

Richard M. Arenas

Associate Professor, University of New Mexico, Speech & Hearing Sciences

August, 2019

Educational History

Ph.D. 2012, University of Iowa, Iowa City, IA, Speech and Hearing Sciences

Dissertation title: The role of anticipation and an adaptive monitoring system in stuttering: A theoretical and experimental investigation. Dissertation Advisor: Patricia Zebrowski, Ph.D., CCC-SLP, Professor

M.A. 2005, University of Iowa, Iowa City, IA, Speech-language pathology and audiology

Thesis title: Classical conditioning and the effects of autonomic arousal on fundamental frequency and temporal acoustic measures in adults who stutter. Thesis Advisor: Patricia Zebrowski, Ph.D., CCC-SLP, Professor

B.A. 2003, University of Iowa, Iowa City, IA, Speech and Hearing Sciences

Employment History

Associate Professor, 2019-present, University of New Mexico, Department of Speech and Hearing Sciences, Albuquerque, New Mexico

Assistant Professor, 2013-2019, University of New Mexico, Department of Speech and Hearing Sciences, Albuquerque, New Mexico

Adjunct Researcher, 2013-present, MIND Research Network, Albuquerque, NM

Senior Database Administrator and Consultant, 2013-present, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Adjunct Instructor, 2013, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Application Programmer/Analyst, 2011-2013, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Adjunct Instructor, 2011, Augustana College, Department of Communication Sciences and Disorders, Rock Island, Illinois

Research Assistant III, 2011, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Research Assistant II, 2005-2011, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Student Research Assistant, 2001-2005, University of Iowa, Department of Communication Sciences and Disorders, Iowa City, Iowa

Applications Developer III, 2000-2001, McLeod USA Telecommunications, Cedar Rapids, Iowa

Software Developer II, 1999-2000, NCS/Pearsons, Iowa City, Iowa

Applications Developer II, 1997-1999, McLeod USA Telecommunications, Cedar Rapids, Iowa

Professional Recognition and Honors

Malcolm Fraser Foundation, Doctoral Studies Fellowship, 2009-2011, Malcom Fraser Foundation

Research Mentoring-Pair Travel Award, 2009, American Speech-Language and Hearing Association

Students Preparing for Academic and Research Careers (SPARC) award, 2004, American Speech-Language and Hearing Association

Graduate Fellow, 2003-2005, University of Iowa, Department of Communication Sciences and Disorders

Esther Ogdahl Award, 2002, University of Iowa, Department of Communication Sciences and Disorders

Summer Research Opportunity Program Scholar, 2001, University of Iowa

Articles Published in Refereed Journals

Page, T. A., Harrison, M., Moeller, M. P., Oleson, J., **Arenas, R. M.**, & Spratford, M. (2018). Service Provision for Children Who Are Hard of Hearing at Preschool and Elementary School Ages. *Language, Speech, and Hearing Services in Schools*, 1–17. https://doi.org/10.1044/2018_LSHSS-17-0145

Arenas, R. M., Shoemaker, J., & Phillips, J. (2018). High Prevalence of Pineal Cysts in Adults who Stutter. *Brain and Language*, 177-178, 18-22. <https://doi.org/10.1016/j.bandl.2018.01.006>

Arenas, R. M., Walker, E., & Oleson, J. (2017). Developmental Stuttering in Children Who are Hard of Hearing. *Language Speech and Hearing Services in Schools*, 48(4), 234-248. http://doi.org/10.1044/2017_LSHSS-17-0028

Arenas, R. M. (2017). Conceptualizing and investigating the contextual variability of stuttering: The speech and monitoring interaction (SAMI) framework. *Speech, Language and Hearing*, 20(1), 15–28. <https://doi.org/10.1080/2050571X.2016.1221877>

Arenas, R. M., & Zebrowski, P. M. (2017). The relationship between stuttering anticipation and verbal response time in adults who stutter. *Speech, Language and Hearing*, 20(1), 1–14. <https://doi.org/10.1080/2050571X.2016.1201346>

Buhr, T., Zebrowski, P., Moon, J., Tumanova, V., **Arenas, R.** & Loucks, T. (2016). Coordination of opening and closing jaw movements of young children who stutter. *Speech Pathology and Therapy*, 1(115). <http://dx.doi.org/10.4172/2472-5005.1000115>

Harrison, M., Page, T. A., Oleson, J., Spratford, M., Unflat Berry, L., Peterson, B., Welhaven, A., **Arenas, R.M.**, & Moeller, M. P. (2016). Factors Affecting Early Services for Children Who Are Hard of Hearing. *Language Speech and Hearing Services in Schools*, 47(1), 16-30. http://doi.org/10.1044/2015_LSHSS-14-0078

Tomblin, J. B., Walker, E. A., McCreery, R. W., **Arenas, R.M.**, Harrison, M., & Moeller, M. P. (2015). Outcomes of Children with Hearing Loss: Data Collection and Methods. *Ear and Hearing*, 36, 14S–23S. <http://doi.org/10.1097/AUD.0000000000000212>

Tumanova, V., Zebrowski, P. M., Goodman, S. S., & **Arenas, R.M.** (2015). Motor practice effects and sensorimotor integration in adults who stutter: Evidence from visuomotor tracking performance. *Journal of Fluency Disorders*, 45, 52–72. <http://dx.doi.org/10.1016/j.jfludis.2015.04.001>

Bentler, R., Walker, E., McCreery, R., **Arenas, R.M.**, & Roush, P. (2014). Nonlinear frequency compression in hearing aids: Impact on speech and language development. *Ear and Hearing*, 35:4, 143-152. <http://dx.doi.org/10.1097/AUD.0000000000000030>

McGregor, K, Licandro, U., **Arenas, R.**, Eden, N., Stiles, D., Bean, A. & Walker, E. (2013). Why words are hard for adults with developmental language impairment. *Journal of Speech, Language and Hearing Research*, 56, 1845-1856. [http://dx.doi.org/10.1044/1092-4388\(2013\)12-0233](http://dx.doi.org/10.1044/1092-4388(2013)12-0233)

Arenas, R. & Zebrowski, Z. (2013). The effects of autonomic arousal on speech production in adults who stutter: A preliminary study. *Speech, Language and Hearing*, 16:3, 176-185. <http://dx.doi.org/10.1179/2050572813Y.0000000011>

McGregor, K., Rost, G., **Arenas, R.**, Farris-Trimble, A. & Stiles, D. (2013). Children with autism can use gaze in support of word recognition and learning. *Journal of Child Psychology and Psychiatry*, 54:7, 745-753. <http://dx.doi.org/10.1111/jcpp.12073>

Arenas, R.M., Zebrowski, P., & Moon, J. (2012). Phonetically governed voicing onset and offset behavior in preschool children who stutter. *Journal of Fluency Disorders*, 37, 179-187. <http://dx.doi.org/10.1016/j.jfludis.2012.04.001>

Zebrowski, P. & Arenas, R.M. (2011). The “Iowa Way” revisited. *Journal of Fluency Disorders*, 36, 144-157. <http://dx.doi.org/10.1016/j.jfludis.2010.08.001>

Invited or Refereed Abstracts

Richardson, J.D., Quinn, D., Arenas, R., Dalton, S.G.H., Larsen, N., von Hoyningen-Huene, S., Duhigg, C., & Pinchotti, D. (2019). Abstract #86: Optical Measurement of Cerebral Blood Flow to Investigate Brain Stimulation and Task Engagement. *Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation*, 12(2), e30. <https://doi.org/10.1016/j.brs.2018.12.093>

Arenas, R. M., Richardson, J., Dalton, S. G., & Stewart, H. (2019). Abstract #47: Current State of Blinding in tACS Research. *Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation*, 12(2), e17. <https://doi.org/10.1016/j.brs.2018.12.054>

Invited or Refereed Presentations at Professional Meetings

Finan, D., Arenas, R., Neel, A., & Tasko, S. (2019, November). *Unleashing the Power of Praat Analysis: An Introduction to Scripting*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Orlando, FL.

Arenas, R., Davidow, J., Gerlach, H., Jackson, E.S., Rodgers, N. H., Tichenor, & Zebrowski, P. (2019, November). *Anticipation of Stuttering: A Panel Discussion on Theory, Research, and Clinical Implications*. 2 hour presentation presented at the American Speech-Language-Hearing Association Annual Convention, Orlando, FL.

Shymanski, J., Walker, E., & Arenas, R. (2019, November). *Competitive Learning Processes: The Role of Verbal Mediation in Sequential Learning*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Orlando, FL.

Arenas, R. (2019, July). Minimizing the stuttering beast: Iceberg 2.0. *Invited presentation* at the Friends Conference, Chicago, IL.

Arenas, R., & Neel, A. (2018, November). *Changes in the Duration of Disfluencies During Adaptation*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Boston, MA.

Richardson, J.D., Quinn, D., Arenas, R., Dalton, S.G.H., Larsen, N., von Hoyningen-Huene, S., Duhigg, C., & Pinchotti, D. (2018, August). *Optical measurement of cerebral blood flow to investigate brain stimulation and task engagement*. Poster presented at NYC Neuromodulation Conference and NANS Summer Series, New York City, NY.

Arenas, R., Richardson, J.D., Dalton, S.G.H., & Stewart, H. (2018, August). *Current state of blinding in tACS research*. Poster presented at the NYC Neuromodulation Conference and NANS Summer Series, New York City, NY.

Arenas, R. (2017, November). *High Prevalence of Pineal Cysts in a Sample of Adults Who Stutter*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Los Angeles, CA.

Arenas, R., Richardson, J., Hudspeth Dalton, S., & Stewart, H. (2017, October). *Current state of blinding in tACS research*. Poster presented at the New Mexico Clinical Neurostimulation meeting, Albuquerque, NM.

Arenas, R. (2017, July). The anticipation of stuttering: Its impact on quality of life and on the speech production process. *Invited presentation* at the National Stuttering Association Research Symposium, Dallas, TX.

Arenas, R., & Buhr, A. (2016, November). *The Dynamic Social Self as a Way to Understand Change in Stuttering*. One hour seminar presented at the American Speech-Language-Hearing Association Annual Convention, Philadelphia, PA.

Arenas, R., Walker, E. & Oleson, J. (2016, November). *The Incidence and Prevalence of Stuttering in Children Who Are Hard of Hearing*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Philadelphia, PA.

Neel, A., **Arenas, R.**, & Misuzawa, C. (2016, March). *Changes in Disfluent Speech with Adaptation in Stuttering*. Poster presented at the Conference on Motor Speech, Newport Beach, CA.

Arenas, R. (2016, March). *Investigating the use of brain stimulation to improve fluency in people who stutter*. Poster presented at the BBHI Neuroscience Day, Albuquerque, NM.

Arenas, R. (2015, November). *Conceptualizing & Investigating the Contextual Variability of Stuttering: The SAMI Framework*. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Denver, CO.

Arenas, R., & Zebrowski, P. (2014, November). *Effects of the anticipation of stuttering on speech production*. Technical talk presented at the American Speech-Language-Hearing Association Annual Convention, Orlando, FL

McGregor, K, Licandro, **Arenas, R.**, Eden, N., Stiles, D., Bean, A. & Walker, E. (2011, May). *The Integrity of Memory Processes that Support Word Learning in Students with Language Learning Disabilities*, Poster session presented at Symposium for Research in Child Language Disorders, Madison, WI

Tumanova, V., Zebrowski, P., Goodman, S., Uc, E. & **Arenas, R.** (2010, November). *Procedural learning abilities of adults who stutter and adults with Parkinson's disease:*

Implications from visuomotor tracking performance. Poster presented at the American Speech-Language-Hearing Association Annual Convention, Philadelphia, PA

Tumanova, V., Zebrowski, P., **Arenas, R.** & Goodman, S. (2009, November). *Visuomotor tracking abilities of adults who stutter and adults with Parkinson's disease.* Poster presented at the American Speech-Language-Hearing Association Annual Convention, New Orleans, LA

Arenas, R.M. (2009, November). *Classical Conditioning and the Effects of Autonomic Arousal on Fundamental Frequency and Temporal Acoustic Measures in Adults Who Stutter.* Poster session presented at the American Speech-Language-Hearing Association Annual Convention, New Orleans, LA.

Arenas, R.M. & Zebrowski, P.M. (2007, November). *Phonetically-Governed Voicing Onset and Offset in Children Who Stutter.* Poster session presented at the American Speech-Language-Hearing Association Annual Convention, Boston, MA.

Contributed (un-refereed) Abstracts and/or Oral Presentations at Professional Meetings

Arenas, R. (2019, Winter). A father's advice on stuttering. *Stuttering Foundation of America Newsletter*. Retrieved from <https://www.stutteringhelp.org/blog/fathers-advice>

Khalsa, H. & Arenas, R. (2015, Summer). Website increases stuttering awareness. *Stuttering Foundation of America Newsletter*. Retrieved from <http://www.stutteringhelp.org/sites/default/files/Summer2015Newsletter.pdf>

Arenas, R.M. (2014, October). *Effects of the anticipation of stuttering on speech production.* Poster session presented at the New Mexico Speech-Language-Hearing Association, Albuquerque, NM.

Arenas, R.M. (2013, October). *Speech and Monitoring Interaction (SAMI) Framework of Stuttering.* Poster session presented at the New Mexico Speech-Language-Hearing Association, Albuquerque, NM.

Darling, M., & Arenas, R. (2012, February). SPARCing Careers in Research and Academia, *The ASHA Leader*. Retrieved from <http://leader.pubs.asha.org/article.aspx?articleid=2280133>

Arenas, R.M. (2010, Fall). Feedforward strategy in children: Investigating the use of a feedforward motor strategy in the speech of children who stutter. *Stuttering Foundation of America Newsletter*. Retrieved from http://www.stutteringhelp.org/sites/default/files/Migrate/fall_newsletter_2010_web.pdf

Arenas, R.M. (2007). Free software for DAF. *Advance healthcare network for Speech & Hearing*, 17:45, 15. Retrieved from <http://speech-language-pathology-audiology.advanceweb.com/Article/Free-Software-for-DAF.aspx>

Arenas, R.M. (2007). Add Altered Auditory Feedback to Your Toolbox... For Free. *International Stuttering Awareness Day Online Conference*. Retrieved from <http://www.mnsu.edu/comdis/isad10/papers/arenas10.html>

Research Funding

Funded

Project Title: The effects of transcranial direct current stimulation on speech production

Principal Investigator: Richard Arenas, Ph.D.

Funding organization: University of New Mexico – Research Allocation Grant

Start date: November, 2014

End date: December, 2015

Amount: \$9,500 funded

Project Title: The use of transcranial direct current stimulation to improve the effectiveness of stuttering therapy

Principal Investigator: Richard Arenas, Ph.D.

Funding organization: Malcolm Fraser Foundation

Start date: March, 2015

End date: December, 2017

Amount: \$15,000 funded

Project Title: Neural correlates of nonword repetition in adults who stutter

Principal Investigator: Richard Arenas, Ph.D.

Funding organization: National Institute of Health (Loan Repayment Program)

Start date: July, 2016

End date: June, 2018

Amount: \$26,426 funded

Not funded

Project Title: Advancing the Methodological Rigor of Non-Invasive Neuromodulation Research

Principal Investigator: Jessica Richardson, Ph.D.

Role: Co-Investigator

Funding organization: National Institute of Health

Expected start date: September, 2018

Amount: \$1,400,000 funded

Project Title: Utilizing brain imaging to guide and inform brain stimulation protocols in adults who stutter

Principal Investigator: Richard Arenas, Ph.D.

Funding organization: National Stuttering Association

Application date: May, 2015

Amount: \$5,000 unfunded

Project Title: The effects of anticipatory and emotional factors on speech production in people who stutter

Principal Investigator: Richard Arenas, Ph.D.

Funding organization: National Institute of Health (Loan Repayment Program)

Application date: November, 2013

Amount: \$29,000 unfunded

Teaching

Doctoral Advisement

Committee member:

Sarah Grace Dalton; May, 2019; Using Electrophysiology to Investigate Changes in Brain Activation in Individuals with Chronic Stroke

Masters Advisement

Committee chair:

Amanda Ortiz-Alvarez; May, 2020 (anticipated); A phenomenological investigation of the contextual variability and anticipation of stuttering

Katlyn Ferguson; May, 2020 (anticipated); A qualitative study of support groups for parents of children who stutter

Committee member:

Sofiya Krasilshchikova, May, 2020 (anticipated); TBI in MMA fighters

Shauna Murray, May, 2020 (anticipated); Frame rate and swallowing evaluations

Nevin Thul; June, 2018; Quality of Life Measures as Prognostic Indicators in Patients with Head and Neck Cancers

Sarah Nieman; June, 2018; The Effect of Breathly and Strained Voice Quality on Vowel Perception

Trisha Tanaka; May, 2017; Estimating the impact of assessment and treatment fidelity on aphasia treatment outcomes

Elizabeth Young; December, 2017; Discourse Changes Following Severe Traumatic Brain Injury: A Longitudinal Study

Chloe Mizusawa; May, 2016; Changes in disfluent behavior during adaptation and stuttering

Funded Undergraduate Student Mentoring

Elizabeth Torres, Fall 2015-Spring 2016, Students Preparing for Academic and Research Careers (SPARC) award, American Speech-Language and Hearing Association

Amanda Ortiz-Alvarez, Fall 2019-Spring 2020, Students Preparing for Academic and Research Careers (SPARC) award, American Speech-Language and Hearing Association

Classroom Teaching

2019; Fall; Introduction to Communication Disorders (online); SHS302; 52 students
2019; Fall; Anatomy and Physiology of Human Communication; SHS310; 39 students
2019; Fall; Fluency Disorders; SHS 538; 29 students
2019; Spring; Anatomy and Physiology of Human Communication; SHS 310; 34 students
2019; Spring; Introduction to Communication Disorders; SHS 302; 52 students
2018; Fall; Anatomy and Physiology of Human Communication; SHS310; 48 students
2018; Fall; Fluency Disorders; SHS 538; 34 students
2018; Spring; Anatomy and Physiology of Human Communication; SHS 310; 68 students
2018; Spring; Introduction to Communication Disorders; SHS 302; 70 students
2017; Fall; Reading and Writing in Research; SHS 506; 16 students
2017; Fall; Fluency Disorders; SHS 538; 23 students
2017; Spring; Anatomy and Physiology of Human Communication; SHS 310; 64 students
2017; Spring; Introduction to Communication Disorders; SHS 302; 51 students
2016; Fall; Reading and Writing in Research; SHS 506; 27 students
2016; Fall; Fluency Disorders; SHS 538; 19 students
2016; Spring; Anatomy and Physiology of Human Communication; SHS 310; 74 students
2016; Spring; Introduction to Communication Disorders; SHS 302; 62 students
2015; Fall; Reading and Writing in Research; SHS 506; 25 students
2015; Fall; Fluency Disorders; SHS 538; 17 students
2015; Summer; Anatomy and Physiology of Human Communication; SHS 310; 7 students
2014; Fall; Motor Speech Disorders; SHS 531; 28 students
2014; Fall; Fluency Disorders; SHS 538; 11 students
2014; Spring; Anatomy and Physiology of Human Communication; SHS 310; 61 students
2014; Summer; Anatomy and Physiology of Human Communication; SHS 310; 22 students
2013; Fall; Motor Speech Disorders; SHS 531; 21 students

Curriculum Development or Teaching Administrative Positions

Fluency Disorders, SHS 538. Developed as a new course; first offered Fall 2014.

Service

Government and Public Agencies

Reviewer, Board of Regents Support Fund Research and Development Program, FY2014-2015,
State of Louisiana 2014

Editorial Service

Ad-hoc Reviewer, Journal of Speech-Language Hearing Research 2012 -
Ad-hoc Reviewer, Speech, Language and Hearing 2013 -
Ad-hoc Reviewer, Journal of Communication Disorders 2016 -
Ad-hoc Reviewer, Journal of Motor Behavior 2016 -
Ad-hoc Reviewer, Journal of Fluency Disorders 2016 -
Reviewer, ASHA Perspectives; Fluency and Fluency Disorders 2019 -
Ad-hoc Reviewer, Folia Phoniatica et Logopaedica 2019 -

Departmental Service

Graduate advisor 2019 -
Chair, Assessment Committee 2019 -
Chair, Assistant Professor Search Committee 2018
Member, Comps Committee 2019
Nondegree academic advisor 2018 - 2019
Departmental web master 2014- 2016, 2018 -
Member, Clinical Faculty Search Committee 2018
Member, Assistant Professor Search Committee 2016
Member of the PhD proposal committee 2015-
Member, Assistant Professor Search Committee 2014
Member, Audiology Faculty Search Committee 2014
Departmental library liaison 2013- 2014

University Service

Representative, Faculty Senate 2018 - 2020

Clinical Service

Director, Summer Fluency Program 2015
Co-Director, Re-authoring Stuttering Group 2019
Co-Director, Acceptance and Commitment Stuttering Group 2019

Community Service

Treasurer, FRIENDS (<https://www.friendswhostutter.org/>) 2020 –
Sierra Vista South Co-op, Water Board Director 2019 -
Chapter Leader, National Stuttering Association local chapter 2017-