

Aging & Speech Communication Conference – November 3-6, 2019 Itinerary

Sunday, Nov. 3:

4:00 p.m. Conference Registration Check-In

6:00 p.m. <u>Humes Keynote Opening Lecture, Sunday night Banquet, (dinner provided):</u>
Dr. Jerker Rönnberg, Professor of Behavioural Sciences and Learning, Disability Research Division, Linköping University, Sweden <u>Title</u>: Cognitive Hearing Science (CHS): Three memory systems, two approaches, and one model.

<u>Monday, Nov. 4</u>: *Invited Session:* Underpinnings of Age-Related Hearing and Speech Communication Problems. Session Chairs: Joseph Walton, Kelly Tremblay

- 8:00 a.m. **Dr. Ebenezer Yamoah,** Professor of Physiology & Cell Biology, Univ. Nevada-Reno, NV, USA <u>Title</u>: Alterations in outer hair cell and auditory neuron in aged mouse models with a hearing phenotype akin to humans.
- 8:40 a.m. **Dr. Hainan Lang,** Assoc. Professor, Dept. Pathology and Laboratory Medicine, Med. Univ. S. Carolina, SC, USA <u>Title</u>: Cellular mechanism alterations in the aging cochlea and implications for future therapies.
- 9:20 a.m. Break (light breakfast provided)
- 9:40 a.m. **Dr. Dwayne Simmons**, Cornelia Smith Endowed Professor, Dept. Chair, Biology; Baylor Univ., TX, USA <u>Title</u>: Plasticity of the Older Ear and Brain: Neurobiological Mechanisms and Neuroscientific Underpinnings of Age-Related Hearing and Speech Communication Problems.
- 10:20 a.m. **Dr., Ed Bartlett,** Assoc. Professor Biology & Biomedical Engineering; Purdue Univ., IN, USA <u>Title</u>: Age-related changes of temporal coding representations in the peripheral and central auditory systems
- 11:00 a.m. **Dr. Jonathan Peelle,** Associate Professor, Otolaryngology Dept., Washington Univ., MO, USA <u>Title</u>: Cognitive contributions to understanding acoustically challenging speech.
- 11:40 a.m. DISCUSSION;

11:50 -1:00 p.m. Lunch (provided)



1 - 3 p.m.Podium PresentationsSession Chairs: Ann Eddins, Matt Goupell

1:00 Abstract #27. Effects of aging and cognitive effort on talker familiarity benefit in a complex listening environment.

Julie I. Cohen1*#, Douglas S. Brungart 2, and Sandra Gordon-Salant 1 1 University of Maryland, College Park, MD, USA

2 Walter Reed National Military Medical Center, Bethesda, MD, USA

1:15 Abstract #40. Contralateral speech interference in cochlear-implant users worsens with age: Neural plasticity or attention?

Matthew J. Goupell 1, and Joshua G. W. Bernstein 2

1 University of Maryland, College Park, MD, USA

2 Walter Reed National Military Medical Center, Bethesda, MD, USA

1:30 Abstract #47. Perceptual Decision-Making during Speech Recognition in Noise by Middle-Aged and Older Adults.

Kenneth I. Vaden Jr.*#1, Susan Teubner-Rhodes 1,2, Jayne B. Ahlstrom 1, Judy R. Dubno 1, Mark A. Eckert 1

1 Department of Otolaryngology – Head and Neck Surgery, Medical University of South Carolina, 135 Rutledge Avenue, MSC 550, Charleston, SC USA

2 Department of Psychology, 226 Thach Hall, Auburn University, AL, USA

1:45 Abstract #52. Associations Among Sensory Function, Cognitive Processing and Daily Function: A Longitudinal Study of Older Adults.

Larry E. Humes1*#, and Thomas A. Busey 2

1 Department of Speech & Hearing Sciences, Indiana University, Bloomington, IN, USA 2 Department of Psychological & Brain Sciences, Indiana University, Bloomington, IN, USA

2:00 Abstract #61. Exploring the Biological Mechanisms of Transforming Growth Factor (TGF) for Inflammation and the Ageing Processes of the Inner Ear.

Mark A. Bauer#, Parveen Bazard, Bo Ding, Xiaoxia Zhu, Robert D. Frisina* Medical Engineering Dept., Global Center for Hearing & Speech Research, Univ. South Florida, Tampa, FL, USA

2:15 Abstract #60. Short-term Acoustic Deprivation and Enhancement lead to Central Gain Modulation in the Brainstem and Cortex.

Peter J. Hutchison*#, Hannah Maeda, David A. Eddins, Ann C. Eddins Auditory and Speech Sciences Laboratory, University of South Florida, Tampa, FL, USA Global Center for Hearing & Speech Research, University of South Florida, Tampa, FL, USA

2:30 Abstract #65. Gene Expression and Auditory Physiology Analyses to Determine the Roles of Connexin 30 and 43 in Age-Related Hearing Loss.

Jennifer Pineros1,3#, Xiaoxia Zhu1,3, Bo Ding1,3, Parveen Bazard1,3, Robert D. Frisina1,2,3* 1 Dept. of Medical Engineering, 2 Dept. of Communication Sciences & Disorders,

3 Global Center for Hearing & Speech Research, Univ. South Florida, Tampa, FL, USA



2:45 Abstract #23. When individual differences are more important than age: Subcortical envelope encoding of sustained amplitude modulation predicts speech-in-noise performance in difficult listening conditions.

Carolyn M. McClaskey*#, James W. Dias, Kelly C. Harris

Dept. Otolaryngology-Head and Neck Surg., Med. Univ. South Carolina, Charleston, SC, USA

3:00 p.m. Break

3:15 - 5:30 p.m.	POSTER SESSION- Posters are all displayed Tuesday afternoon as well; Refreshments provided at the Poster Session- Posters listed below
5:45 – 6:15 p.m.	Transportation to Aquarium
6:30 – 8:30 p.m	Group-wide Social Event – Clearwater Marine Aquarium Appetizers and beverages served
8:30 – 9:00 p.m.	Transportation to Hotel

<u>Tuesday Nov. 5</u>: *Invited Session:* Interactions Between Cognitive Decline in Aging and Age-Related Speech Deficits and Hearing Loss: Translational Implications. Session Chairs: Sophia Kramer, Larry Humes

- 8:00 a.m. **Dr. Dona M P Jayakody,** Senior Research Audiologist at Ear Science Institute of Australia <u>Title</u>: The Peripheral Hearing and Central Auditory Processing Skills of Individuals with Subjective Cognitive Decline.
- 8:40 a.m. **Dr. Piers Dawes,** Senior Lecturer, Div. of Human Communication, Development & Hearing; Cathie Marsh Inst. for Social Research, School of Social Sci., Univ. Manchester, UK; Macquarie University, Australia <u>Title</u>: Hearing and vision impairment and mental well-being in older age.
- 9:20 a.m. Break (light breakfast provided)
- 9:40 a.m. **Dr. Boaz Ben-David,** Baruch lvcher School of Psychology, IDC Herzliya, Israel. Topic: Focus is on communication, cognitive and sensory integration in aging: investigates the premise that reductions in the quality of the sensory input will result in less efficient cognitive functioning.
- 10:20 a.m. **Dr. Jennifer Ryan,** Senior Scientist at Baycrest's Rotman Research Institute and psychology and psychiatry professor at the Univ. of Toronto, Canada <u>Title</u>: The intersection of memory and active vision in aging.



- 11:00 a.m. Dr. Antje Heinrich, Senior Lecturer, Div. of Human Communication, Development & Hearing; Cathie Marsh Inst. for Social Research, School of Social Sci., Univ. Manchester, UK <u>Title</u>: Practice Listening and Understanding Speech (PLUS): Two novel auditorycognitive training programs for hearing-impaired listeners.
- 11:40-11:50 DISCUSSION
- 11:50-1:00 p.m. Lunch (provided)

1 – 3 p.m. **Podium Presentations** Session Chairs: Kelly Harris, Victoria Sanchez

1:00 Abstract #25. Poor talker discrimination ability in adult cochlear implant users: the potential role of aging.

Terrin N. Tamati*# & Aaron C. Moberly. The Ohio State University, Columbus, OH, USA

1:15 Abstract #16. Relations between syllable constituent identification and sentence perception for 212 hearing-aid users with age-related hearing loss.

James D. Miller*# and Charles S. Watson Communication Disorders Technology, Inc., Bloomington, IN, USA

1:30 Abstract #19. Individual differences in corpus callosum structure mediate agegroup deficits in auditory spatial processing.

James W. Dias*#, Carolyn M. McClaskey, & Kelly C. Harris Medical University of South Carolina, Charleston, SC, USA

1:45 Abstract #21. Efficacy of audiological rehabilitation: a randomized controlled trial.

Magits S.¹*#, De Meyere L.¹, Boon E.², Dierckx A.², Verhaert N.^{1,2}, Francart T.¹, Wouters J.¹, van Wieringen A.¹

¹Department of Neurosciences, Res. Group Experimental ORL, KU Leuven, Leuven, Belgium ²Department of Otorhinolaryngology, Head and Neck Surgery, University Hospitals Leuven, Leuven, Belgium

2:00 Abstract #58. Therapeutic intervention against excitotoxicity & preservation of cochlear hair cells after noise-trauma induced hearing loss.

Reza Amanipour #1,3, Xiaoxia Zhu1,3, Guillaume Duvey 2, Sylvain Celanire 2, Joseph P. Walton1,3,4, Robert D. Frisina*1,3,4

1 Medical Engineering Dept., Univ. South Florida, Tampa, FL, USA

2 Pragma Therapeutics, Cedex, France

3 Global Center for Hearing & Speech Res., University of South Florida, Tampa, FL, USA

4 Communication Sciences & Disorders Dept., University of South Florida, Tampa, FL, USA



2:15 Abstract #53. The Interface of Sensory, Motor and Cognitive Aging: Baseline Data from the CLSA.

Paul Mick *#, University of Saskatchewan, Canada

Kathleen Pichora-Fuller, University of Toronto and Simon Fraser University, Toronto, Canada Jennifer Campos, University Health Network, Toronto, Canada

Walter Wittich, University of Montreal, Montreal, Canada

Natalie Phillips, Concordia University, Canada

2:30 Abstract #55. Reliability of audiometric assessment in adults with cognitive impairment.

McClannahan, K.*#1, Chiu, Y. 2, Sommers, M.1, Peelle, J.E. 3

1 Department of Psychological and Bran Sciences, Washington University, St. Louis, MO, USA

2 Communication Sciences and Disorders, St. Louis University, St. Louis, MO, USA

3 Department of Otolaryngology, Washington University Medical School, St. Louis, MO, USA

2:45 Abstract #49. Hearing aids provide clear benefit for elderly users –results from a large-scale study.

Nikolai Bisgaard*#1, Tobias Piechowiak 1, Jesper H. Schmidt 2, Sabina Houmøller 3, Anne Wolf 4,

1 GN Hearing as, Copenhagen, Denmark

2 Dept. of ORL Head and Neck Surgery and Audiology, Odense University Hospital, Institute of Clinical Research, University of Southern Denmark, Denmark

3 Department of Clinical Research, University of Southern Denmark, Odense, Denmark

4 Dept. Otolaryngology-Head & Neck Surg. & Audiol., Aalborg Univ. Hosp., Aalborg, Denmark

3:00 p.m. Break

3:30-6:00 p.m. POSTER SESSION- Same posters as Monday, Posters listed below

<u>Wednesday Nov. 6:</u> *Invited Session*: Aging Co-morbidities: Intersection of Age-linked Medical Conditions and Age-related Speech and Hearing Problems: Session Chairs: Karen Helfer, Sherri Smith

- 8:00 a.m. **Dr. Lois Travis**, Einhorn Professor of Cancer Research, Department of Medicine, and Professor of Medical & Molecular Genetics, Indiana Univ. School of Medicine, Indianapolis, IN, USA <u>Title</u>: Ototoxicity and Chemotherapy: Genetics and Phenotypic Comorbidity Analyses in Adult-Onset Cancer Survivors.
- 8:40 a.m. **Dr. Bamini Gopinath,** Associate Professor (Northern) and Principal Research Fellow Sensory Loss Epidemiology, Westmead Clinical School, The Westmead Inst. for Medical Research, Univ. of Sydney, Australia <u>Title</u>: Health and Social Outcomes Associated with Age-Related Hearing Loss.

9:20 a.m. Break



- 9:40 a.m. **Dr. Murray Grossman,** Professor of Neurology, School of Medicine, Univ. of Pennsylvania, Philadelphia, PA, USA <u>Title</u>: Automated Acoustic and Lexical-Semantic Analysis of Digitized Speech Samples in Aging and Neurodegenerative Disease.
- 10:20 a.m. **Dr. Natalie Phillips,** Professor, Dept. Psychology, Centre for Research in Human Development and the Centre for Research on Brain, Language, and Music, Concordia Univ., Montreal, Canada <u>Title</u>: Sensory function, cognition, and brain anatomy in older adults with, or at risk for dementia.
- 11:00 a.m. **Dr. Sara Mamo,** Assistant Professor of Communication Disorders, Public Health and Health Sciences, University of Massachusetts- Amherst, MA, USA <u>Title</u>: The interactions between and combined effects of age-related hearing loss and dementia.
- 11:40 a.m. DISCUSSION.
- 11:55 a.m. **Adjourn**



POSTERS (displayed on Monday and Tuesday) - #Presenting Author; *Submitting Author

Abstract #1.

Effects of listener age, talker accent, and semantic context on lexical access. Rebecca E. Bieber*#, Christian Brodbeck, Vera Yevsukov, and Samira Anderson.

University of Maryland, College Park, MD, USA

Abstract #2.

Benefits of a Time-Expansion Training Protocol for Recognition of Non-Native Speech by Older Listeners.

Anna R Tinnemore*#, Rebecca E Bieber, Sandra Gordon-Salant. Department of Hearing and Speech Sciences, University of Maryland, College Park, MD, USA

Abstract #3.

Effects of noise type on speech quality ratings in older adults with hearing loss.

Melinda C. Anderson* University of Colorado School of Medicine, CO, USA

Kathryn H. Arehart#, University of Colorado Boulder, CO, USA

SongHui Chon, Belmont University, USA

Lewis O. Harvey, Jr., James M. Kates, Elizabeth B. McNichols, Emily Lundberg, University of Colorado Boulder, CO, USA

Pamela Souza, Varsha H.Rallapalli, Northwestern University, Evanston, IL, USA

Abstract #4.

Comparing performance on a speech-in-noise task among personal sound amplification products.

Lincoln Dunn#, Karen S. Helfer*, Sara Mamo, Michael Clauss. Univ. Massachusetts, Amherst, MA, USA

Abstract #5.

Localization Comparison Using Traditional Hearing Aids and Personal Sound Amplification Products.

Nirmal Kumar Srinivasan*#,1, Nicholas Reed 2,3, Frank Lin 2,3, Peggy Korczak1, Breanna Collins1, Tiffany Connatser1, and Christina Downs1.

1 Department Speech-Language Pathology & Audiology, Towson University, Towson, MD, USA

2 Department Otolaryngology, Johns Hopkins University School of Med., Baltimore, MD, USA

3 Center on Aging and Health, Johns Hopkins University, Baltimore, MD, USA

Abstract #7.

Tolerance to Cross-modal Asynchronies in Early Auditory Processing of Speech Declines in Older Adults.

Alexandra Jesse*#, Elina Kaplan, Department of Psychological and Brain Sciences, University of Massachusetts, Amherst, MA, USA

Abstract #8.

How Do Spoken Sentence Predictability and Cognitive Load Affect Cognitive Spare Capacity in Elderly Adults?

Cynthia R. Hunter*#1, David B. Pisoni 2, & Larry E. Humes 3

1 Speech Perception, Cognition, and Hearing Laboratory, Univ. Kansas, Lawrence, KS, USA



2 Speech Research Laboratory, Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, USA

3 Audiological Research Laboratory, Department of Speech and Hearing Sciences, Indiana University, Bloomington, IN, USA

Abstract #9.

The Quick Repeat-Recall Test (Quick-RRT): An integrative and clinically-oriented assessment of realistic speech-in-noise communication.

Christopher Slugocki 1*#, Francis Kuk 1, Petri Korhonen 1, & Neal Ruperto 1 1Widex Office of Research in Clinical Amplification (WidexORCA-USA)

Abstract #11.

Assessing the Time Course of Perceptual Learning with Pulse Rate Discrimination Training in Younger and Older Adults.

Lindsay A. DeVries, Alyson Schapira, Samira Anderson, Matthew J. Goupell, Ed Smith, Sandra Gordon-Salant.

University of Maryland, College Park, MD, USA

Abstract #12.

Logical and Auditory Inference Making: Performance in the HINT in normally-hearing and hearing-impaired listeners.

Victoria Stenbäck*#1,2, Erik Marsja 1,2, Henrik Danielsson 1,2, Jerker Rönnberg 1,2

- (1) Disability Research Division, Linköping, Sweden
- (2) Department of Behavioural Sciences and Learning, Linköping University, Sweden

Abstract #13.

Examining how Cognitive Functioning, Aging, and Hearing Loss, Affect Speech-in-Noise Performance.

Erik Marsja*#1,2, Henrik Danielsson1,2, Victoria Stenbäck1,2, & Jerker Rönnberg1,2

(1) Disability Research Division, Linköping, Sweden

(2) Department of Behavioural Sciences and Learning, Linköping University, Sweden

Abstract #14.

Does working memory mediate self-reported difficulties in noise for older listeners? Katie Brow,*#Lindsay A. DeVries, Sandra Gordon-Salant University of Maryland, College Park, MD, USA

Abstract #15.

The Contribution of Personality Traits to Hearing Handicap in Older Adults.

Kate McClannahan*# and Mitchell Sommers

Department of Psychological and Brain Sciences, Washington University, St. Louis, MO, USA

Abstract #17.

The association between auditory function and serum aldosterone levels in older age.

Jitpakorn Pichaitanaporn*#, Taylor Traficant, David A. Eddins, Ann C. Eddins Dept. of Communication Sciences & Disorders, University of South Florida, Tampa, FL, USA



Abstract #18.

EEG Frequency Measures During Effortful Listening.

David B.Ryan*#.1, Mark A. Eckert 2, Eric W. Sellers 3, Kim S. Schairer 1, Sherri L. Smith 4

1. Hearing & Balance Res. Prog., James H. Quillen VA Medical Ctr, Mountain Home TN, USA

- 2. Medical University of South Carolina, Charleston, SC, USA
- 3. East Tennessee State University, Johnson City TN, USA
- 4. Duke University School of Medicine, Durham, NC, USA

Abstract #20.

Processing temporal cues for word identification in adult cochlear-implant users: Effects of aging and context.

Zilong Xie*#, Samira Anderson, Sandra Gordon-Salant and Matthew J. Goupell Department of Hearing and Speech Sciences, University of Maryland, College Park, MD, USA

Abstract #22.

How effective are speech adaptations? A closer look at the effects of elderspeak.

Raheleh Saryazdi*#, Tamara Mostarac, Craig G. Chambers University of Toronto, Toronto, ON, Canada

Abstract #26.

The combined predictive value of multiple cognitive abilities for speech-in-noise perception by older adults.

Antje Heinrich1,3*# and Sarah Knight 2,3

- 1 Manchester Centre for Audiology and Deafness (ManCAD), University of Manchester, UK
- 2 Speech, Hearing & Phonetic Sciences, University College London, UK
- 3 MRC Institute of Hearing Research, University of Nottingham, UK

Abstract #28.

Inhibition of Estrogen Modulates Autophagic Processes and Auditory Function in Aging Female CBA/CaJ Mice.

XiaoXia Zhu 1,3, Bo Ding 1,3, Mckenzie Watson3, Tanika Williamson1,3, Robert D. Frisina1,2,3 1 Department of Medical Engineering, College of Engineering and Morsani College of Medicine, University of South Florida, Tampa, FL, USA

2 Department of Communication Sciences and Disorders, College of Behavioral & Community Sciences, University of South Florida, Tampa, FL, USA

3 Global Center for Hearing and Speech Research, Univ. of South Florida, Tampa, FL, USA

Abstract #29.

Listening effort discounting.

Drew J. McLaughlin*#, 1; Jonathan E. Peelle 2

1 Department of Psychological & Brain Sciences, Washington University, St. Louis, MO, USA 2 Department of Otolaryngology, Washington University, St. Louis, MO, USA

Abstract #30.

Signal processing to ease listening effort for persons with profound hearing loss.

Åsa C Skagerstrand*#

Audiological Research Centre, Örebro University hospital, SIDR, Swedish Institute of Disability Research, Sweden



Abstract #31.

Age effects on timing perception of altered sentence rhythms.

DylanV.Pearson1*#, Yi Shen1, J. Devin McAuley 2, Gary Kidd 1

1 Speech & Hearing Sciences, Indiana University -Bloomington, Bloomington , IN, USA

2 Department of Psychology, Michigan State University, East Lansing, MI, USA

Abstract #32.

Does increasing vocal loudness affect hearing perception in persons with Parkinson's Disease.

Caroline Menezes*# and Lori Pakulski University of Toledo, Toledo, OH, USA

Abstract #33.

17β -estradiol Blocks Stress-Induced Apoptosis through Autophagy Enhancement for Cochlear Hair Cells.

Bo Ding*#,2,3, XiaoXia Zhu 2,3, Mckenzie Watson 3, Robert D. Frisina1,2,3

1 Department of Communication Sciences and Disorders, College of Behavioral & Community Sciences, University of South Florida, Tampa, FL, USA

2 Dept. Medical Engineering, College of Engineering, University South Florida, Tampa, FL, USA 3 Global Center for Hearing & Speech Research, University of South Florida, Tampa, FL, USA

Abstract #34.

Individualized estimation of spectral weighting during sentence recognition in noise among normal-hearing and hearing-impaired listeners.

Yi Shen*#, Donghyeon Yun, and Yi Liu

Department of Speech and Hearing Sciences, Indiana University, Bloomington, IN, USA

Abstract #35.

Beam Steering for A Speaker Tracking-Based First-Order Differential Microphone Array. Ali Sarafnia, M.O. Ahmad, M.N.S. Swamy

Department of Electrical and Computer Engineering, Concordia University, Montreal, Canada

Abstract #38.

The relationship between the perception of spectral information and the effects of dynamic pitch on older individuals' speech recognition in noise.

Jing Shen*#

Department of Speech Language and Hearing Sciences, Western Michigan University, MI, USA

Abstract #39.

The effect of aging on the electrically evoked compound action potential.

Bruna S. Mussoi,1*#, & Carolyn J. Brown, 2

1 Kent State University, Department of Speech Pathology and Audiology, Kent, Ohio, USA 2 University of Iowa, Department of Communication Sciences and Disorders / Department of Otolaryngology – Head and Neck Surgery, Iowa City, Iowa, USA



Abstract #41.

Peripheral versus central age-related temporal processing deficits: Insights from cochlear-implant users.

Matthew J. Goupell, Maureen J. Shader, Samira Anderson, Sandra Gordon-Salant University of Maryland, College Park, MD, USA

Abstract #42.

Can the diffuseness of sound sources alter speech perception in young and older adults?

Meital Avivi-Reich#*1, #Rupinder K.Sran 2, and Bruce A. Schneider 2

1 Communication Arts, Sciences, and Disorders, Brooklyn College of City University of NewYork (CUNY), NY, USA

2 Psychology Department, University of Toronto, Mississauga, ON, Canada

Abstract #43.

The cardiac pre-ejection period as a measure of listening effort during a speech-in-noise task.

Bethany J. Plain*#a,c, Michael Richter b, Adriana A. Zekvelda d,e, Thomas Lunnerd f, Tanveer Bhuiyan c, Sophia E. Kramer a

a Amsterdam UMC, Vrije Univ. Amsterdam, Otolaryngology-Head & Neck Surgery, Ear & Hearing, Amsterdam Public Health Res. Inst., DeBoelelaan 1117, Amsterdam, the Netherlands b School of Natural Sciences and Psychology, Liverpool John Moores University, Liverpool, UK c Eriksholm Research Centre, Snekkersten, Denmark

d Department of Behavioural Sciences and Learning, Linköping University, Linköping, Sweden e Linnaeus Centre HEAD, The Swedish Institute for Disability Research, Linköping and Orebro Universities, Linköping, Sweden

f Department of Health Technology, Technical University of Denmark, Denmark

Abstract #44.

Age-related deficits in Spanish-accented speech understanding for cochlear-implant listeners are partially overcome with audiovisual presentation.

Emily Waddington, Brittany Jaekel, Anna Tinnemore, Sandra Gordon-Salant, and Matthew J. Goupell

University of Maryland, College Park, MD, USA

Abstract #45.

Age-related changes in the auditory steady-state response measured across the lifespan of CBA/CaJ mice.

Kendra E. Stebbins*# 1,3, Joseph P. Walton 1,2,3

1 Department of Communication Sciences and Disorders, College of Behavioral & Community Sciences, University of South Florida, Tampa, FL, USA

2 Dept. Medical Engineering, College of Engineering, University South Florida, Tampa, FL, USA

3 Global Center for Hearing & Speech Research, University of South Florida, Tampa, FL, USA



Abstract #46.

Suboptimal hearing aid gain negatively impacts perceptual and cognitive processing of speech.

Elaine Hoi Ning Ng1,2*#, Josefine Juul Jensen1, Michael Schulte 3, and Dorothea Wendt 4,5 1 Oticon A/S, Smørum, Denmark.

2 Department of Behavioural Sciences and Learning, Linnaeus Centre HEAD, Swedish Institute for Disability Research, Linköping University, Linköping, Sweden

3 Hörzentrum Oldenburg GmbH, Germany

4 Eriksholm Research Centre, Oticon A/S, Snekkersten, Denmark

5 Hearing Systems, Department of Health Technology, Tech. University of Denmark, Denmark

Abstract #48.

Lower General Cognitive Function is Related to Elevated Low-Frequency Thresholds and Poorer Dichotic Listening in Older Adults.

Jacqueline M. Eberhard#, Lois J. Matthews, Kenneth I. Vaden Jr., Judy R. Dubno, Mark A. Eckert*

Department of Otolaryngology – Head and Neck Surgery, Medical University of South Carolina, 135 Rutledge Avenue, MSC 550, Charleston, SC USA

Abstract #50.

Modelling hearing aid coverage across the world.

Nikolai Bisgaard*#, GN Hearing as, Copenhagen, Denmark

Abstract #51.

Trends in prevalence of hearing loss and benefits of hearing aid use as expressed in EurTrak surveys from 2009 to 2018.

Nikolai Bisgaard*#1, Stefan Ruf 2 1 GN Hearing as, Copenhagen, Denmark 2 Anovum, Zurich, Switzerland

Abstract #54.

The effect of aging on Mandarin speech recognition in multi-talker babble.

Can Xu *# 1, Hongwei Ding 2, Yuxia Wang 2, Chang Liu 1 1 Dept. of Communication Sciences & Disorders, Univ. Texas-Austin, Austin, TX, USA 2 School of Foreign Languages, Shanghai Jiao Tong Univ., Shanghai, China

Abstract #57.

Interactions between Speech Recognition in Noise, Mobility and Risk of Falling in Older Adults.

Putter-Katz H.*#, Horev N., Bichman A. Been E.

Department of Communication Sciences and Disorders, Faculty of Health Professions, Ono Academic College, Kiryat Ono, Israel

Abstract #59.

Predictors for performance in HINT: Objective and subjective outcome measures.

Victoria Stenbäck*#1,2, Erik Marsja 1,2, Henrik Danielsson 1,2, Jerker Rönnberg 1,2

1 Disability Research Division, Linköping, Sweden

2 Department of Behavioural Sciences and Learning, Linköping University, Sweden



Abstract #56.

Speech-based individualized signal processing strategy (ISPS) for hearing aid fitting. Anusha Yellamsetty*#, David A. Eddins*

Dept. of Communication Sciences and Disorders, University of South Florida, Tampa, FL, USA Global Center for Hearing & Speech Research, University of South Florida, Tampa, FL, USA

Abstract #62.

Aldosterone upregulates NKCC1 membrane proteins and voltage-gated potassium currents as a modulator.

Parveen Bazard#, Bo Ding, Harish K. Chittam, Xiaoxia Zhu, Venkat R. Bhethanabotla, Joseph P. Walton, Robert D. Frisina*

Medical Engineering, Chemical & Biological, and Communication Sciences & Disorders Depts., Global Center for Hearing & Speech Research, Univ. South Florida, Tampa, FL, USA

Abstract #64.

The role of $TNF\alpha$ in aging processes of mouse inner ear cells.

Cody Spence#, Bo Ding, Xiaoxia Zhu, Mark A. Bauer, Robert D. Frisina* Medical Engineering Dept., Global Center for Hearing & Speech Research, Morsani College of Medicine, College of Engineering, University of South Florida, Tampa, FL, USA

Abstract #66.

Temporal Rate Discrimination Training Effects on Perception and Neural Encoding in Younger and Older Listeners.

Samira Anderson*#, Lindsay A. DeVries, Matthew J. Goupell, Ed Smith, Sandra Gordon-Salant University of Maryland, College Park, MD, 20742