

## Justin M. Aronoff, Ph.D.

Associate Professor  
Department of Speech and Hearing Science  
University of Illinois at Urbana-Champaign  
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### Employment and Affiliations

Discovery Partners Institute Affiliate	2021-present
Associate Professor, Department, of Otolaryngology, University of Illinois at Chicago	2019-present
Associate Professor, Speech and Hearing Science Department, University of Illinois at Urbana-Champaign	2019-present
Research Affiliate, Carle Hospital	2017-present
Assistant Professor, Department, of Otolaryngology, University of Illinois at Chicago	2014-2019
Assistant Professor, Speech and Hearing Science Department, University of Illinois at Urbana-Champaign	2013-2019

### Education

University of Southern California and House Research Institute: NIH T32 Post-doctoral fellow	2011-2013
House Research Institute: Communication and Neuroscience Division, Post-doctoral fellow	2007-2011
University of Southern California: Neuroscience, Ph.D. Dissertation: The role of similarity in restoring missing notes in music Dissertation co-chairs: Elaine S. Andersen, Ph.D. Zhong-Lin Lu, Ph.D.	August 2007
University of Southern California: Linguistics, M.A.	May 2003
University of Illinois at Urbana-Champaign: Teaching of Spanish, B.A.	May 2001

## External Funding

Principal Investigator, R01 DC018529, The contributions of interaurally correlated signals and interaurally symmetric place of stimulation for the binaural auditory system, Direct costs: \$1,062,500 Indirect costs: \$508,927	National Institutes of Health (NIH)/National Institute on Deafness and Other Communication Disorders (NIDCD)	2021-2026
Principal Investigator, Effectiveness of the AB bimodal system in adult bimodal cochlear implant recipients (Michael Novak, co-investigator) \$19,202	Advanced Bionics	2017-2020
Gift to support research (with Torrey Loucks) \$15,000	Advanced Bionics	2017
Principal Investigator, “The importance of coordination for binaural cochlear implant processors” (David Landsberger, co-investigator) \$40,000	American Hearing Research Foundation	2016-2017
Principal Investigator, Flexi grant, “Limitations on the integration of signals across ears” \$8,172.63	Action on Hearing Loss	2013-2014
Principal Investigator, R03 DC013380, “Improving cochlear implant performance by optimizing bilateral speech processors” Direct costs: \$300,000 Indirect costs: \$157,165	National Institutes of Health (NIH)/National Institute on Deafness and Other Communication Disorders (NIDCD)	2013-2017
Principal Investigator, “Improving bilateral cochlear implant patient performance” (David Landsberger, co-investigator) \$20,000	National Organization for Hearing Research Foundation	2012-2014

## Internal Funding

AHS Innovation Planning grant, “Accelerating development of SHS online post-baccalaureate certificate program (with Matthew Rispoli) \$20,000	Applied Health Sciences college, University of Illinois at Urbana-Champaign	2021-2022
Principal Investigator, Arnold O. Beckman Award, “Why using two ears can make it harder for cochlear implant users to control the pitch of their voice.” \$22,149	Campus Research Board, University of Illinois at Urbana-Champaign	2018-2021
Principal Investigator, Pilot grant, “Determining whether there is a unitary	Center on Health, Aging, and Disability, University of Illinois at Urbana-Champaign	2016-2018

optimal bilateral electrode pairing across the binaural auditory system.”  
\$20,000

USC Academic Professionalization Grant for organizing Graduate symposium (with Nicholas Foster & Elaine Andersen) \$2,000	University of Southern California	2005-2006
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### Mentored Grants

Emma Martin, “Contributions of vocal tract length to cochlear implant users’ perception of vocal pitch” \$1,000	Bernard & Lottie Drazin Memorial Grant, American Hearing Research Foundation	2022
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Christopher Mularczyk, “Temporal and spectral manipulation and vocal pitch perception in cochlear implant users” \$1,000	Bernard & Lottie Drazin Memorial Grant, American Hearing Research Foundation	2021
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Cody Jeu, “A cochlear implant simulation study to determine the effects of transposing frequencies on binaural benefits” \$1,000	Bernard & Lottie Drazin Memorial Grant, American Hearing Research Foundation	2020
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Elise Lippmann, “Validating the use of a non-linguistic test across a broad clinical population” \$1,000	Bernard & Lottie Drazin Memorial Grant, American Hearing Research Foundation	2019
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### Awards and Honors

List of teachers ranked as excellent by their students Neural basis of speech and language (2014) Communication neuroscience (2015, 2016, 2018) Cochlear implants (2017, 2018, 2020) Language and the Brain (2018, 2019)	University of Illinois at Urbana-Champaign	
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Applied Health Sciences Excellence in Undergraduate Teaching Award	University of Illinois at Urbana-Champaign	2019
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Graduate student/postdoctoral fellow travel award	Association for Research in Otolaryngology	2013
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NIH Hearing and Communication Neuroscience T32 Post-doctoral Fellowship	House Research Institute and University of Southern California	2011-2013
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Hearst Scholarship	House Research Institute	2007
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USC Final Year Fellowship	University of Southern California	2006-2007
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Bursary for Oxford Summer School on Connectionist Modeling	Oxford University	2003
NIH Cognitive and Computational Neuroscience T32 Pre-doctoral Fellowship	University of Southern California	2001-2003

## Journal Articles

\* indicates student co-author

1. \*Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (in press). The effect of simulated insertion depth differences on the vocal pitches of cochlear implant users. *Journal of the Acoustical Society of America Express Letters*.
2. \*Kim, G.H., **Aronoff, J.M.** (2021). Using unilateral stimulation to create a reference for bilateral fusion judgments. *JASA Express Letters*, 1 (11), 114401.
3. \*Staisloff, H.E., **Aronoff, J.M.** (2021). Comparing methods for pairing electrodes across ears with cochlear implants. *Ear and Hearing*, 42 (5), 1218-1227.
4. \***Aronoff, J.M.**, Duitsman, L., Matusik, D.K., Hussain, S., Lippmann, E. (2021). Examining the relationship between speech recognition and a spectral-temporal test with a mixed group of hearing aid and cochlear implant users. *Journal of Speech, Language, and Hearing Research*, 64, 1073-1080.
5. \*Abbs, E., **Aronoff, J.M.**, Kirchner, A., O'Brien, E., Harmon, B. (2020). Cochlear implant users' vocal control correlates across tasks. *Journal of Voice*, 34(3), 490.e7-490.e10.
6. \*Kirchner, A., Loucks, T.M., Abbs, E., Shi, K., Yu, J.W., **Aronoff, J.M.** (2020). Influence of bilateral cochlear implants on vocal control. *Journal of the Acoustical Society of America*, 147(4), 2423-2431.
7. \***Aronoff, J.M.**, Staisloff, H.E., Kirchner, A., Lee, D.H., Stelmach, J. (2019). Pitch matching adapts even for bilateral cochlear implant users with relatively small initial pitch differences across ears. *Journal of the Association for Research in Otolaryngology*, 20 (6), 595-605.
8. Landsberger, D.M., Stupak, N., **Aronoff, J.M.** (2019). Spectral-temporally modulated ripple test Lite for computerless Measurement (SLRM): A nonlinguistic test for audiology clinics. *Ear and Hearing*, 40(5), 1253-1255.
9. \***Aronoff, J.M.**, Kirchner, A., Abbs, E., & Harmon, B. (2018). When singing with cochlear implants, are two ears worse than one for perilingually/postlingually deaf individuals? *Journal of the Acoustical Society of America*, 143, EL503-EL508.
10. \*Lee, D.H., **Aronoff, J.M.** (2018). Changing stimulation patterns can change the broadness of contralateral masking functions for bilateral cochlear implant users. *Hearing Research*, 363, 55-61.
11. \*Lawler, M., Yu, J., **Aronoff, J.M.** (2017). Comparison of the spectral-temporally modulated ripple test with the Arizona biomedical institute sentence test in cochlear implant users. *Ear and Hearing*, 38 (6), 760-766.

12. \*Stelmach, J., Landsberger, D.M., Padilla, M., & **Aronoff, J.M.** (2017). Determining the minimum number of electrodes that need to be pitch matched to accurately estimate pitch matches across the array. *International Journal of Audiology*, 56, 894-899.
13. \*Suneel, D., Staisloff, H., Shayman, C., Stelmach, J., **Aronoff, J.M.** (2017). Localization performance correlates with binaural fusion for interaurally mismatched vocoded speech. *Journal of the Acoustical Society of America*, 142 (3), EL276-280.
14. \***Aronoff, J.M.**, Padilla, M., Stelmach, J., & Landsberger, D.M. (2016). Clinically paired electrodes are often not perceived as pitch matched. *Trends in Hearing*, 20, 1-9.
15. \*Staisloff, H.E., Lee, D. H., & **Aronoff, J.M.** (2016). Perceptually aligning apical frequency regions leads to more binaural fusion of speech in a CI simulation. *Hearing Research*, 337, 59-64.
16. \***Aronoff, J.M.**, Stelmach, J., Padilla, M., Landsberger, D.M. (2016). Interleaved processors improve cochlear implant patients' spectral resolution. *Ear and Hearing*, 37 (2), E85-E90.
17. \*Loucks, T.M., Suneel, D., **Aronoff, J.M.** (2015). Audio-vocal responses elicited in adult cochlear implant users. *Journal of the Acoustical Society of America*, 138(4), EL393-EL398.
18. **Aronoff, J.M.**, Padilla, M., Fu, Q.-J., and Landsberger, D.M. (2015). Contralateral masking in bilateral cochlear implant patients: A model of medial olivocochlear function loss. *PLOS ONE*, 10(3): e0121591. doi:10.1371/journal.pone.0121591
19. \***Aronoff, J.M.**, Shayman, C., Prasad, A., Suneel, D., & Stelmach, J. (2015). Unilateral spectral and temporal compression reduces binaural fusion for normal hearing listeners with cochlear implant simulations. *Hearing Research*. 320, 24-29.
20. **Aronoff, J.M.**, Amano-Kusumoto, A., Itoh, M., Soli, S. D. (2014). The effect of interleaved filters on normal hearing listeners' perception of binaural cues. *Ear and Hearing*, 35 (6), 708-710.
21. Amano-Kusumoto, A., Hosom, J.-P., Kain, A., & **Aronoff, J.M.** (2014). Determining the relevance of different aspects of formant contours to intelligibility. *Speech Communication*. 59, 1-9.
22. **Aronoff, J.M.** & Landsberger, D.M. (2013). The development of a modified spectral ripple test. *Journal of the Acoustical Society of America*, 134(2), E1217-EL222.
23. Eskridge, E.N., Galvin, J.J., **Aronoff, J.M.**, Li, T., & Fu, Q-J (2012). Speech perception with music maskers by cochlear implant users and normal hearing listeners. *Journal of Speech, Language, and Hearing Research*, 55, 800-810.
24. **Aronoff, J.M.**, Freed, D.J., Fisher, L.M., Pal, I., Soli, S.D. (2012): Cochlear implant patients' localization using interaural level differences exceeds that of untrained normal hearing listeners. *Journal of the Acoustical Society of America*, 131(5), EL382-EL387.
25. **Aronoff, J.M.**, Freed, D.J., Fisher, L., Pal, I., & Soli, S.D. (2011). The effect of different cochlear implant microphones on acoustic hearing individuals' binaural benefits for speech perception in noise. *Ear and Hearing*, 32(4), 468-484.
26. **Aronoff, J. M.**, Yoon, Y.-S., & Soli, S. D. (2010). Stratification of American hearing aid users by age and audiometric characteristics: A method for representative sampling. *Ear and Hearing*, 31(3), 401-406.

27. **Aronoff, J.M.**, Yoon, Y.-S., Freed, D.J., Vermiglio, A.J., Pal, I., & Soli, S.D. (2010). The use of interaural time and level difference cues by bilateral cochlear implant users. *Journal of the Acoustical Society of America*, 127 (3), EL87-EL92.
28. Almor, A., **Aronoff, J. M.**, MacDonald, M. C., Gonnerman, L. M., Kempler, D., Hintiryan, H., Hayes, U. J., & Andersen, E. S. (2009). A common mechanism in noun and verb naming evidenced by semantic deficits in patients with Alzheimer's disease. *Brain and Language*, 111(1), 8-19.
29. **Aronoff, J. M.**, Gonnerman, L. M., Almor, A., Arunachalam, S. Kempler, D., & Andersen, E. S. (2006). Information content versus relational knowledge: Semantic deficits in patients with Alzheimer's disease. *Neuropsychologia*, 44 (1), 21-35.

## Proceedings, Published Abstracts, And Editorials

1. Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (2021). Lyrics provide a small benefit for singing accuracy. *Proceedings of Meetings on Acoustics*, 45, 035001.
2. **Aronoff, J.M.**, Lee, D.H., Kirchner, A., Staisloff, H.E. (2018). Listening with two different ears. *Proceedings of the Alexander Graham Bell 2018 Research Symposium, Alexander Graham Bell Association for the Deaf and Hard of Hearing*, 14-16. **Aronoff, J.M.** & Hughes, M. (2016). Editorial: Binaural hearing with cochlear implants for bilateral, bimodal, and single-sided deafness patients. *Ear and Hearing*, 37 (3), 247.
3. Amano-Kusumoto, A., **Aronoff, J.M.**, Itoh, M., and Soli, S.D. (2012). The effect of dichotic processing on the perception of binaural cues. *InterSpeech 2012 Proceedings*.
4. Lilley, J., **Aronoff, J.M.**, Soli, S., Bunnell, T., and Pal, I. (2010). Automatic scoring of responses to the hearing in noise test using utterance verification based on hidden Markov models. *Journal of the Acoustical Society of America*, 127(3), 1902.
5. Jiang, J., **Aronoff, J. M.**, and Bernstein, L. E. (2008). Development of a visual speech synthesizer via second-order isomorphism. *ICASSP 2008*, 4677-4680.
6. **Aronoff, J. M.** (2006). Remembering what's missing: Modeling phoneme restoration and other complex forms of auditory induction as the triggering of a memory. *Journal of the Acoustical Society of America*, 120, 3341.
7. **Aronoff, J. M.** (2006). Investigating auditory induction without complete continuity. *Journal of the Acoustical Society of America*, 119, 3333.
8. **Aronoff, J. M.**, Nuria G., and Mintz, T. H. (2006). Stochastic approaches to morphology acquisition. In Carol A. Klee and Timothy L. Face (eds.), *Selected Proceedings of the 7th Conference on the Acquisition of Spanish and Portuguese as First and Second Languages*, 110-121. Somerville, MA: Cascadilla Proceedings Project.
9. **Aronoff, J. M.**, Gonnerman, L. M., Almor, A., Kempler, D., Andersen, E. S. (2004). The role of similarity structure in category specific deficits in Alzheimer's disease. *Brain and Language*, 91 (1), 154-155.
10. Gonnerman, L. M., **Aronoff, J. M.**, Almor, A., Kempler, D., & Andersen, E. S. (2004). From Beetle to bug: Progression of error types in naming in Alzheimer's disease. In K. Forbus, D. Gentner, & T. Regier (eds.) *Proceedings of the Twenty-Sixth Annual Conference of the Cognitive Science Society*, 1563.

11. Almor, A., Kempler, D., Andersen, E. S., **Aronoff, J. M.**, Gonnerman, L. M., & MacDonald, M. C. (2003). Investigating semantic deficits with nouns and verbs in Alzheimer's disease. *Brain and Language*, 87, 109-111.
12. **Aronoff, J. M.** (2003). Gender and the letter fluency task: Evidence from second language learners. *USC Working Papers in Linguistics*, 1(1), 111-120.
13. **Aronoff, J. M.** (2003). Null subjects in child language: Evidence for a performance-based account. In G. Garding and M. Tsujimura (eds.) *WCCFL 22 Proceedings*, 43-55. Somerville, MA: Cascadilla Press.
14. **Aronoff, J. M.**, Gonnerman, L. M., Andersen, E. S., Kempler, D., & Almor, A. (2003). Implications of distributed representations for semantic processing: Evidence from Alzheimer's disease. In *Proceedings of the Twenty-Fifth Annual Conference of the Cognitive Science Society*, 97-102 Mahwah, NJ: Erlbaum.
15. Gonnerman, L. M., **Aronoff, J. M.**, Andersen, E. S., Kempler, D., & Almor, A. (2003). The relationship between naming performance and underlying category structure in Alzheimer's disease. *Brain and Language*, 87, 29-30

## Conference Presentations

\* indicates invited talk

1. **Aronoff, J.M.**, Staisloff, H.E., Soleimanifar, S., Jawad, M. (2022). A rapid measurement for interaural mismatch and interaural time differences. *Talk presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
2. Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (2022). Stimulation location affects cochlear implant users' vocal pitch. *Talk presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
3. Jawad, M., Soleimanifar, S., **Aronoff, J.M.** (2022). Using ECAPs to Determine the Effect of Interaural Mismatch. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
4. Landsberger, D.M., Stupak, N., Dahl, C., **Aronoff, J.M.** (2022). Musical interval perception in single-sided deafened cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Virtual conference.*
5. Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (2021). Do lyrics help individuals to sing in tune? *Talk presented at the Acoustical Society of America conference, Seattle, WA.*
6. **Aronoff, J.M.**, Staisloff, H.E., Soleimanifar, S., Jawad, M., Bernstein, L.R. (2021). A rapid measurement for the effect of interaural mismatch on interaural time difference sensitivity. *Poster presented at the Acoustical Society of America conference, Seattle, WA.*
7. Jawad, M., **Aronoff, J.M.** (2021). Exploring the use of ECAPs to predict the detrimental effect of interaural mismatches. *Talk presented at the Midwest Conference on Cochlear Implants, Virtual conference.*
8. Kim, G.H., **Aronoff, J.M.** (2021). Providing anchors for measuring binaural fusion with cochlear implant users. *Talk presented at the Conference on Implantable Auditory Prostheses, Virtual conference.*
9. Soleimanifar, S., Murgia, S., **Aronoff, J.M.**, Bottalico, P. (2021). The voice quality in cochlear implant users. *Talk presented at the Conference on Implantable Auditory Prostheses, Virtual conference.*

10. Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (2021). Insertion depth and vocal pitch differences for cochlear implant users. *Poster presented at the Conference on Implantable Auditory Prostheses*, Virtual conference.
11. **Aronoff, J.M.**, Harmon, B., Soleimanifar, S. (2021). Investigating the encoding of indexical properties by cochlear implant processors. *Talk presented at the American Auditory Society Scientific and Technology Meeting*, Virtual conference.
12. Staisloff, H.E. and **Aronoff, J.M.** (2021). Do low stimulation rates interfere with place-pitch? *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Virtual conference.
13. Staisloff, H.E., Jeu, C., Soleimanifar, S., **Aronoff, J.M.** (2021). A vocoder study evaluating the effects of transposition. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Virtual conference
14. Soleimanifar, S., Murgia, S., **Aronoff, J.M.**, Bottalico, P. (2021). Cochlear implant users' voice quality. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Virtual conference.
15. Soleimanifar, S., Staisloff, H.E., **Aronoff, J.M.** (2021). Insertion depth and vocal pitch differences for cochlear implant users. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Virtual conference.
16. **Aronoff, J.M.**, Harmon, B., Soleimanifar, S., Kim, G., Kirchner, A., Staisloff, H. (2020). Temporal pitch explanation limits for cochlear implant users' pitch perception. *Talk presented at the American Auditory Society Scientific and Technology Meeting*, Scottsdale, AZ.
17. **Aronoff, J.M.**, Stupak, N., Dahl, C., Landsberger, D.M. (2020). Pitch perception preserved with single sided deafness and cochlear implants. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Scottsdale, AZ.
18. Dahl, C., Maghinang, C., **Aronoff, J.M.** (2020). Differences between the perception and production of sung melodies. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Scottsdale, AZ.
19. Kim, G.H. and **Aronoff, J.M.** (2020). Providing anchors for measuring binaural fusion with cochlear implant users. *Poster presented at the American Auditory Society Scientific and Technology Meeting*, Scottsdale, AZ.
20. \***Aronoff, J.M.** (2019). Individuals with cochlear implants use feedback from their own productions to alter the pitch of their voice. *Talk presented at the Acoustical Society of America conference*, San Diego, CA.
21. \***Aronoff, J.M.** (2019). Getting the two ears to work together. *Talk presented at Advanced Bionics*, Valencia, CA.
22. Soleimanifar, S., Staisloff, H. E., **Aronoff, J.M.** (2019). The role of cochlear place of stimulation on vocal pitch perception. *Talk presented at the Conference on Implantable Auditory Prostheses*, Lake Tahoe, CA.
23. **Aronoff, J.M.**, Staisloff, H.E., Kirchner, A. (2019). Towards a clinical approach for creating bilateral cochlear implant maps. *Poster presented at the Conference on Implantable Auditory Prostheses*, Lake Tahoe, CA.



24. Harmon, B.E., Staisloff, H.E., O'Brien, EA, Kim, G.H., **Aronoff, J.M.** (2019). Determining underlying vocal pitch dimensions in cochlear implant users. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
25. **Aronoff, J.M.**, Staisloff, H.E., Black, J., Novak, M., Agrawal, S. (2019). Assessing the benefits of bimodal fitting. *Poster presented at the 16<sup>th</sup> symposium on cochlear implants in children., Hollywood, FL.*
26. **Aronoff, J.M.**, Kirchner, A.C., Shi, K., Lippmann, E., Yu, J. (2019). Examining the roots of cochlear implant users' difficulties with vocal control. *Talk presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
27. Landsberger, D.M., Stupak, N., **Aronoff, J.M.** (2019). A non-linguistic test for audiology clinics. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
28. **Aronoff, J.M.**, Staisloff, H.E., Kirchner, A.C. (2019). Measuring pitch matching for cochlear implant patients using acoustic stimuli. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
29. Kirchner, A.C., Loucks, T.M., Abbs, E., Shi, K., Yu, J., **Aronoff, J.M.** (2019). Can vocal stability be achieved by bilateral cochlear implants? *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
30. O'Brien, E., Harmon, B., Soleimanifar, S., Kim, G., Kirchner, A., **Aronoff, J.M.** (2019). The distortion of vocal pitch by cochlear implant processors. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
31. Staisloff, H.E., **Aronoff, J.M.** (2019). Optimizing electrode pairs. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
32. \***Aronoff, J.M.** (2018). Listening with two different ears. *Talk presented at the Alexander Graham Bell Association for the Deaf and Hard of Hearing Research Symposium, Scottsdale, AZ.*
33. \***Aronoff, J.M.** (2018). The benefits, limits, and potential of bilateral cochlear implants. *Knowles Hearing Center Lecture, Northwestern University, Chicago, IL.*
34. **Aronoff, J.M.**, Agrawal, S., Black, J., Kirchner, A., Lee, D.H., Novak, M. (2018). Evaluating the benefits of bimodal fitting. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
35. **Aronoff, J.M.**, Lee, D.H., Kirchner, A., Staisloff, H.E. (2018). Interaural mismatches result in uncorrelated signals, causing degraded binaural abilities. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
36. Kirchner, A., **Aronoff, J.M.**, Samuels, M., Loucks, T.M. (2018). Ongoing vocal corrections to brief loudness shifts: Voice stabilization mechanisms. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
37. Abbs, L., Kirchner, A., O'Brien, E., Harmon, B., **Aronoff, J.M.** (2018). Comparing cochlear implant users' vocal control across tasks. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
38. **Aronoff, J.M.**, Kirchner, A., O'Brien, E., Harmon, B., Abbs, E. (2018). Singing with cochlear implants. *Talk presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*

39. \***Aronoff, J.M.** (2017). The importance of moving towards bilateral maps. *Talk presented at Advanced Bionics, Valencia, CA.*
40. **Aronoff, J.M.,** Buente, A.C., Samuels, M.J., Abbs, E., Loucks, T.M. (2017). The effects of bilateral cochlear implants on vocal control. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
41. **Aronoff, J.M.,** Todd, A.E., Staisloff, H.E., Lee, D.H., Landsberger, D.M. (2017). Using the acoustic signal to time-lock the pulses in the left and right cochlear implant. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
42. **Aronoff, J.M.,** Stelmach, J., Lee, D.H. (2017). Bilateral pitch matches adapt based on the processor frequency allocation for bilateral cochlear implant users. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
43. Staisloff, H.E., Lee, D.H., **Aronoff, J.M.** (2017). Comparing methods for pairing electrodes across ears with cochlear implants. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
44. Buente, A.C., **Aronoff, J.M.,** Samuels, M.J., Louck, T.M. (2017). Ongoing vocal corrections to brief loudness shifts: voice stabilization mechanisms. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
45. Johnson, E.C., Lee, D.H., Jones, D.L., **Aronoff, J.M.,** Ratnam, R. (2017). Neural timing code improves speech perception in vocoder simulations of cochlear implant sound coding. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
46. **Aronoff, J.M.** (2017). The importance of moving towards bilateral maps. *Talk presented at Advanced Bionics, Valencia, CA.*
47. **Aronoff, J.M.,** Buente, A., Samuels, M., Abbs, E., Loucks, T.M. (2017). Maintaining a stable voice with a cochlear implant. *Talk presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
48. Staisloff, H.E., Lee, D.H., **Aronoff, J.M.** (2017). Comparing methods for pairing electrodes across ears with cochlear implants. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
49. **Aronoff, J.M.,** Todd, A., Staisloff, H.E., Lee, D.H., Landsberger, D.M. (2017). Using the acoustic signal to time-lock bilateral cochlear implants. *Poster presented at the American Auditory Society Scientific and Technology Meeting, Scottsdale, AZ.*
50. **Aronoff, J.M.,** Todd, A., Staisloff, H.E., Lee, D. H., Landsberger, D.M. (2017). Using the acoustic signal to time-lock the pulses in the left and right cochlear implant. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
51. Johnson, E.C., Lee, D.H., Jones, D.L., **Aronoff, J.M.,** Rama, R. (2017). A neural timing code improves speech perception in vocoder simulations of cochlear implant sound coding. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
52. **Aronoff, J.M.,** Staisloff, H., Lee, D. (2017). Improving bilateral cochlear implant users' sensitivity to interaural time differences. *Talk presented at Ear Day, Chicago, IL.*
53. Samuels, M., **Aronoff, J.M.,** Buente, A., Abbs, E., Loucks, T. M. (2017). The relationship between vocal pitch and pitch perception in cochlear implant users. *Talk presented at Ear Day, Chicago, IL.*

54. **Aronoff, J.M.**, Buente, A., Samuels, M., Abbs, E., Loucks, T.M. (2016). What cochlear implant users' voice says about what they hear. *Talk presented at the Midwest Conference on Cochlear Implants, Madison, WI.*
55. **Aronoff, J.M.**, Gampa, A., Lee, D., Stelmach, J. (2016). Bilateral maps can improve bilateral cochlear implant patients' spectral resolution. *Talk presented at the International Conference on Cochlear Implants, Toronto, Canada.*
56. Yu, J., Lawler, M., **Aronoff, J.M.** (2016). Comparison of the spectral-temporally modulated ripple test (SMRT) with the Arizona Biomedical Institute (AzBio) sentence test in cochlear implant (CI) users. *Talk presented at the International Conference on Cochlear Implants, Toronto, Canada.*
57. **Aronoff, J.M.**, Samuels, M., Suneel, D., Loucks, T.M. (2016). Using vocal production to measure cochlear implant patients' perception. *Poster presented at the International Conference on Cochlear Implants, Toronto, Canada.*
58. Stelmach, J. Landsberger, D. Padilla, M, **Aronoff, J.M.** (2016). Developing a clinically feasible pitch matching task for bilateral cochlear implant users. *Poster presented at AudiologyNOW American Academy of Audiology Conference, Phoenix, AZ.*
59. **Aronoff, J.M.**, Gampa, A., Stelmach, J., Padilla, M., Landsberger, D. M. (2016). Leveraging bilateral implants to improve cochlear implant patients' spectral resolution. *Talk presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
60. Buente, A., **Aronoff, J.M.**, Samuels, M. (2016). Effects of vocoder carrier bandwidths on binaural fusion. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
61. Lee, D.H., **Aronoff, J.M.** (2016). Effects of broadening contralateral maskers on masking functions in bilateral cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
62. Staisloff, H.E., Lee, D.H., **Aronoff, J.M.** (2016). Perceptually aligning apical frequency regions can lead to more binaural fusion of speech in a cochlear implant simulation. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
63. Stelmach, J. Landsberger, D. Padilla, M, **Aronoff, J.M.** (2016). Developing a clinically feasible pitch matching task for bilateral cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
64. Staisloff, H.E., Lee, D. H., & **Aronoff, J.M.** (2015). Perceptually aligning apical frequency regions leads to more binaural fusion of speech in a CI simulation. *Talk presented at the Midwest Conference on Cochlear Implants, Madison, WI.*
65. **Aronoff, J.M.**, Gampa, A., Stelmach, J., Padilla, M., & Landsberger, D.M. (2015). Leveraging bilateral implants to improve cochlear implant patients' spectral resolution. *Talk presented at Ear Day, Chicago, IL.*
66. Stelmach, J., Landsberger, D.M., Padilla, M.D., **Aronoff, J.M.** (2015). Developing a clinically feasible pitch matching task for bilateral cochlear implant users. *Talk presented at Ear Day, Chicago, IL.*
67. **Aronoff, J.M.**, Laubenstein, A., Gampa, A., Lee, D.H., Stelmach, J., Samuels, M.J., & Buente, A.C. (2015). When perceptually aligning the two ears, is it better to only use the portions that can be aligned or to use the whole array? *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
68. Lee, D.H. & **Aronoff, J.M.** (2015). The effects of a broader masker on contralateral masking functions. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*

69. Todd, A.E., **Aronoff, J.M.**, Staisloff, H., Landsberger, D.M. (2015). The effect of interaural mismatch and interaurally interleaved channels on spectral resolution in simulated cochlear implant listening. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
70. Loucks, T.M., Suneel, D., **Aronoff, J.M.** (2015). Perceived pitch shifts elicit vocal corrections in cochlear implant patients. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
71. **Aronoff, J.M.**, Stelmach, J., Padilla, M., and Landsberger, D. (2015). Interaural place mismatches persist for long-term bilateral cochlear implant users. *Talk presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
72. Shayman, C., Stelmach, J., Prasad, A., Suneel, D., and **Aronoff, J.M.** (2015). The role of spectral and temporal cues in binaural fusion. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
73. **Aronoff, J.M.**, Shayman, C., Suneel, D., Stelmach, J., Lee, D., Prasad, A., Staisloff, H., and Laubenstein, A. (2015). Holding sound together and pulling it apart. *Talk presented at the Mid-Atlantic Conference on Cochlear Implants, College Park, MD*
74. Suneel, D., Staisloff, H., Shayman, C.S., Stelmach, J., **Aronoff, J.M.** (2015). Examining the relationship between localization abilities and binaural fusion. *Talk presented at the Mid-Atlantic Conference on Cochlear Implants, College Park, MD*
75. **Aronoff, J.M.**, Shayman, C. S., Suneel, D., Stelmach, J., Prasad, A., and Staisloff, H. (2014). Holding sound together and pulling it apart: The role of similarity in binaural fusion. *Talk presented at Ear Day, Chicago, IL.*
76. Shayman, C.S., Suneel, D., Stelmach, J., Prasad, A., Staisloff, H., and **Aronoff, J.M.** (2014). Binaural fusion: A single-sided deafness perspective simulated in normal-hearing listeners. *Talk presented at the Midwest Conference on Cochlear Implants, Madison, WI.*
77. **Aronoff, J.M.**, Padilla, M., and Landsberger, D. M. (2014). Improving cochlear implant patients' performance by interleaving the signal across ears. *Talk presented at the International Conference on Cochlear Implants, Munich, Germany.*
78. **Aronoff, J.M.**, Padilla, M., and Landsberger, D. M. (2014). The peak of contralateral masking is predicted by pitch matching. *Talk presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
79. Padilla, M., **Aronoff, J.M.**, and Landsberger, D. M. (2014). The virtual tripole: A new stimulation mode for cochlear implants. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, San Diego, CA.*
80. **\*Aronoff, J.M.** (2013). Two ears are better than one: The benefits, limits, and possibilities of bilateral cochlear implants. *Talk presented at Indiana University.*
81. **Aronoff, J.M.** (2013). Using contralateral masking to gain insight into the binaural system. *Talk presented at the Midwest Conference on Cochlear Implants, Madison, WI.*
82. **Aronoff, J.M.**, Padilla, M., Fu, Q.-J., and Landsberger, D. M. (2013). Improving cochlear implant patients' spectral resolution by dividing the signal across ears. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*

83. Landsberger, D.M., Srinivasan, A.G., **Aronoff, J.M.**, Ong, B., Crew, J. (2013). Partial tripolar stimulation improves speech in noise and spectral resolution. *Poster presented at the Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.*
84. **Aronoff, J. M.**, Padilla, M., Fu, Q.-J., and Landsberger, D. M. (2013). Ipsilateral and contralateral masking in bilateral cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
85. Landsberger, D.M., Srinivasan, A.G., **Aronoff, J.M.**, Ong, B., Crew, J., and Shannon, R. V. (2013). Current focusing improves speech in noise and spectral resolution in cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
86. Amano-Kusumoto, A., **Aronoff, J.M.**, Itoh, M., and Soli, S.D. (2012). The effect of dichotic processing on the perception of binaural cues. *Poster presented at InterSpeech, Portland, OR.*
87. **Aronoff, J. M.** & Fu, Q.-J. (2011). The relationship between place mismatch and detection in noise thresholds with simulated cochlear implants. *Poster presented at the Conference on Implantable Auditory Prostheses, Pacific Grove, CA.*
88. Eskridge, E. N., Galvin, J. J., Fu, Q.-J., & **Aronoff, J. M.** (2011). Speech perception in music backgrounds by cochlear implant users and normal hearing listeners. *Poster presented at the Conference on Implantable Auditory Prostheses, Pacific Grove, CA.*
89. **Aronoff, J. M.** (2011). Two cochlear implants are (sometimes) better than one. *Talk presented at the 2<sup>nd</sup> annual Hearing and Communication Neuroscience Retreat, Catalina Island, CA.*
90. **Aronoff, J. M.** & Fu, Q.-J. (2011). Do bilateral cochlear implant patients have binaurally coherent representations? *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Baltimore, MD.*
91. **Aronoff, J. M.** (2010). Are cochlear implant users sensitive to interaural correlation? *Talk presented at the 1<sup>st</sup> Annual SoCal Hearing Conference, Irvine, CA.*
92. Lilley, J., **Aronoff, J. M.**, Soli, S., Bunnell, T., Pal, I. (2010). Automatic scoring of responses to the hearing in noise test using utterance verification based on hidden Markov models. *Poster presented at the Acoustical Society of America meeting, Baltimore, MD.*
93. **Aronoff, J. M.**, Yoon, Y.-S., & Soli, S. D. (2010). The role of interaural time and level cues in spatial release from masking and localization abilities for cochlear implant users. *Poster presented at the Association for Research in Otolaryngology midwinter meeting, Anaheim, CA.*
94. **Aronoff, J. M.**, Yoon, Y.-S., & Soli, S. D. (2009). A stratified sampling plan for hearing aid research. *Poster presented at the American Academy of Audiology meeting, Dallas, TX.*
95. **Aronoff, J. M.** & Soli, S. D. (2008). The demographics of hearing aid users in the United States. *Poster presented at the International Hearing Aid Conference, Lake Tahoe, CA.*
96. Jiang, J., **Aronoff, J. M.**, and Bernstein, L. E. (2008). Development of a visual speech synthesizer via second-order isomorphism. *Poster presented at the IEEE International Conference on Acoustics, Speech, and Signal Processing, Las Vegas, NV.*
97. **Aronoff, J. M.** (2006). Remembering what's missing: Modeling phoneme restoration and other complex forms of auditory induction as the triggering of a memory. *Talk presented at the Acoustical Society of America meeting, Honolulu, HI*

98. **Aronoff, J. M.** (2006). Investigating auditory induction without complete continuity. *Talk presented at the Acoustical Society of America meeting, Providence, RI*
99. **Aronoff, J. M.,** Foster, N. (2006). Phoneme restoration using illusory bottom-up information. *Talk presented at the Linguistic Society of America meeting, Albuquerque, NM*
100. **Aronoff, J. M.,** Foster, N. (2004). A computational model of the effects of varying input frequency ranges on directional selectivity in human auditory cortex. *Poster presented at the Society for Neuroscience meeting, San Diego, CA*
101. **Aronoff, J. M.,** Gonnerman, L. M., Almor, A., Kempler, D., Andersen, E. S. (2004) The role of similarity structure in category specific deficits in Alzheimer's disease. *Poster presented at the Academy of Aphasia meeting, Chicago, IL*
102. **Aronoff, J. M.,** Nuria G., and Mintz, T. H. (2004). Stochastic approaches to morphology acquisition. *Talk presented at the 8th Hispanic Linguistics Symposium and the 7<sup>th</sup> Conference on the Acquisition of Spanish and Portuguese as First and Second Languages, Minneapolis, MN*
103. **Gonnerman, L. M., Aronoff, J. M.,** Almor, A., Kempler, D., & Andersen, E. S. (2004). From Beetle to bug: Progression of error types in naming in Alzheimer's disease. *Poster presented at the Cognitive Science Society meeting, Chicago, IL.*
104. **Gonnerman, L. M., Aronoff, J. M.,** Andersen, E. S., Kempler, D., & Almor, A. (2003). The relationship between naming performance and underlying category structure in Alzheimer's disease. *Poster presented at the Academy of Aphasia meeting, Vienna, Austria*
105. **Almor, A., Kempler, D., Andersen, E. S., Aronoff, J. M.,** Gonnerman, L. M., & MacDonald, M. C. (2003). Investigating semantic deficits with nouns and verbs in Alzheimer's disease. *Poster presented at the Academy of Aphasia meeting, Vienna, Austria*
106. **Aronoff, J. M.,** Gonnerman, L. M., Andersen, E. S., Kempler, D., & Almor, A. (2003). Implications of distributed representations for semantic processing: Evidence from Alzheimer's disease. *Poster presented at the Cognitive Science Society meeting, Boston, MA*
107. **Aronoff, J. M.** (2003). Null subjects in child language: Evidence for a performance-based account. *Talk presented at the West Coast Conference on Formal Linguistics, San Diego, CA*

### **Teaching Experience**

University of Illinois at Urbana- Champaign	Research methods in health science (AHS 494)	2020
	Language and the brain (SHS 427)	2018-2021
	Communication neuroscience (SHS 280)	2015-present
	Cochlear implants (SHS 580)	2015-present
	Introduction to sound and hearing (SHS 240)	2014-2018
	Neural basis of speech and language (SHS 470)	2013-2014
House Research Institute	Stats Seminar	2011

## Professional Certification

Illinois Teaching Certification	2001
American Academy of Otolaryngology Oto Tech Certification	2009

## Professional Activities

Section Editor, Ear and Hearing	2016-present
Guest Editor, Ear and Hearing	2015

*Ad-hoc grant reviewer:* Action on Hearing Loss  
American Speech-Language-Hearing Foundation  
Austrian Academy of Sciences  
Health Education England/National Institute for Health Research  
National Institutes of Health/National Institute on Deafness and Other  
Communication Disorders (2021)

*Ad-hoc reviewer:* Ear and Hearing  
Hearing Research  
International Journal of Audiology  
Journal of the Acoustical Society of America  
Journal of the Association for Research in Otolaryngology  
Journal of Speech Language and Hearing Research  
Otology and Neurotology  
PLoS ONE

### University committees

Pre-Tenure Advisory Group for the Provost's office	2015-2016
Senate Educational Policy Committee	2019-present

### College committees

Bob Bilger Award committee, member	2014-2020
Educational Policy Committee member	2015-2017, 2019-2020
ex-officio	2020-present
Faculty Distribution of Effort Task Force, member	2017
Corporate and Foundation Relations Strategic Planning committee, member	2017-2018
Committee on developing a core sequence in methods and statistics, member	2018-2019
Committee to develop research/lab space allocation processes, member	2018-2019
Director of career services search committee, member	2018-2019

### Department administrative positions

Director of Undergraduate Studies	2019-present
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### Department committees

Graduate admissions committee, member	2013-2016, 2018-2019
Visiting Laboratory Coordinator Search committee, chair	2014

AuD Task Force	2014-2015
Faculty search committees	2014-2018
Graduate programs committee	2014-2016
Faculty Advisory Committee	2016-2017, 2019-present
Educational Policy Committee	
member	2016-2018
ex-officio	2019-present
Awards Committee, member	2017-2019

Test Development:

Co-developed (with David Landsberger) the Spectral-temporally Modulated Ripple Test (SMRT).

- Quickly measures spectral resolution in both normal hearing and hearing impaired populations.
- Reduces confounds in previous spectral resolution tests (i.e. spectral ripple).
- Available for free download at <http://smrt.tigerspeech.com>

Co-developed (with David Landsberger) the SMRT Lite for computerless Measurement (SLRM).

- Adaptation of SMRT for use in clinical settings when computers are unavailable

Moderator, Speech processing and psychoacoustics session, American Auditory Society Scientific and Technology Meeting	2022
Co-Moderator, Binaural psychoacoustics podium session, Association for Research in Otolaryngology Midwinter meeting.	2014
Topic co-leader, Young investigator mentoring session <i>Conference on Implantable Auditory Prostheses</i>	2013
USC Graduate Student Symposium “Interdisciplinary approaches to psycholinguistic and neurolinguistic research: Investigating speech perception and production” <i>Organizer</i> (with N. Foster, faculty advisor E. Andersen)	2005-2006
USC Working Papers in Linguistics, 1(1) <i>Editor</i>	2003

**Professional Associations**

Acoustical Society of America  
American Auditory Society