

Tamiko Azuma

Curriculum Vitae (*Updated December 2020*)

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Education

Arizona State University, Tempe, AZ
Ph.D., Cognitive Psychology, August, 1995.
M.A., Cognitive Psychology, December, 1991.

University of California, Santa Cruz, CA
B.A., Psychology (College Honors), June, 1989.

Academic Positions

Assistant Dean of Undergraduate Education, College of Health Solutions, Arizona State University, July 2018 – present.

Associate Professor, Speech & Hearing Science, Arizona State University, August 2004 – present.

Assistant Chair, Department of Speech & Hearing Science, Arizona State University, October 2016 – July 2018

Assistant Professor, Department of Speech & Hearing Science, Arizona State University, August 1998 – August 2004.

Visiting Assistant Professor, Department of Psychology, Arizona State University, August, 1997 - May, 1998.

Post-Doctoral Research Fellow, National Center for Neurogenic Communication Disorders, The University of Arizona, August, 1995 - July, 1997.

Research & Scholarship

Research Interests

My research focuses on working memory, attention, episodic memory, and language processing in healthy young and older adults, young bilingual adults with and without history of traumatic brain injuries, and military veterans with and without history of traumatic brain injuries and cognitive processing deficits.

Grants Awarded

Arizona State University, 2020-2021 Global Sport Institute Seed Grant Program. *Relating Gender-Associated Profiles of Resilience, Stress, and Self-Perception to Injury Outcomes in College Athletes and Military Veterans*. **\$19,588**. PI: Tamiko Azuma

Arizona State University Center for Sustainable Health: Observational Clinical Trial for Project HoneyBee (Year 3): *Assessing the feasibility and effectiveness of using a wearable health tracking device to identify Military Veterans at risk for service-related conditions*. **\$25,845**. PI: **T. Azuma**, Co-PI: Karen Gallagher.
Award period: Sept. 2016 – Aug. 2017.

NIH / National Institute on Deafness and Communicative Disorders (NIDCD) R01 Grant: *Speech Perception and Memory in an Episodic Lexicon*. Total Budget: **\$1,527,911**. (Grant # 1 R01-DC04535-08-13). Principal Investigator: S.D. Goldinger. Co-Investigator: **T. Azuma**. Award period: June 2007-May 2012

National Institute on Deafness and Communicative Disorders (NIDCD) R01 Grant: *Speech Perception and Memory in an Episodic Lexicon*. Competing renewal of Grant 1 R01-DC04535-01-3. Award: **\$714,236**. Principle Investigator: S.D. Goldinger. Co-Investigator: **T. Azuma**. Award period: August, 2003 – July, 2006.

NIH: Small Grant (R03) Program for the NIDCD: *Effects of Aging and Disease on Semantic Processing* (5 R03 DC04231-03). Award: **\$150,000**. PI: **T. Azuma**. Award period: Jan. 2001 - Dec. 2003.

Arizona Alzheimer's Disease Core Center: *Language Production in Healthy Aging, Mild Cognitive Impairment, and Alzheimer's Disease*. Award: \$25,000. Principle Investigator: N. Silverberg. Key Personnel: **T. Azuma**. Award period: 2002-2003.

Small Grants & Awards

Arizona Department of Veterans Services Small Grant Award. Project Title: *Veteran Cognition and Academic Success*. Co-investigators: K. Pittenger and **T. Azuma**. Award: 8/1/2014 - 7/31/2015. \$4,170.

Disabled Veterans National Foundation. Project Title: *Veterans Cognition and Communication Program*. Co-investigators: K. Pittenger and **T. Azuma**. Award: 8/1/2014 - 7/31/2015. \$4,500.

Arizona State University, Faculty Grant-In-Aid: *Aging and Semantic Memory*. Award: \$7000. Awarded January 1999.

Grants Submitted (pending or unfunded)

National Institutes of Health (NIH) R15 Grant Proposal. *The Impact of Mild Traumatic Brain Injuries and Naturalistic Auditory Distraction on Reading: An Eye-tracking Investigation*. Total Requested Budget: \$428,076 (ASU Subaward: \$74,994). Pending grant proposal. PI: I. Ratiu. Co-I: **T. Azuma**. Requested Award period: 07/01/2021-06/30/2024

Department of Defense. CDMRP. *The Impact of TBI and Concomitant Conditions on Cognitive Performance in Military Veterans and Civilians*. Unfunded grant proposal (2019). Total Requested Budget: \$645,842. PI: **T. Azuma**.

National Science Foundation (NSF). *Understanding and encoding context driven changes in human brain activity*. (2018). Total Requested Budget: \$985,483. Unfunded grant

proposal. PI: S. Gupta. Co-PI: **T. Azuma**.

Spencer Small Research Grants. *Understanding Context Effects in Computerized Adaptive Testing through Experiments with College Students*. (2018) Total Requested Budget: \$50,000. Unfunded grant proposal. PI: Y. Zheng. Co-PI: **T. Azuma**.

National Science Foundation (NSF). *BLAST-IT: Brain-signal Leveraged Affective Sign-language Translation Into Text*. Unfunded grant proposal. (2017) Total Requested Budget: \$499,596.00 PI: S. Gupta. Co-PI: **T. Azuma**.

ASHFoundation Clinical Collaborative Research Grant. *Assessment of Working Memory and Speech Perception Deficits in Military Veterans with and without History of Mild Traumatic Brain Injury*. (2017) Total Requested Budget: \$50,000. Unfunded grant proposal. Principal Investigator: **T. Azuma**.

HHS: National Institutes of Health (NIH) R21 Grant: *Real Time and Extendable Sign Language Translation for the Deaf in Emergency Care*. (2016). Total requested Budget: \$337,665. Unfunded grant proposal. Principal Investigator: S. Gupta. Co-PI: **T. Azuma**

Doctoral Dissertation

Azuma, T. Sensing Senses: Detecting Ambiguity in Words with Related and Unrelated Meanings. Arizona State University. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. 1995 Dec; Volume 56(6-B). Page 3482.

Refereed Articles Published & In Press

(*project conducted by student that I mentored or co-mentored)

Luo, X., Kolberg, C., Pulling, K. R., & **Azuma, T.** (2020). Psychoacoustic and Demographic Factors for Speech Recognition of Older Adult Cochlear Implant Users. *Journal of speech, language, and hearing research: JSLHR*, 63(6), 1712-1725. https://doi.org/10.1044/2020_JSLHR-19-00225

Ratiu, I., & **Azuma, T.** (2019). Assessment of Executive Function in Bilingual Adults with History of Mild Traumatic Brain Injury. *Brain Impairment*. DOI: <https://doi.org/10.1017/Brlmp.2019.17>

*Gallagher, K., & **Azuma, T.** (2018). Analysis of Story Recall in Military Veterans with and without mTBI: Preliminary Results. *American Journal of Speech-Language Pathology*, 27, 485-494. DOI: 10.1044/2017_AJSLP-16-0208

*Ratiu, I., Hout, M. C., Walenchok, S., **Azuma, T.**, & Goldinger, S. D. (2017). Comparing Visual Search and Eye Movements in Bilinguals and Monolinguals. *Attention, Perception, & Psychophysics*, 79(6), 1695-1725. doi:10.3758/s13414-017-1328-3

*Ratiu, I., & **Azuma, T.** (2016). Language Control in Bilingual Adults with and without History of Mild Traumatic Brain Injury. *Brain and Language*, 166: 29-39. DOI: 10.1016/j.bandl.2016.12.004

*Tat, M.J., & **Azuma, T.** (2015). The Effect of Cognitive Load on Hemispheric Asymmetries in True and False Memory. *Laterality: Asymmetries of Body, Brain and Cognition*, 21, 1-26. DOI: 10.1080/1357650X.2015.1073297

- *Tat, M.J., & **Azuma, T.** (2015). Remembering "Txt" but not "Text": The Effect of Context and Lexicality on Memory for Text Message Abbreviations. *Journal of Applied Psycholinguistics*, 1, 1-25. DOI: 10.1017/S0142716415000065
- *Ratiu, I. & **Azuma, T.** (2015). Working Memory Capacity: Is There a Bilingual Advantage? *Journal of Cognitive Psychology*, 27, 1-11. DOI: 10.1080/20445911.2014.976226
- *Tat, M.J., & **Azuma, T.** (2015). What Forgetting Tells Us about Remembering: The Influence of Top-Down Control on Hemispheric Asymmetries in Verbal Memory. *Laterality: Asymmetries of Body, Brain and Cognition*, 20, 171-190. DOI: 10.1080/1357650X.2014.948450
- Azuma, T.**, Connor, D.J., & Sabbagh, M.N. (2013). The Effect of Healthy Aging and Mild Cognitive Impairment on Semantic Ambiguity Detection. *Journal of Neurolinguistics*, 26, 271-282. DOI:10.1016/j.jneuroling.2012.09.003
- *Tat, M.J., & **Azuma, T.** (2012). Don't Shoot the Messenger: Memory for Misspellings in Context. *Journal of Psycholinguistic Research*, 131, 215-236. DOI: 10.1007/s10936-011-9188-9
- *Slovarp, L. J., **Azuma, T.**, & LaPointe, L. (2012). The Effect of Traumatic Brain Injury on Sustained Attention and Working Memory. *Brain Injury*, 26, 48-57. doi:10.3109/02699052.2011.635355
- Choe, Y., Liss, J.M., **Azuma, T.**, & Mathy, P. (2012). Evidence of cue use and performance differences in deciphering dysarthric speech. *Journal of Acoustical Society of America*, 131, pp. EL112-EL118. DOI: 10.1121/1.3674990
- Cardon, T.A., & **Azuma, T.** (2012). Visual Attending Preferences in Children with Autism Spectrum Disorders: A Comparison between Live and Video Presentation Modes. *Research in Autism Spectrum Disorders*, 6, 1061-1067. DOI: 10.1016/j.bbr.2011.03.031.
- Cardon, T. A. & **Azuma, T.** (2011, June). Deciphering Single-Subject Research Design and Autism Spectrum Disorders. *The ASHA Leader*.
- *Utianski, R.L., Lansford, K.L., Liss, J.M., & **Azuma, T.** (2011). The effects of topic knowledge on intelligibility and lexical segmentation in hypokinetic and ataxic dysarthria. *Journal of Medical Speech-Language Pathology*, 19(4), 25-36.
- Choe, Y., **Azuma, T.**, & Mathy, P. (2010). The Use of Computers and Augmentative and Alternative Communication Devices in Independent Naming Practice: Three Single-Case Studies. *Journal of Medical Speech-Language Pathology*, 18, 12-26.
- *Choe, Y., **Azuma, T.**, Mathy, P., Liss, J.M., & Edgar, J. (2007). The effect of home computer practice on naming in individuals with non-fluent aphasia and verbal apraxia. *Journal of Medical Speech-Language Pathology*, 15, 407-421.

- *Jones, W., Mathy, P., **Azuma, T.**, & Liss, J. (2004). The effect of general and specific synthetic cues on the intelligibility of a speaker with ALS. *Augmentative and Alternative Communication*, 20, 22-29.
- Goldinger, S.D., & **Azuma, T.** (2004). Episodic memory reflected in printed word naming. *Psychonomic Bulletin and Review*, 11, 716-722.
- *Davie, J.E., **Azuma, T.**, Goldinger, S.D., Connor, D.J., Sabbagh, M.N., & Silverberg, N. (2004). Sensitivity to expectancy violations in healthy aging and Mild Cognitive Impairment. *Neuropsychology*, 18, 269-275. PMID: 15099149 DOI: 10.1037/0894-4105.18.2.269
- Azuma, T.**, *Williams, E., *Davie, J.E. (2004). Paws + Cause = Pause? Working memory load and memory blends in homophone recognition. *Psychonomic Bulletin & Review*, 11, 723-728.
- Azuma, T.** (2004). Working memory and perseveration in verbal fluency. *Neuropsychology*, 18, 69-77. DOI: 10.1037/0894-4105.18.1.69
- Goldinger, S.D., Kleider, H.M., **Azuma, T.**, & Beike, D. (2003). "Blaming the victim" under memory load. *Psychological Science*, 14, 81-85.
- Goldinger, S.D., & **Azuma, T.** (2003). Puzzle-solving science: The quixotic quest for units in speech perception. *Journal of Phonetics*, 31, 305-320.
- Azuma, T.**, Cruz, R.G., Bayles, K.A., Tomoeda, C.K., & Montgomery, E.B. (2003). A longitudinal study of neuropsychological change in individuals with Parkinson's Disease. *International Journal of Geriatric Psychiatry*, 18, 1115-1120.
- Forster, K.I., & **Azuma, T.** (2000). Masked priming for prefixed words with bound stems: Does revive prime survive? *Language and Cognitive Processes*, 15, 539-561.
- Bayles, K.A., Tomoeda, C.K., Montgomery, E.B., Cruz, R.F., & **Azuma, T.** (2000). The relation of mental status to integrity of lexical-semantic knowledge in Parkinson's Disease. *Advances in Speech-Language Pathology*, 2, 67-75.
- Azuma, T.**, Cruz, R.F., Bayles, K.A., Tomoeda, C.K., Wood, J.A., & Montgomery, E.B. (2000). Incidental learning and verbal memory in individuals with Parkinson Disease. *Journal of Medical Speech Language Pathology*, 8, 163-174.
- Bayles, K.A., **Azuma, T.**, Cruz, R.F., Tomoeda, C.K., Wood, J.A., & Montgomery, E.B. (1999). Gender differences in language of Alzheimer's Disease patients revisited. *Alzheimer's Disease and Associated Disorders*, 13, 138-146.
- Bayles, K.A., Tomoeda, C.K., Wood, J.A., Cruz, R.F., **Azuma, T.**, & Montgomery, E.B., (1997). The effect of Parkinson's disease on language. *Journal of Medical Speech-Language Pathology*, 5, 157-166.
- Azuma, T.**, Bayles, K.A., Cruz, R.F., Tomoeda, C.K., Wood, J.A., McGeagh, A., & Montgomery, E.B. (1997). Comparing the difficulty of letter, semantic, and name

fluency tasks for normal elderly and Parkinson patients. *Neuropsychology*, 11, 488-497.

Azuma, T., & Bayles, K.A. (1997). Memory impairments underlying language difficulties in dementia. *Topics in Language Disorders*, 18, 58-71.

Goldinger, S.D., **Azuma, T.**, Abramson, M., & Jain, P. (1997). Open wide and say "blah!" Attentional dynamics of delayed naming. *Journal of Memory and Language*, 37, 190-216.

Azuma, T., & Van Orden, G.C. (1997). Why SAFE is better than FAST: The relatedness of a word's meanings affects lexical decision times. *Journal of Memory and Language*, 36, 484-504.

Bayles, K.A., Tomoeda, C.K., Wood, J.A., Montgomery, E.B., Cruz, R.F., **Azuma, T.**, & McGeagh, A. (1996). Change in cognitive function in idiopathic Parkinson's disease. *Archives of Neurology*, 53, 1140-1146.

Tomoeda, C.K., Bayles, K.A., Trosset, M.W., **Azuma T.**, & McGeagh, A. (1996). Cross-sectional analysis of Alzheimer Disease effects on oral discourse in a picture description task. *Alzheimer's Disease and Related Disorders*, 10, 204-215.

Azuma, T. (1996). Familiarity and relatedness of word meanings: Ratings for 110 homographs. *Behavior Research Methods, Instruments, & Computers*, 28, 109-124.

Evidence-Based Practice Recommendations (Peer-reviewed)

Mahendra, N., Kim, E.S., Bayles, K.A., Hopper, T., Cleary, S., & **Azuma, T.** (2006). Evidence-based practice recommendations for working with individuals with dementia: Computer-assisted cognitive interventions (CACIs). *Journal of Medical Speech-Language Pathology*, 13, xxxv-xliv.

Kim, E., Cleary, S., Hopper, T., Bayles, K., Mahendra, N., **Azuma, T.** & Rackley, A. (2006). Evidence based practice recommendations for working with individuals with dementia: Group reminiscence therapy. *Journal of Medical Speech-Language Pathology*, xxiii-xxxiv.

Mahendra, N., Hopper, T., Bayles, K.A., **Azuma, T.**, Cleary, S., & Kim, E.S. (2006). Evidence-based practice recommendations for working with individuals with dementia: Montessori-based interventions. *Journal of Medical Speech-Language Pathology*, 14, xv-xxv.

Hopper, T., Mahendra, N., Kim, E., **Azuma, T.**, Bayles, K.A., Cleary, S.J., & Tomoeda, C.K. (2005). Evidence-based practice recommendations for working with individuals with dementia: Spaced-retrieval training. *Journal of Medical Speech-Language Pathology*, 13, xxvii-xxxiv.

Bayles, K.A., Kim, E.S., **Azuma, T.**, Bond-Chapman, S., Cleary, S., Hopper, T., Mahendra, N., McKnight, P., Rackley, A., Tomoeda, C., Zientz, J. (2005). Developing Evidence-Based practice guidelines for speech-language pathologists serving individuals with Alzheimer's dementia. *Journal of Medical Speech-Language Pathology*, 13, xiii-xxv.

Non-Refereed Papers

Goldinger, S.D., & **Azuma, T.** (2004) Resonance within and between linguistic beings. *Behavioral and Brain Sciences*, 27, 199-200.

Goldinger, S.D., **Azuma, T.**, Kleider, H.M., & Holmes, V. (2003). Font-specific memory: More than meets the eye? In J.S. Bowers & C. Marsolek (Eds.), *Rethinking Implicit Memory*. Oxford University Press. Pp. 157-196. (Peer-reviewed volume.)

Manuscripts Submitted or in Preparation

Luo, X., **Azuma, T.**, Kolberg, C., & Pulling, K. (under review) The Effects of Stimulus Modality, Task Complexity, and Cuing on Working Memory and the Relationship with Speech Recognition in Older Cochlear Implant Users. *Journal of Communication Disorders*.

Ratiu, I., Whiting, M., Murnion, L., Fissel, S., & **Azuma, T.** (submitted) 'Now You Hear Me, Now You Don't: The Impact of Mild Traumatic Brain Injury and Auditory Distraction on Reading Comprehension, Eye Movements, and Memory. *Journal of Clinical and Experimental Neuropsychology*.

*Sorenson, K., Sabbagh, M.N., Johnson, M., **Azuma, T.** (re-submitted) Do Neuropsychological Profiles Differ between Amyloid PET Positive and Negative Amnesic MCI Subjects? *Journal of Alzheimers Disease and Parkinsonism*, 9:476.

Azuma, T., & *Gallagher, K. (in prep). Self-perception of Cognitive Deficits and Complex Working Memory Span in Military Veterans.

*Gallagher, K., & **Azuma, T.** (in prep). Memory Processing in Military Veterans with and without Mild Traumatic Brain Injury.

Major Research Presentations (*student that I mentored or co-mentored)

Xin, L., & **Azuma, T.** (2020). Effects of Stimulus Modality and Cuing on Working Memory and the Relationship with Speech Recognition in Older Cochlear Implant Users. Oral presentation at the 19th annual Auditory Perception, Cognition, and Action Meeting (APCAM). November 2020.

Ratiu, I., & **Azuma, T.** (2020). Examining Executive Function and Language Control in Bilinguals with a History of Mild Traumatic Brain Injury, Poster presented at the Annual Meeting of the Psychonomic Society. November 2020.

*Alateeq, H., & **Azuma, T.** (2020). Executive Function and Language Control in Bilinguals with a History of Mild Traumatic Brain Injury. Poster presented at the Annual Meeting of the Psychonomic Society. November 2020.

*Green, L., *Alateeq, H., & **Azuma, T.** (2020). The Effects of Presentation Modality and Language Proficiency on Digit Span Performance in Bilinguals. Poster presented at the Annual Meeting of the Psychonomic Society. November 2020.

- *Alateeq, H., & **Azuma, T.** (2020). Language and Communication Deficits in Monolinguals and Bilinguals with History of Mild Traumatic Brain Injury. Proposal accepted at the Annual Convention of the American Speech-Language-Hearing Association, San Diego, CA (Convention canceled).
- *Alateeq, H., & **Azuma, T.** (2020). The Effects of Presentation Modality and Language Proficiency on Digit Span Performance in Bilinguals. Proposal accepted at the Annual Convention of the American Speech-Language-Hearing Association, San Diego, CA (Convention canceled).
- Luo, X., Kolberg, C., Pulling, K., & **Azuma, T.** (2019). Cognitive and Auditory Factors for Speech Perception in Older Adult Cochlear Implant Users. ARO Annual MidWinter Meeting. Baltimore, MD. February 2019
- Azuma, T.**, Gallagher, K., Luo, X., & Gallun, F. (2019). The Effects of Anxiety on Auditory and Visual Working Memory in Military Veterans. International Neuropsychological Society Annual Meeting. New York, NY. February 2019
- Gallagher, K., **Azuma, T.**, Ingram, K., & Bacon, C. (2019). Complex Verbal Working Memory in Military Veterans with and without mTBI. International Neuropsychological Society Annual Meeting. New York, NY. February 2019.
- Gallagher, K., **Azuma, T.**, & *McLaughlin, W. (2018). The Impact of Elicitation Procedures on Narrative Recall in Military Veterans. Poster given at the Annual American Speech-Language-Hearing Association Convention. Boston, MA. November 2018.
- *Alateeq, H., & **Azuma, T.** (2018). The Effect of Mild Traumatic Brain Injury on Bilingual Cognitive & Language Control. Oral presentation given at the Annual American Speech-Language-Hearing Association Convention. Boston, MA. November 2018.
- *Alateeq, H., & **Azuma, T.** (2018). Self-Awareness & Academic Challenges in College Students With History of Mild Traumatic Brain Injury. Oral Presentation given at the Annual American Speech-Language-Hearing Association Convention. Boston, MA. November 2018.
- Ratiu, I., & **Azuma, T.** (2018). ¿Quién Dijo What? Source Language and Voice Memory in Bilingual Speakers. Poster presented at Annual Meeting of the Psychonomic Society. New Orleans, LA. November 2018.
- *Larson, C.T., Helms Tillery, K., Scherer, N., & **Azuma, T.** (2018). Feeding & Swallowing Disorders in Malawi: Perspectives & Practices. Poster presented at the Annual American Speech-Language-Hearing Association Convention. Boston, MA. November 2018.
- *Van Vuren, K., Helms Tillery, K., Scherer, N., & **Azuma, T.** (2018). Feeding & Swallowing Disorders in Malawi: Perspectives & Practices. Poster presented at the Annual American Speech-Language-Hearing Association Convention. Boston, MA. November 2018.
- *Alateeq, H., & **Azuma, T.** (2017). Working Memory & Executive Function in Bilinguals With

& Without History of Traumatic Brain Injury. Poster presented at the Annual American Speech-Language-Hearing Association Convention. Los Angeles, CA. November 2017.

Azuma, T., *Gallagher, K., & *Tully, K. (2017). Serial Updating Task Performance in Veterans With & Without History of Mild Traumatic Brain Injury. Presentation given at the Annual American Speech-Language-Hearing Association Convention. Los Angeles, CA. November 2017.

*Gallagher, K., **Azuma, T.,** & *Tully, M. (2017). The Effect of Anxiety & Working Memory on Decision-Making Patterns in Young Military Veterans Presentation given at the Annual American Speech-Language-Hearing Association Convention. Los Angeles, CA. November 2017.

Ratiu, I., Murnion, L., Fissel, S., & **Azuma, T.** (2017). Eye Movements and Reading Comprehension in Individuals with Mild Traumatic Brain Injury. Poster presented at the Annual Meeting of the Psychonomic Society. Vancouver, Canada. November 2017.

*Gallagher, K., & **Azuma, T.** (2017). Self-Report of Cognitive and Anxiety Symptoms in Military Veteran and Non-veteran College Students with Mild Traumatic Brain Injury. Poster presented at the 2017 Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury Summit - Advances in the State of the Science and Best Practices. September 2017.

Azuma, T., & *Gallagher, K. (2017). Self-Report of Cognitive and Anxiety Symptoms in Military Veterans and Non-Veterans with and without Mild Traumatic Brain Injury. Presentation at the International Communication Disorders Conference. Orange, CA. January 2017.

*Ratiu, I., & **Azuma, T.** (2016). Bilingual Recognition Memory and Confidence Judgments in a Cross-Language Levels-of-Processing Task. Poster presented at the Annual Meeting of the Psychonomic Society. Boston, MA. November 2016.

*Gallagher, K. & **Azuma, T.** (2016). Memory & mTBI: Narrative Recall in Veterans with Mild Traumatic Brain Injury. Presentation given at the Annual American Speech-Language-Hearing Association Convention. Philadelphia, PA. November 2016.

*Gallagher, K. & **Azuma, T.** (2016). Analysis of Story Recall in Military Veterans with and without mTBI: Preliminary Results. Presentation at the Clinical Aphasiology Conference. Charlottesville, VA. May 2016.

*Gallagher, K., **Azuma, T.,** & Ingram, K. (2015). Military Culture & Clinical Challenges: The Assessment of Military Veterans With Mild Traumatic Brain Injury. Presentation at the Annual American Speech-Language-Hearing Association Convention. Denver, Colorado. November 2015.

*Gallagher, K., **Azuma, T.,** & Ingram, K. (2015). Military Veteran Students With mTBI: Does Symptom Self-Report Predict Their Academic Success? Poster presented at the Annual American Speech-Language-Hearing Association Convention. Denver,

Colorado. November 2015.

- *Ratiu, I., & **Azuma, T.** (2015). Executive Function & Language Control in Bilinguals With mTBI. Presentation at the Annual American Speech-Language-Hearing Association Convention. Denver, Colorado. November 2015.
- *Pittenger, K., **Azuma, T.**, & Ingram, K. (2014). Memory Performance in Military Veteran & Non-Veteran College Students: Preliminary Results. Poster presented at the Annual American Speech-Language-Hearing Association Convention. Orlando, Florida. November 2014.
****Awarded 2014 ASHA Meritorious Poster Submission****
- *Baker, S., & **Azuma, T.** (2014). The Update on Updating Tasks: The Effects of Working Memory and Note-Taking on Lecture Test Performance. Poster presented at the Annual Meeting of the Psychonomic Society. Long Beach, California. November 2014.
- *Ratiu, I., & **Azuma, T.** (2014). Symmetry and Asymmetry: Working Memory and Language Proficiency in Bilinguals. Poster presented at the Annual Meeting of the Psychonomic Society. Long Beach, California. November 2014.
- *Ratiu, I., Hout, M. C., Walenchok, S. **Azuma, T.**, & Goldinger, S. D. (2014). The bilingual advantage investigated using visual search. Poster presented at the 21st annual Object Perception, Attention and Memory Conference: Long Beach, CA. November, 2014.
- Mehta, Z., Eikenberry, G., DiStefano, S., **Azuma T.** (2014) (C)APD: what works and what does not. Poster presented at: AudiologyNOW! American Academy of Audiology Annual Meeting; March 26-29, 2014; Orlando, FL.
- *Tat, M., & **Azuma, T.** (2013). Visual and Verbal Cognitive Loads Influence Hemispheric True (but not False) Memories. Poster presented at the Annual Meeting of the Psychonomic Society. Toronto, Canada. November 2013.
- *Ratiu, I., Hout, M. C., **Azuma, T.**, & Goldinger, S. D. (2013). The bilingual advantage investigated using visual search. Poster presented at the 21st annual Object Perception, Attention and Memory Conference: Toronto, Canada. November, 2013.
- *Ratiu, I., & **Azuma, T.** (2013). Reading libro but Remembering book: Bilingual Language and Memory Processing in a Cross-Language Levels-of-Processing Task. Poster presented at the Annual Meeting of the Psychonomic Society. Toronto, Canada. November 2013.
- *DiStefano, B. Mehta, Z., **Azuma, T.** & Eikenberry, G. (2013). Children with Suspected (C)APD and Gaps-in-Noise Test Performance. Poster to be presented at American Academy of Audiology's annual meeting, Anaheim, CA.
- *DiStefano, B. Mehta, Z., **Azuma, T.** & Eikenberry, G. (2013). Involvement of the Lower Brainstem in Auditory Processing Disorders. Poster to be presented at American Academy of Audiology's annual meeting, Anaheim, CA.
- *Tat, M., & **Azuma, T.** (2012). What Forgetting Tells Us About Remembering: Hemispheric Differences in Memory Retrieval. Poster presented at the Annual Meeting of the

Psychonomic Society. Minneapolis, Minnesota. November 2012.

- *Ratui, I., & **Azuma, T.** (2012). Working Memory Capacity: Is There a Bilingual Advantage? Poster presented at the Annual Meeting of the Psychonomic Society. Minneapolis, Minnesota. November 2012.
- *Eikenberry, G., Mehta, Z., & **Azuma, T.** (2012). Are Auditory-Evoked Potentials Useful for Diagnosing (C)APD in Children? Poster presentation accepted for the 2012 convention of the American Speech Language-Hearing Association, Atlanta, GA.
- *Tat, M., & **Azuma, T.** (2011). In One's Right (or Left) Mind: What Lexicality Reveals About Hemispheric Processing Asymmetries. Poster presented at the Annual Meeting of the Psychonomic Society. Seattle, Washington. November 2011.
- *Ratui, I., & **Azuma, T.** (2011). Cross-Language Semantic Satiation: Mass Repetition Affects More Than One Language. Poster presented at the Annual Meeting of the Psychonomic Society. Seattle, Washington. November 2011.
- *Lansford, K., Liss, J.M., Utianski, R., **Azuma, T.**, Dorman, M., and Lotto, A. (2011). Contribution of vowel distinctiveness to intelligibility and vowel identification accuracy of dysarthric speech. 161st Meeting of the Acoustical Society of America, Seattle, WA. May 2011.
- *Tat, M., & **Azuma, T.** (2010). Grt is Great, but Gr8 is not: The Effect of Context on Text Message Processing and Memory. Poster presented at the Annual Meeting of the Psychonomic Society, St. Louis, MO. November 2010.
- *Tat, M., & **Azuma, T.** (2010). When Hearing is Seeing: Cross-Modal Source Errors in a Levels-of-Processing Task. Poster presented at the meeting of the Auditory Cognitive Neuroscience Society. Tucson, AZ. January 2010.
- Azuma, T.** & *Hickox, A. (2010). The effect of voice consistency on the memory for French and English words. Presentation given at the meeting of the Auditory Cognitive Neuroscience Society. Tucson, AZ. January 2010.
- Choe, Y., **Azuma, T.**, Liss, J., Lotto, A., & Mathy, P. (2009) Individual Differences in Understanding Speech. ASHA Convention, New Orleans, LA: November 2009.
- *Choe, Y., Mathy, P, **Azuma, T.** (2005). Computer and AAC Device for Independent Naming Practice by Individuals with Chronic Non-fluent Aphasia. Presentation given at the Conference of the American Speech-Language-Hearing Association. San Diego, CA. November, 2005.
- *Choe, Y., Mathy, P, **Azuma, T.**, Liss, J., & Edgar, J. (2004). Effect of Computer-Mediated Training on Naming Performance by Individuals with Aphasia. Poster presented at the Conference of the American Speech-Language-Hearing Association. Philadelphia, PA. November, 2004.
- *Davie, J.E., **Azuma, T.**, Goldinger, S.D., Connor, D.J., Sabbagh, M.N., & Caselli, R. (2004). Semantic Satiation in the Changing Brain. Poster presented at the 44th Annual Meeting of the Psychonomic Society. Minneapolis, Minnesota. November 2004.

*Choe, Y., Mathy, P, & **Azuma, T.** (2004). Treatment Effect of Computer and AAC Device Practice on Naming in Aphasia. Poster presented at the Conference of the Arizona Speech-Language-Hearing Association. May, 2004.

*Nixon, S.M., LaPointe, L.L., Duane, D.D., **Azuma, T.**, & Case, J.L. (2003). Too much noise? Auditory distraction and written fluency in adults with ADHD. Poster presented at the Conference of the American Speech and Hearing Association. November, 2003.

*Davie, J.E., **Azuma, T.**, Connor, D.J., Sabbagh, M.N., Silverberg, N., & Goldinger, S.D. Contextual bias and hyper-inhibition in mild cognitive impairment. Poster presented at the 43rd Annual Meeting of the Psychonomic Society. Kansas City. November 2002.

Goldinger, S.D., & **Azuma, T.** Puzzle-Solving Science: The quixotic quest for units in speech perception. Keynote Address: Temporal integration in the perception of speech. Aix-en- Provence, France. April 2002.

*Baker, L., LaPointe, L., **Azuma, T.**, & Katz, R. Sustained attention and working memory following traumatic brain injury. Poster presented at the Conference of the American Speech and Hearing Association. November, 2001.

Regional Conference Presentations

*Alateeq, J., & **Azuma, T.** The Effect of TBI on Executive Function in Bilingual Adults. Arizona Speech-Language-Hearing Association Conference. April 2018.

*Baker, S., & **Azuma, T.** College Athletes, Classrooms, and Concussions: The Role of Working Memory and Attention on the Processing and Encoding of Academic Material. Arizona Speech-Language-Hearing Association Conference. April 2016.

Invited Presentations

Azuma, T. (March 2016). ASU Origins of Pattern Processing Workshop. "Thought Interrupted: Higher Order Cognition and the Damaged Brain." Tempe, Arizona.

Azuma, T. (January 2016). Arizona State University – Barrow Neurological Institute Neuroscience Research Symposium. "Understanding Memory Deficits in Special Populations." Phoenix, Arizona.

Other Scholarly Work

Azuma, T. (1997). Learning and memory: Remembering what's been learned. ASHA Continuing Education Tape. Tucson: Canyonlands Publishing, Inc.

Teaching and Mentoring

Teaching Awards

Arizona State University Provost Teaching Fellow (2015-2016; 2016-2017)

Nominated for ASU Faculty Women's Association Outstanding Mentor 2015.

Awarded ASU College of Liberal Arts and Sciences Zebulon Pearce Distinguished Teaching Award. Academic Year 2011-2012. Award amount: \$5000.

Nominated for ASU College of Liberal Arts and Sciences Zebulon Pearce Distinguished Teaching Award. Academic Year 2008-2009, 2009-2010, 2010-2011.

Finalist, ASU Professor of the Year 2009. Arizona State Parents Association.

Finalist, ASU Professor of the Year 2008. Arizona State Parents Association.

Honored at *The Fifteenth Annual Tribute to Arizona State University Faculty and Academic Professionals*. November 2004.

Teaching/Mentoring Positions (in addition to classroom teaching)

Coordinator of the *Advanced Research Experience Seminar in Speech and Hearing Science* - Fall 2014 to present

In this seminar, undergraduate students apply to work in a faculty research lab in the ASU Department of Speech & Hearing Science. Over the course of two semesters, they complete a project and present the results in a formal poster symposium held at the end of the Spring semester.

ASU Barrett Honors College, Departmental Faculty Advisor

As the Barrett Honors College Departmental Faculty Advisor, I meet and advise all current Honors students who are majoring in Speech and Hearing Science.

Graduate Student Mentoring – Chair or Co-Chair

Master's Level

Katherine Van Vuren (Master's degree awarded 2018)
Master's Thesis: Pediatric Feeding Disorders: Caregiver Perspectives on Child Healthcare in the Latino Population

Christie Larson (Master's degree awarded 2018)
Master's Thesis: Management of Feeding and Swallowing Disorders in Malawi

Brittany Becvar (Master's degree awarded 2017)
Master's Thesis: Developmental Acoustic Analysis of the /r/ Phoneme

Megan Peterson (Master's degree awarded 2013)
Master's Thesis: The Effect of Word Frequency and Dual Tasks on Memory for Presentation Frequency

Ileana Ratiu (Master's degree awarded 2009)
Master's Thesis: Memory for Words in Two Languages: Examining Selective Models and Connectionist Models of Bilingual Memory.

Yu-kyong Choe (Master's degree awarded 2003)
Master's Thesis: Treatment Effect of Independent Computer Practice on Naming in the Case of Chronic Non-fluent Aphasic Individuals

Juliet Davie (Master's degree awarded 2002)

Laurie Baker (Master's degree awarded 2000)
Master's Thesis: The Effect of Traumatic Brain Injury on Sustained Attention and Working Memory

Doctoral Level

Samuel McGee (Current Ph.D. candidate; 4th year)
Research Interest: Bilingualism and Educational Technology

Halah Alateeq (Ph.D. awarded August 2020)
Research Interest: Bilingualism and Traumatic Brain Injury
Dissertation Title: Cognitive-Communication Abilities in Bilinguals with a History of Mild Traumatic Brain Injury
Current position: Assistant Professor, St. Augustine University for Health Sciences, Austin, Texas

Karen Gallagher, M.S. (Ph.D. awarded December 2017)
Dissertation Title: Service-Related Conditions and Higher-Order Cognitive Processing in Military Veteran College Students
Current position: Senior Postdoctoral Research Scholar, Global Sport Institute, ASU

Ileana Ratiu, M.S. (Ph.D. awarded December 2015)
Dissertation Title: Executive Function and Language Control in Bilinguals with a History of Mild Traumatic Brain Injury
Current position: Assistant Professor, Midwestern University

M.J. Tat (Ph.D. awarded summer 2013)
Dissertation Title: Investigating the Influence of Top-Down Mechanisms on Hemispheric Asymmetries in Verbal Memory
Position after graduation: Post-doctoral Fellow, Center For Translational Cognitive Neuroscience VA Boston Healthcare System

Yu-kyong Choe (Co-Chair, Ph.D. awarded Summer 2008)
Dissertation Title: Individual Differences in Understanding Speech
Current position: Associate Professor at University of Massachusetts, Amherst

Shauna Baker (Ph.D. candidate: Fall 2013-Fall 2016)

Juliet Davie (Ph.D. candidate: Fall 2002-Summer 2007)

Doctoral Level – Dissertation Examiner

Maryam Ghaleh University of Canterbury, NZ Spring 2015
Dissertation Title: Discourse Processing Abilities of Ageing: Influence of Working Memory Capacity on Reference Resolution.

NIH-PREP Scholars

Jenel Murray (Mentor, NIH-PREP scholar, 2010-2011)

Graduate Student Mentoring – Committee Member

Taylor Crawford (Master's prospectus, Fall 2020)

Marissa Miller (Master's degree awarded 2020)

Christen Webb (Master's degree awarded 2019)

Rebekah Filippini (Master's degree awarded 2018)
 Julia Cai (Master's degree awarded 2017)
 Cimmaron Ludwig (Master's degree awarded 2015)
 Christine Delfino (Master's degree awarded 2015)
 Stephen Walenchok (Master's degree awarded 2014) – Psychology
 Cynthia Hensley (Master's degree awarded 2013)
 Rebecca Norton (Master's degree awarded 2012)
 Rene Utianski (Master's degree awarded 2010)
 Anthony Barnhart (Master's degree awarded 2009) – Psychology
 Michael Hout (Master's degree awarded 2009) – Psychology
 Ashley Levy (Master's degree awarded 2008)
 Whitney Hansen (Master's degree awarded 2007) - Psychology
 Yi He (Master's degree awarded 2006)
 Breeta Garland (Master's degree awarded 2002)
 Wylanta Jones (Master's degree awarded 2001)
 Jeannine Bailey (Master's degree awarded 2000) - Psychology
 Stephanie Nixon (Master's degree awarded 1999)

Sara DiStefano (AuD research project 2013)
 Greta Eikenberry (AuD research project 2012)

Prajwal Paudyal (Ph.D. committee, Spring 2020)
 Colton Clayton (Ph.D. Comps Committee, Summer 2020)
 Sara Chao (Ph.D. Preliminary Exam Committee, Summer 2020)
 Megan Fitzhugh (Ph.D. committee, Spring 2019)
 Arianna LaCroix (Ph.D. committee, Spring 2019)
 Stephen Walenchok (Ph.D. committee, Fall 2018)
 Hui-Chun Yang (Ph.D. committee, Summer 2015)
 Kate Helms Tillery (Ph.D. committee, Spring 2015)
 Michael Hout (Ph.D. committee, Summer 2013) - Psychology
 Louise Loisselle (Ph.D. committee, Spring 2013)
 Shixiong Chen (Ph.D. committee, Spring 2012)
 Kaitlyn Lansford (Ph.D. committee, Fall 2011)
 Whitney Hansen (Ph.D. committee, Spring 2011) – Psychology
 Teresa Cardon (Ph.D. committee, Spring 2010)
 Patricia McCarthy (Ph.D. awarded May 2009)
 Esther Kim (Ph.D. awarded 2006) – University of Arizona

Undergraduate Honors Theses (ASU Barrett, The Honors College)

Director of Honors Thesis

Keaton Sorenson Honors thesis completed May, 2018
Thesis Title: Do amnesic MCI subjects have different neuropsychological profiles if they are amyloid PET positive or negative?

McKayla Tully Honors thesis completed May, 2018
Thesis Title: Iowa Gambling Task and Stress in Military Veteran Students

Kelly Allen Honors thesis completed May, 2016
Thesis Title: Memory and Related Processes in Military Veteran Students

Elizabeth Hsiung Honors thesis completed May, 2011

Thesis Title: Simulating Autism-type Deficits in a Reading Comprehension Task

Emily Padilla Honors thesis completed May, 2011
Thesis Title: Changing Your Mind: The Effect of Attentional Demands on Change Blindness in Reading

Ann Hickox Honors thesis completed May, 2006
Thesis title: Who Said That? Investigating Effects of Language and Familiarity on Speaker Recognition.

Erica Brooks Honors thesis completed May, 2002
Thesis title: Information in Working Memory Can Cause Recognition Errors

Honors Committees

Alexandra Cleveland Honors thesis completed Fall 2019
Cassandra Rehwalt Honors thesis completed Spring 2019
Nicole Marzan Honors thesis completed Spring 2018
Courtney Kolberg Honors thesis completed Spring 2018
Soren Mickelsen Honors thesis completed Spring 2016
Nancy Flores Honors thesis completed Spring 2016
Erica Corvasce Honors thesis completed Spring 2015
Garrett McCann Honors thesis completed Fall 2014
Chloe Kolaz Honors thesis completed Fall 2013
Brittany Garcia Honors thesis completed Spring 2012
Leah Carter Honors thesis completed Spring 2008
Christine Lippman Honors thesis completed Spring 2001, Psychology

Undergraduate Research Projects

(Note: All projects were presented at formal poster sessions. Served as Mentor or Co-mentor)

Lauren Green - Advanced Research Experience Seminar Student (2019)
Title: The Effects of Presentation Modality and Language Proficiency on Digit Span Performance in Bilinguals

Rachel Ladzinski – Advanced Research Experience Seminar Student (2018)
Title: The Effect of Auditory Distractions and Service-related Conditions on Verbal Fluency Performance in Military Veterans

Staley Lane – Advanced Research Experience Seminar Student (2018)
Title: Switching It Up! Rule Learning, Set Switching, and Working Memory in Military Veterans.

McKayla Tully – Advanced Research Experience Seminar Student (2017)
Title: Who Should you Take to Vegas? Analyzing Risk Taking Behaviors in U.S. Military Veterans Utilizing the Iowa Gambling Task.

Katherine Tully – Advanced Research Experience Seminar Student (2017)
Title: It All Adds Up? Examining Serial Addition Performance in Veterans with and without History of Mild Traumatic Brain Injury.

Whitney McLaughlin – Advanced Research Experience Seminar Student (2017)
Title: Complex Narrative Recall Tasks in Military Veterans with and without History of Mild Traumatic Brain Injury.

Cassandra Elias – Advanced Research Experience Seminar Student (2015)
Title: Self-Report of Deficits and Complex Working Memory Span in Military Veterans

- Kelly Allen– Advanced Research Experience Seminar Student (2015)
Title: The Effect of Auditory Distraction on Verbal Memory in Military Veterans with and without mTBI
- Vianeth Santiago - Advanced Research Experience Seminar Student (2015)
Title: Cross-language Naming Performance in Spanish-English Bilinguals
- Setarae Banihashemi - Advanced Research Experience Seminar Student (2015)
Title: Turning “perro” into “pup”: What Cross-Language Errors Tell Us about Bilingual Executive Function
- Melanie Howarth - SHS Undergraduate Seminar Researcher (2013)
Title: The Effect of Presentation Styles on Learning
- Alexandra Markovich - SHS Undergraduate Seminar Researcher (2012)
Title: Remembering What’s Right (or Left): Visual and Verbal Memory in the Cerebral Hemispheres
- Heather Beauvais - SHS Undergraduate Seminar Researcher (2011)
Title: The Effect of Feedback on Monitoring and Complex Task Performance
- Courtney Nakata – SHS Undergraduate Seminar Researcher (2009)
Title: Where Familiarity and Bias Lead, Errors are Sure to Follow: Implicit and Explicit Processes Guide Source Memory Judgments
- Elizabeth Worcester - SHS Undergraduate Seminar Researcher (2009)
Title: Distraction and Dual-Tasking: The Effect of Attentional Demands on the Processing of Explicit and Inferred Information
- Emily Solchenberger – School of Life Sciences Undergraduate Researcher (2008)
Title: (Mis)Remembering What You Heard: How Working Memory Affects Source Memory
- Emily Wirth – School of Life Sciences Undergraduate Researcher (2008)
Title: A One-Way Mirror: The Effects of Word Frequency and Working Memory Span in a Controlled Suppression Task
- Andrea Graffa – SHS Undergraduate Seminar Researcher (2008)
Title: Learning to Play by the Rules: Two Studies of Cognitive Flexibility

Teaching Interests

Psycholinguistics, Cognitive Psychology, Cognitive Neuropsychology, Memory, Research Methods

Teaching Experience

SHS 367: Language Science (Spring 1999 through current year)

This course covers the major areas of language research and theory. The diverse topics include basic linguistic principles, memory and language, the organization of internal knowledge, speech, reading, discourse processing, and neurolinguistics.

SHS 394/350: Brain, Memory, and Language (Fall 2002 through Spring 2017)

This course covers basic brain functions and their relation to memory and language processing. We examine the impact of brain damage and resulting disorders, such as amnesia, dyslexia, and aphasia. The relationship between cognition and the brain are explored by studying neuro-imaging techniques, case studies, and illuminating research.

*SHS 500: Research Methods in Speech and Hearing Science
(2002-2004; Spring 2009; Fall 2014 through current year)*

This graduate level course covers the essential aspects of scientific study, including proper methods, research design, statistics, theoretical development, and hypothesis testing. The class also includes interpretation of statistical tests and ethics in human research.

SHS 790: Doctoral Proseminar (ongoing)

Topics include: Critical Thinking/Research Project Development; Effective Course Development, Teaching, and Mentoring; Research Project Development

SHS 791: ST: Critical Thinking in Research and Theory (Spring 2007)

SHS 485: Acquired Speech and Language Disorders (Spring 2001)

This course covers a range of language disorders resulting from stroke, TBI, disease, and other brain disorders. The nature of speech and language impairment and treatment approaches are discussed.

SHS 580: Right Hemisphere, Traumatic Brain Injury, and Dementia (Spring 2001)

This course covers the impact of TBI, dementia, and RH damage on cognitive and communicative functions. Compensatory strategies and therapies emphasizing intact abilities are discussed and evaluated.

SHS 591: Cognitive Interactions with Linguistic Functions (Fall 2000-2001)

This course covers current theories and research in cognition, including working memory, long-term memory, attention, visuo-spatial skills, and pattern recognition. The interactions of these processes and language are highlighted.

SHS 598: The Psychology of Language (Spring 1999)

This course covers advanced topics in psycholinguistics: dyslexia, models of and basic research in word perception, and visual and spoken language processing.

Additional Courses (ASU Department of Psychology)

PSY 324: Memory & Cognition

PSY 290: Research Methods

Community Service Presentations

Long-term Memory and the Brain. In-service teaching presentation at Chandler Preparatory Academy, Chandler, Arizona. March 2017.

Working Memory and the Brain. In-service teaching presentation at Chandler Preparatory Academy, Chandler, Arizona. March 2016.

Learning, Memory, and Teaching. In-service teaching presentation at Archway Classical Academy, Chandler, Arizona. January 2012.

Academic Service

Professional Memberships

The Psychonomic Society. Membership: Fellow

American Speech-Language-Hearing Association: Member

University Committees

ASU University General Studies Council (2015 - present)

ASU University Graduate Council (2016 - present)

ASU Provost Teaching Academy (2015 - 2017)

ASU University Senator (2012 - 2015)

College of Health Solutions Committees (*ad hoc member)

CHS Curriculum Committee*

College of Health Solutions Teaching Task Force (2015 - 2016)

Previous Departmental Service

Personnel, Policy, and Budget Committee (Chair)

Ph.D. Admissions and Policy Committee (Chair for 2015-16 year)

Curriculum Committee (Member)

Promotion, Tenure, and Faculty Review Committee (Chair, Member)

Undergraduate Curriculum Committee (Member)

Master's SLP Program Policy and Admissions Committee (Member)

Editorial Boards

Editorial Board Member for the *American Journal of Speech-Language Pathology*

Area: Motor Speech Disorders and Traumatic Brain Injury

Ad Hoc Reviewer

American Journal of Speech-Language Pathology

Aphasiology

Applied Psycholinguistics

Bilingualism: Language and Cognition

European Neurology

Journal of Speech, Language, and Hearing Research

Journal of Experimental Psychology: Human Perception and Performance

Quarterly Journal of Experimental Psychology

PLOS One