

## CURRICULUM VITA

RUTH LITOVSKY

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### Current Positions, University of Wisconsin Madison

Professor and Chair, Department of Communication Sciences & Disorders

Oros Family Chair, Department of Communication Sciences & Disorders

Professor with Joint appointment in Department of Surgery, Division of Otolaryngology

Program Faculty, Neuroscience Training Program

### Research Areas

- Auditory Neuroscience
- Developmental Sensation and Perception
- Implantable Auditory Prostheses
- Psychoacoustics
- Engineering and Signal Processing in Acoustics and Cochlear Implants
- Aging, Cognitive Impairment and Auditory Processing in Alzheimer's Disease
- Functional Brain Mapping and Neuroimaging using Near Infrared Spectroscopy
- Cognitive Load and Listening Effort using Pupillometry

### Education

Washington University, St. Louis, MO	B.A.	1987 Psychology
Washington University, St. Louis, MO	M.A.	1988 Psychology (Neuropsychology)
University of Massachusetts-Amherst	Ph.D.	1991 Developmental Psychology
University of Wisconsin-Madison	Postdoctoral Fellow	1991-1994 Neurophysiology

### Positions and Employment

1983-1986	Research Assistant, Infant touch lab, Washington University, St. Louis MO
1986-1987	Research Assistant, Vision physiology lab, Washington University, St. Louis MO
1987-1991	Graduate Assistant, Dept. of Psychology, University of Massachusetts, Amherst MA
1991-1994	Post-doctoral fellow, Individual NIH fellowship. University of Wisconsin, Madison WI
1996-2001	Research Associate, MIT and Massachusetts Eye and Ear Infirmary-EPL, Boston MA
1998-2000	Lecturer in Biological Sciences, Harvard University, Cambridge MA
1995-2001	Senior Research Associate, Boston University, Boston MA
2001-2006	Assistant Professor, Dept. of Communicative Disorders, University of Wisconsin, Madison, WI
2006-2010	Associate Professor, Dept. of Communicative Disorders, University of Wisconsin, Madison, WI
2014-2019	Visiting Professor, University of Oslo, Norway, Dept. Special Needs Education
2018-2019	Associate Chair, Dept. of Communication Sciences & Disorders
2015-2019	Visiting Professor, Dept. Medical Bionics, Faculty of Medicine, The University of Melbourne
2010-present	Professor, Dept. of Communication Sciences & Disorders, University of Wisconsin, Madison, WI
2010-present	Professor, Dept. of Surgery, Division of Otolaryngology, University of Wisconsin, Madison WI
2005-present	Affiliate Faculty, Department of Psychology
2005-present	Program Faculty, Neuroscience Training Program, University of Wisconsin, Madison WI
2019-present	Chair, Dept. of Communication Sciences & Disorders

## **Professional Activities, Honors, Awards**

- NIMH training fellowship, University of Massachusetts, Amherst MA, 1987-1988.
- NIH National Research Service Award (F32 individual post-doctoral fellowship), 1992-1994.
- Vilas Associate Fellowship, University of Wisconsin, 2005-2007.
- Elected Fellow, Acoustical Society of America, 2009.
- Elected Councilor, Association for Research in Otolaryngology, 2011-2014.
- Council of Scientific Trustees, Hearing Health Foundation, 2013-present.
- Fulbright U.S. Senior Scholar, East Asia Pacific, 2014-2015.
- Presidential Citation for Extraordinary Leadership, Association for Research in Otolaryngology, 2018.
- Kellett Mid-Career Award, University of Wisconsin Madison, 2018-2023.
- Oros Family Chair in Communication Sciences & Disorders, 2018-present.
- Council Member, Gordon Research Conferences, 2018-present.
- Scientific Advisory Board, Cluster of Excellence "Hearing4all" Germany, 2018-present.
- Board Member (inaugural), Auditory Implant Research (AIR) Inc. to support the administration of the meeting series Conference on Implantable Auditory Prostheses (CIAP), 2019-present.
- Elected President, Association for Research in Otolaryngology, 2020-2021 (president elect 2019-2020; president 2020-2021, past president 2021-2022).
- Scientific Advisory Board, Frequency Therapeutics, <https://www.frequencytx.com/>, 2020-present.
- Scientific Advisory Board, Hemideina, <https://hemideina.com/>, 2021-present.
- Scientific Advisory Board, University of Southern California, Hearing & Communication Neuroscience (HCN) training program, 2021-present.
- Silver Medal in Psychological and Physiological Acoustics, Acoustical Society of America, to be presented at the Fall meeting of ASA in Seattle, 2021.

## Conference Related Activities:

- Program Committee, Association for Research in Otolaryngology, 2011-2019.
- Chair, Program Committee, Association for Research in Otolaryngology, 2014-2019.
- Elected Co-Chair, 2011 Conference on Implantable Auditory Prostheses.
- Steering Committee, Conference on Implantable Auditory Prostheses, 2007, 2009, 2013, 2015.
- Elected, Auditory System Gordon Research Conference Vice-chair in 2018 and Chair in 2022.
- Organizer/chair: Invited symposium sessions at the 1999, 2001 & 2005 meetings of the Acoustical Society of America; 2012 meeting of the Acoustical Society of America in Hong Kong; 1998, 2011, 2013, 2019 meetings of the Association for Research in Otolaryngology.
- Organizer & Chair, Annual Midwest Cochlear Implant Conference, Madison WI, 2009-present.

## Committees on Professional Organizations:

- Animal Research Committee, Association for Research in Otolaryngology, 2001-2004.
- Government Relations Committee, Association for Research in Otolaryngology, 2005-2008.
- Elected member, Acoustical Society of America P&P Technical Committee, 2001-2004; 2007-2010; 2013-2016; 2018-2021.
- External Relations Committee, Association for Research in Otolaryngology, 2012-2014.
- Inter-organizational committee on Diversity Equity and Inclusion in CSD, 2020-present.

## Journal Editor Positions and Editorial Boards:

- Associate Editor, Journal of the Acoustical Society of America, 2006-2019.
- Associate Editor, American Journal of Audiology, 2008-2012.
- Associate Editor, Journal of the Assoc. Research in Otolaryngology, 2013-2020.
- Editorial Board, Springer Handbook of Auditory Research Series, 2017-present.

Ad-hoc reviewer peer-reviewed publications:

British Medical Journal; J. Acoust. Soc., Amer.; J. Speech Language and Hearing Research; J. Neurophysiology; Ear & Hearing; Hearing Research; Perception & Psychophysics; Acustica; Int. J. Audiology; IEEE; Am. J. Audiology; J. Assoc. Res. Otolaryngology; Nature Neuroscience; Perception & Psychophysics; Trends in Neuroscience; Arch. Otolaryngol. J. Neuroscience, eLife.

### **Grant Reviews**

- NIH-NIDCD, Member, Communicative Disorders Review Committee, 2006-2010.
- NIH-NIDCD R03 Review panel: Member, 2003; Chair 2005 & 2006.
- Department of Defense, Hearing and Balance, ad-hoc, 2014.
- NIH-NIDCD LCOM study section, ad-hoc, 2016.
- NIH-NIDCD, Member, Special emphasis panels ad-hoc reviewer, 2004-present, ~2-3 panels per year.
- Wellcome Trust, UK. 2018.
- Foundation Pour L'Audition, Committee on scientific prizes of excellence, 2018-2019.
- Australian Research Council, ad-hoc, 2014-2018.
- Israel Science Foundation, ad-hoc, 2008-2010.
- Cancer Association of South Africa (CANSA), 2017.
- Fondation Pour l'Audition, France, standing panel member, 2017-2018.
- Hear4All Consortium, Germany, 2018-present.
- NIH-NIDCD AUD study section and SEP, ad-hoc, 2-3 times per year 2012-2020.
- NIH-NIDCD, Standing Member, AUD Study Section, 2020-present.

### **Highlights of University of Wisconsin-Madison leadership**

- Elected, Chair of Committee on Women at the University, 2011-2013.
- Elected, Biological Divisional Executive Committee, 2013-2016.
- Elected, University Committee (Executive committee of the faculty), 2015-2018.
- Elected, Academic Planning Council, College of Letters & Sciences, 2017-2019.
- Faculty chair, Ad-Hoc Diversity Planning Committee, 2013-2015; *diversityplan2013.wisc.edu*
- Committee on Committees, 2015-2018.
- Tenure and termination committee, 2015-2016.
- Search Committee, UW-Madison Chief Human Resources Officer, 2016-2017.
- Director, Doctorate in Audiology Program, 2011-2014.
- Director, Annual Midwest Conference on Cochlear Implants – Waisman Center, 2010-present.
- Director, Annual 'Day with Experts on Cochlear Implants – Waisman Center, 2011-present.
- Director, Undergraduate Studies, Department of Communication Sciences and Disorders, 2016-2018.
- Chair, Search Committee for Faculty Hire, Dept. Communication Sciences and Disorders, 2016-2017.
- Chair, Diversity Liaison Project Faculty Group, 2018-2020.
- Chair, Search Committee for Inaugural Associate Dean for Diversity, Letters and Sciences, 2020-2021.

### **Patents**

Litovsky, R.Y. (2003). Method and system for rapid and reliable testing of speech intelligibility in children. U.S. Patent No. 6,584,440.

### **Major Peer-reviewed scientific journal publications**

1. Litovsky, R.Y. (1990). Stimulus differentiation by preterm infants can guide caregivers. *Pre and Perinatal Psychology Journal*, 5(1), 41-67.
2. Freyman RL, Clifton RK, Litovsky RY. (1991). Dynamic processes in the precedence effect. *J Acoust Soc Am.* 90:874-84.
3. Clifton RK, Rochat P, Litovsky RY, Perris EE. (1991). Object representation guides infants' reaching in the dark. *J Exp Psychol Hum Percept Perform.* 17:323-9.

4. Litovsky, R. and Clifton, R. (1992). Use of sound-pressure level in auditory distance discrimination by 6month old infants and adults. *J. Acoust. Soc. Amer.*, 92(2), 794-802.
5. Litovsky, R. and Macmillan, N. (1994). Minimum auditory angle for clicks with simulated echoes: Effects of azimuth and standard. *J. Acoust. Soc. Amer.*, 96(2), 752-758.
6. Clifton, R., Freyman, R., Litovsky, R. and McCall, D. (1994). Listeners' expectations about echoes can raise or lower *echo threshold*. *J. Acoust. Soc. Amer.*, 95(5), 1525-1533.
7. Litovsky, R. (1997). Developmental changes in the precedence effect: Estimates of Minimal Audible Angle. *J. Acoust. Soc. Amer.*, 102, 1739-1745.
8. Litovsky, R.Y., Yin, T.C.T., Rakerd, B., and Hartmann, W.M. (1997). Psychophysical and physiological evidence for a precedence effect in the median sagittal plane. *J. Neurophys. Rapid Communication*, 77, 2223-2226.
9. Litovsky, R.Y. and Yin, T.C.T. (1998a). Physiological studies of the precedence effect in the inferior colliculus of the cat: I. Correlates of psychophysics. *J. Neurophys.* 80, 1302-1316.
10. Litovsky, R.Y. and Yin, T.C.T. (1998b). Physiological studies of the precedence effect in the inferior colliculus of the cat: I. Neural Mechanisms. *J. Neurophys.* 80, 1285-1301.
11. Litovsky, R.Y. (1998). Physiological studies of the precedence effect in the inferior colliculus of the kitten. *J. Acoust. Soc. Amer.*, vol. 104, *selected research article*, 103, 3139-3152.
12. Hawley, M.L., Litovsky, R.Y., and Colburn, H.S. (1999). Speech intelligibility and localization in complex environments. *J. Acoust. Soc. Amer.*, 105, 3436-3448.
13. Litovsky, R.Y., Colburn, H.S., Yost, W.A., and Guzman, S. (1999). The precedence effect. Review & Tutorial paper, *J. Acoust. Soc. Amer.*, 106, 1633-1654.
14. Delgutte, B., Joris, P., Litovsky, R. and Yin, T.C. (1999). Physiological studies in the inferior colliculus of the cat: I. Neural sensitivity to sound source direction as measured with virtual space stimuli. *J. Neurophys*, 81, 2833-2851.
15. Litovsky, R.Y., Hawley, M.L., Fligor, B. and Zurek, P.M. (2000). Failure to unlearn the precedence effect. *J. Acoust. Soc. Amer.*, 108, 2345-2352.
16. Litovsky, R.Y. and Shinn-Cunningham, B.G. (2001). Investigation of the relationship between three common measures of precedence: fusion, localization dominance and discrimination suppression. *J. Acoust. Soc. Amer.*, 109, 346-358.
17. Shinn-Cunningham BG, Schickler J, Kopco N, Litovsky R. (2001). Spatial unmasking of nearby speech sources in a simulated anechoic environment. *J. Acoust. Soc. Amer.*, 110(2), 1118-29.
18. Litovsky, R.Y. and Delgutte, B. (2002). Neural correlates of the precedence effect in the inferior colliculus: effect of localization cues. *J Neurophysiol.* 87(2), 976-994.
19. Litovsky, R.Y., Fligor, B. and Tramo, M. (2002). Functional role of the human inferior colliculus in binaural hearing. *Hearing Research*, 165:177-188.
20. Hawley, M.L., Litovsky, R.Y. and Culling. J.F. (2004). The benefit of binaural hearing in a cocktail party: Effect of location and type of interferer. *J. Acoust. Soc. Amer.* 115: 833-843.
21. Litovsky, R.Y., Parkinson, A., Arcaroli, J., Peters, R., Lake, J., Johnstone, P. and Yu, G. (2004). Bilateral cochlear implants in adults and children. *Arch. Otolaryngology Head and Neck Surgery.* 130: 648-655.
22. Dizon, R.M. and Litovsky, R.Y. (2004). Localization dominance in the median-sagittal plane: effect of stimulus duration. *J Acoust Soc Am.* 115(6):3142-55.
23. Stickney, G., F.G., Litovsky, R.Y. and Assman, P. (2004). Cochlear implant speech recognition with speech maskers. *J. Acoust. Soc. Amer.* 116: 1081-1091.
24. Culling, J.F., Hawley, M.L. and Litovsky, R.Y. (2004). The role of head-induced interaural time and level differences in the speech reception threshold for multiple interfering sound sources. *J. Acoust. Soc. Amer.* 116: 1057-1065.
25. Litovsky, R.Y. (2005). Speech intelligibility and spatial release from masking in young children. *J. Acoust. Soc. Amer.* 117: 3091-9.
26. Litovsky, R.Y., Johnstone, P.M., Godar, S., Agrawal, S., Parkinson, A., Peters, R. and Lake, J. (2006). Bilateral cochlear implants in children: localization acuity measured with minimum audible angle. *Ear and Hearing.* 27(1):43-59.

27. Litovsky, R.Y., Johnstone, P. and Godar, S. (2006). Benefits of bilateral cochlear implants and/or hearing aids in children. *Int. J. Audiology*. Jul;45 Suppl:78-91.
28. Long, C.J., Carlyon, R.P., Litovsky, R.Y. and Downs, D.H. (2006). Binaural Unmasking with Bilateral Cochlear Implants. *J Assoc Res Otolaryngol*. 7(4):352-60. Epub 2006 Aug 29.
29. Litovsky, R.Y., Parkinson, A., Arcaroli, J. and Sammath, C. (2006). Clinical Study of Simultaneous Bilateral Cochlear Implantation in Adults: A Multicenter Study. *Ear and Hearing*. 27(6):714-31.
30. Johnstone, P.M. and Litovsky, R.Y. (2006). Effect of masker type on speech intelligibility and spatial release from masking in children and adults. *J. Acoust. Soc. Amer*. 120(4):2177-89.
31. Garadat, S. and Litovsky, R.Y. (2007). Speech Intelligibility in Free Field: Spatial Unmasking in Preschool Children. *J. Acoust. Soc. Amer*. 121: 1047-1055.
32. Peters, R., Litovsky, R.Y., Parkinson, A. and Lake, J. (2007). Importance of Age and Post-Implantation Experience on Performance in Children with Sequential Bilateral Cochlear Implants. *Otol. Neurotol*. 28(5):649-57.
33. Grieco-Calub, T., Litovsky, R.Y. and Werner, L.A. (2008). Using the observer-based psychophysical procedure to assess localization acuity in toddlers who use bilateral cochlear implants. Invited paper in special issue of *Otology and Neurology*. 29(2):235-239.
34. Balkany, T., Hodges, A., Telischi, F., Hoffman, R., Madell, J., Parisier, S., Gantz, B., Tyler, R., Peters, R. and Litovsky, R. (2008). William House Cochlear Implant Study Group: position statement on bilateral cochlear implantation. *Otol Neurotol*. 29:107-8.
35. Jones, G.L. and Litovsky, R.Y. (2008). Effects of uncertainty in a cocktail party environment in adults. *J. Acoust. Soc. Amer*. 124: 3818-3830.
36. Loizou P.C, Hu, Y., Litovsky, R.Y., Yu, G., Peters, R., Lake, J. and Roland, P. (2009). Speech recognition by bilateral cochlear implant users in a cocktail-party setting. *J Acoust Soc Am*. 125:372-83.
37. Litovsky, R.Y., Parkinson, A. and Arcaroli, J. (2009). Spatial hearing and speech intelligibility in bilateral cochlear implant users. *Ear and Hearing*. 30(4):419-31.
38. Miller, S., Litovsky, R.Y. and Kluender, K. (2009). Predicting echo thresholds from speech onset characteristics. *J. Acoust. Soc. Amer., Electronic Letters*. 125(4):EL134-40.
39. van Hoesel, R.J.M., Jones, G.L. and Litovsky, R.Y. (2009). Interaural time-delay sensitivity in bilateral cochlear implant users: Effects of pulse-rate, modulation-rate, and place of stimulation. *J. Assoc. Res. Otolaryngol*. 10(4):557-67.
40. Potts, L., Skinner, M., Litovsky, R.Y., Kuk, F. and Strube, M. (2009). Recognition and Localization of Speech by Adult Cochlear Implant Recipients Wearing a Digital Hearing Aid in the Non-implanted Ear (Bimodal Hearing). *Int. J. Audiology*. 20:353-373.
41. Garadat, S.N., Litovsky, R.Y., Yu, G. and Zeng, F.G. (2009). Role of Binaural Hearing in Speech Intelligibility and Spatial Release from Masking Using Vcoded Speech. *J. Acoust. Soc. Amer*. 126(5):2522-35.
42. Garadat, S.N., Litovsky, R.Y., Yu, G. and Zeng, F.G. (2010). Effects of Simulated Spectral Holes on Speech Intelligibility and Spatial Release from Masking under Binaural and Monaural Listening. *J. Acoust. Soc. Amer*. 127(2):977-89.
43. Grieco-Calub, T., Saffran, J. and Litovsky, R.Y. (2009). Spoken word recognition in toddlers who use cochlear implants. *J. Sp. Lang. Hear. Res*. 52(6):1390-400.
44. Litovsky, R.Y., Jones, G.L., Agrawal, S. and van Hoesel, R. (2010). Effect of age at onset of deafness on binaural sensitivity in electric hearing in humans. *J. Acoust. Soc. Amer*. 127(1):400-14.
45. Lu, T., Litovsky, R. and Zeng, F.G. (2010). Binaural masking level differences in actual and simulated bilateral cochlear implant listeners. *J. Acoust. Soc. Amer*. 127(3): 1479-1490.
46. Godar, S.P. and Litovsky, R.Y. (2010). Experience with bilateral cochlear implants improves sound localization acuity in children. *Otology Neurotology*. 31(8):1287-92.
47. Grieco-Calub, T. and Litovsky, R.Y. (2010). Sound localization skills in children who use bilateral cochlear implants and in children with normal acoustic hearing. *Ear Hearing*, 31(5):645-56.
48. Litovsky, R.Y. and Godar, S.P. (2010). Difference in precedence effect between children and adults signifies development of sound localization abilities in complex listening tasks. *J. Acoust. Soc. Amer*, 128(4) 1979-1991. PMID: PMC2981114

49. Litovsky, R.Y. (2011). Review of recent work on spatial hearing skills in children with bilateral cochlear implants. *Cochlear Implants International*. 12 Suppl 1:S30-4.
50. Lu, T., Litovsky, R. and Zeng, F.G. (2011). Binaural unmasking with multiple adjacent masking electrodes in bilateral cochlear implant users. *J. Acoust. Soc. Amer.* 129(6):3934-45.
51. Jones, G.L. and Litovsky, R.Y. (2011). A cocktail party model of spatial release from masking by both noise and speech interferers. *J Acoust Soc Am.* 130(3):1463-74.
52. Todd, A.E., Edwards, J. and Litovsky, R.Y. (2011). Production of contrast between sibilant fricatives by children with cochlear implants. *J Acoust Soc Am.* 130:3969-3979
53. Runge, C., Jensen, J., Friedland, D., Litovsky, R. and Tarima, S. (2012). Aiding and Occluding the Contralateral Ear in Implanted Children with Auditory Neuropathy Spectrum Disorder. *J. Am. Academy Audiol.* 22(9):567-77.
54. Van Hoesel, R. and Litovsky, R.Y. (2011). Statistical bias in the assessment of binaural benefit relative to the better ear. *J Acoust Soc Am.* 130(6):4082.
55. Goupell, M.J., Yu, G. and Litovsky, R.Y. (2012). The effect of an additional echo in a precedence effect experiment. *J Acoust Soc Am.* 131(4):2958-67
56. Grieco-Calub, T. and Litovsky, R.Y. (2012). Spatial acuity in two-to-three-year-old children with normal acoustic hearing, unilateral cochlear implants and bilateral cochlear implant. *Ear Hearing*, 33(5):561-72.
57. Litovsky, R.Y., Goupell, M.J., Godar, S., Grieco-Calub, T., Jones, G.L., Garadat, S., Agrawal, S., Kan, A., Todd, A., Hess, C. and Misurelli, S. (2012). Studies on Bilateral Cochlear Implants at the University of Wisconsin's Binaural Hearing and Speech Lab. *Journal of the American Academy of Audiology*. Invited Paper. 23(6):474-494.
58. Misurelli, S.M. and Litovsky, R.Y. (2012). Spatial release from masking in children with normal hearing and with bilateral cochlear implants: effect of interferer asymmetry. *J Acoust Soc Am.* 132(1):380-391.
59. Litovsky, R.Y. (2012). Spatial Release from Masking, A Review. *Acoustics Today*. Invited Article. *Acoustics Today*. 2012;April:18-25.
60. Ihlefeld, A. and Litovsky, R.Y. (2012). Interaural level differences do not suffice for restoring spatial release from masking in simulated cochlear implant listening. *PLoS One*. 2012;7(9):e45296.
61. Litovsky, R.Y., Harris, S., Ehlers, E. and Hess, C. (2013). Reaching For Sound: Ecologically Valid Estimate of Spatial Hearing in 2-3 year old Children with Bilateral Cochlear Implants. *Otology Neurology*. 34(3):42935.
62. Goupell, M. J., Kan, A., and Litovsky, R. Y. (2013). Mapping procedures can produce non-centered auditory images in bilateral cochlear-implant users, *J. Acoust. Soc. Am.* 133(2):EL101-7. PMC3562277
63. Goupell, M. J., Stoelb, C., Kan, A. and Litovsky, R. Y. (2013). Effect of mismatched place-of-stimulation on the salience of binaural cues in conditions that simulate bilateral cochlear-implant listening, *J. Acoust. Soc. Am.* 133(4):2272-87.
64. Kan, A., Stoelb, C., Litovsky, R.Y. and Goupell, M.J. (2013). Effect of mismatched place-of-stimulation on binaural fusion and lateralization in bilateral cochlear-implant users. *J. Acoust. Soc. Am.* 134(4):2923-2936
65. Goupell, M.J. and Litovsky, R.Y. (2014). The effect of interaural fluctuation rate on correlation change discrimination. *J. Assoc. Res. Otolaryngol.* Epub Nov 21.
66. Churchill, T.H., Kan, A.K., Goupell, M.J., Ihlefeld, A. and Litovsky, R.Y. (2014). Speech Perception in Noise with a Harmonic Complex Excited Vocoder. *J. Assoc. Res. Otolaryngol.* Apr;15(2):265-78.
67. Ihlefeld, A., Kan, A. and Litovsky, R.Y. (2014). Across-frequency combination of interaural time difference in bilateral cochlear implant listeners. *Frontiers in Systems Neuroscience*. 8:22. doi: 10.3389/fnsys.2014.00022.
68. Tolnai, S., Litovsky, R.Y. and King, A.J. (2014). The Precedence Effect and its Build-up and Breakdown in Ferrets and Humans. *J. Acoust. Soc. Am.* 135: 1406–1418.
69. Hess, C.L., Zettler-Greeley, C., Godar, S.P., Ellis-Weismer, S. and Litovsky, R.Y. (2014). The Effect of Differential Listening Experience on the Development of Expressive and Receptive Language in Children with Bilateral Cochlear Implants. *Ear Hearing*. Jul-Aug;35(4):387-95.

70. Potts, L. and Litovsky, R.Y. (2014). Transitioning from Bimodal to Bilateral Cochlear Implant Listening: Speech Recognition and Localization in Four Individuals. *The American Journal of Audiology*. Vol.23, 7992.
71. Gartrell, B., Jones, H.G., Kan, A., Burh-Lawler, M., Gubbels, S. and Litovsky, R.Y. (2014). Investigating Long-Term Effects of Cochlear Implantation in Single-Sided Deafness: A Best Practice Model for Longitudinal Assessment of Spatial Hearing Abilities and Tinnitus Handicap. *Otology & Neurotology*. Oct;35(9):1525-32.
72. Churchill, T.H., Kan, A., Goupell, M.J. and Litovsky, R.Y. (2014). Spatial hearing benefits demonstrated with presentation of acoustic temporal fine structure cues in bilateral cochlear implant listeners. *J. Acoust. Soc. Am.* Sep;136(3):1246.
73. Kan, A. and Litovsky, R.Y. (2014). Binaural hearing with electrical stimulation. *Hearing Research*, Invited paper in special issue. Sep 2. pii: S0378-5955(14)00143-9.
74. Jones, H., Kan A. and Litovsky, R.Y. (2014). Comparing sound localization deficits in bilateral cochlear implant users and vocoder simulations with normal-hearing listeners. *Trends in Hear.* Nov 10;18.
75. Kan, A., Goupell, M.J. and Litovsky, R.Y. (2015). Effects of interaural pitch-matching and auditory image centering on binaural sensitivity in cochlear-implant users. *Ear Hearing*. 36(3):e62-8. doi: 10.1097/AUD.000000000000135.
76. Goupell, M.J. and Litovsky, R.Y. (2015). Sensitivity to interaural envelope correlation changes in bilateral cochlear-implant users. *J. Acoust. Soc. Am.* 137, 335-349.
77. Winn, M., Edwards, J. and Litovsky, R.Y. (2015). The Impact of Auditory Spectral Resolution on Listening Effort Revealed by Pupil Dilation. *Ear Hearing*. Feb 4. [Epub ahead of print].
78. Winn, M. and Litovsky, R.Y. (2015). Using speech sounds to test functional spectral resolution in listeners with cochlear implants. *J. Acoust. Soc. Am.* 137, 1430-1442.
79. Misurelli, S. and Litovsky, R.Y. (2015). Spatial release from masking in children with bilateral cochlear implants and with normal hearing: Effect of target-interferer similarity. *J. Acoust. Soc. Am.* Jul;138(1):319.
80. Ihlefeld, A., Carlyon, R.P., Kan, A., Churchill, T. and Litovsky, R.Y. (2015-in press). Limitations on monaural and binaural temporal processing in bilateral cochlear implant users. *J. Assoc. Res. Otolaryngol.* 16(5):641-52. doi: 10.1007/s10162-015-0527-7.
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82. Litovsky R. (2015). Development of the auditory system. *Handbook of Clin Neurol.* 129:55-72. doi: 10.1016/B978-0-444-62630-1.00003-2. Review.
83. Brown, A.D., Jones, H.G., Kan A.H., Thakkar, T., Stecker, G.C., Goupell, M.J. and Litovsky, R.Y. (2015). Evidence for a neural source of the precedence effect in sound localization. *J Neurophysiol.* Nov;114(5):2991-3001. doi: 10.1152/jn.00243.2015. Epub 2015 Sep 23.
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87. Litovsky, R.Y. and Gordon, K. (2016). Bilateral cochlear implants in children: Effects of auditory experience and deprivation on auditory perception. *Hearing Research*. Aug;338:76-87.
88. Jones, H., Kan, A.H. and Litovsky, R.Y. (2016). The effect of microphone placement on interaural level differences and sound localization across the horizontal plane in bilateral cochlear implant users. *Ear Hearing*. Sep-Oct;37(5).
89. McKay CM, Shah A, Seghouane AK, Zhou X, Cross W, Litovsky R. (2016). Connectivity in Language Areas of the Brain in Cochlear Implant Users as Revealed by fNIRS. *Adv Exp Med Biol.* 894:327-35.

90. Ehlers, E., Kan, A., Winn, M., Stoelb, C. and Litovsky, R.Y. (2016). Binaural hearing in children using cochlear implant simulations. *J. Acoust. Soc. Am.* Apr;139(4):1724.
91. Todd, A.E., Goupell, M.J. and Litovsky, R.Y. (2016). Binaural release from masking with single- and multielectrode stimulation in children with cochlear implants. *J. Acoust. Soc. Am.* 140(1) 59-73.
92. Goupell, M.J., Kan, A. and Litovsky, R.Y. (2016). Spatial attention in bilateral cochlear-implant users. *J. Acoust. Soc. Am.* 140(3):1652.
93. Kan, A., Jones, H. and Litovsky, R.Y. (2016). Lateralization of interaural timing differences with multielectrode stimulation in bilateral cochlear-implant users *J. Acoust. Soc. Am.* 140(5):EL392.
94. Reidy, P.F., Kristensen, K., Winn, M.B., Litovsky, R.Y. and Edwards, J.R. (2017). The Acoustics of WordInitial Fricatives and Their Effect on Word-Level Intelligibility in Children with Bilateral Cochlear Implants. *Ear Hearing.* Jan/Feb;38(1):42-56.
95. Todd, A.E., Goupell, A.E. and Litovsky, R.Y. (2017). The Relationship Between Intensity Coding and Binaural Sensitivity in Adults with Cochlear Implants. *Ear Hearing.* Mar/Apr;38(2):e128-e141.
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97. Zheng, Y., Escaby, M. and Litovsky, R.Y. (2017). Spectro-temporal cues enhance modulation sensitivity in cochlear implant users. *Hearing Research.* 351:45-54. PMID: PMC5924682.
98. Goupell, M.J., Kan, A., Litovsky, R.Y. (2017). Spatial attention in bilateral cochlear-implant users. *J Acoust Soc Am.* 2016 Sep;140(3):1652.
99. Litovsky, R.Y., Goupell, M.J., Kan, A. and Landsberger, D. (2017). Use of research interfaces for psychophysical studies with cochlear-implant users. *Trends in Hearing.* Jan-Dec; 21:2331216517736464. doi: 10.1177/2331216517736464.
100. Goupell, M.J., Stoelb, C.A., Kan, A. and Litovsky, R.Y. (2018). The Effect of Simulated Interaural Frequency Mismatch on Speech Understanding and Spatial Release from Masking. *Ear Hearing.* Jan 15. doi: 10.1097/AUD.0000000000000541. [Epub ahead of print].
101. Thakkar, T., Kan, A., Jones, H. and Litovsky, R.Y. (2018). Using mixed rates of stimulation to improve sensitivity to interaural timing differences in bilateral cochlear implant listeners. *J. Acoust. Soc. Am.* 143(3):1428. doi: 10.1121/1.5026618.
102. Litovsky, R.Y., Moua, K., Godar, S., Kan, A., Misurelli, S.M. and Lee, D.J. (2018). Restoration of Spatial Hearing in Adult Cochlear Implant Users with Single-Sided Deafness. *Hearing Research.* Apr 14. pii: S0378-5955(17)30511-7. doi: 10.1016/j.heares.2018.04.004. [Epub ahead of print]
103. Hess, C.L., Misurelli, S.M. and Litovsky, R.Y. (2018). Spatial release from masking in 2-year olds with normal hearing and with bilateral cochlear implants. *Trends in Hearing.* Jan-Dec;22:2331216518775567. doi: 10.1177/2331216518775567.
104. Zhou, X., Seghouse, A.K., Shah, A., Innes-Brown, H., Cross, W., Litovsky, R.Y. and McKay, C.M. (2018, in press). Cortical speech processing in post-lingually deaf adult cochlear implant users, as revealed by fNIRS. *Trends in Hearing.* Jan-Dec;22:2331216518786850. doi: 10.1177/2331216518786850.
105. Peng, Z.E., Hess, C.L., Saffran, J.R., Edwards, J.E. and Litovsky, R.Y. (2019). Assessing fine-grained speech discrimination in young children with bilateral cochlear implants. *Otology Neurotology.* Mar;40(3):e191-e197. doi: 10.1097/MAO.0000000000002115.
106. Winn, M.B., Kan, A. and Litovsky, R. (2019). Temporal dynamics and uncertainty in binaural hearing revealed by anticipatory eye movements. *J. Acoust. Soc. Am.* 145(2):676. doi: 10.1121/1.5088591.
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108. Todd, A.E., Goupell, M.J. and Litovsky, R.Y. (2019). Binaural unmasking with temporal envelope and fine structure in listeners with cochlear implants. *J. Acoust. Soc. Am.* 145(5):2982. doi: 10.1121/1.5102158.
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118. Goupell, M.J., Draves, G.T. and Litovsky, R.Y. (2020). Understanding vocoded words and sentences in quiet and multi-talker babble with children and adults. *PloS One.* Dec 29;15(12):e0244632. doi: 10.1371/journal.pone.0244632.
119. Zhou, X., Sobzak, G. McKay, C. and Litovsky, R.Y. (2020). Comparing fNIRS signal qualities between approaches with and without short channels. *PLoS ONE* 15(12): e0244186. <https://doi.org/10.1371/journal.pone.0244186>.
120. Burg, E., Thakkar, T., Fields, T., Misurelli, S., Kuchinsky, S., Roche, J., Lee, D.J. and Litovsky, R.Y. (2021). Systematic comparison of trial exclusion criteria for pupillometry data analysis. *Trends in Hearing.* doi: 10.1177/23312165211013256.
121. Peng, Z.E. and Litovsky, R.Y. (2021). Novel Approaches to Measure Spatial Release from Masking in Children with Bilateral Cochlear Implants. *Ear and Hearing.* In press.
122. Kristensen, K., Lorenz, K.M., Zhou, X., Piro-Gambetti, B., Hartley, S.L., Godar, S., Diel, S., Neubauer, E. and Litovsky, R.Y. (2021). Language and Executive Functioning in young adults with Down syndrome. *Journal of Intellectual Disability Research.* In press.

**Peer-reviewed scientific journal publications – submitted, in revision and resubmitted**

1. Zhou, X., Sobzak, G., McKay, C. and Litovsky, R.Y. (revision submitted). Binaural separation of degraded speech and noise results in release from effort measured with functional near-infrared spectroscopy (fNIRS). *Trends in Hearing.*
2. Dennison, S.R., Jones, H.G., Kan, A. and Litovsky, R.Y. (revision submitted). Spatial hearing with a real-time bilateral cochlear implant processor. *J. Acoust. Soc. Am. Express Letters.*
3. Peng, Z.E. and Litovsky, R.Y. (revision submitted). The role of interaural differences, head shadow, and binaural redundancy in spatial release from masking among school-aged children. *Trends in Hearing.*
4. Warnecke, M. and Litovsky, R.Y. (revision submitted). Signal envelope and speech intelligibility differentially impact auditory motion processing. *Scientific Reports, Nature.*

5. Zhou, X., Burg, E., Kan, A. and Litovsky, R.Y. (in revision). fNIRS and pupillometry measures reveal effortful speech perception in cochlear implant and normal hearing listeners. *Hearing Research*.
6. Leclere, T., Kan, A. and Litovsky, R.Y. (in revision). Speech intelligibility of unilateral cochlear implant listeners with a mixed-rate strategy. *J. Acoust. Soc. Am.*
7. Zheng, Y. and Litovsky, R.Y. (in revision). Comparison of spatial acuity and absolute sound localization in children. *Hearing Research*.
8. Jones, H.G., Churchill, T., Gai, Y. and Litovsky R.Y. (in revision). Psychophysiological analyses reveal neural envelope coding is not sufficient for sound localization of speech signals. *Hearing Research*.

### **Invited Peer-Reviewed Book Chapters, Encyclopedia Entries and Conference Proceedings**

1. Delgutte, B., Joris, P., Litovsky, R. and Yin, T.C.T. (1995). Relative importance of different acoustic cues to the directional sensitivity of inferior-colliculus neurons. In: *Advances in Hearing Research: Proceedings of the 10th International Symposium on Hearing*. World Scientific Publishers, ed. G.A. Manley, G.M. Klump, C. Koppl, H. Fastl, and H. Oeckinghaus.
2. Yin, T. and Litovsky, R. (1995). Physiological studies of the precedence effect in the inferior colliculus of the cat. In: *Advances in Hearing Research: Proceedings of the 10th International Symposium on Hearing*. World Scientific Publishers, ed. G.A. Manley, G.M. Klump, C. Koppl, H. Fastl, and H. Oeckinghaus.
3. Litovsky, R. and Ashmead, D. (1997). Developmental aspects of binaural and spatial hearing. In: *Binaural and Spatial Hearing*, R.H. Gilkey and T.R. Anderson, Eds. Hillsdale, NJ: Lawrence Earlbaum Associates, pp. 571-592.
4. Litovsky, R.Y., Lane, C.C., Atencio, C.A. and Delgutte, B. (2000). Physiological measures of the precedence effect and spatial release from masking in the cat inferior colliculus. In: *D.J. Breebart, A.J.M. Houtsma, A. Kohlrausch, V.F. Prijs, R. Schoonhoven, Physiological and Psychophysical Bases of Auditory Function*. Shaker Publishing BV, Maastricht.
5. Litovsky, R.Y. (2002). Development of spatial hearing and clinical implications. *Proceedings of the Second International Conference, Sound Foundations through early amplifications*, Phonak AG.
6. Peters, B., Litovsky, R., Lake, J. and Parkinson, A. (2004). Sequential Bilateral Cochlear Implantation in Children. In: *International Congress Series, Vol. 1273*, R. Miyamoto, Ed. Elsevier, p. 462-465.
7. Litovsky, R.Y., Johnston, P., Parkinson, A., Peters, R. and Lake, J. (2004). Bilateral cochlear implants in children: Effect of experience. *Int. Congress Series, Vol. 1273*, R. Miyamoto, Ed. Elsevier, p. 451-454.
8. Godar, S.P., Litovsky, R.Y., Johnstone, P.M. and Agrawal, S.S. (2004). Cochlear implant plus hearing aid: Measuring Binaural Benefit in Children. *International Congress Series, Vol. 1273*, R. Miyamoto, Ed. Elsevier, p. 219-222.
9. Litovsky, R.Y. (2008). Benefits of Bilateral Hearing in Children with Cochlear Implants. *Proceedings of the AG Bell Research Symposium*, June.
10. Litovsky, R.Y. and Madell, J. (2009). Bilateral cochlear implants in children. In: *Clinical Management of Children with Cochlear Implants*. L. Eisenberg, Ed. Plural Publishing.
11. Litovsky, R.Y. and McAlpine, D.A. (2010). Physiological correlates of the precedence effect and binaural masking level differences. In: *Auditory Brain, Volume 2 of the Oxford Handbook of Auditory Science*, A. Rees and A. Palmer, Eds. Oxford University Press.
12. Litovsky, R.Y. (2011). Development of binaural and spatial hearing. *Springer Handbook of Auditory Research* (L.A. Werner, R.R. Fay and A.N. Popper, eds). Springer-Verlag, New York. Pp. 163-195.
13. Litovsky, R.Y. (2016). Binaural and Spatial Hearing in Implanted Children. In: *Cochlear Implants in Children: Learning and the Brain*. Nancy Young and Karen Kirk (eds). Springer.
14. Litovsky, R.Y. (2016). Bilateral Cochlear Implants in Children. In: *Clinical Management of Children with Cochlear Implants Second edition*. L. Eisenberg, Ed. Plural Publishing.
15. Litovsky, R.Y., Goupell, M.J., Misurelli, S.M. and Kan, A. (2017). Hearing with Cochlear Implants and Hearing Aids in Complex Auditory Scenes. In: *The Auditory System at the Cocktail Party* (J. Middlebrooks, J. Simon, R.R. Fay and A.N. Popper, eds). Springer-Verlag, New York.
16. Kan, A., Peng, Z.E., Moua, K. and Litovsky R.Y. (2018). A systematic assessment of a cochlear implant processors ability to encode interaural time differences. *Proceedings of the Asia-Pacific Signal and*

Information Processing Association - Annual Summit and Conference (APSIPA-ASC). Honolulu, HI, Nov 12-15, 2018.

17. Litovsky, R.Y. (2019). Binaural hearing. In J. Damico & M. Ball (Eds.), *The SAGE encyclopedia of human communication sciences and disorders* (Vol. 1, pp. 289-289). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781483380810.n92 Binaural Processing. *The SAGE Encyclopedia of Human Communication Sciences and Disorders*.
18. Litovsky, R.Y. and Goupell, M.J. (2021). Binaural Processing of Sounds. In: *Binaural Hearing*. (R.Y. Litovsky, M.J. Goupell, R.R. Fay and A.N. Popper, eds). Springer-Verlag, New York.

**Invited book review:**

Litovsky, R.Y. (2004). Book Review of: *Cochlear implants: objective measures*, Helen E. Cullington (editor). *J. Acoust. Soc. Amer.* 115: 1385.

**Book Editorship:**

Litovsky, R.Y., Goupell, M.J., Fay, R.R. and Popper, A.N. (2021). *Binaural Hearing*. Springer-Verlag. (Springer Handbook of Auditory Research, 73) 1st ed. 2021 Edition. ISBN-13: 978-3030570996

Invited Papers - Other

1. Litovsky, R.Y. (2003). The value of having two ears. *Hearing Health*, a publication of the Deafness Research Foundation.
2. Litovsky, R.Y. (2006). Bilateral cochlear implants. British Auditory Society publication.
3. Litovsky, R.Y. (2006). Binaural Hearing. White Paper distributed by Cochlear Americas.
4. Litovsky, R.Y. (2007). Potential Advantages from Bilateral Cochlear Implants. White Paper distributed by Cochlear Americas.
5. Featured article in the American Speech and Hearing (ASHA) Foundation *Leader*, Spring 2010.
6. Litovsky, R.Y. (2021) Benefits to Patients from Binaural Hearing: Spatial Perception and Cognitive Load. AG Bell Conference Proceedings.

**Invited Presentations and Keynote Lectures (First-Authored only are listed)**

1998

1. Assoc. Res. Otolaryngology. Symposium. Tampa, FL.
2. Meeting on Binaural Hearing, sponsored by MURI, University of Maryland, College Park, MD.

1999

3. Joint meeting of the Acoustical Society of America and the European Acoustical Society. Special on localization and speech perception in realistic acoustic environments. Berlin, Germany.

2000

4. International Symposium on Hearing, Mierlo, The Netherlands.
5. Meeting on Binaural Hearing, Hearing Loss, Hearing Aids and Cochlear Implants. University of Iowa.

2001

6. A Sound Foundation Through Early Amplification, sponsored by Phonak. Chicago, IL.
7. Conference on implantable auditory prostheses. Asilomar, CA.
8. International Hearing Aid Conference. University of Iowa, Iowa City.
9. American Speech and Hearing Association special session on binaural hearing. Atlanta, GA.

2002

10. Workshop on Binaural Hearing in Cocktail Parties. Hanse-Wissenschaftskolleg, Delmenhorst, Germany.
11. Am. Academy of Audiology Special Session on Advances in Cochlear Implants. Philadelphia, PA.

2003

12. Conference on Implantable Auditory Prostheses. Asilomar, CA.
13. Workshop on Spatial and Binaural Hearing. Utrecht, The Netherlands.

14. 145th meeting of the Acoustical Society of America, special session on Developmental Psychoacoustics. Pittsburgh, PA.
15. 9th Annual Pediatric Audiology Conference. New York, NY.
16. International Acoustic Ecology Workshop. University of British Columbia, Vancouver Canada.

#### 2004

17. 5th Wullstein Symposium on Bilateral Cochlear Implants and Binaural Signal Processing, Germany.
18. 8th International Cochlear Implant Conference. Indianapolis, IN.

#### 2005

19. 149th meeting of the Acoustical Society of America. Vancouver, Canada.
20. Symposium on Bilateral Cochlear Implants. Institute for Hearing Research. Nottingham, England.
21. Symposium on Bilateral Cochlear Implants. Institute for Hearing Research. Nottingham, England.
22. International Binaural Symposium (25th Anniversary). University of Manchester, England.
23. Annual Marjorie Sherman Named Lecture on Deafness in Children (intended for a wide audience). Sponsored by The Ear Foundation, Nottingham, England.

#### 2006

24. Translational research talk, American Auditory Society, Scottsdale, AZ.
25. Conference on Bilateral Cochlear Implants. Beth Israel Medical Center – New York Eye and Ear.
26. New England Audiology Update, University of Massachusetts Medical School. Keynote Speaker.
27. House Ear Institute, Alumni Fellowship Group, Am. Academy of Otolaryngology Meeting, Toronto, Canada.
28. Meeting of the Acoustical Society of America, Hawaii. Special Session sponsored by Architectural Acoustics and Psychophysics and Physiological Acoustics on hearing in rooms.

#### 2007

29. 6th International Meeting on Binaural Signal Processing, Berne Switzerland. Keynote Speaker.
30. International 11th Symposium on Cochlear Implants in Children. North Carolina.
31. Auditory Neuroscience Retreat, University of Washington, Seattle WA. Keynote lecture.
32. International Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.
33. Conference on perceptual development, honoring Rachel Keen, Univ. of Massachusetts,

#### 2008

34. Hallpike symposium, Great Ormond Street Hospital, London, England.
35. German Audiological Society, Kiel, Germany, Keynote speaker.
36. MICHA Symposium on binaural hearing and bilateral cochlear implants in children, Tel Aviv, Israel (x 4 lectures). Keynote speaker.
37. British Cochlear Implant Group annual meeting, Yorkshire, England.
38. Alexander Graham Bell Research Symposium, Milwaukee, WI.
39. Acoustical Society of America and European Acoustics Meeting, Paris, France.

#### 2009

40. Convergence of Cochlear Implant and Hearing Aid Technology, Miami Sc. Medicine.
41. American Speech and Hearing Association, Annual Virtual Conference on Audiology.
42. International 12th Symposium on Cochlear Implants in Children, Seattle, WA.
43. Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.
44. Alexander Graham Bell North Carolina, Hear 'N' Now Conference, Keynote speaker.
45. PHONAK and The Ear Foundation Virtual Conference, "Round the world in 15 hours: Future challenges for hearing technologies.

#### 2010

46. 11<sup>th</sup> International Conference on Cochlear Implants, Stockholm, Sweden.
47. Auditory System Gordon Research Conference, New London, NH.
48. Hearing Loss Association of America, Milwaukee, WI.
49. Wisconsin Speech and Hearing Association, Oshkosh, WI.

#### 2011

50. "Hot Topics" Invited lecture, Acoustical Society of America meeting, Seattle WA.
51. Endowed Lecture. Sixth Annual Advances in Children's Hearing Lecture for the Bill Daniels Center for Children's Hearing at the Children's Hospital – Colorado.
52. Communication Disorders Leadership Conference, Univ. of Massachusetts, Amherst.
53. Conference on Implantable Auditory Prostheses, Pacific Grove, CA.
54. 13<sup>th</sup> International Symposium on Cochlear Implants in Children, Chicago, IL.
55. 4<sup>th</sup> Annual State of Science Meeting, Hearing Enhancement in Children, Wilmington, DE.

#### 2012

56. Presidential Symposium, Association for Research in Otolaryngology, San Diego, CA.
57. Symposium on binaural hearing in people with hearing loss, ASA meeting, Hong Kong.
58. The RealLife Meeting, International Meeting on Implantable Prostheses, Rome Italy.

#### 2013

59. Travel Award Luncheon Keynote Speaker, Association for Research in Otolaryngology.
60. AudiologyNow, Featured Session, Anaheim, CA.
61. AudiologyNow, Audiology Research Conference, Anaheim, CA.
62. Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.

#### 2014

63. Symposium on deafness; Association for Research in Otolaryngology, San Diego, CA.
64. 8th Objective Measures Symposium on Auditory Implants, Toronto Canada (October).
65. 14th Symposium on Cochlear Implants in Children, Nashville TN (December).

#### 2015

66. "The future of hearing" workshop. Delmenhorst, Germany.
67. University of Oldenburg Summer Institute in Neuroscience, Walsrode, Germany.
68. Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.
69. 11<sup>th</sup> International Workshop on Auditory Processing, Cody, Wyoming, USA.
70. Norwegian Departments of Education and Special Needs, Oslo, Norway.
71. Keynote speaker, 12<sup>th</sup> International Wullstein Symposium, Würzburg, Germany.

#### 2016

72. Keynote speaker, Workshop on future directions in cochlear implant research. Sydney, AU.
73. Assoc. Res. Otolaryngology, Invited Workshop on technology transfer, San Diego, CA.
74. Auditory System Gordon Research Conference. Bates College, Lewiston Maine.
75. Global Research Symposium on the Future of Cochlear Implant, Sydney, AU.

#### 2017

76. Academy Research Conference, AAA. Ped. Advancements, Assessment & Rehab.
77. The Johns Hopkins University, The Lloyd Minor Lecture, March.
78. University of Southern California, The John Niparko Lecture, April.
79. IFOS, ENT World Congress, Symposium organized by Agir Pour L'Audition, Paris, France.
80. University of Oslo, Oslo Norway, Invited Colloquium, May.
81. University of Kyoto Medical Center, Kyoto, Japan, November.
82. Fukuoka University Hospital, Fukuoka, Japan, November.
83. Kobe City General Medical Centre, Kobe, Japan, November.
84. Nagoya University, Nagoya, Japan, November.
85. Otolological Society of Japan, Yokohama, Japan, November.

#### 2018

86. Colloquium Speaker, Medical Research Council, Cambridge, UK, January.
87. Tel Aviv University, 3-lecture series featuring Binaural Hearing, Sheba Medical Center, March
88. Academy Research Conference, AAA, Featured Speaker, April.
89. Invited Colloquium Speaker, University of Michigan, Kresge Hearing Research Institute, April.
90. Keynote Speaker, Warren Estabrooks Speaker Series Conference- *Sound Intuition*, April.
91. Invited Symposium, Acoustical Society of America 175<sup>th</sup> Meeting, Minneapolis, MN, May.

92. Keynote Speaker, University of Oslo, Int'l Research Summit, School of Special Education, May.
93. Colloquium Speaker, University of Colorado Medical School, June.
94. Gordon Research Conference on Neuroplasticity of Sensory Systems, Hong Kong, June.
95. 10th International Symposium on Objective Measures in Auditory Implants, Tel Aviv Israel, October.

## 2019

96. Colloquium Speaker, T32 informal mentor Purdue, January.
97. Colloquium Speaker, T32 informal mentor. Boystown Nat'l Hospital, Omaha, March.
98. American Neurotology Soc, "Frontiers in Neurotology; Super Saturday" New Orleans, September.
99. Keynote Speaker, Michigan Academy of Audiology Annual Meeting, October.
100. Keynote Speaker, Symposium of the Hearing Health Consortium, Hannover, Germany, October.
101. Keynote speaker, U. Maryland Translational Auditory and Vestibular Research Day. Baltimore, MD.
102. Distinguished Guest Speaker, Univ. of Pittsburg, Training Grant Annual research conference.
103. Special Session Honoring the Contributions of William Yost, Acoustical Society of America, Chicago IL.
104. The Royal Society, Theo Murphy international scientific meeting: Realising the potential of cochlear implants. England. *EVENT DELAYED DUE TO COVID19.*
105. Invited speaker/panelist, Women in Science workshop, University of Minnesota.

## 2021

106. Symposium Speaker (Litovsky, R.Y. and Golding, N). Hearing and Donut: Cells and Circuits of the Auditory System - In Memory of Donata Oertel. Assoc. Res. Otolaryngol. Virtual, February.
107. Carhart Memorial Lecture, American Auditory Society, Virtual, March.
108. Keynote, Univ. Southern CA, Hearing & Communication Neuroscience Annual Retreat, Virtual, May.
109. Keynote speaker, Alexander Graham Bell, Virtual, June.

## Speaking Invitations for 2021:

1. Key Speaker, International Symposium on Auditory and Audiological Research (ISAAR 2021), Virtual, August.

## **Contributed Conference Presentations and Lectures**

My lab contributes approximately 8-15 posters and talks at national and international conferences per year. Copies of the posters are available on our website:

<https://bhsl.waisman.wisc.edu/presentations/>

## **RESEARCH SUPPORT**

### **Ongoing Extramural Research Support**

NIH NIDCD 5R01 DC008365 (years 6-10), Litovsky (PI) (NCE) <i>Improving binaural hearing in children with cochlear implants</i> Role: Principal Investigator	12/01/2013 - 11/31/2021
NIH NIDCD 5R01 DC03083 (years 16-20), Litovsky (PI) <i>Binaural Sensitivity and Spatial Hearing in Bilateral Cochlear Implant Users</i> Role: Principal Investigator	08/01/2016 - 07/30/2021
NIH NIDCD 1 R01 DC016839 <i>CCI-Mobile: Signal Processing Advancements for Cochlear Implant Users in Naturalistic Environments</i> Role: Principal Investigator [Multi-PI grant: Litovsky, Hansen (UT Dallas) and Svirsky (NYU)]	05/01/2018 – 04/30/2023

NIH NIDCD R01 DC016839 S1 09/01/2020 - 08/31/2021  
*Diversity Supplement to support PhD student Jasenia Hartman.*  
Role: Principal Investigator [Multi-PI grant: Litovsky, Hansen (UT Dallas) and Svirsky (NYU)]

NIH NIDCD R01 DC016839 S2 09/01/2020 - 08/31/2021  
*Supplement to support development and implementation of a database repository.*  
Role: Principal Investigator [Multi-PI grant: Litovsky, Hansen (UT Dallas) and Svirsky (NYU)]

NIH NIDCD 5R01 DC03083-S1, Litovsky (PI) 09/15/2018 - 06/30/2021  
*Supplement to study auditory function in adults with Down Syndrome*  
Role: Principal Investigator

NIH NIDCD R13 DC018693, Litovsky (PI) not yet active 07/01/2022 – 08/01/2024  
*2022/2024 AUDITORY SYSTEM Gordon Research Conference/GRS. (delayed from 2020 to 2022)*

### **Ongoing Extramural Grant Participation, Consulting and Advisory**

American Otological Society, Fellowship Grant for Medical Students, awarded to Gabriel Sobczak.  
07/01/2020-06/20/ 2021  
Role: Mentor and Sponsor

NIH NIDCD F32, Bakst, Sarah (PI). Postdoctoral fellowship.  
04/01/2019-03/31/2021 (relinquished after October 2020 to take job).  
Role: Mentor and Co-Sponsor with Carrie Niziolek as primary sponsor

NIH NIDCD F31 DC018716, Anderson, Sean (PI). Predoctoral fellowship.  
07/01/2020 - 06/30/2022  
Role: Mentor and Sponsor

NIH-NIDA R34DA050258, Waisman Center. Planning grant titled Promoting resilience in children: protocol development for a birth cohort study to assess factors impacting neurodevelopment, 2018-present (Andrew Alexander and Doug Dean, PIs)  
Role: Investigator

NIH-NICHD 5 U54 HD090256, Waisman Center Core Grant, 2016-present (Albee Messing, Qiang Chang PIs)  
Role: Investigator

NIH-NICHD 2 P30 HD03352, Waisman Center Core Grant, 2001-2016 (Marsha Maillik, Albee Messng, PIs)  
Role: Investigator

NIH-NICHD T32 HD07489, Postdoctoral Training in Mental Retardation Research  
Training Grant. 2005 – present (Marsha Maillik, Sigam Hartley, PIs)  
Role: Training Faculty.

Health Resources & Services Administration, Maternal and Child Health. Leadership Education in  
Neurodevelopmental Disabilities (MCH LEND), 2007-present (Anne Harris, PI).  
Role: Faculty Advisor, Audiology

NIH-NIDCD T32DC000013 postdoctoral training program at Boys Town National Research Hospital; 2014-  
present.  
Role: External Advisory Committee

NIH-NIDCD R01DC013307 (Lina Reiss, PI). Binaural spectral integration with hearing loss and hearing devices, 2013-2018.

Role: External Consultant

NIH-NIDCD R01DC009404 (Rene Gifford, PI). Cochlear implants: combined electric and binaural acoustic stimulation; 2015-2020.

Role: External Consultant

NIH-NIDCD R01 DC012142 (Julie Arenberg, PI). Perceptual implications of cochlear implant electrode-neuron interfaces; 2015-2020.

Role: External Consultant

National Institute for Health Research, United Kingdom (D. Vickers, PI). Binaural training in children with hearing loss; 2019-2024.

Role: Consultant/collaborator,

### **Ongoing Internal Research Support**

University of Wisconsin, Office of the Vice Chancellor for Research & Graduate Education and the Waisman Center 06/01/2017-present

*A novel integrative platform: Building capacity for non-invasive neuroimaging research (fNIRS)*

Total Award \$150,000 (direct cost)

Role: Principal Investigator

University of Wisconsin, Department of Surgery 06/01/2017-present

*A novel integrative platform: Building capacity for non-invasive neuroimaging research (fNIRS support)*

Total Award \$30,000 (direct cost)

Role: Principal Investigator

Kellett Mid-Career Award

07/01/2018-06/30/2023

Total Award: \$75,000 (direct cost)

Oros Family Chair in Communication Sciences and Disorders  
Annual budget

07/01/2018-present  
(renewable)

### **Upcoming Internal Research Support**

UW Fall Competition, VCRGE, Litovsky, Hartley, Alexander (multi-PIs)

7/01/2021-60/30/2022

*Auditory function, neurocognition and brain structure in Down Syndrome*

Total Award \$73,675

### **Completed Extramural Research Support**

NIH-NIDCD F32

01/01/1992-12/31/1994

*Binaural mechanisms involved in spatial hearing*

Role: Principal Investigator

Total Award \$116,000



NIH-NIDCD R03 <i>Binaural hearing and the precedence effect</i> Role: Principal Investigator Total Award \$83,594	04/01/1995-03/31/1997
National Organization for Hearing Research Echo suppression in listeners with hearing impairment. Role: Principal Investigator; Total Award \$5,000	01/01/1999-12/31/2000
Deafness Research Foundation Speech intelligibility and spatial release from masking in young children Role: Principal Investigator Total Award \$20,000	09/01/2001-12/31/2002
National Organization for Hearing Research Speech intelligibility and spatial release from masking in young children. Role: Principal Investigator Total Award \$10,000	01/1/2001-12/31/2002
NIDCD R29 DC03083, Litovsky (PI) <i>Directional Hearing and the Precedence Effect</i> Role: Principal Investigator Total Award: \$618,750	05/01/1998 - 06/31/2003
NIDCD R21DC05469, Litovsky (PI) <i>Binaural Hearing in Children with complex Environments</i> Role: Principal Investigator Total Award \$145,000	04/01/2002 - 03/31/2005
NIDCD R21 DC006642, Litovsky (PI) <i>Functional Abilities in Children with Bilateral Hearing</i> Role: Principal Investigator Total Award \$394,625	04/01/2004 - 03/31/2006
NIDCD F31 DC6785 <i>Stimulus Uncertainty In A Cocktail Party Environment</i> Role: Mentor Pre-doctoral award to Patti Johnstone	10/01/2004-09/30/2006
NIDCD F32 DC008452 <i>Spatial hearing and word-learning skills in toddlers</i> Role: Mentor Post-doctoral award to Tina Grieco-Calub	03/15/2007 – 03/14-2009
NIDCD F31 DC009361 <i>Human binaural sensitivity in electrical hearing: effect of channel interactions</i> Role: Mentor Pre-doctoral award for Gary L. Jones	09/01/2007 – 08/31/2009

NIH NIDCD R01 DC03083 (years 7-10), Litovsky (PI) 12/01/2003 - 11/30/2010  
*Directional Hearing in Complex Auditory Environments*  
Role: Principal Investigator

NIH-NIDCD F31 DC, Diversity Supplement 9/01/2008 – 08/31/2011  
*Speech Perception and Production in Children who use Cochlear Implants*  
Role: Principal Investigator; diversity supplement for Ann Todd  
Total Award \$85,400

NIH NIDCD 5R01 DC008365 (years 1-5), Litovsky (PI) 07/01/2007 – 06/30/2012  
*Spatial Hearing in Children with Normal Hearing and Bilateral Cochlear Implants*  
Role: Principal Investigator

NIDCD K99/R00 DC010206, Goupell (PI) 07/01/2009 – 06/30/2014  
Role: Mentor/Sponsor  
*Speech understanding and signal detection in noise in bilateral cochlear implants* This award is to support pathway to independence for Matthew Goupell.

NIDCD F31 DC013228 07/01/2013 – 03/30/2016  
*Binaural Unmasking in Children with Cochlear Implants*  
Role: Mentor  
Pre-doctoral award for Ann Todd

NIH NIDCD 5R01 DC03083 (years 11-15), Litovsky (PI) 03/01/2010 - 02/28/2016  
*Binaural Sensitivity and Spatial Hearing in Bilateral Cochlear Implant Users*  
Role: Principal Investigator

NIH NIDCD 5R01 DC 008365  
*Improving Binaural Hearing in Children who use Cochlear Implants* Role: Principal Investigator;  
diversity supplement for Keng Moua

NIH NIDCD R01 5R01DC010494 (Litovsky PI on sub-contract; Hansen PI)  
*User Customization and User Optimization of Cochlear Implant Devices* Role: Principal Investigator on  
Sub-Contract to UW-Madison

Acoustical Society of America Hunt Postdoctoral Fellowship, awarded to Michaela Warnecke, PhD.  
05/01/2020-04/30/ 2021  
Role: Mentor and Sponsor

### **Completed Internal Research Support**

Wisconsin Alumni Research Foundation  
07/01/03-06/30/2004  
*Spatial hearing in complex auditory environments in cochlear implant users*  
Role: Principal Investigator  
Total Award \$28,000

University of Wisconsin, University-Technology Innovation Fund  
7/01/2003-06/30/2004  
*Validation of auditory perception measures for clinical use.*  
Role: Principal Investigator  
Total Award \$30,000

University of Wisconsin, University-Technology Innovation Fund  
07/01/2004-06/30/2005  
*Development of a clinical test for children*  
Role: Principal Investigator  
Total Award \$43,000

University of Wisconsin, Vilas Research Associate Fellowship  
06/01/2005-05/31/2007  
*Innovations in bilateral cochlear implants.*  
Role: Principal Investigator  
Total Award \$61,000

### **University of Wisconsin – Mentored Hilldale Undergraduate Research Awards**

2004-2005 Auditory perception in children in noisy environments; awarded to Ashley Eisen.  
2005-2006 Auditory processing in children with specific language impairment, co-mentored with Julia Evans; awarded to Stephanie Pesa.  
2008-2009 Double your Input, increase your success: Are two cochlear implants better than one? Reach for the answer; awarded to Samantha Harris  
2010-2011 Categorical Perception in Children with Cochlear Implants, co-mentored with Jenny Saffran; awarded to Alyssa Lamers  
2012-2013 Internalized listening abilities of normal hearing children using binaural cues; awarded to Kristina Ward.  
2014-2015 Echo Suppression and Sound Localization in 2- to 3-Year Old Children; awarded to William Keener.  
2020-2021 Using fNIRS to investigate auditory attention in cochlear implant listeners with single-sided deafness; awarded to Liberty Moore.

### **Teaching**

A. Courses taught at UW - Communicative Sciences & Disorders (CSD)

831: Amplification Systems Spring, 2002, 2003, 2004

202: Normal Aspects of Hearing

Fall, 2001; 2002; 2003; 2004; 2005; 2006; 2008; 2009; 2010; 2015; 2017, 2018;  
Spring 2013, 2014.

851: Hearing Science II: Advanced Topics

Spring, 2005; 2006; 2009; 2010.

850: Hearing Science I

Fall, 2011, Fall 2012, Fall 2015, Fall 2016.

921: Seminars in Audiology, Spring 2012.

900: PhD Seminar in Implantable Auditory Prostheses Spring, 2012.

900: PhD seminar in Speech & Hearing, and Professional Issues, Spring 2016, Spring 2017, 2019.

863: Implantable Auditory Prostheses

Fall, 2017, 2018, 2019, 2020.

Neuroscience 500: Guest lecture every year or two.

Waisman Center Ethics and Professional Development Seminar: Guest lecture annually (since circa 2013).  
Topics: *Conflict of Interest*, and *Policies in Human Subjects Research*, *Grant writing workshop*, *Work-life balance*, *Collaborative research*, including collaborations with industry.

## Teaching Innovation:

1. CSD 851 & 850 (1st year AuD students) developed an opportunity for engaging students in research through a 1.5-day mini-conference, that introduces students from Madison and Stevens Point to research on hearing and neuroscience at the UW-Madison campus
2. CSD 202 (Undergraduate students) interactive learning approaches, such as 'clicker' response system to enhance learning activities
3. CSD 863 (3<sup>rd</sup> year AuD students) engaging students in novel laboratory experience involving temporal bone examination, in collaboration with Dr. J. Roche Guest Teaching at other institutions:
4. Ono Academic College, Israel, Online Course, Psychoacoustics, Spring 2011
5. Tel Aviv University, Israel, mini-course (6 hours), Binaural Hearing, Spring 2018
6. University of Oslo, Norway, Video conference course (6 hours), Auditory Psychophysics and Physiology, 2014, 2015, 2016, 2017.

## B. Ph.D. Students Mentoring and Supervision

### 1. Currently Supervised

- Sean Anderson (PhD/ ComSciDis), Fall 2015-present
- Jasenia Hartman (PhD/ Neuroscience), Fall 2015-present
- Stephen Dennison (PhD/Electrical and Computer Engineering), Fall 2018-present
- Emily Burg (PhD, AuD dual degree/ ComSciDis), Fall 2017-present
- Lukas Suveg (PhD/ ComSciDis), Fall 2019-present

### 2. Past graduate Students Supervised

- Patti Johnstone (PhD, ComDis), Fall 2001-2006; Currently Assoc. Prof. Univ. TN
- Scott Miller (PhD, Psychology), Spring 2005-Fall 2007; Transferred to Univ. of Louisville
- Soha Garadat (PhD, ComDis), Spring 2003-Fall 2007; Post-doctoral fellow, Univ. of Michigan, Ann Arbor, Kresge, Bryan Pfingst supervisor.
- Smita Agrawal (PhD, ComDis), Fall 2002-August 2008; Post-doctoral fellow, Univ. of Iowa, Richard Tyler supervisor. Currently scientist at Advanced Bionics Corporation.
- Gary Jones (PhD, Physiology), Spring 2003- August 2009; Post-doctoral fellow, Univ. of Washington, Seattle, Jay Rubinstein, supervisor.
- Tyler Churchill (PhD, Physics), Fall 2009- December 2013.
- Christi Hess (PhD, ComSciDis), Fall 2010- May 2014. Birth-3 program coordinator, Wisconsin.
- Michael Kiewe (PhD, Physics), Fall 2010-May 2014. Professor of Physics, • Ann Todd (PhD, ComSciDis), Fall 2007-May 2015; Post-doctoral fellow, NYU.
- Sara Misurelli (PhD, ComSciDis), Fall 2009-2014; Visiting Assistant Professor UW-Madison and Research fellow in Litovsky lab.
- Erica Ehlers (PhD / AuD dual degree, ComSciDis), Fall 2011-May 2016. Director of Audiology sub-clinic, Henry Ford Hospital, Detroit, MI.
- Keng Moua (MS/ ComSciDis), 2014-2018.
- Taylor Fields (MS/ Neuroscience), Fall 2015-2019.
- Tanvi Thakar (PhD/ ComSciDis), Fall 2013-May 2019. Postdoctoral Fellow, Univ. of Wisconsin.

## C. Post-doctoral Fellows

### 1. Currently Being Supervised

- Tanvi Thakkar, 2019-present.

### 2. Past Post-doctoral Fellows and current positions

- Yu Gonquiang, PhD, 2001-2008; Currently research engineer, University of Connecticut.
- Tina Grieco-Calub, AuD CCC PhD, 2005-2008, Assistant Professor, Northwestern University.
- Cynthia Zettler-Greeley, PhD; Currently Assistant Director, Research and Evaluation at Nemours.

- Yi Zheng, PhD, 2007-2010. Research Scientist, Peking Neuroscience Research Institute.
- Matthew Goupell, PhD, 2009-2011; Professor, U. of Maryland, College Park.
- Antje Ihlefeld, PhD, 2012-2013; Assistant Professor New Jersey Institute of Technology.
- Matthew Winn, 2012-2015. Associate Professor, U. of Minnesota, MN Twin Cities.
- Heath Jones, 2011-2016. Director of a Research lab at the U.S. Department of Defense.
- Sara Misurelli, 2014-2015. AuD extern, VA, Madison, WI. Soon to be Director of Audiology.
- Thibaud Lecelere, 2016-2018. Researcher, University of Salamanca, Spain.
- Alan Kan, 2010-2019. Researcher, Macquarie University, Sydney, Australia.
- Michaela Warnecke, 2018-2021. Post-doctoral fellow, Facebook Oculus team.
- Ellen Peng, 2016-2021. Research Scientist, Boystown National Hospital.
- Xin Zhou, 2018-2021. Postdoctoral Fellow, The Chinese University of Hong Kong.

D. AuD Student Capstone Projects Supervised, by year of completion:

- 2006: Sarah Neader, Corina Vidal, Raena Holmberg
- 2007: Jacquelyn Heeren, Rose Cotton
- 2008: Eileen Storm
- 2009: Diane Benz, Sarah Chapman
- 2011: Nick Liimata, Jenifer Sliper, Jayna David
- 2012: Shelby Seeberg, Alison Vanamber, Melissa Vipond
- 2013: Kimberly Falkenstein, Lindsey Kunsch, Kyle Martell
- 2014: Tori Ashton
- 2015: Corey Stoelb
- 2016: Hye Yoon Seol, Kasey Englebert
- 2017: Rachael Jocewicz, Meg Pearson, Ariel Young
- 2018: Ruth White, William Keener, Rebecca Rancourt, Chantal Van Ginkel
- 2019: Ilsa Feierabend, Carly Amurao, Seamus Doyle, Jordan Krentz
- 2020: Danielle Jorgenson
- 2020-21: Lauren O'Neil

E. Course Taught During Prior Appointment(s)

Developmental Psychology (Undergraduate requirement for major), University of Massachusetts Amherst, Summer 1991.

Neurobiology and psychophysics of the auditory system (Bio-95; Undergraduate seminars taught to Biology majors), Harvard University, 1998, 1999.

F. Seminars and Colloquia –not as part of organized conferences:

Places visited for talks in 2000-2021

University of Iowa, Dept. of Neurosurgery; Boston University, Hearing Research Center; Massachusetts Eye and Ear Infirmary, Eaton-Peabody Laboratory, Boston, MA; MIT, Research Laboratory of Electronics, Cambridge, MA; University of Oxford, Physiology, Oxford, England; University of Connecticut Health Center, Farmington, CT; Loyola University, Parmly Hearing Institute; University of Wisconsin-Madison, Dept. of Psychology; University of Wisconsin-Madison, Physical Sciences Laboratory; University of Wisconsin-Madison, Dept. of Physiology; University of Wisconsin-Madison, Dept. of Communicative Disorders; Nottingham University and Institute for Hearing Research, Nottingham, England; University of Cambridge, Cambridge, England; House Ear Institute, Los Angeles, CA; University of Massachusetts, Amherst, Dept. of Psychology; Mass. Eye and Ear Infirmary, Boston, MA. Northwestern University, Dept. of Speech and Hearing; House Ear Institute, Los Angeles. Dept. of Speech and Hearing, Indiana University, Indianapolis, IN.

### Invited Seminars and Colloquia, 2014-2021:

1. University College London, London, UK. 2014
2. Medical Research Council IHR, Nottingham, UK. 2014
3. Boston University Hearing Research Center, Boston MA. 2015
4. Oregon Health Sciences University, Portland OR. 2016
5. Northeast Ohio Medical School, Kent OH. 2016
6. Massachusetts Eye and Ear Infirmary, Boston. 2016
7. Karolinska Institute, Stockholm, Sweden. 2016
8. Vanderbilt University, Nashville TN. 2016
9. Department of Otolaryngology, Johns Hopkins University, Baltimore MD. 2017
10. Department of Otolaryngology, University of Southern California, Los Angeles, CA. 2017
11. Cambridge University, Cambridge UK. 2018
12. Kresge Hearing Research Center, University of Michigan. 2018
13. University of Colorado Medical Center, Denver, CO. 2018
14. Dept. of Speech and Hearing, Purdue University of Maryland, College Park, MD. 2019.
15. Invited Colloquium Speaker, Boystown National Research Hospital, Omaha NE. 2019.
16. University of Pittsburgh, 2020.
17. University of Washington, Seattle, 2021.

### **Service**

#### A. Departmental and the Waisman Center

1. Chair, Hearing Area Group, Dept. Communicative Disorders, 2002-2007, 2016-present.
2. Doctoral committee, Dept. Communicative Disorders, 2002-2004, 2016-present.
3. Timetable committee, Dept. Communicative Disorders, 2016-present.
4. Search committee, IT staff, Dept. Communicative Disorders, 2003-2004.
5. Space improvement committee, Dept. Communicative Disorders, 2004-2010.
6. Search committee, Faculty position, Dept. Communicative Disorders, 2004; 2006.
7. Committee on Affiliate Appointments, Dept. Communicative Disorders, 2006.
8. Chair, Awards committee, 2010-2014.
9. Chair, AuD self-study, 2010-2012.
10. Budget committee, 2010-2013.
11. Director, AuD Program, Dept. of Communication Sciences & Disorders, 2011-2014.
12. Audiology Faculty, Maternal Child Health, Leadership Education in Neurodevelopmental and Related Disabilities, 2013-present.
13. Coordinator, Undergraduate Studies, Dept. of Communication Sciences & Disorders, 2016-present.
14. Chair, faculty search committee, 2016-2017.
15. Brain Imaging Core, Waisman Center, 2018-present.
16. Associate Chair, Dept. of Communication Sciences & Disorders, 2018-2019.
17. Chair, Dept. of Communication Sciences & Disorders, 2019-present.

#### B. Tenure-Track Faculty Mentoring Committees

1. Chair, mentoring committee for Assistant Professor K. Schairer, Dept. of Communicative Disorders.
2. Member, Mentoring committee for Susan Thibeault, Dept. of Surgery.
3. Member, Mentoring committee for Samuel Gubbels, Dept. of Surgery.
4. Mentoring committee for Joseph Roche, Dept. of Surgery.
5. Chair, Mentoring committee for Jessica Van Beek-King, Dept. of Surgery.
6. Member, Mentoring committee for Benjamin Parrell, Dept. of CS&D.
7. Member, Mentoring committee for Sriram Boothanlingam, Dept. of CS&D.
8. Member, Mentoring committee for Carrie Niziolek, Dept. of CS&D.

### C. College/ University

1. Faculty senator, 2001-2002
2. Advisory Committee to Provost, Women Faculty Mentoring Committee, 2002-present
3. Advisory Committee to Provost, Equity and Diversity Resource Committee, 2002-present
4. Faculty Connections Program, invited to participate by dean's office, 2003-2004
5. Conflict of Interest Committee, 2005-2011
6. Institutional Conflict of Interest Committee, Spring 2006
7. Faculty Appeals Committee, 2006-2012
8. Health Sciences Teaching Symposium, 2009-present
9. Committee on Women at the University, 2010-2014
10. Chair, Committee on Women at the University, 2011-2013
11. Campus Planning Committee, Rep. from Committee on Women, 2010-2013
12. Elected, Executive Committee University of Wisconsin-Madison Faculty Division of the Biological Sciences, 2012-2016
13. Co-Chair, UW Diversity Planning Committee (appointed by University Committee), 2013-2015
14. L&S New Faculty Welcome, 2011, 2012
15. Postdoctoral Mentoring Program Committee, 2012-present
16. Ad-Hoc "anti bullying" (climate and culture) committee, 2013-2014
17. Tenure Policy Committee, 2015-2016
18. Ad-hoc committee on Research Misconduct Policy, 2016-present
19. Search Committee, UW Madison – Chief Human Resources Officer, 2016
20. Ad Hoc Student Services Advisory Committee (by Chancellor's invitation), 2017
21. Campus Climate Survey (CCS) Task Force (TF), 2017
22. Committee on Committees, 2016-2018
23. Elected, Academic Planning Council, Letters & Sciences, 2017-present
24. Diversity Liaison, invited by office of the Deputy Vice Chancellor, 2017-present
25. Hostile and Intimidating Behavior Liaison, invited by the office of the VP Faculty & Staff, 2017-present
26. PROFS steering committee (faculty advocacy to legislature), 2018-present
27. Chair, Letters & Sciences Search Committee, Associate Dean, Diversity, Inclusion & Equity, 2020-2021.

### D. Professional

#### Sessions Chaired/Organized at Conferences

- 2001: Organizer/chair: Invited symposium at the meeting of the Acoustical Society of America. Behavioral studies and physiological correlates.
- 2000: Chair: Poster session at the meeting of the Acoustical Society of America. Perception and Psychophysics.
- 1999: Co-Organizer/chair: Invited symposium at the joint meeting of the Acoustical Society of America; Acoustical European Society (Berlin). Perception and localization in complex and reverberant environments.
- 1998: Organizer/chair: Invited symposium at the meeting of the Association for Research in Otolaryngology. Psychophysical and physiological studies on the precedence effect.
- 2005: Organizer/chair: Invited symposium at the 149th meeting of the Acoustical Society of America. Communicative abilities of congenitally deaf children: From behavior to physiology, from psychophysics to hair cell regeneration. (Co-chair with Mario Svirsky).
- 2001, 2005: Invited Panel Member, Binaural Cochlear Implants. Cochlear Implant Northeast Family Retreat, Sturbridge MA.
- 2007-2015: Steering Committee, Conference on Implantable Auditory Prostheses.

2011: Organize/chair: Invited symposium at the Meeting of the Association for Research in Otolaryngology. Progress and Challenges in Implantable Auditory Prostheses: Lessons Learned from Psychophysics, Physiology and Engineering.

2011: Elected Co-Chair, Conference on Implantable Auditory Prostheses, Asilomar CA.

2011: Program Committee, 13<sup>th</sup> Symposium on Cochlear Implants in Children, Chicago, IL.

2011-2014: Executive Committee, Association for Research in Otolaryngology (elected council member).

2012: Organize/chair: Invited symposium at the Acoustics 2012 Meeting, Hong Kong. Release from Masking in Listeners with Normal and Impaired Hearing.

2010-present: Chair & Organizer of annual 'Cochlear Implant CRASH' conference, Waisman Center. See also section on: Professional Activities, Honors, Awards for recent activities 2016-18: Co-Chair (elected), Gordon Research Conference on Auditory Function.

2018: Chair/moderate, Invited Session at the Objective Measures Cochlear Implant Meeting. Tel Aviv, Israel.

2019: Organize/co-chair: Invited symposium at the Association for Research in Otolaryngology.

2018 Co-Chair (elected), Gordon Research Conference on Auditory Function.

2021: Organize Presidential Symposium at the Association for Research in Otolaryngology: Implantable Prostheses: Progress, Future Possibilities and Multi-sensory integration

2022 Chair (elected), Gordon Research Conference on Auditory Function.

Professional mentoring and special interest:

1. Mentoring session for women, 2009, International 12th Symposium on Cochlear Implants in Children, Seattle, WA.
2. Mentoring session for graduate students, post-doctoral fellows and young scientists, 2009 Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.
3. Mentoring session for graduate students, post-doctoral fellows and young scientists, 2011 Conference on Implantable Auditory Prostheses, Lake Tahoe, CA, Asilomar CA.
4. Mentoring session for women, 2011, International 13th Symposium on Cochlear Implants in Children, Chicago, IL.
5. Multi-day, multi-topic (9 sessions overall): Mentoring session for graduate students, post-doctoral fellows and young scientists, 2013- present; Association for Research in Otolaryngology.
6. Mentoring session for graduate students, post-doctoral fellows and young scientists, Conference on Implantable Auditory Prostheses, CA: 2009, 2011, 2013, 2015, 2017, 2019.

**Other**

Media; Featured stories on research in the Litovsky lab

- a. 2006: Features in "Sound and Fury" video, follow-up on original Nova story
- b. 2007: Featured UW news article
- c. 2007: Daily Cardinal article
- d. 2007: Minneapolis Star Tribune
- e. 2007: SIGNews, a national newspaper for the signing community
- f. 2008: NIDCD Public Health Bulletin
- g. 2009: American Institute of Physics
- h. Online stories and articles: <http://www.medicalnewstoday.com>; <http://www.medilexicon.com>; <http://www.hospitalsworldwide.com>; <http://www.ivanhoe.com/science/story/2010/11/788a.html>
- i. <http://www.news.wisc.edu/17519>
- i. 2012: University of Wisconsin-Madison Home page story on research in Litovsky lab. After appearing on main page, the movie will be moved to: [http://www.youtube.com/watch?v=K\\_cDdpeNtVc](http://www.youtube.com/watch?v=K_cDdpeNtVc)
- j. 2013: ABC-WKOW: <http://www.wkow.com/story/22914896/2013/07/23/how-auditory-brainstemimplants-could-help-the-deaf>
- k. University of Wisconsin-Madison homepage story:



- l. <https://www.waisman.wisc.edu/2021/03/16/illuminating-the-brain-through-a-new-channel/>  
[http://www.youtube.com/watch?feature=player\\_embedded&v=KYEEbvOzS1I](http://www.youtube.com/watch?feature=player_embedded&v=KYEEbvOzS1I)
- m. <https://www.waisman.wisc.edu/2021/03/16/illuminating-the-brain-through-a-new-channel/>
- n. EurekAlert! AAAS The Global Source for Science News:  
[https://www.eurekalert.org/pub\\_releases/2018-05/asoa-scs050218.php](https://www.eurekalert.org/pub_releases/2018-05/asoa-scs050218.php)
- o. Illuminating The Brain Through a New Channel:  
<https://www.waisman.wisc.edu/2021/03/16/illuminating-the-brain-through-a-new-channel/>

Signed 

Date: 6/21/2021