## **BIOGRAPHICAL SKETCH**

NAME: Tharpe, Anne Marie

eRA COMMONS USER NAME: **Tharpeam** 

POSITION TITLE: Chair, Department of Hearing and Speech Sciences

Professor of Hearing and Speech Sciences

**Professor of Otolaryngology** 

Associate Director, Vanderbilt Bill Wilkerson Center

#### **EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE	Date	FIELD OF STUDY
Southwestern at Memphis, Memphis, TN		1975	General Studies
University of Arizona	B.S.	1979	Hearing & Sp Sciences
Vanderbilt University, Nashville, TN	M.S.	1980	Hearing Science
Vanderbilt University, Nashville, TN	Ph.D.	1994	Hearing Science

#### A. Personal Statement

I have a 40 year history of doing research and/or working clinically with children who have hearing loss. The primary research emphasis in my laboratory has been in furthering our understanding of the developmental impact of hearing loss on young children. This work has been done by examining questions of behavioral indices of attention, communication, and academic outcomes. More recently, work has focused on the short- and longterm impact of hearing technology interventions on communication in school and at home by children with hearing loss and children with autism. I have served as PI, co-PI, or co-Investigator on numerous NIH, DOE, and MCHB research grants. Moreover, I have served as Project Director or PI of training grants continuously for over 25 years. As chair of a large department in the School of Medicine, I have oversight for clinical programs that provide approximately 85,000 patient visits annually across 14 clinics, plus the provision of all newborn hearing screenings in the well-baby and NICU nurseries, and adult acute care services in Vanderbilt University Medical Center.

B. Positions and Honors					
	1981 82	Vanderbilt University School of Medicine, Nashville, Tennessee			
		Research Associate in Audiology			
	1982 - 84	King Fahad Hospital, Riyadh, Kingdom of Saudi Arabia Chief of Audiology Services			
	1984 - 94	Bill Wilkerson Hearing and Speech Center, Nashville, Tennessee Staff Audiologist			
	1986 – 95	Vanderbilt University School of Medicine, Nashville, Tennessee Clinical Instructor			
	1995 - 96	Vanderbilt University School of Medicine, Nashville, Tennessee Assistant Professor			
	1994 - 96	Louisiana State University Medical Center, New Orleans, Louisiana Assistant Professor			
	1996 - 2002	Vanderbilt University School of Medicine, Nashville, Tennessee Assistant Professor			
	2002- 06	Vanderbilt University School of Medicine, Nashville, Tennessee Associate Professor			
	2006 – preser	nt Vanderbilt University School of Medicine, Nashville, Tennessee Professor, Dept. Hearing & Speech Sciences			
	2009 – present Vanderbilt University School of Medicine, Nashville, Tennessee				
Chair, Department of Hearing and Speech Sciences,					
	Professor, Dept. of Otolaryngology				

## Other Experience and Professional Memberships (Selected)

1978 – present Tennessee Speech and Hearing Association/TAASLP

Membership Chairperson, 1981 - 82

Chairperson, Committee on Audiology, 1982 - 83

Program Committee 1987 - 88, 1988 - 89

1989 – present American Academy of Audiology

Chair, Pediatric Audiology Session, 1992 Chair, Pediatric Audiology Session, 1993 Member, Student Research Forum Committee, 1994 - 95

Member, Publications Committee, 1994 - 96

Member, Pediatric Hearing Aid Task Force, 2000 - 01 Member, Featured Session Committee, 2000 - 01 Member, Pediatric Assessment Workgroup, 2005 - 09 Member, Convention Program Committee, 2006 - 07 Member, Pediatric Hearing Aid Task Force, 2009 - 10

Member, Advisory Board to Student Academy of Audiology, 2009 -11

1981 - present American Speech Language Hearing Association,

Sub Committee Chair, Ad Hoc Committee on Auditory Integration and Facilitated

Communication, 1993 94

Faculty, Audiologic Assessment and Intervention Interdisciplinary Preschool Services

Training Project, 1994 96

Member, Auditory Assessment Panel, 1995-96

Member, Conference Sub Committee, Auditory Intervention: Communication Strategies,

Cochlear Implants, and Assistive Devices, 1996 97

Member, Auditory Assessment in Children Working Group, 1999-2001

Chair, AIT Committee 1999-2003

Chair, Behavioral Assessment Section, 2002 ASHA Convention, Atlanta, GA., 2001-02

Member, Committee on Infant Hearing, 2001-2004 Member, Continuing Education Board, 2004-2010

Member, Hearing Loss in Children: Rehabilitation and Education Issues, ASHA

Convention, 2004

Member, Knowledge and Skills for Auditory Assessment in Children Working Group,

2005-2006

Member, Knowledge and Skills for Counseling Families with Children with Hearing Loss

Working Group, 2006

Chair, EHDI Professional Audiology Practice Standard, 2008-2010

Member, Hearing Assessment in Infants: Evidence-Based Systematic Review, 2008-

present

Member, Infant Hearing: Screening and Assessment Sub-Committee, 2012 ASHA

Convention, Atlanta, GA., 2012

Joint Committee on Infant Hearing, invited panel member for Quality Infant Audiology

Services

2005 Centers for Disease Control & Prevention, invited steering committee member for Task

Force on Minimal Hearing Loss in Children

2008 Centers for Disease Control & Prevention, Invited Discussant, Accountability and EHDI

Systems: Achieving Successful Outcomes: Strategies for Overcoming Obstacles,

Breckenridge CO, July 2008

2008-2009 Member, International Advisory Panel 7th Asia-Pacific Symposium on Cochlear Implants

and Related Sciences

2012 – present National Center for Hearing Assessment and Management

Member, Tele-Audiology Learning Community

Review Chair, EHDI Workforce Issues Track, 2011-12; 2012-13 Chair, Student Involvement Committee, 2011-12; 2012-13

Chair, Student Involvement Committee, 2012-13

2013 – present Member, American Telemedicine Association

2019 – present Member, Board of Trustees, American Speech-Language-Hearing Association

Foundation

**Honors** 

1999 American Speech, Hearing, Language Association's Editor's Award

"Auditory Integration Training: The Magical Mystery Cure", Language Speech & Hearing

Services in the Schools

2000 American Speech, Hearing, Language Association's Research in Higher Education

Mentoring Program

2002 American Speech, Hearing, Language Association's Editor's Award

"A Longitudinal Investigation of Infant Auditory Sensitivity", American Journal of

Audiology, 10(2): 104-112

Fellow, American Speech, Hearing, Language Association

2005 Honorary Visiting Expert, Ministry of Health – Singapore 2007-08 National Advisor, National Association of Future Doctors of Audiology American Speech, Hearing, Language Association's Editors' Award 2007 "Directional Benefit in Simulated Classroom Environments", American Journal of Audiology 16(2): 130-144 2009 Judith S. Gravel Distinguished Alumnus Award, Vanderbilt University, Department of Hearing & Speech Sciences 2016 American Academy of Audiology, Inaugural Marion Downs Award for Excellence in Pediatric Audiology 2017 Distinguished Alumnus Award, University of Arizona, Department of Speech, Language, and Hearing Sciences. Association Honors, American Speech, Hearing, Language Association 2019

### C. Contributions to Science

- 1. Pioneered work in minimal and unilateral hearing loss in children. My early work was focused on the impact of minimal degrees of hearing loss on psychoeducational development in school-age children. Prior to the initiation of these studies, children with minimal degrees of hearing loss, including unilateral loss, were commonly believed to experience little if any academic or behavioral deficits. This work led to multiple publications with collaborators on educational outcomes, teacher- and parent-rated behaviors, auditory performance, and listening effort and fatigue in children with unilateral and minimal bilateral hearing losses. I served as primary or co-investigator in all of these studies.
  - a. Bess FH, & Tharpe AM (1984). *Unilateral Hearing Impairment in Children*, Pediatrics, Aug;74:2:206-16. PMID: 6462820
  - b. Hicks CB, & Tharpe AM (2002). Listening Effort and Fatigue in School Age Children With and Without Hearing Loss. Journal of Speech, Hearing, Language Research, Jun;45(3), 573-584. PMID12069009
  - c. Picou E, Davis HK, Lewis D, Tharpe AM (2020). Contralateral Routing of Signals Systems Can Improve Speech Recognition and Comprehension in Dynamic Classrooms, Journal of Speech, Language, Hearing Research.
  - d. Picou E, Davis H, Tharpe AM (2020). Considerations for Choosing Microphone Technologies for Students with Limited Useable Hearing Unilaterally. Language Speech and Hearing Services in the Schools, 51(1):74-83. doi.org/10.1044/2019 LSHSS-OCHL-19-0018.
- 2. **Detailed the development of auditory sensitivity in infants.** Another focus of research has been the development of behavioral auditory sensitivity in infants. This work emphasized behavioral responsiveness of infants and resulted in one of the only longitudinal studies in this area. I served as primary or co-investigator in the following studies.
  - a. Hicks CB, Tharpe AM, & Ashmead DH (2000). Behavioral Auditory Assessment of Young Infants: Methodological Limitations or Natural Lack of Auditory Responsiveness? American Journal of Audiology, Dec;9(2): 124-130. PMID: 11200188
  - b. Tharpe, AM, & Ashmead, DH (2001). A Longitudinal Investigation of Infant Auditory Sensitivity. American Journal of Audiology, Dec;10(2): 104-112. PMID: 11808718
- 3. **Described pediatric hearing assessment and intervention procedures for clinical use.** With the onset of universal newborn hearing screening in the 1990s, there was a need for efficient assessments of hearing and techniques to fit hearing technologies in infants with hearing loss. With multiple collaborators, I documented the effectiveness of various behavioral test techniques and hearing technology fitting procedures in infants. I served as primary or senior investigator in the following studies.
  - a. Tharpe AM, Sladen D, Huta H, & Rothpletz AM (2001). *Practical Considerations of Real-Ear-to-Coupler Difference Measures in Infants*. American Journal of Audiology, Jun;10(1): 41-49. PMID: 11501896
  - b. Bagatto MP, Seewald RS, Scollie S, & Tharpe AM (2006). *Evaluation of a probe-tube insertion technique for measuring the Real-Ear-to-Coupler Difference (RECD) in Young Infants*, Journal of the American Academy of Audiology. 2006 Sep;17(8):573-81. PMID: 16999252
  - c. Benítez-Barrera, C.R., Thompson, E.C., Angley, G.P., Tharpe, A.M. (2019). *Remote Microphone System Use at Home: Impact on Child-Directed Speech*. Journal of Speech, Hearing, Language Research, 62(6), 2002-2008, doi: 10.1044/2019 JSLHR-H-18-0325.
  - d. Thompson E, Benitez-Barrera CR, Angley GP, Woynaroski T, Tharpe AM (2020). Remote Microphone System Use in the Homes of Children with Hearing Loss: Impact on Child Responsiveness and Communicative Engagement, Journal of Speech, Language, Hearing Research, 63, 633-642, doi.org/10.1044/2019\_JSLHR-19-00197.

- 4. **Detailed audiologic assessment and management for children with hearing loss and additional disabilities.** Approximately 35-40% of children with hearing loss have additional disabilities. As such, it is imperative that audiologists have an understanding of the auditory characteristics of these children and necessary variations in intervention. The following publications represent my work with colleagues in this area of research.
  - a. Tharpe AM, Fino-Szumski MS, & Bess FH (2001). Survey of Hearing Aid Fitting Practices for Children with Multiple Impairments. *American Journal of Audiology*, Jun;10(1): 32-40. PMID: 11501895
  - b. Tharpe AM, Ashmead DH, Ricketts TA, Rothpletz AM, & Wall R (2002). *Optimization of Amplification for Deaf-Blind Children*, In: Seewald, RC & Gravel JS (Eds.), A Sound Foundation Through Early Amplification 2001: Proceedings of the Second International Conference, Great Britain: St. Edmundsbury Press.
  - c. Tharpe AM, Bess FH, Sladen D, Schissel H, Couch S, & Schery T (2006). *Auditory Characteristics of Children with Autism*, Ear & Hearing Aug;27(4), 430-431. PMID: 16825892
  - d. Porter H, Grantham DW, Ashmead D, Tharpe AM (2014). *Binaural Masking Release in Children with Down Syndrome. Ear and Hearing*. Jul-Aug;35(4):e134-42. doi: 10.1097/AUD.00000000000000000. PMID: 24535557. PMCID: n/a

## 5. Contributed to graduate education, mentoring, and professional leadership.

In addition to the scholarly activities described above, I have played an instrumental role in the clinical and research training of professionals entering careers in communication sciences. I have mentored a number of pre- and post-doctoral fellows, have served as Project Director for numerous training grants including those from the Maternal Child Health Bureau, Association of University Centers on Disabilities, U.S. Department of Education, and private foundations.

# D. Research Support

Current

NIH R01 2019-2024

Clinical Factors in Aminoglycoside-Induced Ototoxicity.

The goal of this study is to observe the clinical effect of cumulative gentamicin dosing and confirmed or suspected sepsis that are strongly associated with increased hearing loss in preclinical models.

Role: Site PI

Sonova 2019-2020

Cortical Auditory Evoked Potentials of Children with Normal Hearing Following a Short Auditory Training with a Remote Microphone System

Role: PI

Sonova

Phenotyping Unilateral Hearing Loss: An Exploratory Study 2019-2020

Role: PI

Completed (most recent three years)

Sonova 2018-2020

Technology Options for Children with Unilateral Hearing Loss II

Role: Co-PI

Phonak, AG 2018-2020

Remote microphone system (RMS) Use in Children with Autism Spectrum Disorder

Role: Co-PI

Phonak, AG 2018-2020

Auditory Processing During Sleep in Young Children

Role: PI