

Yu-Hsiang Wu
Communication Sciences and Disorders
Report includes January 1, 2003 to August 31, 2021
Curriculum Vitae as of August 31, 2021

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EDUCATION AND PROFESSIONAL HISTORY

Post Graduate Education

2008 - 2009 **Postdoctoral Fellow**, Hearing science, University of Iowa
Mentor(s): Bentler, Ruth

Higher Education

2007 **PhD**, Hearing sciences, University of Iowa
Thesis: The impact of visual cues on directional benefit
1994 **MD**, Medicine, National Taiwan University

Professional and Academic Positions

2018 - Present **Associate Professor, Department of Communication Sciences and Disorders**, University of Iowa
2012 - 2018 **Assistant Professor, Department of Communication Sciences and Disorders**, University of Iowa
2011 - 2012 **Adjunct Assistant Professor, Department of Communication Sciences and Disorders**, University of Iowa
2009 - 2012 **Assistant Research Scientist, Department of Communication Sciences and Disorders**, University of Iowa
2001 - 2003 **Clinical Otolaryngologist, Department of Otolaryngology**, Tzu Chi General Hospital

Honors and Awards

2020 **Ear and Hearing Editors' Award**, Ear and Hearing, Ear and Hearing Editors' Award: Wu, Y. H., Stangl, E., Chipara, O., Hasan, S. S., DeVries, S., & Oleson, J. (2019). Efficacy and effectiveness of advanced hearing aid directional and noise reduction technologies for older adults with mild to moderate hearing loss. *Ear and Hearing*, 40(4), 805-822.
2011 **CLAS Exceptional Performance Flexible Pay Awards**, University of Iowa
2009 **Travel Award**, Aging and Speech Communication: Third International and Interdisciplinary Research Conference, Indiana University, Bloomington, IN
2008 **NIH Mentored Student Research Award**, America Auditory Society, Scottsdale, AZ
2006 **Kenneth T. Key Scholarship**, University of Iowa
2006 **Student Scholarship Award**, International Hearing Aids Research Conference (IHCON), Lake Tahoe, CA

Memberships

2007 - Present Acoustical Society of America
2007 - Present American Academy of Audiology
2007 - Present American Auditory Society
2007 - Present American Speech-Language-Hearing Association

TEACHING

Courses Taught at the University of Iowa

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2021	CSD:6293:0001	Vestibular Rehabilitation	6	6
Fall 2021	CSD:7590:5042	Research	1	1
Spring 2021	CSD:7238:1	Capstone Requirement	4	4
Spring 2021	CSD:7590:1802	Research	2	2
Spring 2021	CSD:6291:1	Vestibular Assessment	6	6
Fall 2020	CSD:7238:9344	Capstone Requirement	2	2
Fall 2020	CSD:5240:0001	Hearing Aids I	6	6
Fall 2020	CSD:7590:9249	Research	3	3
Fall 2020	CSD:6293:0001	Vestibular Rehabilitation	9	9
Spring 2020	CSD:7238:0001	Capstone Requirement	10	10
Spring 2020	CSD:7590:7992	Research	1	1
Spring 2020	CSD:6291:0001	Vestibular Assessment	9	9
Fall 2019	CSD:5240:0001	Hearing Aids I	7	7
Fall 2019	CSD:6242:0001	Hearing Aids II	9	9
Fall 2019	CSD:7590:5387	Research	2	2
Fall 2019	CSD:6293:0001	Vestibular Rehabilitation	5	5
Spring 2019	CSD:7238:0001	Capstone Requirement	8	8
Spring 2019	CSD:7590:2860	Research	2	2
Spring 2019	CSD:6291:0001	Vestibular Assessment	5	5
Fall 2018	CSD:6242:0001	Hearing Aids II	7	
Fall 2018	CSD:7590:1662	Research	3	
Spring 2018	CSD:7238:0001	Capstone Requirement	4	
Spring 2018	CSD:7590:9938	Research	2	
Fall 2017	CSD:6242:0001	Hearing Aids II	10	
Fall 2017	CSD:7590:7132	Research	3	
Fall 2017	CSD:6291:0001	Vestibular Assessment and Rehabilitation	10	

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2021	CSD:6293:0001	Vestibular Rehabilitation	6	6
Fall 2021	CSD:7590:5042	Research	1	1
Spring 2017	CSD:7590:5396	Research	1	
Fall 2016	CSD:6242:1	Hearing Aids II	12	
Fall 2016	CSD:7590:3126	Research	2	
Fall 2016	CSD:6291:1	Vestibular Assessment and Rehabilitation	9	
Summer 2016	CSD:7590:1429	Research	1	
Spring 2016	CSD:4098:0057	Honors Thesis	1	
Spring 2016	CSD:7590:0057	Research	1	
Fall 2015	CSD:4098:0057	Honors Thesis	1	
Fall 2015	CSD:1015:0001	Intro to Speech & Hearing Proces & Disor	95	
Fall 2015	CSD:7590:0057	Research	1	
Fall 2015	CSD:6291:0001	Vestibular Assessment and Rehabilitation	5	
Spring 2015	CSD:4165:0001	Communication Disorders and Aging	33	
Spring 2015	CSD:4098:0057	Honors Thesis	1	
Spring 2015	CSD:1015:0001	Intro to Speech & Hearing Proces & Disor	26	
Fall 2014	CSD:4098:0057	Honors Thesis	1	
Fall 2014	CSD:7590:0057	Research	1	
Fall 2014	CSD:6291:0001	Vestibular Assessment and Rehabilitation	8	
Spring 2014	003:098:057	Honors Thesis	2	
Spring 2014	003:015:001	Intro to Speech & Hearing Proces & Disor	36	
Fall 2013	003:098:057	Honors Thesis	2	
Fall 2013	003:590:057	Research	1	
Fall 2013	003:291:001	Vestibular Assessment and Rehabilitation	9	
Spring 2013	003:240:001	Hearing Aids I	9	
Spring 2013	003:098:057	Honors Thesis	1	

Term	Course#	Title	Ten-Day Enrollment	Final Enrollment
Fall 2021	CSD:6293:0001	Vestibular Rehabilitation	6	6
Fall 2021	CSD:7590:5042	Research	1	1
Fall 2012	003:590:057	Research	1	
Fall 2012	003:291:001	Vestibular Assessment and Rehabilitation	9	

Student Mentoring Summary

Fall 2021	Honors advisor, Chair, # Students: 8
Fall 2021	Undergraduate Advisor, Chair, # Students: 12
Spring 2021	Honors advisor, Chair, # Students: 5
Spring 2021	Undergraduate Advisor, Chair, # Students: 14
Fall 2020	Honors advisor, Chair, # Students: 5
Fall 2020	Undergraduate Advisor, Chair, # Students: 14
Spring 2020	Honors advisor, Chair, # Students: 7
Spring 2020	Undergraduate Advisor, Chair, # Students: 13
Fall 2019	Honors advisor, Chair, # Students: 7
Fall 2019	Undergraduate Advisor, # Students: 12
Spring 2019	Honors advisor, Chair, # Students: 10
Spring 2019	Undergraduate Advisor, Chair, # Students: 4
Fall 2018	Honors advisor, Chair, # Students: 10
Fall 2018	Undergraduate Advisor, Chair, # Students: 4
Spring 2018	Honors advisor, Chair, # Students: 9
Fall 2017	Honors advisor, Chair, # Students: 9

Student Mentoring

AuD - Capstone Project, Chair

2019 - Present	Emory, Caroline
2019 - Present	Kromer-Edwards, Meredith
2019 - 2021	Petty, Abigail; <i>Completed</i>
2018 - 2021	Jensen, Justin; <i>Completed</i>
2018 - 2019	Ostwinkle, Krista; <i>Completed</i>
2017 - 2020	Venkitakrishnan, Soumya; <i>Completed</i>
2017 - 2019	Rossio, Megan; <i>Completed</i>
2016 - 2017	Menscher, Rory; <i>Completed</i>
2015 - 2016	Brody, Lisa; <i>Completed</i>
2017 - 2019	Kim, Sieon; <i>Completed</i>
2015 - 2017	Bailey, Kelly; <i>Completed</i>
2014 - 2016	Wisecup, Nathaniel; <i>Completed</i>

BA - Undergraduate Honors Thesis

2015 - 2016	McSorley, Skylar; <i>Completed</i>
2014 - 2015	Eilers, Emily; <i>Completed</i>
2014 - 2015	Haverkamp, Tess; <i>Completed</i>

2013 - 2014 Kim, Sieon; *Completed*
 2013 - 2014 Perkins, Joanna; *Completed*
 Fall 2012 - Spring 2014 Stone, Caitlin; *Completed*
 Fall 2011 - Spring 2013 Pang, Carol; *Completed*
 Fall 2010 - Spring 2012 Lentz, Emily; *Completed*
 Fall 2009 - Spring 2011 Fehlberg, Hannah; *Completed*

PhD - Comprehensive Exam

Fall 2011 - Spring 2012 Lewis, James; *Completed*

PhD - Comprehensive Exam, Chair

September 2019 Jorgensen, Erik
 April 2019 - June 2019 Venkitakrishnan, Soumya

PhD - Comprehensive Exam, Member

September 2019 Sapp, Caitlin
 December 2017 - 2017 Kim, Subong; *Completed*
 2017 Klein, Kelsey; *Completed*
 2016 Tejani, Viral; *Completed*
 2015 Hasan, Syed Shabih; *Completed*
 Fall 2012 - Spring 2013 Wróblewski, Marcin; *Completed*

PhD - Dissertation Committee Chair

June 2019 - Present Jorgensen, Erik; *In Process*
 June 2019 - Present Venkitakrishnan, Soumya; *In Process*
 2015 - 2017 Giuliani, Nicholas; *Completed*

PhD - Dissertation Committee Member

April 2017 Hasan, Syed Shabih; *Completed*
 Fall 2012 - Winter 2017 Wróblewski, Marcin; *Completed*
 2014 - 2016 Mussoi, Bruna; *Completed*
 Fall 2012 - Spring 2013 Silberer, Amanda; *Completed*

Publications

CLAS * System * = Senior Author, Major Contribution, ** = Secondary Contribution *** = Equal Contribution, **** = Minor Contribution

Refereed Articles

1. * Jorgensen, E. J., Stangl, E., Chipara, O., Hernandez, H., Oleson, J., & Wu, Y.H. (2021). GPS predicts stability of listening environment characteristics in one location over time among older hearing aid users. *International Journal of Audiology*, 60(5), 328-340
2. * Dunn, C. C., Stangl, E., Oleson, J., Smith, M., Chipara, O., Wu, Y. H. (2021). The Influence of Forced Social Isolation on the Auditory Ecology and Psychosocial Functions of Listeners With Cochlear Implants During COVID-19 Mitigation Efforts. *Ear and Hearing*, 42, 20-28.
3. * Urbanski, D., Hernandez, H., Oleson, J., & Wu, Y. H. (2021). Toward a new evidence-based fitting paradigm for over-the-counter hearing aids. *American Journal of Audiology*, 30 (1), 43-66.
4. * Wu, Y.H., Xu, J., Stangl, E., Pentony, S., Vyas, D., Chipara, O., Gudjonsdottir, A., Oleson, J., & Galster, J. (2021). Why ecological momentary assessment surveys go incomplete? when it happens and how it impacts data. *Journal of the American Academy of Audiology*, 32(1), 016-026.
5. * Guiliani, N.P., Brown, C.J., & Wu, Y.H. (2021). Comparisons of the sensitivity and reliability of multiple measures of listening effort. *Ear and Hearing*, 42(2), 465-474.
6. * Wu, Y.H., Stangl, E., Chipara, O., Gudjonsdottir, A., Oleson, J., & Bentler, R. (2020). Comparison of in-situ and retrospective self-reports on assessing hearing aid outcomes. *Journal of the American Academy of Audiology*, 31(10), 746-762.
7. * Xu, J., Wu, Y. H., Crukley, J., Pentony, S., Galster, J. (2020). Using Smartphone-Based Ecological Momentary Assessment in Audiology Research: The Participants' Perspective. *American Journal of Audiology*, 29, 935-943.
8. * Jensen, J., Vyas, D., Urbanski, D., Garudadri, H., Chipara, O., Wu, Y. H. (2020). Common Configurations of Real-Ear Aided Response Targets Prescribed by NAL-NL2 for Older Adults With Mild-to-Moderate Hearing Loss. *American Journal of Audiology*, 29, 460-475.
9. * Wu, Y. H., Stangl, E., Chipara, O., Zhang, X. (2020). Test-retest Reliability of Ecological Momentary Assessment in Audiology Research. *Journal of the American Academy of Audiology*, 31, 599-612.
10. * Wu, Y. H., Stangl, E., Chipara, O., Hasan, S. S., DeVries, S., Oleson, J. (2019). Efficacy and Effectiveness of Advanced Hearing Aid Directional and Noise Reduction Technologies for Older Adults with Mild to Moderate Hearing Loss. *Ear and Hearing*, 40, 805-822.
11. * Kawaguchi, L., Wu, Y. H., Miller, C. (2019). The Effects of Amplification on Listening Self-Efficacy in Adults With Sensorineural Hearing Loss. *American Journal of Audiology*, 28, 572-582.
12. * Brody, L., Wu, Y. H., Stangl, E. (2018). A comparison of personal sound amplification products (PSAPs) and hearing aids in ecologically-relevant test environments. *American Journal of Audiology*, 27(4), 581-593.
13. Wu, Y. H., Stangl, E., Chipara, O., Hasan, S. S., Welhaven, A., Oleson, J. (2018). Characteristics of Real-World Signal-to-noise Ratios and Speech Listening Situations of Older Adults with Mild-to-Moderate Hearing Loss. *Ear and Hearing*, 39(2), 293-304.
14. * Klein, K., Wu, Y. H., Stangl, E., Bentler, R. A. (2018). Using a digital language processor to quantify the auditory environment and the effect of hearing aids for adults with hearing loss. *Journal of the American Academy of Audiology*, 29(4), 279-291.
15. * Wu, Y. H., Dumanch, K., Stangl, E., Miller, C., Tremblay, K. (2017). Is the Device-Oriented Subjective Outcome (DOSO) independent of personality? *Journal of the American Academy of Audiology*, 28(10), 932-940.
16. * Perreau, A. E., Wu, Y. H., Tatge, B., Irwin, D., Corts, D. (2017). Listening effort measured in adults with normal hearing and cochlear implants. *Journal of the American Academy of Audiology*, 28(8), 685-697.
17. ** Miller, C. W., Bentler, R. A., Wu, Y. H., Lewis, J., Tremblay, K. (2017). Output signal-to-noise ratio and speech perception in noise: Effects of algorithm. *International Journal of Audiology*, 56(8), 568-579.
18. ** Miller, C., Stewart, E. K., Wu, Y. H., Bishop, C., Bentler, R. A., Tremblay, K. (2017). Working memory and speech recognition in noise under ecologically relevant listening conditions: Effects of visual cues and noise type among adults with hearing loss. *Journal of Speech, Language, and Hearing Research*, 60, 2310-2320.
19. * Wu, Y. H., Ho, C. H., Hsiao, S. H., Brummet, R. B., Octav, C. (2016). Predicting 3-month and 12-month Post-Fitting Real-World Hearing Aid Outcome using Pre-fitting Acceptable Noise Level (ANL). *International Journal of Audiology*, 55(5), 285-294.
20. * Wu, Y. H., Stangl, E., Zhang, X., Perkins, J., Eliers, E. (2016). Psychometric functions of dual-task

- paradigms for measuring listening effort. *Ear and Hearing*, 37(6), 660-670.
21. * Wu, Y. H., Stangl, E., Zhang, X., Bentler, R. (2015). Construct Validity of the Ecological Momentary Assessment in Audiology Research. *Journal of the American Academy of Audiology*, 26, 872-884.
 22. ** Silberer, A., Bentler, R. A., Wu, Y. H. (2015). The importance of high-frequency audibility with and without visual cues on speech recognition for listeners with normal hearing. *International Journal of Audiology*, 54, 865-872.
 23. *** Hasan, S. S., Brummet, R. B., Octav, C., Wu, Y. H., Yang, T. (2015). In-situ Measurement and Prediction of Hearing Aid Outcomes using Mobile Phones (pp. 525 - 534). *IEEE International Conference on Healthcare Informatics (ICHI)*.
 24. * Zhang, X., Wu, Y. H. (2015). Directional microphones of modern hearing aids. *Journal of Audiology and Speech Pathology*, 23, pp. 301-306.
 25. * Wu, Y. H., Aksan, N., Rizzo, M., Stangl, E., Zhang, X., Bentler, R. (2014). Measuring Listening Effort: Driving Simulator Versus Simple Dual-Task Paradigm. *Ear and Hearing*, 35, 623-632.
 26. * Wu, Y. H., Stangl, E., Pang, C., Zhang, X. (2014). The Effect of Audiovisual and Binaural Listening on the Acceptable Noise Level (ANL): Establishing an ANL Conceptual Model. *Journal of the American Academy of Audiology*, 25, 141-153.
 27. ** Hasan, S., Chipara, O., Wu, Y. H., Aksan, N. (2014). Evaluating Auditory Contexts and Their Impacts on Hearing Aid Outcomes with Mobile Phones (pp. 126-133). *Pervasive Computing Technologies for Healthcare*.
 28. * Ho, C. H., Wu, Y. H., Hsiao, S. H., Stangl, E., Lentz, E., Bentler, B. A. (2013). Acceptable noise level (ANL) and real-world hearing-aid success in Taiwanese listeners. *International Journal of Audiology*, 52, 762-770.
 29. * Wu, Y. H., Stangl, E., Bentler, R. A. (2013). Hearing-aid users' voices: A factor that could affect directional benefit. *International Journal of Audiology*, 52, 789-794.
 30. * Wu, Y. H., Stangl, E. (2013). The Effect of Hearing Aid Signal Processing Schemes on Acceptable Noise Levels: Perception and Prediction. *Ear and Hearing*, 34, 333-341.
 31. ** Hasan, S., Lai, F., Chipara, O., Wu, Y. H. (2013). AudioSense: Enabling Real-time Evaluation of Hearing Aid Technology In-Situ (pp. 143-148). *International Symposium on Computer-Based Medical Systems (CBMS)*.
 32. * Wu, Y. H., Stangl, E., Bentler, R. A., Stanziola, R. W. (2013). The effect of hearing aid technologies on listening in an automobile. *Journal of the American Academy of Audiology*, 24, 474-485.
 33. * Ho, C. H., Wu, Y. H., Hsiao, S. H., Stangl, E., Lentz, E., Bentler, R. A. (2013). The equivalence of acceptable noise level (ANL) with English, Mandarin, and non-semantic speech: A study across the U.S. and Taiwan. *International Journal of Audiology*, 52, 83-91.
 34. * Wu, Y. H., Bentler, R. A. (2012). Clinical measures of directivity: the assumption, accuracy, and reliability. *Ear and Hearing*, 33, 44-56.
 35. * Wu, Y. H., Bentler, R. A. (2012). Do older adults have social lifestyles that place fewer demands on hearing? *Journal of the American Academy of Audiology*, 23, 697-711.
 36. * Wu, Y. H., Bentler, R. A. (2012). The effect of reverberation on audio-visual directional microphone benefit: Perception and prediction. *Ear and Hearing*, 33, 604-614.
 37. * Wu, Y. H., Bentler, R. A. (2011). A method to measure hearing aid directivity index and polar pattern in small and reverberant enclosures. *International Journal of Audiology*, 50, 405-416.
 38. * Wu, Y. H., Bentler, R. A. (2010). Impact of visual cues on directional benefit and preference: Part 1 - laboratory tests. *Ear and Hearing*, 31, 22-34.
 39. * Wu, Y. H., Bentler, R. A. (2010). Impact of visual cues on directional benefit and preference: Part 2 - field tests. *Ear and Hearing*, 31, 35-46.
 40. Wu, Y. H. (2010). The effect of age on directional microphone hearing aid benefit and preference. *Journal of the American Academy of Audiology*, 21, 78-89.
 41. * Wu, Y. H., Bentler, R. A. (2009). Using a signal cancellation technique involving impulse response to assess directivity of hearing aids. *Journal of the Acoustical Society of America*, 126, 3214-3226.
 42. ** Bentler, R. A., Wu, Y. H., Kettel, J., Hurtig, R. (2008). Digital Noise Reduction: Outcomes from laboratory and field studies. *International Journal of Audiology*, 47, 447-460.
 43. * Wu, Y. H., Bentler, R. A. (2007). Using a signal cancellation technique to assess adaptive directivity of hearing aids. *Journal of the Acoustical Society of America*, 122, 496-511.
 44. * Wu, Y. H., Ho, H. C., Lin, Y. L., Lai, Y. M. (2003). Changing the sequence of ENT examination and upper GI endoscopy can reduce failure rates for indirect nasopharyngoscopy and indirect laryngoscopy in health

examinations. *Tzu Chi Medical Journal*, 15, 377-381.

Non-refereed Articles

1. ** Mueller, G., Stangl, E., & Wu, Y. H. (2021). Comparing MPOs from six different hearing aid manufacturers: Headroom considerations. *Hearing Review*. 28(4), 10-16.
2. ** Sabin, A., Jensen, J., Chipara, O., & Wu, Y. H. (2021). Comparing population coverage between hearing aids using presets vs Bose CustomTune. *Hearing Review*. 28(6), 28-29.
3. * Urbanski, D. & Wu, Y. H. (2021). New evidence-based fitting paradigm for over-the-counter hearing aids. *The Hearing Journal*, 74(4), 16-18.
4. ** Littmann, V., Wu, Y. H., Froehlich, M., Powers, T. A. (2017). Multi-center evidence of reduced listening effort using new hearing aid technology. *Hearing Review*, 24(2), 32-34.
5. ** Chalupper, J., Wu, Y. H., Weber, J. (2011). SpeechFocus - A new automatic directional microphone system for special listening situations. *Hearing Journal*, 64(1), 22-26.
6. ** Mueller, H. G., Bentler, R. A., Wu, Y. H. (2008). Prescribing maximum hearing aid output: Differences among manufacturers found. *Hearing Journal*, 61, 30-36.
7. ** Bentler, R. A., Wu, Y. H., Jeon, J. (2006). Effectiveness of directional microphones in open-canal fittings. *Hearing Journal*, 59, 40-47.

Book Chapters

1. * Wu, Y. H., Bentler, R. A. (2014). Use of Directional Microphone Technologies to Improve User Performance in Noise. M. M. Metz (Ed.), *Sandlin's Textbook of Hearing Aid Amplification: Technical and Clinical Consideration*. San Diego: Plural Publishing Inc.
2. ** Bentler, R. A., Wu, Y. H. (2013). Developments in hearing aid technology and verification techniques. J.J. Montana & J.B. Spitzer (Eds.), *Advanced Practice in Adult Audiologic Rehabilitation*. San Diego: Plural Publishing Inc..

Grants and Contracts

Funded

- | | |
|---------------------|---|
| Jan 2021 – Dec 2021 | <i>Clinical Claims Study of the BHA100 Series Braun Clear Hearing Aid</i>
Funded by Helen of Troy. Investigator/s Yu-Hsiang Wu (Principal Investigator). |
| Jan 2021 – Dec 2021 | <i>Clinical Validation Study of the BHA100 Series Braun Clear Hearing Aid</i>
Funded by Helen of Troy. Investigator/s Yu-Hsiang Wu (Principal Investigator). |
| Jan 2019 - Dec 2024 | <i>Optimizing the Wireless Ecosystem for Hearing Aids 90REGE0013-01-00</i>
Funded by National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). Investigator/s Yu-Hsiang Wu (Co-Principal), Octave Chipara (Co-Principal), Christian Vogler (Principal Investigator). |
| Jan 2018 - Dec 2023 | <i>Outcomes, value, and candidacy of low-cost amplification intervention 1R01DC015997-01A1</i>
Funded by NIH/NIDCD. Award amount: (\$1,617,639.00) Number of Months: 2. Investigator/s Yu-Hsiang Wu (Principal Investigator). |
| Jan 2019 - Dec 2023 | <i>Cost-effective hearing aid delivery models for older adults with dementias and hearing loss</i>
Funded by NIH/NIDCD, supplement grant. Percent effort: 20. Investigator/s Y H Wu (Principal Investigator). |
| Nov 2019 - Nov 2020 | <i>Hearing Aids in Complex Listening Situations</i>
Funded by Sivantos, Inc. Award amount: (\$55,856.00). Investigator/s Y H Wu. |
| Jan 2018 - Jun 2019 | <i>Optimizing over-the-counter hearing aids</i>
Funded by Retirement Research Foundation. Award amount: (\$114,521.00) Number of Months: 18. Investigator/s Y H Wu (Principal Investigator). |
| Jan 2014 - Dec 2018 | <i>Context-sensitive assessment of real-world situations via integrated smartphones and hearing aids 90RE5020-01-00</i>
Funded by National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). Award amount: (\$434,744.00) Percent effort: 15. Investigator/s Yu-Hsiang Wu (Co-Principal), Octave Chipara (Co-Principal), |

- Christian Vogler (Principal Investigator).
- Jan 2013 - Dec 2018 *Linking SNR to hearing aid success*
Funded by NIDCD/NIH. Award amount: (\$1,250,000.00). Investigator/s Yu-Hsiang Wu (Investigator), Ruth Bentler (Principal Investigator), Kelly Tremblay (Principal Investigator).
- Jan 2017 - Dec 2017 *An empirical model for auditory ecology*
Funded by Starkey Inc. Award amount: (\$50,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2017 - Dec 2017 *Method for Context-Sensitive Evaluation of Hearing Aid Technology in Situ*
Funded by Center on Aging Mind and Brain Initiative. Award amount: (\$25,000.00). Investigator/s Octav Chipara (Principal Investigator), Yu-Hsiang Wu (Investigator).
- Jul 2016 - Dec 2017 *Compact super-directional microphone array to improve hearing in background noise*
Funded by NIH/NIDCD. Investigator/s Gary Elko (Principal Investigator), Ruth Bentler (Investigator), Yu-Hsiang Wu (Investigator).
- Jan 2016 - Dec 2016 *Hearing aid and listening effort*
Funded by Sivantos, Inc. Award amount: (\$45,754.00) Percent effort: 15. Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2015 - Dec 2016 *Evaluation of Samsung Hearing Aid*
Funded by Samsung Electronics Co., Ltd. Award amount: (\$207,563.00). Investigator/s Ruth Bentler (Co-Principal), Yu-Hsiang Wu (Co-Principal).
- Jan 2015 - Dec 2015 *Enabling cognitive load-dependent real-time assessment of hearing aid outcomes*
Funded by Center on Aging Mind and Brain Initiative. Award amount: (\$25,000.00). Investigator/s Octav Chipara (Principal Investigator), Yu-Hsiang Wu (Investigator).
- Jan 2014 - Dec 2015 *Impact of directional microphone systems on speech recognition and localization for special listening situations*
Funded by Siemens Hearing Instruments. Award amount: (\$57,860.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2012 - Dec 2015 *Minimal technologies for hearing aid success in elderly adults*
Funded by NIDCD/NIH. Award amount: (\$300,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2013 - Dec 2014 *Acceptable Noise Levels (ANL): A trait or a state?*
Funded by Dalin Tzu Chi General Hospital, Taiwan. Award amount: (\$10,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator), Hsu-Chueh Ho (Principal Investigator).
- Jan 2013 - Dec 2014 *Measuring Listening Effort: Developing Psychometric Functions and Adaptive Testing Procedures for the Dual-Task Paradigm*
Funded by ASHFoundation. Award amount: (\$10,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2013 - Dec 2014 *Systematically Investigating the Effect of Directional Speech Enhancement on Listening Effort*
Funded by Siemens Hearing Instruments. Award amount: (\$26,950.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2013 - Dec 2014 *Understanding and enhancing driver-to-driver communication to improve older driver safety during left turns across traffic*
Funded by IPRC (Injury Prevention Research Center). Award amount: (\$25,000.00). Investigator/s Satoshi Kitazaki (Principal Investigator), Yu-Hsiang Wu (Investigator).
- Jan 2011 - Dec 2012 *Establishing a conceptual model of the Acceptable Noise Level Test (ANL)*
Funded by American Academy of Audiology. Award amount: (\$10,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).
- Jan 2011 - Dec 2012 *Evaluating the effectiveness of new hearing aid technologies in car listening situations*

- Funded by Siemens Hearing Instruments. Award amount: (\$57,860.00).
Investigator/s Yu-Hsiang Wu (Principal Investigator), Ruth Bentler (Principal Investigator).
- Jan 2010 - Dec 2012 *Acceptable Noise Level Test (ANL): The use of ANL in a non-English-speaking culture*
Funded by Dalin Tzu Chi General Hospital, Taiwan. Award amount: (\$20,000.00).
Investigator/s Yu-Hsiang Wu (Principal Investigator), Hsu-Chueh Ho (Principal Investigator).
- Jan 2010 - Dec 2011 *Impact of a new automatic directional microphone system for special listening situations*
Funded by Siemens Hearing Instruments. Award amount: (\$47,149.00).
Investigator/s Yu-Hsiang Wu (Co-Principal), Ruth Bentler (Principal Investigator).
- Jan 2008 - Dec 2010 *Directional microphones: A systematic evaluation of directional microphones in natural environments*
Funded by Department of Education/National Institute on Disability and Rehabilitation Research (NIDRR). Award amount: (\$175,815.00). Investigator/s Yu-Hsiang Wu (Co-Principal), James Mahshie (Principal Investigator), Matthew Bakke (Principal Investigator).
- Jan 2006 - Dec 2007 *Impact of visual cues on directional benefit and preference*
Funded by ASHFoundation. Award amount: (\$5,000.00). Investigator/s Yu-Hsiang Wu (Principal Investigator).

Invited Lectures and Conference Presentations

- Jorgensen, E., Vyas, D., Anwar, Y., Chipara, O., & Wu, Y.H. (2021). [Quantifying hearing aid users' auditory ecology with a deep neural net](#). Poster presented in the Virtual Poster Hall of the Annual Conference of the American Auditory Society.
- Jensen, J., Vyas, D., Anwar, Y., Jorgensen, E., Chipara, O., & Wu, Y.H. (2021). [Improving hearing aid personalization algorithm efficiency with user preference correlations](#). Poster presented in the Virtual Poster Hall of the Annual Conference of the American Auditory Society.
- Xu, J., Wu, Y.H., Stangl, E., Pentony, S., & Galster, J. (2021). [Relationship between EMA and standard questionnaire in evaluating speech understanding](#). Poster presented in the Virtual Poster Hall of the Annual Conference of the American Auditory Society.
- Venkitakrishnan, S., Giuliani N., & Wu, Y. H. (2020). [Can facial expression measure listening difficulty?](#) Poster presented in the Virtual Poster Hall of the Annual Meeting of the American Academy of Audiology.
- Kim, S., Wu, Y. H., & Choi, I. (2020). [Electroencephalography-based Optimization of Noise Reduction in Hearing Aids](#). Poster presentation at the 43rd Annual MidWinter Meeting of the Association for Research in Otolaryngology, San Jose, CA.
- Jensen, J., Vyas, D., Garudadri, H., Chipara, O., & Wu, Y. H. (2020). [Evaluation of hearing aid personalization algorithms](#). Poster presented at The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Jorgensen, E. Chipara, O., Xu, J., & Wu, Y. H. (2020). [Use of entropy to quantify real world listening environments and effects on listening performance](#). Poster presented at The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Venkitakrishnan, S., Urbanski, D., & Wu, Y. H. (2020). [Non-customized gain frequency responses for pre-configured hearing aids: A clinical trial](#). Poster presented at The Annual Conference of the American Auditory Society, Scottsdale, AZ.

- Chipara, O., Wu, Y.H., & Garudadri, H. (2020). [A framework for optimizing hearing aids in situ based on patient feedback, auditory context, and audiologist input](#). Poster presented at The National Science Foundation's Advancing Health Through Science Smarth Health Workshop, Boston, MA.
- Bose, A., Gan, Z., Sengupta, D. Chipara, O., Wu, Y.H., & Garudadri, H. (2020). [Self-fit generation of wide dynamic range compression parameters for hearing aids](#). Poster presented at The National Science Foundation's Advancing Health Through Science Smarth Health Workshop, Boston, MA.
- Venkitakrishnan, S., Urbanski, D., & Wu, Y. H. (2020). [Validation of a fitting method for over-the-counter hearing aids: A clinical trial](#). Poster presented at: The Association for Research in Otolaryngology Annual Conference, San Jose, CA.
- Petty, A., Wu, Y.H., & Stangl, E. (2019). [Consistency of hearing aid troubleshooting across clinicians](#). Poster presented at: The Iowa Speech-Language Hearing Association Annual Conference, Des Moines, IA.
- Urbanski, D.P. & Wu, Y.H. (2019). [User's preferred gain-frequen](#). Poster presented at: The Academy Research Conference (ARC) of the Annual Conference of the American Acedemy of Audiology, Columbus, OH.
- Jensen, J., Vyas, D., Hossain, K., Garudari, H., Chipara, O. & Wu, Y.H. (2019). [Enabling automatic in-field hearing aid optimization](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Urbanski, D.P. & Wu, Y.H., Hernandez, H. & Oleson, J. (2019). [Toward a new evidence-based fitting paradigm for OTC Hearing Aids](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Urbanski, D.P. & Wu, Y.H. (2019). [Development of evidence-based gain-frequency responses for preconfigured OTC hearing aids](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Venkitakrishnan, S., Giuliani, N, & Wu, Y.H. (2019). [Facial expression as an indicator of listening difficulty](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Jorgensen, E., Wu, Y.H., Chipara, O., Oleson, J. (2018). [Temporal stability of auditory ecology among adult hearing aid users](#). Poster presented at: The 10th biennial International Hearing Aid Research Conference, Tahoe City, CA.
- Pentony, S., Xu, J., Wu, Y.H., Galster, J. (2018). [Using Ecological Momentary Assessment in Audiology Research: The Participants' Perspective](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Hone, G., Miller, C., Lee, M., Wu, Y.H., Bentler, R.A., & Tremblay, K (2018). [Linking Signal-to-Noise Ratio to Hearing Aid Success](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Kawaguchi, L., Miller, C., Wu, Y.H., & Bentler, R.A. (2018). [The Effects of Amplification on Listening Self-Efficacy in Hearing Aid Users](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Kim, S., Wu, Y.H., Xu, J., Galster, J., Pentony, S., & Chipara, O. (2018) [Relationship between automatic behavior of directional microphone and listening effort](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.

- Brody, L., Wu, Y.H., & Stangl, E. (2017). [Comparison of hearing aids and PSAPs in ecologically relevant situations](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Hidedohrn, C., Miller, C., Wu, Y.H., Bentler, R.A., & Tremblay, K. (2017). [Defining hearing aid success for adults: A comparison of three models](#). Poster presented at: The Annual Convention of the American Academy of Audiology, Indianapolis, IN.
- Osborne, S., Miller, C., Tremblay, K., Saunders, G., Wu, Y.H., & Bentler, R.A. (2017). [Accurate estimation of abilities to understand speech in noise: Effects of personality](#). Poster presented at: The Annual Convention of the American Academy of Audiology, Indianapolis, IN.
- Tatge, B., Walker, E., & Wu, Y.H. (2017). Fixed-Level vs Fixed-Performance Dual Task Procedures to Evaluate Listening Effort in Children. Poster presented at: The Annual Convention of the American Academy of Audiology, Indianapolis, IN.
- Smith, M., Lee, M., Miller, C., Tremblay, K., Wu., Y.H., & Bentler, R.A. (2017). [Are Variations in Speech-In-Noise Thresholds Related to Central Inhibitory Function?](#) Poster presented at: The Annual Convention of the American Academy of Audiology, Indianapolis, IN.
- Stangl, E., Wu, Y.H., Miller, C., Tremblay, K., & Bentler, R. (2017). [Self-reported listening predicts real-world amplification outcomes](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Bailey, K., Wu, Y.H., & Nelson, H. (2016). [The Effect and Interaction of Hearing Aid Technologies on Listening Effort](#). Poster presented at: The Annual Convention of the American Academy of Audiology, Chicago, IL.
- Dumanch, K., Wu, Y.H., Stangl, E., Bentler, R.A., Miller, C., Bishop, C., & Tremblay, K. (2016). [Is the Device-Oriented Subjective Outcome \(DOSO\) Independent of Personality?](#) Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Kim, S., Wu, H.S., Bentler, R.A., Miller, C., Bishop, C., & Tremblay, K. (2016). [Contribution of Aided Audibility to Real-world Hearing Aid Outcomes](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- McSorely, S., Wu, Y.H., & Stangl, E. (2016). [Using a more ecologically valid test to measure hearing aid outcomes](#). Poster presented at: The Spring Undergraduate Research Festival, The University of Iowa, Iowa City, IA.
- Trapp, K., Miller, C., Bishop, C., Lee, M., Wu, Y.H., Bentler, R.A., & Tremblay, K. (2016). [Predicting hearing aid success from characteristics of the psychometric function for speech perception in noise](#). Poster presented at: The 8th biennial International Hearing Aid Research Conference, Tahoe City, CA.
- Eilers, E., Wu, Y.H., Stangl, E. & Bentler, R.A. (2015). [Listening Effort: Psychometric Functions of Dual-Task Paradigms](#). Poster presented at: Annual Convention of the American Speech-Language Hearing Association, Denver, CO.
- Haverkamp, T., Wu, Y.H., & Stangl, E. (2015). [List Equivalency in the Measurement of Listening Effort: Use of SPIN Lists in a Dual-Task Paradigm](#). Poster presented at: Annual Convention of the American Speech-Language Hearing Association, Denver, CO.
- Klein, K., Wu, Y.H., & Bentler, R.A. (2015). [TV & Speech Levels as Objective Real-World Hearing Aid Outcome Measures](#). Poster presented at: Annual Convention of the American Speech-Language Hearing Association, Denver, CO.

- Klein, K., Bentler, R.A., & Wu, Y.H. (2015).  [Use of LENA to quantify hearing aid outcomes](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Wu, Y.H., & Stangl, E. (2015).  [Is the ecological momentary assessment a valid methodology in audiology?](#) Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Kim, S., Wu, Y.H. & Stangl, E. (2014).  [Measuring Listening Effort: Adaptive testing procedure for a dual-task paradigm](#). Poster presented at: The Spring Undergraduate Research Festival, The University of Iowa, Iowa City, IA.
- Perkins, J., Wu, Y.H., & Stangl, E. (2014).  [Measuring Listening Effort: The paradoxical effect of noise on listening effort](#). Poster presented at: The Spring Undergraduate Research Festival, The University of Iowa, Iowa City, IA.
- Perreau, A., Wu, Y.H., McFarlin & Turner, C. (2014). Comparison of Front-Back Sound Localization Accuracy Among ITC and BTE Hearing Aids. Poster presented at: The Annual Convention of the American Speech-Language Hearing Association, Orlando, FL.
- Silberer, A.B., Bentler, R.A., & Wu, Y.H. (2014).  [Importance of high frequency audibility on speech recognition with and without visual cues in listeners with normal hearing](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Wu, Y.H., Stangl, E., & Perkins, J. (2014).  [New insight regarding psychometric functions of dual-task paradigms](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Stone, C., Wu, Y.H., Stangl, E., & Bahr, A. (2013). The effect of compression time constant on speech recognition. Poster presented at: The Spring Undergraduate Research Festival, The University of Iowa, Iowa City, IA.
- Hartling, C., Wu, Y.H., & Bentler, R.A. (2012).  [Hearing aid algorithm stability: Hagerman's phase-inversion technique](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Miller, C., Wu, Y.H., & Bentler, R.A. (2012).  [The potential for using Hagerman's phase-inversion technique with individual fittings](#). Poster presented at: The 7th biennial International Hearing Aid Research Conference, Tahoe City, CA.
- Miller, C., Bentler, R.A., Tremblay, & Wu, Y.H. (2012).  [The relationship between the Hagerman-derived signal-to-noise ratio and speech perception](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.
- Pang, C.W., Wu, Y.H., Bentler, R.A. & Stangl, E. (2012). The effect of audiovisual and binaural listening on Acceptable Noise Level (ANL) judgment. Poster presented at: The Spring Undergraduate Research Festival, The University of Iowa, Iowa City, IA.
- Stangl, E., Wu, Y.H., Stanziola, R.W., & Bentler, R.A. (2012).  [The effect of hearing aid technologies on listening in an automobile](#). Poster presented at: The 7th biennial International Hearing Aid Research Conference, Tahoe City, CA.
- Stanziola, R.W., Wu, Y.H., Stangl, E. & Bentler, R.A. (2012).  [The effect of hearing aid technologies on speech recognition in cars](#). Poster presented at: The Annual Convention of the American Academy of Audiology, Boston, MA.
- Bentler, R.A., Cole, B. & Wu, Y.H. (2011).  [Deriving an audibility index for frequency-lowered hearing aids](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.

Bentler, R.A., Kirby, B., Stiles, D., Perk, K., Wu, Y.H., & Challuper, J. (2010). Impact of digital noise reduction on pediatric performance. Poster presented at: The Annual Convention of the American Academy of Audiology, San Diego, CA.

Bentler, R.A., Wu, Y.H., Hayes, D., Gay, P., & Stangl, E. (2010). Impact of user control versus traditional fitting on hearing aid outcomes. The Annual Convention of the American Academy of Audiology, San Diego, CA.

Bentler, R.A., Wu, Y.H., Tomblin, J.B. & Moeller, M.P. (2010).  [Acoustic considerations in LENA protocols](#). Poster presented at: The First LENA Users Conference, Denver CO.

Wu, H.S., & Bentler, R.A. (2009). The effect of age on directional microphone hearing aid benefit and preference. Poster presented at: The Aging and Speech Communication: An International and Interdisciplinary Research Conference, Bloomington, IN.

Bentler, R.A. & Wu, Y.H. (2008).  [Impact of visual cues on directional benefit and preference](#). Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.

Wu, Y.H., & Bentler, R.A. (2006). Using a signal cancellation technique with impulse responses to assess adaptive directivity of hearing aids. Poster presented at: The 5th biennial International Hearing Aid Research Conference, Tahoe City, CA.

Stiles, D., Wu, Y.H. & Bentler, R.A. (2005). Polar responses in adaptive directional hearing aids. Poster presented at: The Annual Convention of the American Academy of Audiology, Minneapolis, MN.

Wu, Y.H. & Bentler, R.A. (2005). Using a signal cancellation technique to assess adaptive directivity of hearing aids. Poster presented at: The Annual Convention of the American Academy of Audiology, Minneapolis, MN.

Wu, Y.H. & Bentler, R.A. (2004). New Norms for abbreviated profile of hearing aid benefit (APHAB)? Poster presented at: The Annual Conference of the American Auditory Society, Scottsdale, AZ.

SERVICE

Profession

2021-present	Section Editor for Amplification, Ear and Hearing
2014 - Present	Journal of Speech, Language, and Hearing Research, Reviewer
2013 - Present	Hearing Research, Reviewer
2013 - Present	International Journal of Otolaryngology, Reviewer
2011 - Present	Journal of Eye Movement Research, Reviewer
2011 - Present	Scientific Review Committee, International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design, Reviewer
2010 - Present	American Journal of Audiology, Reviewer
2010 - Present	Ear and Hearing, Reviewer
2010 - Present	International Journal of Audiology, Reviewer
2010 - Present	Journal of the American Academy of Audiology, Reviewer

Department

2017 - Present	Honors advisor
2016 - Present	PhD studies committee, Member
2014 - Present	AuD Admission Committee, Member
2012 - Present	AuD Qualifying Exam Committee, Member
2019 - 2020	Audiology faculty search committee, Chair
2014	Faculty search committee, Member

University

2019 - Present Honors Scholarship Committee, U of Iowa, Reviewer, Honors Scholarship Committee
Reviewers, review 30+ honors scholarship applications
2015 Oberman center working group, Member
2013 - 2017 Harkin Library Representative, Attendee

Media Contributions

2014 TV, CBS2/FOX28, State
Hearing Aids Get a Boost from Smartphone App