria Due to Cerebral Palsy. Journal of Speech Language and Hearing Research, 46, 1401-1415.
- Patel, R.** (2002). Prosodic Control in Severe Dysarthria: Preserved Ability to Mark the Question-statement Contrast. Journal of Speech Language and Hearing Research, 45(5), 858-870.
- Patel, R.** (2002). Phonatory Control in Adults with Cerebral Palsy and Severe Dysarthria. Augmentative and Alternative Communication, 18(1), 2-10.

## **OTHER PUBLICATIONS**

### ***Peer-reviewed Conference and Workshop Publications***

- \*Cai, S., Bunnell, T.H., & **Patel, R.** (2013). Unsupervised Vocal Tract Length Estimation Through Model-based Acoustic-to-articulatory Inversion. Proceedings of 14<sup>th</sup> Conference of the International Speech Communication Association, INTERSPEECH 2013, Lyon, France.
- \*Wiegand, K., & **Patel, R.** (2012). SymbolPath: A Continuous Motion Overlay Module for Icon-Based Assistive Communication. Proceedings of the 14th international ACM SIGACCESS conference on Computers and Accessibility, ASSETS '12, New York, NY, USA, p. 209-210.
- \*Wiegand, K. & **Patel, R.** (2012). Non-Syntactic Word Prediction for AAC. Proceedings of the Third Workshop on Speech and Language Processing for Assistive Technologies. Montréal, Canada: Association for Computational Linguistics, 28-36.
- Patel, R.** & \*Furr, W. (2011): ReadN'Karaoke: Visualizing Prosody in Children's Books for Expressive Oral Reading. Proceedings of ACM CHI 2011 Conference on Human Factors in Computing Systems 2011, p. 3203-3206.
- Patel, R.** (2011). Message Formulation, Organization, and Navigation Schemes for Icon-Based Communication Aids, Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '11), p. 5364-5367.
- Deng, Y., **Patel, R.**, Heaton, J., Colby, G., Gilmore D., Cabrera, J. Roy, S. De Luca, C., Meltzner, G. (2009). Disordered Speech Recognition Using Acoustic and sEMG Signals. Proceedings of the 10<sup>th</sup> Annual Conference of the International Speech Communication Association, INTERSPEECH 2010, Brighton, UK. p. 644-647.
- Patel, R.** & \*Jriege, C., & Bunnell, T. (2009). VocaliD: Personalizing Text-to-Speech Synthesis for Individuals with Severe Speech Impairment. Association for Computing Machinery, SIGACCESS Conference on Computers & Accessibility, Pittsburgh, PA. p. 259-260.

- Patel, R.,** \*Everett, M., & \*Sadikov, E. (2006). Loudmouth: Modifying Text-to-Speech Synthesizer in Noise. Association for Computing Machinery, SIGACCESS Conference on Computers & Accessibility, Portland, Oregon. p. 227-228.
- Roy, D., **Patel, R.**, \*DeCamp, P., \*Kubat, R., \*Fleischman, M., \*Roy, B., \*Mavridis, N., \*Tellex, S., \*Salata, A., Guinness, J., Levit, M., & \*Gorniak, P. (2006). The Human Speechome Project. Proceedings of the 28th Annual Cognitive Science Conference, Vancouver, Canada.
- \*Dominowska, E., Roy, D., & **Patel, R.** (2002). An Adaptive Context-sensitive Communication Aid. Proceedings of the 17th Annual International Conference Technology and Persons with Disabilities, Northridge, CA. (<http://www.csun.edu/cod/conf/2002/proceedings/109.htm>)
- Patel, R.** (2002). How Speakers With and Without Speech Impairment Mark the Question-Statement Contrast. Proceedings of the International Conference on Spoken Language Processing, ICSLP 2002, Denver, CO, p. 570-574.
- Basu, A., Sarkar, S., Chakraborty, K., Bhattacharya, S., Choudhury, M., & **Patel, R.** (2002). Vernacular Education and Communication Tool for the People with Multiple Disabilities, Proceedings of the International Conference on Open Collaborative Design for Sustainable Development, Bangalore, India.
- Patel, R.** (2001). Rethinking Technology Design in AAC: A User Centered Approach, Silent Voices: International Conference on Augmentative and Alternative Communication, Ed. Sudha Kaul & Reena Sen.
- Patel, R.** (1999). Prosody Conveys Information in Severely Impaired Speech. Proceedings of the European Speech Community Association Workshop of Dialogue and Prosody, Veldhoven, The Netherlands. p. 129-135.
- Patel, R.** and Roy, D. (1998). Teachable interfaces for individuals with severe physical and speech disabilities, American Association for Artificial Intelligence workshop on Assistive Technology, Madison, WI. p. 40-47.
- Patel, R.** (1998). Acoustic Analysis of Vocalizations Produced by Individuals with Severe Dysarthria. Proceedings of the International Society of Alternative & Augmentative Communication, Dublin, Ireland. p. 489-491.

### ***Book chapters***

- Patel, R.** Assessment of prosody in motor speech impairment. (2010). In R. D. Kent and A. Lowjit. Assessment and Treatment of Motor Speech Disorders. Plural Publishing, pp. 75-95.

### ***Book reviews***

- Patel, R.** (2012). Speech Prosody in Atypical Populations: Assessment and Remediation, edited by Vesna Stojanovic and Jane Setter. International Journal of Language & Communication Disorders, 47, p. 471-472.

## **INVITED LECTURES & PRESENTATIONS**

### ***Invited Talks***

- Dec. 2013 "Eliciting Vocal Identities" TEDWomen, San Francisco, CA, Invited Talk.
- Nov. 2013 "Cerebral Palsy: Speech, Language, & Cognition Throughout the Life Span", American Speech and Hearing Association Convention, Chicago, IL, Invited Talk.
- Oct. 2013 "User-Centric Design of Assistive Technology" Boston University, Hearing Research Center Colloquium.
- June 2013 "Harnessing Prosody for Speech and Reading," Duquesne University, Pittsburg,

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- PA, Invited workshop.
- Dec. 2012 "Prosodic Control in Speech Disorders," Nemours AI DuPont Hospital for Sick Children, Wilmington, DE, Invited Colloquium.
- May 2012 "Games and Assistive Technologies for Speech Impairment," Georgia Institute of Technology, Atlanta, GA Invited Seminar.
- April 2012 "Prosodic Control in Healthy & Impaired Speakers: Scaffolding, Not Just Suprasegmental" Haskins Laboratories, New Haven, CT. Invited Colloquium.
- Nov. 2011 "Cutting Edge Approaches for Working with Children with Cerebral Palsy," American Speech and Hearing Association Convention, San Diego, CA, Invited Talk.
- June 2011 "Motor and Linguistic Bases of Prosodic Cue Trading Relations in Dysarthria," Speech Motor Control Conference, Groningen, Netherlands, Invited keynote.
- Nov. 2010 "Making the Unintelligible Intelligible in Motor Speech Disorders," American Speech and Hearing Association Convention, Philadelphia, PA, Invited talk.
- Oct. 2010. "Audio-visual Interfaces to Assess and Augment Speech Melody" Northeastern University Computer Science Seminar Series, Invited talk.
- Dec. 2009 "Human Computer Interfaces to Enhance Communication," University of Massachusetts Eunice Kennedy Shivers Center Seminar, Waltham, MA, Invited Colloquium.
- Nov. 2009 "Think Tech: Using Everyday Technologies in the Motor Speech Clinic," American Speech and Hearing Association Convention, New Orleans, LA, Invited talk.
- Sep. 2009 "Leveraging Technology to Improve Communication Bandwidth," Morton Hospital Seminar, Taunton, MA, Invited seminar.
- Apr. 2009 "Novel Communication Interfaces to Augment Communication," Northeastern University, Benefactor Symposium, Invited talk.
- May 2008 "Human-Machine Interfaces for Non-Speaking Individuals," University of Toronto Department of Speech Language Pathology 50<sup>th</sup> Anniversary Gala Celebration, Invited keynote address.
- Mar. 2008 "VocaliD: Conveying User Identity in Text to Speech," Northeastern University, Center of Digital Signal Processing Workshop, Invited talk.
- Feb. 2006 "Improving the Intelligibility of a Text-to-Speech Synthesizer in the Presence of Noise," Northeastern University Human Computer Interaction Seminar, College of Computer and Information Sciences, Invited Colloquium.
- Oct. 2006 "Analyzing, Rehabilitating & Augmenting Communication," Northeastern University Bouve College Interdisciplinary lecture series, Invited talk.
- May 2006 "Predicting Vocabulary on a Communication Aid," YESODOT, Jewish Philanthropist Association annual conference, Newton, MA, Invited talk.
- Feb. 2005 "Multimodal Contextually-Aware Communication Aids," Northeastern University Human Computer Interaction Seminar Series, College of Computer and Information Sciences, Invited talk.
- Nov. 2004 "Prosodic Impairments in Dysarthria: Implications on Speech Intelligibility," American Speech Language Hearing Association Annual Convention, Philadelphia, PA, invited talk.

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- Oct. 2004 "Prosody, Symbols and Assistive Communication," MITRE Corporation, Burlington, MA, Invited talk.
- Dec. 2004 "The Untapped Communicative Potential of Prosody in Impaired Speech," MIT Speech Communication Group Colloquium Series, Cambridge, MA, Invited talk.
- Mar. 2004 "Acoustic and Perceptual Consistencies in Impaired Speech," Northeastern University Department of Psychology, Invited seminar.
- Apr. 2003 "Cultural Considerations in AAC Service Delivery," Adelphi University, Garden City, NY, Invited seminar.
- Sept. 2003 "Communication Analysis and Design," Northeastern University Bouve College of Health Science Colloquium, Boston, MA, Invited talk.
- May 2002 "Adaptive Communication Technologies: User Centered Interface Design," Teachers College Columbia University Movement Science Conference, NY, NY, Invited talk.
- May 2002 "Vocalization: An Alternative Access Method to AAC Devices," Rehabilitation Engineering and Assistive Technology Society workshop, Minneapolis, MN, Invited talk.
- Apr. 2002 "Meaning-Based Assistive Communication Technologies," Teachers College Columbia University Colloquium Series, New York, NY, Invited talk.
- Aug. 2001 "Rethinking Technology Design in AAC: A User Centered Approach," International Conference on AAC, Calcutta, India, Invited keynote address.
- May 2000 "Technology Design in AAC: Building Technologies that Adapt to the User," Conference of the Australian Group on Severe Communication Impairment, Adelaide, Australia, Invited keynote address.
- Oct. 2000 "Acoustic Consistencies in F0 and Duration in Severe Dysarthria," MIT Speech Communication Group Colloquium Series, Cambridge, MA, Invited talk.
- Aug. 2000 "Applications of Speech Recognition for Individuals with Communication Disorders," BBN Technologies, Cambridge, MA, Invited talk.

### ***International Conference Presentations***

- Sweeny, S. & **Patel, R.** (2012). Using Computer-Generated Speech Visualization to Improve Reading Fluency & Comprehension. International Reading Conference. Chicago, IL.
- Patel, R.**, Weigand K., & Erdogmus, D. (2010). Leveraging Semantic Frames And Serial Icon Presentation For Message Construction. 14<sup>th</sup> Biennial Conference Of The International Society For Augmentative And Alternative Communication, Barcelona, Spain.
- Jreige, C., **Patel, R.**, & Bunnell, T. (2010). VocaliD: Creating Personalized Text-to-speech Synthesis for AAC Users with Dysarthria. 14<sup>th</sup> Biennial Conference Of The International Society For Augmentative And Alternative Communication, Barcelona, Spain.
- Deng, Y., **Patel, R.**, Heaton, J., Colby, G., Gilmore D., Cabrera, J. Roy, S. De Luca, C., Meltzner, G. (2009). Disordered Speech Recognition Using Acoustic and sEMG Signals. 10<sup>th</sup> Annual Conference of the International Speech Communication Association, Brighton, UK.
- Shattuck-Hufnagel, S., **Patel, R.**, & Veilleux, N. (2007). Prosodic Labeling of Adult Dysarthric Speech, Conference on Speech Prosody in Atypical Populations, Reading, UK.
- Campellone, P., DiCicco, T., & **Patel, R.** (2007). Identification of Stress Placement in Speakers with and without Speech Impairment, International Conference on Dysarthria, Sheffield, UK.

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Roy, D., **Patel, R.**, \*DeCamp, P., \*Kubat, R., \*Fleischman, M., \*Roy, B., \*Mavridis, N., \*Tellex, S., \*Salata, A., Guinness, J., Levit, M., & \*Gorniak, P. (2006). The Human Speechome Project, Simulation of Adaptive Behavior, Workshop on Emergence and Evolution of Linguistic Communication, Rome, Italy.

Dakwar-Khamis, R., & **Patel, R.** (2004). Cultural Considerations for AAC Service Delivery. 11<sup>th</sup> Biennial Conference of the International Society of Augmentative & Alternative Communication, Natal, Brazil.

**Patel, R.** (2002). How Speakers With and Without Speech Impairment Mark the Question-Statement Contrast, International Conference on Spoken Language Processing, Denver, CO.

Dominowska, E., Roy, D., & **Patel, R.** (2002). An Adaptive Context-sensitive Communication Aid," International Conference Technology and Persons with Disabilities, Northridge, CA.

**Patel, R.** (2002). Acoustic Consistencies in Prosody Among AAC Users with Severe Dysarthria. 10<sup>th</sup> Biennial Conference of the International Society of Alternative & Augmentative Communication, Odense, Denmark.

Basu, A., Sarkar, S., Chakraborty, K., Bhattacharya, S., Choudhury, M., & **Patel, R.** (2002). Vernacular Education and Communication Tool for the People with Multiple Disabilities. International Conference on Open Collaborative Design for Sustainable Development, Bangalore, India.

**Patel, R.**, & Roy, D. (2002). Multimodal Interfaces for Individuals with Severe Communication Impairments. 10<sup>th</sup> Biennial Conference of the International Society of Alternative & Augmentative Communication, Odense, Denmark.

**Patel, R.** (2000). Prosodic Signals in Severely Dysarthric Speech. 9<sup>th</sup> Biennial Conference of the International Society of Alternative & Augmentative Communication, Washington, DC.

**Patel, R.** (1999). Prosody Conveys Information in Severely Impaired Speech, European Speech Community Association (ESCA) Workshop of Dialogue and Prosody, Veldhoven, The Netherlands.

**Patel, R.** (1998). Acoustic Analysis of Vocalizations Produced by Individuals with Severe Dysarthria, 8<sup>th</sup> Biennial Conference of the International Society of Alternative & Augmentative Communication, Dublin, Ireland.

### ***National Conference Presentations***

Higginbotham, C. J., Engelke, C. & **Patel, R.** (2014) Symposium on the Augmented Voice. Assistive Technology Industry Association, Orlando, FL.

Stapp, C., Burmberg, J., & **Patel, R.** (2012). Games for Assessment and Rehabilitation of Speech and Language Impairments. American Speech, Language and Hearing Association, Annual Convention, Atlanta, GA.

**Patel, R.**, Hustad, K., Connaghan, K., & Wiegand, K. (2012). Relationship Between Prosody and Intelligibility in Children with Dysarthria. Conference on Speech Motor Control and Motor Speech Disorders, Santa Rosa, CA.

**Patel, R.** & Mills, T. (2012). Generating Personalized Speech Synthesis for Speakers with Dysarthria Using Source-filter Theory. Conference on Speech Motor Control and Motor Speech Disorders, Santa Rosa, CA.

**Patel, R.**, Reilly, K., Archibald, E., & Guenther, F. (2012). Intensity Perturbation During Running Speech. Conference on Speech Motor Control and Motor Speech Disorders, Santa Rosa, CA.



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- Connaghan, K. & **Patel, R.** (2012). Impact of Global and Local Prosodic Strategies on Intelligibility in Children with Motor Speech Impairment. Conference on Speech Motor Control and Motor Speech Disorders, Santa Rosa, CA.
- Patel, R.**, & Alexander, K. (2010). Effect of Speaking Rate on Comprehension of Prosodic Intent in Dysarthria. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- Patel, R.**, Niziolek, C., Reilly, K., & Guenther, F. (2010). Prosodic Compensations to Pitch Perturbations in Running Speech. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- Patel, R.**, Cleveland, D., Edsall, E., Olsen, L., Ramage, L., Tyler, E., & Russell, S. (2010). The Caterpillar: A Novel Reading Passage for Assessment of Motor Speech Disorders. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- Russell, S., **Patel, R.**, & Laures-Gore, J. (2010). Treating Expressive Apraxia: A Case Study. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- Heaton, J., **Patel, R.**, Deng, Y., Colby, G., Cabrera, J., Gilmore, L., Roy, S., De Luca, C., & Meltzner, G. (2010). Computer Recognition of Dysarthric Speech using Acoustic and sEMG Signals. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- DiCicco, T. & **Patel, R.** (2010). Improving Acoustic Landmark Detection in Dysarthria Using Contrastive Stress. Conference on Speech Motor Control and Motor Speech Disorders, Savannah, GA.
- Patel, R.**, & McNab, C. (2009). READn'KARAOKE: Visualizing Speech Melody to Facilitate Prosody in Oral Reading, American Speech and Hearing Association Convention, New Orleans, LA.
- Patel, R.**, Jreige, C., & Bunnell, T. (2009). VocaliD: Personalizing Text-to-Speech Synthesis for Individuals with Severe Speech Impairment. Association for Computing Machinery, SIGACCESS Conference on Computers & Accessibility, Pittsburgh, PA.
- DiCicco, T., & **Patel, R.** (2008). Machine Classification of Dysarthric Productions as an AAC Input Modality. Speech motor control and motor speech disorders, Monterey, CA.
- Patel, R.**, & Roden, A., (2008). Intelligibility of a Speech Synthesizer Vocoder Using Dysarthric Vocalizations. Speech motor control and motor speech disorders, Monterey, CA.
- Patel, R.**, & Campellone, C. (2008). The Effect of Rate Reduction on Marking Prosodic Contrasts in Dysarthria: Pilot Results. Speech motor control and motor speech disorders, Monterey, CA.
- Patel, R.**, & Campellone, P. (2008). Adverse Consequences of Rate Reduction on Marking Prosodic Contrasts in Dysarthria. American Speech and Hearing Association Convention, Chicago, IL.
- Patel, R.**, & Roden, A. (2008) Intelligibility and Peer Attitudes toward Personalized Speech Synthesis on a VOCA. American Speech and Hearing Association Convention, Chicago, IL.
- Patel, R.**, & McNab, C. (2008). The Effect of Contrastive Stress on Vowel Formants in Speakers with Dysarthria. American Speech and Hearing Association Convention, Chicago, IL.
- Patel, R.**, & Campellone, P. (2007). Acoustic & Perceptual Aspects of Contrastive Stress in Dysarthria. American Speech Language Hearing Association Convention, Boston, MA.
- Patel, R.**, Everett, M., & Campellone, P. (2007). Influence of Prosodic Modifications on Text-to-Speech Intelligibility in Noise. American Speech Language Hearing Association Convention, Boston, MA.

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- Patel, R.**, & Brayton, J. (2007). Identifying Prosodic Contrasts Produced by Four, Seven, and Eleven-Year-Old Children. American Speech Language Hearing Association Convention, Boston, MA.
- DiCicco, T., & **Patel, R.** (2007). Machine Classification of Prosodic Control in Dysarthria. American Speech Language Hearing Association Convention, Boston, MA.
- Patel, R.**, & Schell, K. (2007). The Influence of Linguistic Content on the Lombard Effect. American Speech Language Hearing Association Convention, Boston, MA.
- Patel, R.**, Campellone, P., Reilly, K. J., Niziolek, C., Guenther, F.H. (2008). Prosodic Compensations to Pitch Perturbation During Running Speech. Conference on Speech Motor Control and Motor Speech Disorders, Monterey, CA.
- Patel, R.**, & Salata, A. (2006). Using Computer Games to Mediate Caregiver-child Communication: Initial Results of Prosodic Control in Children with Dysarthria. Conference on Speech Motor Control and Motor Speech Disorders, Austin, TX.
- Patel, R.**, Watkins, C., & Briggs, B. (2006). Identification of Contrastive Stress in Dysarthria: Pilot Results," Conference on Speech Motor Control and Motor Speech Disorders, Austin, TX.
- Briggs, B., & **Patel, R.** (2006). Influence of Familiarity on Identifying Prosodic Vocalizations. American Speech Language Hearing Association Convention, Miami, FL.
- Patel, R.**, & Salata, A. (2006). Using Computer Games to Study Prosodic Control in Dysarthria. American Speech Language Hearing Association Convention, Miami, FL.
- Patel, R.**, Schooley, K., & Radhakrishnan, R. (2006). A Comparison of Two Methods of AAC Message Formulation. American Speech Language Hearing Association Convention, Miami, FL.
- Kochanski, G., & **Patel, R.** (2005). Dysarthric Speech Classification. Conference of the Acoustical Society of America, Vancouver, BC.
- Patel, R.**, & Grigos, M. (2005). Acoustics of Contrastive Stress in Children. Conference of the Acoustical Society of America, Vancouver, BC.
- Patel, R.**, Schell, K., & Yaich, E. (2005). Interaction in Noise. American Speech Language Hearing Association Convention, San Diego, CA.
- Patel, R.**, Angermeier, K., Salata, A., & Schooley, K. (2005). Design Principles for Creating Alternative Toy Technologies. American Speech Language Hearing Association Convention, San Diego, CA.
- Patel, R.**, & Wayne, L. (2004). Preliminary Findings of Contrastive Stress in Severe Dysarthria. Speech Motor Control and Motor Speech Disorders Conference, Albuquerque, NM.
- Patel, R.**, Whang, J., & Nunez, P. (2004). Prosodic Alterations to Speech Produced in Noise. Speech Motor Control and Motor Speech Disorders Conference, Albuquerque, NM.
- Grigos, M., & **Patel, R.** (2004). Production of the Question-statement Contrast During Development. Speech Motor Control and Motor Speech Disorders Conference, Albuquerque, NM.
- Patel, R.**, & Pilato, P. (2004). A Visually-Oriented, Context-Engaged Language Learning and Communication Aid. Conference on Human Language Technologies, Boston, MA.
- Patel, R.**, & Syeda, M. (2004). The Influence of Semantic Information on the Acoustics of Speech in Noise. Conference of the Acoustical Society of America, New York, NY.

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- Patel, R.,** Syeda, M., & Grigos, M. (2004). Acoustic Correlates of the Question-statement Contrast in Children. Conference of the Acoustical Society of America, New York, NY.
- Patel, R.,** Syeda, M. & Watkins, C. (2004). Acoustic Modifications to Semantic Content of Speech Produced in Noise. MIT Sound to Sense Conference, Boston, MA.
- Grigos, M., & **Patel, R.** (2004). Kinematic and Acoustic Correlates of the Question Asking in Children. MIT Sound to Sense Conference, Boston, MA.
- Patel, R.,** Radhakrishnan, R., & Roy, D. (2004). Image-oriented Message Formulation in a Communication Aid. Association for Computing Machinery, SIGACCESS Conference on Computers & Accessibility, Atlanta, GA.
- Patel, R.,** Radhakrishnan, R., & Roy, D. (2004). Meaning Based Message Formulation in AAC. American Speech Language Hearing Association Convention, Philadelphia, PA.
- Patel, R.,** Grigos, M., & Syeda, M. (2004). Acquisition of Questions vs. Statements in Children. American Speech Language Hearing Association Convention, Philadelphia, PA.
- Grigos, M., & **Patel, R.** (2004). Articulator Movements During Questions vs. Statements in Children. American Speech Language Hearing Association Convention, Philadelphia, PA.
- Fell, H., **Patel, R.,** & Ferrier, L. J. (2004). Reading with Inflection. American Speech Language Hearing Association Convention, Philadelphia, PA.
- Patel, R.** (2002). Acoustic Evidence for Remapping of Prosodic Control in Severe Dysarthria. Motor Speech Disorders Conference, Williamsburg, WV.
- Patel, R.,** & \*Wilner, J. (2002). Graphical Features in Picture Symbols. American Speech Language Hearing Association Convention, Atlanta, GA.
- Patel, R.** (2002). Acoustic Cues for Prosodic Control in Severe Dysarthria. American Speech Language Hearing Association Convention, Atlanta, GA.
- Patel, R.,** & O'Keefe, B. (2000). Prosodic Information in Severely Dysarthric Vocalizations. Trijoint Conference in Rehabilitation Sciences, Toronto, ON.
- Patel, R.,** & O'Keefe, B. (2000). Residual Prosodic Control Despite Severe Dysarthria. Speech Motor Control & Motor Speech Disorders Conference, San Antonio, TX.
- Patel, R.,** & Roy, D. (1999). Adaptive Spoken Communication Aids. American Speech Language Hearing Association Convention, San Francisco, CA.
- Patel, R.,** & Roy, D. (1998). Teachable Interfaces for Individuals with Severe Physical and Speech Disabilities. American Association for Artificial Intelligence workshop on Assistive Technology, Madison, WI.

#### **AWARDS & HONORS**

2013	University Teaching Excellence Award	(\$3,000)
1996-1998	MacGeachy Foundation Merit Scholarship	(\$55,500)
1993-1994	Ontario Graduate Scholarship	(\$27,000)
1993	Social Science Dean's Scholar	
1992	Department of Psychology, Academic Merit	
1990-1992	Alberta Heritage Fund Scholarship	(\$9,000)
1989	Canada Scholarship	(\$10,000)

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### RESEARCH FELLOWSHIPS

1999	Natural Science & Engineering Research Council Postgraduate Fellowship	(\$19,500)
1999	Harmonize for Speech Foundation Fellowship	(\$5,000)
1998	Bloorview Children's Hospital Foundation Graduate Research Studentship	(\$17,500)
1998	Harmonize for Speech Foundation Fellowship	(\$3,000)
1998	Prentke Romich-ISAAC Research Award	(\$1,000)
1997	Whipper Watson Graduate Research Studentship	(\$16,500)

### GRANT FUNDING

R21 EB018764-01	Patel (PI)	09/01/2014-08/31/2016
National Institute on Biomedical Imaging and Bioengineering (NIBIB)		
<i>Multimodal Speech Translation for Assistive Communication</i>		
Role: PI (\$489,200)		
R21 DC013095	Patel (PI)	12/01/2013 - 11/30/2015
National Institute on Deafness and Other Communication Disorders (NIDCD)		
<i>Prosodic Control in Acquired and Congenital Dysarthria</i>		
Role: PI (\$459,400)		
SBE-0354378	Shinn-Cunningham (PI)	3/01/2013 – 8/31/2015
National Science Foundation (NSF)		
<i>CELEST: A Center for Learning in Education, Science, and Technology.</i>		
Role: Subcontract Co-PI (NU Sub = \$458, 024)		
P50 NICHD	Tager-Flusberg (PI)	6/1/2013 - 5/31/2018
Autism Center of Excellence		
Role: Subcontract Co-PI (NU Sub = \$554, 600)		
IIS	Patel (PI)	10/01/2011 - 9/30/2014
National Science Foundation, Computer and Information Sciences Division		
<i>Modeling Acoustic and Articulatory Features for Hybrid Synthesis</i>		
Role: PI (\$180, 910)		
R03	Patel (PI)	02/01/2011 - 01/31/2014
National Institute on Child and Human Development (NICHD)		
<i>Acquisition of Prosodic Control in Typically Developing Children</i>		
Role: PI (\$164, 677)		
IIS	Patel (PI)	08/01/2009 - 07/31/2014
National Science Foundation, Computer and Information Sciences Division		
<i>Displaying Prosodic Text for Reading Aloud with Expression</i>		
Role: PI (\$498, 407)		
IIS	Patel/Erdogmus (Co-PI)	08/15/2009 - 08/14/2014
National Science Foundation, Computer and Information Sciences Division		
<i>RSVPiconCHAT: A Brain-Computer Interface for Icon-Based Communication</i>		
Role: Co-PI (total award = \$499, 998)		



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Teachers College Columbia University  
*Training Teachers from Arab Minorities to Provide Services for Assistive Technology*  
Role: PI (\$3,000)

**GIFT**

Continuous Path Foundation 09/30/2013 - 9/30/2014  
Gift to support assistive technology efforts within the lab  
Role: PI (\$80,000)

**PENDING GRANT FUNDING**

CHS Medium Patel (PI) 08/01/2014 - 7/31/2018  
National Science Foundation  
Wireless sensing of speech kinematics and acoustics for remediation  
Role: PI (\$1,100,439)

R01 Patel (PI) 05/01/2014 - 4/30/2019  
National Institute on Child and Human Development (NICHD)  
*Leveraging Prosody to Enhance Reading Fluency in Children*  
Role: PI (\$4,005,480)

R21 Patel (PI) 05/1/2014 - 4/30/2016  
NIH – multi-institution: NIBIB, NIDCD, NICHD, NINR and ORWH  
*Multimodal Speech Translation for Assistive Communication*  
Role: PI (\$416,400)

Pedal with Pete Foundation Patel (PI) 05/01/2014-11/30/2016  
*Optimized Communication Device Layouts to Accommodate Motor Capabilities of Individuals with Cerebral Palsy*  
Role: PI (\$30,000)

**MENTORED RESEARCH FUNDING**

Cerebral Palsy International Research Foundation 12/01/2013 - 12/01/2016  
Ethel & Jack Hausman Clinical Research Scholars Grant  
*The Interaction Between Prosody and Intelligibility of Speech in Cerebral Palsy*  
PI – Kate Connaghan, Research Scientist @ CadLab (\$225,000)

New Century Scholars Grant 12/01/2013 - 12/01/2014  
*Prosodic Categories in Speakers with Dysarthria*  
PI – Kate Connaghan, Research Scientist @ CadLab (\$10,000)

American Australian Foundation Research Fellowship 01/1/2014 - 12/31/2014  
*Improving reading fluency in second language learners*  
PI – Heather Kember, Post-Doctoral Associate @ CadLab (\$40,000)

Progressus Therapy Future Leaders In School-Based Speech-Language Pathology Scholarship  
– *In partnership with the Council of Academic Programs in Communication Sciences and Disorders*  
Student: Sara Natale (\$3,000) 11/01/2011 - 10/31/2012

American Speech Language and Hearing Association Student Preparation for  
Academic and Research Careers (SPARC) Award  
Student: Erin Archibald (\$1000) 07/01/2012 - 6/30/2013

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Student: Katherine Alexander (\$1,000)	07/01/2009 - 06/30/2010
Student: Catherine McNab (\$1,500)	07/01/2008 - 06/30/2009
Student: Pamela Campellone (\$1500)	07/01/2007 - 06/30/2008

Northeastern University Provost's Undergraduate Research Award

Student: Catherine McNab (\$1,000)	06/01/2007 - 05/31/2008
Student: Pamela Campellone (\$1,000)	07/01/2006 - 06/30/2007

## TEACHING

### ***Northeastern University, Interdisciplinary Program in Personal Health Informatics***

Spring 2014	Personal Health Interface Field Deployment & Evaluation
Fall 2013	Personal Health Interface Design and Development

### ***Northeastern University, Department of Speech Language Pathology & Audiology***

Spring 2004 - present	Speech Science
Spring 2005	Seminar in Communication Disorders
Fall 2005-2010	Masters Thesis Seminar
Spring 2006	Speech & Hearing Sciences
Spring 2008 - present	Motor Speech Disorders

### ***Northeastern University, Department of Computer and Information Sciences***

Fall 2004, 2007	Reading Course in Computer Science
Spring 2005-2009	Masters Project in Computer Science
F & S 2010 – present	Dissertation Supervision in Computer Science
F 2013	Personal Health Interface Evaluation & Field Deployment

### ***Northeastern University, Electrical and Computer Engineering***

2007-2013	Capstone Project, project advisor (various years)
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### ***Teachers College Columbia University, Biobehavioral Sciences***

Spring 2001	Physiological Phonetics
Spring 2001	Brain and Behaviour
Fall 2001, 2002	Anatomy & Physiology of Speech & Hearing
Spring 2002	Neuroscience of Speech & Language
Spring 2002, 2003	Speech Science

### ***University of Toronto, Department of Speech Language Pathology***

Winter 1998	Alternative and Augmentative Communication
Fall 1998, 1999	Child Language Development and Disorders

### ***Guest Lectures***

Fall 2013	Freshman CCIS Introductory Overview Course
Fall 2012, 2013	Assistive Technology Massachusetts Institute of Technology, Dept. of Computer Science
Spring 2005-present	Motor speech disorders Harvard-MIT Health Science & Technology program Program in Speech and Hearing Biosciences and Technology

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Spring 2008

Behavior management in Communication Disorders  
Northeastern University, Department of Counseling Psychology

### **MENTORED RESEARCH ASSOCIATES**

#### ***Post-doctoral Associates***

November 2012-present Heather Kember (Ph.D. University of Sydney: Psychology)  
January 2013-June 2013 Daniil Umanski (Ph.D. Leiden University; Computational Linguistics)  
Sept. 2010-Jan. 2012 Timothy Mills (Ph.D. University of Edinburgh; Speech Technologies): Current position – University of Alberta, instructor.

#### ***Research Scientist***

September 2010-present Kathryn P. Connaghan (Ph.D. University of Washington; Speech and Hearing Sciences)

### **SUPERVISION OF GRADUATE STUDENTS**

#### ***Doctoral Dissertation advisor/committee member***

##### Advisor:

Jan. 2013 –present Miriam Zizook (co-advisor: M. Goodwin) - topic area: design of a social interaction interface for assistive communication users  
Interdisciplinary Program in Personal Health Informatics, Northeastern University  
Sept. 2012-present Mansoor Pervaiz – topic area: using voice recognition to detect and monitor motor speech disorders  
Interdisciplinary Program in Personal Health Informatics, Northeastern University  
Sept. 2009-present Karl Wiegand - “Disambiguation of Imprecise User Input Through Intelligent Assistive Communication.”  
College of Computer and Information Sciences, Northeastern University.  
August 2009 Thomas DiCicco - “Optimization of Acoustic Feature Extraction from Dysarthric Speech”  
Harvard/MIT Health Science and Technology Division, Program in Speech and Hearing Bioscience and technology, Doctoral Dissertation.

##### Committee member/examiner:

2013-present Martina Schaefer (Advisor: Megan McAuliffe). “The interaction between speech perception and speech production: Implications for speakers with dysarthria”. University of Canterbury, New Zealand.  
2012-present Micah Eckhardt (Advisor: Rosalind Picard). “Story telling tool for children with Autism”. MIT Media Lab, Cambridge, MA.  
2011-Oct. 2012 Sean Lorenz (Advisor: Frank Guenther). “Development of a practical and mobile brain-computer communication device for profoundly paralyzed individuals”. Boston University, Center for Cognitive Neural Systems, Committee Member.  
January 2008 Jason A. Tourville (Advisor: Frank Guenther). “Neural Mechanisms Underlying Auditory Feedback Control Of Speech,” Boston University, Center for Cognitive Neural Systems, Doctoral Dissertation examiner.



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- Oct. 2004 Bruce Wisenburn (Advisor: Jeffery Higginbotham), "The Use of Natural Language Processing for Augmentative and Alternative Communication Utterance Generation,"  
University of Buffalo, Department of Communication Disorders and Sciences, Doctoral Dissertation external examiner.
- April 2003 Miharu Nittono (Advisor, Leslie Beebe), "Japanese hedging in friend-friend discourse,"  
Department of Linguistics, Teachers College Columbia University, Doctoral Dissertation committee member.
- April 2003 Carol Kaufmann (Advisor: John Saxman), "Parental Attitudes toward using Total Communication Intervention with Non-verbal Children,"  
Department of Speech Language Pathology, Teachers College Columbia University, Doctoral Dissertation committee member.
- March 2002 Toshihiko Matsuka (Advisor: James Corter), "Neural network modeling of category learning,"  
Department of Human Behavior, Teachers College Columbia University, Doctoral Dissertation committee member.

*\*\* Note: The Department of Speech Language Pathology and Audiology at Northeastern University does not currently offer a doctoral program.*

***Masters Thesis advisor/committee member***

Advisor:

- Chelsea Werthiem (2015). Topic: Social interaction for non-verbal communicators.  
Northeastern University Department of Speech Language Pathology and Audiology.
- Erin Archibald (2013). "Intensity perturbations to running speech." Northeastern University Department of Speech Language Pathology and Audiology.
- Sara Natale (2012). "Improving Reading Expressivity using Visual Cues to Prosody." Northeastern University Department of Speech Language Pathology and Audiology.
- Katherine Alexander (2010) "Effect of rate reduction on listener ability to identify prosodic intent in speakers with dysarthria." Northeastern University Department of Speech Language Pathology and Audiology.
- Catherine McNab (2009) "Visualizing speech melody to facilitate prosody in oral reading." Northeastern University Department of Speech Language Pathology and Audiology.
- Pamela Campellone (2008) "Impact of Articulation Rate on Speech Prosody in Dysarthria." Northeastern University Department of Speech Language Pathology and Audiology.
- Anna Roden (2008) "Peer Attitudes toward Personalized Speech Synthesis on an Assistive Communication Aid." Bethany Briggs (2006) "Influence of Familiarity on Identifying Prosodic Vocalizations Produced by Children with Severe Dysarthria." Northeastern University Department of Speech Language Pathology and Audiology.
- Julie Brayton (2007) "Identifying Prosodic Contrasts in Utterances Produced by 4, 7, and 11 Year Old Children." Northeastern University Department of Speech Language Pathology and Audiology.
- Kevin Schell (2006) "The Influence of Linguistic Salience on the Lombard Effect." Northeastern University.

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Committee member:

Chelsea Pettibone (2012). "Vowel contrast distance and perturbations of vowel auditory feedback: Adaptation & generalization." Northeastern University Department of Speech Language Pathology and Audiology.

Katie Docherty (2010) "Vowel-specific responses to formant perturbation of speech auditory feedback." Northeastern University Department of Speech Language Pathology and Audiology.

Beth Carter (2007) "The Effects of PECS Instruction on Requesting and Selected Joint Attention Skills in Children with Autism." Northeastern University Department of Speech Language Pathology and Audiology.

Katie Angermier (2006) "Iconicity and Symbol Learning with the Picture Exchange Communication System." Northeastern University Department of Speech Language Pathology and Audiology.

Kristin Wacyra (2006) "Development of Symbols to Facilitate Sexuality Based Conversation for AAC Users." Northeastern University Department of Speech Language Pathology and Audiology.

Jeff Bartelma (2004) "Flycatcher: Fusion of Gaze with Hierarchical Image Segmentation for Robust Object Detection. Master of Engineering MIT.

Eva Dominowska (2002) "Semantic frame-based message formulation." Master of Engineering MIT.

**SERVICE AND PROFESSIONAL MEMBERSHIPS**

***Departmental & University Service @ Northeastern University***

2013-present	Search committee member, Cluster hire in Personalized Medicine
2013-present	Advisory board member, Center for Advancing Teaching & Learning through Research, Northeastern University
2013-present	Search Committee member; Faculty search in Department of Speech Language Pathology and Audiology
2012- present	Search committee member, Dean of Computer and Information Sciences
2010-present	Bouve College Faculty Council
2011-present	Admissions committee, PHI program
2010-present	Co-Founder and Co-director of the Interdisciplinary Doctoral Program in Personal Health Informatics
2008-present	Junior faculty mentor for faculty in SLPA, PT,
2012-2013	Search Committee Chair, Faculty search in Department of Speech Language Pathology and Audiology
2011-2012	Search Committee member, Bouve Associate Dean of Research
2011-2012	Search Committee member, Search for the Chair of the Department of Speech Language Pathology and Audiology
2009-2012	Interdisciplinary faculty search member – CCIS/Bouve
2011, 2012	NU RISE Faculty Judge
2010-2012	CCIS/Bouve Interdisciplinary Ph.D. Task Force
2005-2007, 2011	Departmental Graduate Admissions Committee
2008-present	Departmental Ph.D. Task force

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2008-present	Department Newsletter Committee
2008-present	Chair of Junior Faculty Mentorship Round Table Discussion Group
2005-present	Public Relations and Visibility Committee
2007-2008	Chair of faculty search committee
2006-2007	Member of Chair Search Committee
2005-2008	Steering Committee Member for Doctorate in Neuroscience

### **Professional Service**

**Journal Editor:** Augmentative and Alternative Communication (2004-2007)

**Journal Reviewer:**

Augmentative and Alternative Communication (2000-present)  
Journal of Speech Language & Hearing Research (2001-present)  
Journal of the Acoustical Society of America (2004-present)  
Journal of Communication Disorders (2005-present)  
Folia Phoniatica et Logopaedica (2003-present)  
Medical Monitor (2005-present)  
Language and Speech (2010-present)  
Speech Communication (2010-present)  
Child Language Teaching and Therapy (2010-present)  
Computer Speech and Language (2011-present)  
Asia Pacific Journal of Speech Language and Hearing (2012-present)

**Grant Reviewer:**

NSF Panel Member, 2000, 2005, 2007-present (1-2 times yearly; Research grants & SBIR/STTR competitions)  
NIH invited reviewer 2005-present (1-2 times yearly; Research grants & SBIR/STTR)  
ASHA SPARC award; mentored student research grants 2013  
Neurological Foundation of New Zealand, 2008  
University of Maryland Industrial Partnerships, 2009

**Organizing Boards and Conference Committees:**

SLPAT 2014, 2013 (Speech Language Processing for Assistive Technology),  
Conference Organization Member  
Conference on Motor Speech Disorders and Speech Motor Control (2006, 2008, 2014),  
Conference Committee member  
WOCCI 2013, 2012 - Workshop on Child Computer and Interaction, Conference  
Committee member  
American Speech and Hearing Association – Motor speech disorders track (2007-2012),  
Conference Committee member  
American Speech and Hearing Association – Speech Science track (2007-2009),  
Conference Committee member  
NAACL HLT- Workshop on Speech Language Processing for Assistive Technology  
(2012), Conference Committee member  
Clinical AAC Research Conference (2009), Conference Committee member  
Board of Directors – US Society for Augmentative & Alternative Communication (2003-

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2004)  
Rehabilitation Engineering Research Council (2002-2003)  
Stakeholder Forum on Assistive Technology for Communication Enhancement (2002)  
Founding member of the Greater Toronto Area AAC advocacy group (1998)

***Professional Affiliations and Memberships***

Certified Member, American Speech Language and Hearing Association  
Member, Acoustical Society of America  
Member, Association for Computing Machinery  
Member, American Association for Artificial Intelligence  
Member, Association for Computational Linguistics  
Member, International Society for Augmentative and Alternative Communication

***Leadership Training & Development***

2014            Founded the Boston Initiative for the Advancement of Academic Women in  
                    Communication Sciences – an inter-university leadership development and  
                    mentoring forum

2012            Fellow program graduate – The Partnership Inc. Leadership Training

2012-present   Northeastern University, ReDI Research Leadership Training Program