

CURRICULUM VITAE

Name: XIAO-MING SUN
Address: 1845 Fairmount St., Wichita, KS 67260-0075
Tel: (316)978-6160
Fax: (316)978-3291
E-mail: xiao-ming.sun@wichita.edu

I. EDUCATION

Postdoctoral Fellowship (1999–2000), Auditory Neurophysiology, [Kresge Hearing Research Institute, University of Michigan Medical School](#), Ann Arbor, MI. (Mentor: Dr. D.F. Dolan).

Postdoctoral Fellowship (1998–1999), Auditory Physiology, [Department of Surgery/Otolaryngology, University of Connecticut Health Center](#), Farmington, CT. (Mentor: Dr. D.O. Kim).

PhD (1998), [Communication Science/Speech, Language & Hearing, University of Connecticut](#), Storrs, CT. Thesis: “Distortion product otoacoustic emissions in mouse models of early-onset and late-onset presbycusis”. (Advisors: Drs. D.O. Kim and K.J. Randolph).

MA (1996), Communication Science/Speech, Language & Hearing, [University of Connecticut](#), Storrs, CT. Thesis: “Optimal stimulus level and level difference for the distortion product otoacoustic emission test of sensorineural hearing loss”. (Advisors: Drs. D.O. Kim and K.J. Randolph).

BMed (1982), Medicine; **MMed** (1987), Otolaryngology, [Hunan University of Chinese Medicine](#), Changsha, P.R. China. (*MD equivalent in the USA, Evaluated by Educational Credential Evaluators, Inc.). Thesis: “Eustachian tube function in patients with otitis media with effusion: Application of sonotubometry”. (Advisors: Drs. J. Chen and J. Tan).

II. ACADEMIC AND PROFESSIONAL APPOINTMENTS

Professor, Associate Professor, Assistant Professor (2004–present) [Department of Communication Sciences & Disorders, Wichita State University](#), Wichita, KS.

Assistant Professor (2000–2004,) [Department of Speech Pathology & Audiology, University of South Alabama](#), Mobile, AL.

Research Assistant (1993–1998), Department of Surgery/Otolaryngology, [University of Connecticut Health Center](#), Farmington, CT.

President (1990–1992), [Chu-Tian Medical Training School](#) (affiliated with Hunan Association of Junior

Medical Professionals), Changsha, Hunan, P.R. China. (*Training physicians for rural regions of China)

Lecturer (1989–1992), Department of Otolaryngology, The First Clinical Faculty of Hunan University of Chinese Medicine, Changsha, Hunan, P.R. China. (*Assistant Professor equivalent in the USA)

Staff Physician (1987–1989), **Physician in Charge** (1990–1992), **ENT Department**, The First Hospital of Hunan University of Chinese Medicine, Changsha, Hunan, P.R. China.

III. TEACHING AND ADVISING EXPERIENCE

Dissertation/Theses Committees

Chair (2016–2022) PhD Advisory/Dissertation Committee ([Jingjiao Jiang](#)), Wichita State Univ.

Chair (2009–2011), PhD Advisory Committee (Kayla R. Eldridge), Wichita State Univ.

Chair (2008–2010), Member (2006–2008), PhD Advisory/Dissertation Committee ([Mark D. Shaver](#)),
Wichita State Univ..

Member (2002–2004), PhD Advisory Committee (Fawen Zhang), Univ. of South Alabama.

Member (2001–2003), PhD Advisory Committee (Elizabeth Adams), Univ. of South Alabama.

Member (2000–2003), PhD Advisory/Dissertation Committee (Kathy Duncan), Univ. of South Alabama.

Supervision of Student Research

1. Edie M. Reese (2023–2024), *AuD Research Project*, “Simultaneous Binaural Measurements of Transient Evoked Otoacoustic Emissions in Adults”. [IRB# 5596]
2. Alice Keithly (2022–2023), *AuD Research Project*, “A review of contralateral masking in auditory brainstem tests of unilateral or asymmetric hearing loss”.
3. Hannah DeFord (2021–2022), *AuD Research Project*, “Effects of contralateral sounds on auditory evoked measurements” [IRB# 5101]
4. Jingjiao Jiang (2020–2022), *PhD Dissertation Project*, “Comparison of wideband and single-frequency acoustic reflex growth function in normal-hearing young adults”. [IRB #4955]
(2018–2019), *PhD Pre-Dissertation Research Project*, “Ipsilateral wideband acoustic reflex and single-frequency acoustic reflex thresholds in adults”. [IRB #4242]
5. Brigid Derby (2019–2020), *AuD Research Project*, “Response Criterion for Determining Ipsilateral Acoustic Reflex Thresholds Using a 1000 Hz Probe Tone”. [IRB #4550]
6. Devon Holt (2018–2019), *AuD Research Project*, “Contralateral wideband acoustic reflex and single-frequency acoustic reflex thresholds in adults”. [IRB #4242]
7. Bomina Kang (2016–2017), *AuD Research Project*, “Effects of positive middle-ear pressure on wideband acoustic immittance measurements”. [IRB #3772]

8. Adam Fakir (2016–2017), *AuD Research Project*, “The acceptable noise level test as a clinical tool for pre-fitting hearing aids”
9. Lauren Pitek (2016–2017), *AuD Research Project*, “A study on criterion for the determination of ipsilateral acoustic reflex thresholds”. [IRB #3772]
10. Rebecca Burdine (2015–2016), *AuD Research Project*, “Ipsilateral and contralateral wideband acoustic reflex thresholds in adults”. [IRB #3496]
11. Bailey Brown (2013–2014), *AuD Research Project*, “Ipsilateral wideband middle ear muscle reflex measurements: Test-retest reliability”. [IRB #3046]
12. Mitchell Frye (2013–2014), *AuD Research Project*, “Contralateral wideband middle ear muscle reflex measurements: Test-retest reliability”. [IRB #3046]
13. Junhua Bian (2013–2014), *AuD Research Project*, “Effects of air pressure change rate in the ear canal on 1000 Hz tympanometry”. [IRB #2924]
14. Laina Burdick (2012–2013), *AuD Research Project*, “Effects of tympanometric preconditioning on dynamic energy reflectance measurements”. [IRB #2747]
15. Carla Dominguez–Carazo (2012–2013), *AuD Research Project*, “A study on effects of preconditioning and negative middle ear pressure on tympanometry”. [IRB #2759]
16. Rachael Cavenee (2011–2012), *AuD Research Project*, “Effects of postural change on wideband energy reflectance measurements of the middle ear”. [IRB #2428]
17. April Slaven-McCaslin (2011–2012), *AuD Research Project*, “Prevalence of noise induced hearing loss in local Kansas police officers”. [IRB #2448]
18. Kayla Eldridge (2010–2011), *PhD Pre-Dissertation Research Project*, “Effects of negative middle-ear pressure on multiple frequency tympanometry”. [IRB #1907]
19. Holly Nguyen (2010–2011), *AuD Research Project*, “Simultaneous recording ABR and TEOAEs: A study of the stimulus level”. [IRB #2080]
20. Huyen Luong (2010–2011), *AuD Research Project*, “Effects of negative middle-ear pressure on ABRs: A preliminary study”. [IRB #2053]
21. Carly Sturm (2009–2010), *AuD Research Project*, “A preliminary study on simultaneous testing of ABR and TEOAEs”. [IRB #1756]
22. Nguyen-Kieu Nguyen (2009–2010), *AuD Research Project*, “Effects of negative middle-ear pressure on auditory steady state responses: A preliminary study”. [IRB #1624]
23. Ann Sellers (2009–2010), *AuD Research Project*, “A preliminary study of the relationship between audiology and deaf culture”.
24. Mark Shaver (2008–2010), [*PhD Dissertation Project*](#), “Wideband ER measurements: normative study and effects of negative and compensated middle ear pressures”. [IRB #1625]
(2006), *PhD Pre-Dissertation Research Project*, “Negative middle ear pressure and spontaneous otoacoustic emissions”. [IRB #????]
25. Jason Harader (2008–2009), *AuD Research Project*, “Tympanometric measures in human ears with negative middle-ear pressure”. [IRB #1437]

26. Mandi Popp (2006–2008), *AuD Research Project*, “A survey on the application of otoacoustic emission measures in newborn hearing screening program in the midwest”. [IRB Dec. 21, 2006]
27. Yori Kanekama (2006), *PhD Pre-dissertation Research Project*, “Efferent auditory system and hearing in noise”. (co-advisor, Dr. C. Liu)
28. Fawen Zhang (2002–2004), *PhD Pre-dissertation Research Project*, “Contralateral suppression of DPOAE fine structure”. (co-advisor, Dr. F. A. Boettcher)
29. Kathy Duncan (2002–2003), *PhD Dissertation Project*, “Aging, speech understanding in noise, and efferent suppression. (co-advisor, Dr. Nancy Aarts)
(2001–2002), *PhD Pre-dissertation Research Project*, “A comparison of speech-in-noise measures and contralateral otoacoustic emission suppression measures”. (co-advisor, Dr. N. Aarts)

Support for Students’ Work

Scholarship/Grants:

1. Edie M. Reese (AuD student)
[Kansas Speech-Language-Hearing Association](#), [Margaret Byrne Sarricks Student Scholarship](#) (for a poster presentation, 2024)
2. Alice Keithly (AuD student)
[WSU Graduate School](#), [Special Research Fellowship](#)–Student Travel (2024, \$400).
[Sertoma, Inc.](#), [Communicative Disorders Scholarship](#) (\$1000, 2022)
3. Jingjiao Jiang (PhD student)
[National Institutes of Health](#) via [American Auditory Society](#), [Resident and Graduate Student Mentored Research Travel Award](#) (\$1,000, The AAS Annual Meeting, 2022).
[WSU Graduate School](#), [Special Research Fellowship](#)–Student Travel (2021, \$399).
4. Devon Holt (AuD student)
[The American Academy of Audiology \(AAA\) Annual Conference](#), Selected nominee for the AAA Foundation’s James and Susan Jerger Awards for Excellence in Student Research (2019).
[WSU Student Government Association \(SGA\)](#), Funding for students travel (2019, \$560)
5. Rebecca Burdine (AuD student)
[National Institutes of Health](#) via [American Auditory Society](#), [Resident and Graduate Student Mentored Research Travel Award](#) (\$1,000, The AAS Annual Conference, 2017).
[WSU Student Government Association \(SGA\)](#), Funding for students travel (2017, \$225)
[WSU Graduate School](#), [Special Research Fellowship](#)–Student Travel (2017, \$400)
[Associated Audiologists, Inc.](#), Student Research Award, [KSHA](#) Annual Conference (2016, \$250).
6. Mitchell Frye (AuD student)
[Associated Audiologists, Inc.](#), Student Research Award, [KSHA](#) Annual Conference (2014, \$250).
[Washington University School of Medicine](#) (St. Louis, MO),

NIN (NIDCD) [T35 Short-Term Research Training Program](#) (Summer, 2014)

7. Junhua Bian (AuD student)

The [Alpha Eta](#) National Allied Health Honor Society Wichita State University Chapter,
Alpha Eta Student of the Month Award (2014).
WSU Student Government Association ([SGA](#)), Funding for students travel (2014, \$522.5)
WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2014, \$400).
WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2013, \$300).

8. Laina Burdick (AuD student):

The [Alpha Eta](#) National Allied Health Honor Society, [Excellence in Scholarship Award](#) (2014,
Special guests of the 2014 Alpha Eta Annual Meeting, Las Vegas, NV)
The [Alpha Eta](#) National Allied Health Honor Society Wichita State University Chapter,
Alpha Eta Student of the Month Award (2013).
Associated Audiologists, Inc., Student Research Award, [KSHA](#) Annual Conference (2013, \$250).
WSU Graduate School, [Ollie A. & J.O. Heskett Graduate Fellowship](#) (2013, \$2,500).
WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2013, \$400)
[Kansas Bioscience Organization](#) (Lenexa, KS),
[CGRS Biological Research Poster Presentation Award](#) (2013, \$500).

9. Carla Dominguez-Carazo (AuD student):

WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2013, \$400).

10. Rachael Cavenee (AuD student):

Associated Audiologists, Inc., Student Research Award, [KSHA](#) Annual Conference (2012, \$250).
WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2012, \$400).
WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2011, \$500)
American Speech-Language-Hearing Foundation, Graduate Student Scholarship (2011, not funded).
Starkey Laboratories, Inc., William F. Austin Scholarship (2011, not funded).

11. April Slaven-McCaslin (AuD student):

WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2012, \$400).
WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2011, \$500).

12. Teresa Lynn (AuD student):

WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2011, \$400).

13. Kayla Eldridge (Stone) (PhD student):

Associated Audiologists, Inc., Student Research Award, [KSHA](#) Annual Conference (2011, \$250).
WSU Graduate School, [Special Research Fellowship](#)–Student Travel (2011, \$400).
WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2010, \$300).
American Academy of Audiology Foundation, Roger Ruth Memorial Scholarship (2010, not funded)
Starkey Laboratories, Inc., William F Austin Scholarship (2010, not funded)

14. Huyen Luong (AuD student):

WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2010, \$300).

15. Carly Sturm (AuD student)

WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2009, \$600).

16. Mark Shaver (PhD student):

National Institutes of Health via [American Auditory Society](#), Resident and Graduate Student
Mentored Research Travel Award (The AAS Annual Conference, 2011).

[Starkey Laboratories, Inc.](#), Outstanding Student Clinician Scholarship (2009, \$1,000).

WSU Graduate School, Dora Wallace Hodgson Summer Research Award (2009, not funded).

WSU Graduate School, [Ollie A. & J.O. Heskett Graduate Fellowship](#) (2009, \$3,000).

WSU Graduate School, Dora Wallace Hodgson Outstanding Doctoral-Level Student Award
(2009, not funded).

National Institutes on Aging (NIA) selected attendee to the 2008 Grants Technical Assistance
Workshop (2008, funded).

American Speech-Language-Hearing Foundation, [Graduate Student Scholarship](#) (2006, \$4,000).

WSU Graduate School, Dora Wallace Hodgson Summer Research Award (2006, not funded).

WSU Graduate School, [Delano Maggard, Jr. Graduate Research Grant](#) (2006, \$250).

American Auditory Society 2007 Annual Meeting Travel Award (2006, not funded).

17. Amanda Popp (AuD student)

WSU Graduate School, Delano Maggard, Jr. Graduate Research Grants (2007, not funded).

18. Yori Kanekama (PhD student), [Kansas Speech-Language-Hearing Association](#), Margaret Byrne Sarricks
Student Scholarship (2006, not funded). (co-advisor, Dr. C. Liu)

19. Alisha Lambeth (Undergraduate student) [American Academy of Audiology](#) Summer Research Fellowship
(2003, not funded).

20. Kathy Duncan (PhD student) [American Speech-Language-Hearing Association](#) Annual Convention
Student Research Travel Award (2001, not funded).

Publications/Presentations: (for titles see the next section, “Refereed Publications” & “Presentations”)

1. Edie Reese (AuD) WSU [GRASP](#) 2024; [KSHA](#) 2024
2. Alice Keithly (AuD) WSU [GRASP](#) 2023; [AAA](#) 2024
3. Hannah DeFord (AuD) [AAA](#) 2023
4. Brigid Holmes (Derby) (AuD) WSU [GRASP](#) 2020; [AAA](#) 2021
5. Jingjiao Jiang (PhD) WSU [GRASP](#) 2019; [AAA](#) 2021; [AAS](#) 2021; [AAS](#) 2022
6. Devon Holt (AuD) [AAA](#) 2019; WSU [GRASP](#) 2019
7. Rebecca Burdine (AuD) [KSHA](#) 2016; [AAS](#) 2017; [AAA](#) 2017.
8. Mitchell Frye (AuD) [KSHA](#) 2014, [AAS](#) 2015.
9. Junhua Bian (AuD) [AAA](#) 2014; WSU [GRASP](#) 2014.
10. Carla Dominguez-Carazo (AuD): [AAA](#) 2013; *Int. J. Audiol.* (2015).
11. Laina M. Burdick (AuD): *J. Speech Lang. Hear. Res.* (2014);
[AAA](#) 2013; WSU [GRASP](#) 2013; KS [CGRS](#) 2013; [KSHA](#) 2013.

12. Rachael D. Cavenee (AuD): [AAA](#) 2012; [KSHA](#) 2012.
13. April D. Slaven-McCaslin (AuD): [AAA](#) 2012.
14. Kayla R. Stone (PhD): [AAA](#) 2011; [KSHA](#) 2011.
15. Teresa M. Lynn (AuD): [AAA](#) 2011.
16. Kieu Nguyen (AuD): WSU [GRASP](#) 2010.
17. Jason Harader (AuD): WSU [GRASP](#) 2009.
18. Amanda Popp (AuD): [KSHA](#) 2008.
19. Mark D. Shaver (PhD): [AAS](#) 2007, 2011; *J. Acoust. Soc. Am.* (2013).
20. Yori Kanekama (PhD): [KSHA](#) 2006 (co-advisor, Dr C. Liu).
21. Fawen Zhang (PhD): *Int. J. Audiol.* (2007); [ASHA](#) 2004 (co-advisor, Dr F.A. Boettcher).
22. Kathy Duncan (PhD): [ASHA](#) 2001, 2002.

Courses Taught

Wichita State University: (Department of Communication Sciences & Disorders)

- BA Program: CDS 300, Anatomy & Physiology of the Speech & Hearing Mechanisms (fall 2004, 2005 (team-taught, 33%))
- MS Program: CDS 855, Pediatric Audiology (fall 2004 (team-taught, 50%))
- AuD Program: CSD 803, Introduction to Psychoacoustics (spring 2006 (team-taught, 66%))
CDS 805, Clinical Audiology II (spring 2005)
CSD 806, Advanced Anatomy & Physiology of the Auditory System and Human Genetics (spring 2005 (team-taught, 33%); 2006 (team-taught, 66%), 2007–2012); Advanced Anatomy & Physiology of the Auditory System (summer 2019–2021; fall 2012, 2013, 2015–2018, 2022–2024)
CDS 807, Hearing Science (fall 2004); Acoustics and Instrumentation (fall 2005–2011; spring 2013–2015; fall 2015; summer 2016–2018; fall 2019–2021)
CDS 808, Instrumentation in Audiology (spring 2005); Otoacoustic Emissions (spring 2006–2012; fall 2013, 2016–2021)
CDS 845, Research in CSD (fall 2022–2024)
CSD 851, Medical Audiology (summer 2005, 2006, 2008, 2010, 2012–2014; spring 2016–2024)
CSD 866, Auditory Evoked Potentials (fall 2005–2012; spring 2014–2022)
Principles of AEPs and OAEs (spring 2023, 2024)
CSD 890, Independent Study in SLP & Aud (spring & fall 2012; spring 2013)
CSD 891, Non-thesis Research Project (fall 2007; spring & fall 2008–2014; fall 2015; spring, summer & fall 2016; summer & fall 2018, 2019, 2021–2023)
CSD 892, Presentation of Research (spring 2008–2014; summer 2015, 2016; spring

2017, 2019, 2022–2024)

PhD Program: CSD 740, Selected Topics in CSD (spring 2016)
CSD 890, Independent Study in SLP & Aud (fall 2017)
CSD 935K, Advanced Practicum in Research (fall 2005; spring 2006; fall 2007;
spring & fall 2008; fall 2009; spring 2010; fall 2018; spring 2019)
CSD 935A, Advanced Practicum in Academic Teaching (fall 2006; spring & fall
2007; fall 2019; spring 2020)
CSD 940, Advanced Selected Topics in CSD (fall 2005, 2010; spring 2018)
CSD 990, Advanced Independent Study (summer & fall 2011; fall 2018; Spring
2020)
CSD 992, Advanced Presentation of Research (summer 2011, 2019)
CSD 999, Doctoral Dissertation (spring 2009; fall 2010, 2020, 2021; spring 2021,
2022; summer 2022)

University of South Alabama: (Department of Speech Pathology & Audiology)

BS Program: SPA 313, Fundamentals of Hearing Science (fall 2000–2002)
SPA 470, Introduction to Hearing Disorders (spring 2001 (team-taught, 70%))
MS Program: SPA 570, Advanced Hearing Science (fall 2000–2002)
SPA 575, Medical Audiology (fall, 2000, summer 2001–2003)
SPA 577, Evoked Potentials (include otoacoustic emissions) (spring 2001 (team-taught,
50%), 2002, 2003)
SPA 578 Pediatric Audiology (summer 2000 (team-taught, 50%), spring 2002 (team-
taught, 50%)).
PhD Program: CSD 663 Studies in Hearing Science (fall 2000)
CSD 694 Directed Study (fall 2002, spring & summer 2003)
CSD 695 Directed Research (fall 2001, summer 2002, fall 2003)
CSD 651, Advanced Instrumentation Techniques (fall 2002 (team-taught, 20%))
AuD Program: AuD 612 Anatomy and Physiology of the Hearing Mechanism (fall 2003).
AuD 613 Psychoacoustics (fall 2003).
AuD 614 Instrumentation and Acoustics (fall 2003).
AuD 622 Medical Audiology (spring 2004).
AuD 644 Otoacoustic Emissions (summer 2004).

Hunan College of Chinese Medicine: (China)

Graduate Program: Diagnostic Techniques in Otology (fall 1989, 1990)
Clinical Medicine Program: Otorhinolaryngology (spring 1990–1992)
Continuing Education: Ear, Nose and Throat Surgery (fall 1991)

Academic Advising

2012–2013: Three AuDs
2011–2012: Seven AuDs.
2010–2011: Ten AuDs, two PhDs.
2009–2010: Eleven AuDs, two PhDs.

2008–2009: Ten AuDs, one PhD.
2007–2008: Six AuDs, one PhD.
2006–2007: Eight AuDs, one PhD.
2005–2006: Six AuDs, two PhDs.
2000–2004: Thirty-five Undergraduate students
(Speech Pathology & Audiology program at the Univ. of South Alabama).

IV. SCHOLARLY ACTIVITY

Peer-Reviewed Journal Articles (Underlined, student co-authors; Hyperlink to [abstracts at PubMed.gov](#) and the journals below and to total citations at [Google Scholar](#))

1. **Sun, X.-M.**, Frye, M.D., Kang, B. (2024) Contralateral wideband acoustic reflex thresholds: Normative study and test-retest reliability. *PLOS One*, (under review)
2. Holms, B., **Sun, X.-M.** (2024) Response Criterion for Determining Ipsilateral and Contralateral Acoustic Reflex Thresholds Using a 1000-Hz. *Audiology and Speech Research* (under review)
3. **Sun, X.-M.**, Burdiek, L.M. (2023) Positive middle ear pressure versus ear canal pressure variations: a preliminary study with wideband power absorbance in humans. *Hearing Research* (under review)
4. Jiang, J., **Sun, X.-M.** (2023) Comparison of ipsilateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults. *International Archives of Otorhinolaryngology*, (under review)
5. Holt, D., **Sun, X.-M.** (2023) Comparison of contralateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults. *Audiology and Speech Research* (under review)
6. **Sun, X.-M.** (2016) Wideband acoustic immittance: Normative study and test-retest reliability of tympanometric measurements in adults. [Journal of Speech, Language, and Hearing Research](#), 59(4):819-834. doi: 10.1044/2016_JSLHR-H-14-0322 [\[Online database\]](#) [\[Cited: 37\]](#) *
7. Carazo, C.D., **Sun, X.-M.** (2015) Effects of consecutive trials and test-retest reliability of 1000-Hz tympanometry in adults, [International Journal of Audiology](#), 54(4):241-248. (online Sept. 29th, 2014) doi: 10.3109/14992027.2014.955888 (*corresponding author) [\[Cited: 6\]](#) *
8. Burdiek, L.M., **Sun, X.-M.** (2014) Effects of consecutive wideband tympanometry trials on energy absorbance measures of the middle ear, [Journal of Speech, Language, and Hearing Research](#), 57(5):1997-2004. doi: 10.1044/2014_JSLHR-H-13-0344 (*corresponding author) [\[Cited: 22\]](#) *
9. Shaver, M.D., **Sun, X.-M.** (2013) Wideband energy reflectance measurements: Effects of negative middle ear pressure and application of a pressure compensation procedure. [The Journal of the Acoustical Society of America](#), 134(1):332–341. doi: 10.1121/1.4807509 (*corresponding author) [\[Online database\]](#)[\[Cited: 49\]](#) *

10. **Sun, X.-M., Shaver, M.D., Harader, J.** (2013) Tympanometric measures in ears with negative middle ear pressure, and tests of some common assumptions. [*International Journal of Audiology*](#), 52(5):333– 341.
doi: 10.3109/14992027.2012.759664 [Cited: 3] *
11. **Sun, X.-M.** (2012) Ear canal pressure variations versus negative middle ear pressure: Comparison using distortion product otoacoustic emission measurement in humans. [*Ear and Hearing*](#), 33(1):69–78.
(online July 8th, 2011) doi: 10.1097/AUD.0b013e3182280326 [Cited: 23] *
12. **Sun, X.-M., Shaver, M.D.** (2009) Effects of negative middle-ear pressure on distortion product otoacoustic emissions and application of a compensation procedure in humans. [*Ear and Hearing*](#), 30(2):191–202. doi: 10.1097/AUD.0b013e31819769e1 [Newsletter] [Cited: 53] *
13. **Sun, X.-M.** (2008) Contralateral suppression of distortion product otoacoustic emissions and the middle-ear muscle reflex in human ears. [*Hearing Research*](#), 237(1-2):66–75. (online Dec. 28th, 2007) doi: 10.1016/j.heares.2007.12.004 [Cited: 81] *
14. **Sun, X.-M.** (2008) Distortion product otoacoustic emission fine structure is responsible for variability of distortion product otoacoustic emission contralateral suppression. [*The Journal of the Acoustical Society of America*](#), 123(6):4310–4320. doi: 10.1121/1.2912434 [Cited: 35] *
15. **Zhang, F, Boettcher, F.A., Sun, X.-M.** (2007) Contralateral suppression of distortion product otoacoustic emissions: Effect of the primary frequency in DPgrams. [*International Journal of Audiology*](#), 46(4):187–195. [Cited: 40] *
16. **Sun, X.-M., Kim, D.O.** (1999) Adaptation of 2f1–f2 distortion product otoacoustic emission in young-adult and old CBA and C57 mice. [*The Journal of the Acoustical Society of America*](#), 105(6):3399–3409. [Cited: 39] *
17. **Parham, K., Sun, X.-M., Kim, D.O.** (1999) Distortion product otoacoustic emissions in the CBA/J mouse model of presbycusis. [*Hearing Research*](#), 134(1-2):29–38. [Cited: 35] *
18. **Kim, D.O., Sun, X.-M., Jung, M.D., Leonard, G.** (1997) A new method of measuring distortion product otoacoustic emissions using multiple tone pairs: Study of human adults. [*Ear and Hearing*](#), 18(4):277–285. [Cited: 21] *
19. **Sun, X.-M., Kim, D.O., Jung, M.D., Randolph, K.J.** (1996) Distortion product otoacoustic emission test of sensorineural hearing loss in humans: Comparison of unequal- and equal-level stimuli. [*Annals of Otology Rhinology and Laryngology*](#), 105(12):982–990. [Cited: 39] *
20. **Kim, D.O., Paparello, J., Jung, M.D., Smurzynski, J., Sun, X.** (1996) Distortion product otoacoustic emission test of sensorineural hearing loss: Performance regarding sensitivity, specificity and receiver

operating characteristics. [*Acta Oto-laryngologica \(Stockholm\)*](#), 116(1):3–11.

[Cited: 113] *

21. **Sun, X.**, Tan, J. (1987) A method of treating hearing loss using Chinese medicines. *Shanxi Journal of Chinese Medicine* (China), 8:356–8.

* The number of times cited by other articles, according to *Google Scholar* citations in Jan. 2024.

Other Publications (Invited or non-refereed or conference proceedings; Underlined, student co-authors; [Hyperlink](#) to the papers)

1. Reese, E., **Sun, X.-M.** (2024) Simultaneous binaural measurements of transient evoked otoacoustic emissions in adults. [*Proceedings 2024: 20th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University.
2. Keithly, A., **Sun, X.-M.** (2023) Contralateral Masking in Air-Conduction Auditory Brainstem Response Recordings: A Literature Review. [*Proceedings 2023: 19th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University.
3. Derby, B., **Sun, X.-M.** (2020) Response Criterion for Determining Ipsilateral and Contralateral Acoustic Reflex Thresholds Using a 1000-Hz Probe Tone. [*Proceedings 2020: 16th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University, p.21.
4. Holt, D., **Sun, X.-M.** (2019) Comparison of contralateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults. [*Proceedings 2019: 15th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University.
5. Jiang, J., **Sun, X.-M.** (2019) Comparison of ipsilateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults, [*Proceedings 2019: 15th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University.
6. **Sun, X.-M.** (2014) Assessment of conductive dysfunction: wideband acoustic immittance. [*Journal of Communication Disorders, Deaf Studies, and Hearing Aids*](#), 2:e115. doi: 10.4172/jcdsha.1000e115
7. Bian, J.H., **Sun, X.-M.** (2014) Effects of air pressure change rate in the ear canal on 1000 Hz tympanograms: A preliminary report, [*Proceedings 2014: 10th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University, pp.58–60.
8. Burdiek, L.M., **Sun, X.-M.** (2013) A normative study on wideband tympanometry and energy reflectance in humans ears: Effects of repetitive measurements, [*Proceedings 2013: 9th Annual Symposium on Graduate Research and Scholarly Projects*](#). Wichita, KS: Wichita State University, pp.31–32. [Cited: 1] *
9. Nguyen, K., **Sun, X.-M.** (2010) Effects of negative middle-ear pressure on auditory steady-state

responses: a preliminary study, *Proceedings 2010: 6th Annual Symposium on Graduate Research and Scholarly Projects*. Wichita, KS: Wichita State University, pp.157–158.

10. Harader, J., **Sun, X.-M.** (2009) Tympanometric measures in human ears with negative middle-ear pressure, *Proceedings 2009: 5th Annual Symposium on Graduate Research and Scholarly Projects*. Wichita, KS: Wichita State University, pp.108–109.
11. **Sun, X.-M.**, Dolan, D.F. (2000) Characteristics of efferent mediated enhancement of distortion product otoacoustic emissions. *Journal of the Acoustical Society of America*, 107(5–2): 2916 (139th meeting of the Acoustical Society of America). [Cited: 3]*

Books and Chapters

Parham, K., **Sun, X.-M.**, Kim, D.O. (2001) [Noninvasive assessment of auditory function in mice: auditory brainstem response and distortion product otoacoustic emissions](#). In J. Willott (ed.), [Handbook of Mouse Auditory Research: From Behavior to Molecular Biology](#). CRC Press, New York, NY. [Cited: 7] *[Cited: 74] *

Sun, X.-M. (1998) [Distortion product otoacoustic emissions in mouse models of early-onset and late-onset presbycusis](#), *Dissertation Collection for University of Connecticut*, Publication# AAI9906718, ISBN: 9780599044586. (Date last viewed, 1/17/2022)

Sun, X.-M. (1996) [Deafness and Rehabilitation of Hearing and Language](#). In C. Li & D. Tian (Eds.) *Science on the Eye, Ear, Nose, Throat and Oral Cavity*. Hunan Press of Science and Technology, Changsha, P.R. China, pp.240–242.

Sun, X.-M. (1996) [Examination of the Ear](#). Invited chapter in C. Li & D. Tian (Eds.) *Science on the Eye, Ear, Nose, Throat and Oral Cavity*. Hunan Press of Science and Technology, Changsha, P.R. China, pp.183–185.

Sun, X.-M. (1996) [Anatomy and Physiology of the Ear](#). In C. Li & D. Tian (Eds.) *Science on the Eye, Ear, Nose, Throat and Oral Cavity*. Hunan Press of Science and Technology, Changsha, P.R. China, pp.177–181.

Tan, J., Li, F., Xu, S., Zhang, S., Long, T., **Sun, X.** et al. (1990) *Diseases of the Ear, Nose and Throat in Chinese Medicine*. Textbook, Hunan College of Chinese Medicine, P.R. China.

Invited Presentations

Sun, X.-M. (2016) “Audiology and audiologists in the USA”. [The First Audiology and Speech Pathology Education Symposium](#), Ear Institute, Shanghai Jiaotong University School of Medicine, Shanghai, China, December 16-18.

Sun, X.-M. (2016) Round Table Session Co-Presenter--- “Prospects of the Profession of Audiology and

Audiologic Education”. [The First Audiology and Speech Pathology Education Symposium](#), Ear Institute, Shanghai Jiaotong University School of Medicine, Shanghai, China, December 16-18.

Sun, X.-M. (1998) “Adaptation of 2f1–f2 distortion product otoacoustic emission in young-adult and old CBA and C57 mice”. Hearing, Balance, and Chemical Senses [Seminar Series](#) (1998–1999), Kresge Hearing Research Institute, The Univ. of Michigan Medical Center, Ann Arbor, MI, November 20.

Refereed Research Presentations

(Underlined, student co-authors; *Italic*, published abstracts; [Hyperlink](#) to abstracts)

1. Keithly, A., **Sun, X.-M.** (2024) Contralateral Masking in Air-Conduction Auditory Brainstem Response Recordings: A Literature Review. The [American Academy of Audiology](#) (AAA) Annual Conference (Atlanta, GA, April 17-20): Poster 506.
2. DeFord, H.K., **Sun, X.-M.** (2023) Effects of contralateral sounds on short-latency auditory evoked potentials, The [AAA](#) Annual Conference (Seattle, WA, April 19-22)
3. Jiang, J., **Sun, X.-M.** (2022) A normative study of ipsilateral wideband acoustic reflex growth function, Bulletin of the [American Auditory Society](#) (The 49th Annual Scientific and Technology Conference, Scottsdale, AZ, February 24–26): [pp. 81-82](#)
4. Jiang, J., **Sun, X.-M.** (2021) Comparison of ipsilateral wideband and single-frequency acoustic reflex thresholds in adults, The 33rd Annual Conference of [AAA](#) [virtual], April 14-16.
5. Jiang, J., **Sun, X.-M.** (2021) Ipsilateral wideband and single-frequency acoustic reflex thresholds in adults, Bulletin of the [American Auditory Society](#) (The 48th Annual Scientific and Technology Meeting [virtual], March 4–6: [pp. 9-10](#)
6. Holmes, B., **Sun, X.-M.** (2021) Response Criterion for Determining Acoustic Reflex Thresholds Using a 1000-Hz Probe Tone, The 33rd Annual Conference of [AAA](#) [virtual], April 14-16.
7. Holt, D.E., **Sun, X.-M.** (2019), Comparison of contralateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults, The 31st Annual Conference of [AAA](#) (Columbus, OH, March 27-30).
8. Burdine, R., **Sun, X.-M.**, (2017) Comparison of wideband and single-frequency acoustic reflex thresholds in normal-hearing adults, The [AAA](#) Annual Convention (AudiologyNOW!, Indianapolis, IN, April 5-8).
9. Burdine, R., **Sun, X.-M.**, (2017) Ipsilateral and Contralateral Wideband Acoustic Reflex Thresholds in Adults, *Bulletin of the [American Auditory Society](#)* (The 44th Annual Scientific and Technology Meeting, Scottsdale, AZ, March 2–4), 42(1): [p. 9.](#)
10. **Sun, X.-M.**, McCoy, B.L., Frye, M.D. (2016) Wideband acoustic reflex thresholds: A preliminary study in adult ears with self- induced middle ear pressure, *Abstracts of the 39th Annual Midwinter Meeting, [Association for Research in Otolaryngology \(ARO\)](#)*, [p. 92.](#)

11. **Sun, X.-M.** (2015) Normative study and test-retest reliability of wideband tympanometry in adults, *Bulletin of the [American Auditory Society](#)* (The 42nd Annual Scientific and Technology Meeting, Scottsdale, AZ, March 5–7), 40(1): [p. 11](#).
12. **Frye, M.D., Sun, X.-M.** (2015) Contralateral wideband acoustic reflex thresholds: Normative study and test-retest reliability, *Bulletin of the [American Auditory Society](#)* (The 42nd Annual Scientific and Technology Meeting, Scottsdale, AZ, March 5–7), 40(1): [pp.56-57](#).
13. **Bian, J.H., Sun, X.-M.** (2014) Effects of direction and rate of ear canal air pressure change on 1000 Hz tympanograms, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), \[PP610\]\(#\), Orlando, FL, March 26-29\)](#).
14. **Sun, X.-M., Burdick, L.M.** (2014) Positive middle ear pressure versus ear canal pressure variations: a preliminary study with wideband power absorbance in humans, *Abstracts of the 37th Annual Midwinter Meeting*, [ARO](#), [pp.477-478](#). [Cited: 2]*
15. **Sun, X.-M., Shaver, M.D.** (2013) Negative middle ear pressure versus ear canal pressure variations: Effects on wideband energy absorbance measurements in humans, *Abstracts of the 36th Annual Midwinter Meeting*, [ARO](#), [p.350](#).
16. **Burdick, L.M., Sun, X.-M.** (2013) Effects of repetitive measurements on wideband tympanometry and energy reflectance, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Anaheim, CA, April 3-6\)](#), p.194.
17. **Carazo, C.D., Sun, X.-M.** (2013) Effects of repetitive measurements on 1,000 Hz tympanometry in adults, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Anaheim, CA, April 3-6\)](#), p.194.
18. **Sun, X.-M., Eldridge, K.R.** (2012) The sweep-frequency procedure for clinically estimating the middle-ear resonant frequency: data from ears with negative middle-ear pressure and implications, *Abstracts of the 35th Annual Midwinter Meeting*, [ARO](#), [p.301](#).
19. **Cavenee, R.D., Sun, X.-M.** (2012) Effects of postural change on wideband energy reflectance measurements of middle ear function, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Boston, MA, March 28-31\)](#), p.170.
20. **Slaven-McCaslin, A.D., Sun, X.-M., Nixon, H.L.** (2012) A study on noise-induced hearing loss in law enforcement officers, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Boston, MA, March 28-31\)](#), p.172.
21. **Shaver, M.D., Sun, X.-M.** (2012) Immediate test-retest reliability of wideband energy reflectance in normal-hearing adults, *Bulletin of the [American Auditory Society](#)* (The 39th Annual Scientific and Technology Conference, Scottsdale, AZ, March 8–10), 37(1): pp.??.
22. **Sun, X.-M., Lynn, T.M., Shaver, M.D., DiLollo, L.D.** (2011) Tympanometric preconditioning in negative middle-ear pressure, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Chicago, IL, April 6-9\)](#), p.132.
23. **Eldridge, K.R., Sun, X.-M.** (2011) Resonant frequency in self-induced negative middle-ear pressure, The [AAA Annual Convention \(\[AudiologyNOW!\]\(#\), Chicago, IL, April 6-9\)](#), p.130.

24. **Sun, X.-M., Sturm, C.J.** (2011) A preliminary study on simultaneous testing of auditory brainstem response and transient evoked otoacoustic emissions, *Abstracts of the 34th Annual Midwinter Meeting, ARO*, pp.254–255.
25. **Shaver, M.D., Sun, X.-M.** (2011) Effects of negative middle-ear pressure on wideband energy reflectance, *Bulletin of the American Auditory Society* (Annual Scientific and Technology Conference, Scottsdale, AZ, March 3–5), 36(1): 39–40.
26. **Shaver, M.D., Sun, X.-M.** (2007) Effects of negative middle ear pressure on spontaneous otoacoustic emissions (SOAEs), *Bulletin of the American Auditory Society* (Annual Scientific and Technology Conference, Scottsdale, AZ, March 4–6), 32(1): 53.
27. **Sun, X.-M.** (2007) A study on improving the DPOAE contralateral suppression test in human ears: effect of middle-ear muscle reflex and measurement of phase change, *Abstracts of the 30th Annual Midwinter Meeting, ARO*, p.277. [Cited: 2]*
28. **Sun, X.-M., Shaver, M.D.** (2006) Intra- and inter-subject test-retest reliability of distortion product otoacoustic emissions, The Annual Convention of [American Speech-Language-Hearing Association \(ASHA\)](#), Miami, FL, Nov. 16–18.
29. **Sun, X.-M., Shaver, M.D.** (2006) Comparison of the effects of negative middle-ear pressure and ear-canal pressure variation on distortion product otoacoustic emissions, *Abstracts of the 29th Annual Midwinter Meeting, ARO*, p.21–22.
30. **Sun, X.-M., Shaver, M.D.** (2005) Compensated otoacoustic emissions in humans with negative middle-ear pressure, The Annual Convention of [ASHA](#), San Diego, CA, Nov. 18–20.
31. **Sun, X.-M.** (2005) Distortion product otoacoustic emission (DPOAE) fine structure is responsible for the variability of DPOAE contralateral suppression effect, *Abstracts of the 28th Annual Midwinter Meeting, ARO*, p.233. [Cited: 2]*
32. **Sun, X.-M., Zhang, F.** (2004) A preliminary study on comparison of the olivocochlear efferent and middle-ear muscle reflexes in frequency selectivity using distortion product otoacoustic emission measurement, *Abstracts of the 27th Annual Midwinter Meeting, ARO*, p.179.
33. **Zhang, F., Sun, X.-M., Boettcher, F.A.** (2004) Contralateral suppression of distortion product otoacoustic emission fine structure, The Annual Convention of [ASHA](#), Philadelphia, PA, November 18–20.
34. **Sun, X.-M.** (2003) Distinctive contributions of olivocochlear efferent and middle-ear muscle reflexes to the alteration of distortion product otoacoustic emissions by contralateral noise. *Abstracts of the 26th Annual Midwinter Meeting, ARO*, p.101.
35. **Sun, X.-M., Adams, E.M., Duncan, K.R.** (2002) Effects of the acoustic reflex on distortion product otoacoustic emissions. *The ASHA Leader*, (7)15: p.238. The Annual Convention of [ASHA](#).
36. **Duncan, K.R., Sun, X.-M.** (2002) Comparison of contralateral acoustic suppression of DPOAEs and

- TEOAEs, *The ASHA Leader*, (7)15: p.241. The Annual Convention of [ASHA](#).
37. [Duncan, K.R.](#), [Sun, X.-M.](#) (2001) Distortion product otoacoustic emissions to multiple tone pairs. *The ASHA Leader*, (6)15: p.60. The Annual Convention of [ASHA](#).
 38. Ota, Y, [Sun, X.-M.](#), Dolan, D.F. (2001) Efferent enhancement of the DPOAE and CAP. *Abstracts of the 24th [Annual Midwinter Meeting, ARO](#)*, p.9.
 39. [Sun, X.-M.](#), Dolan, D.F. (2000) Characteristics of efferent mediated enhancement of distortion product otoacoustic emissions. *[Journal of the Acoustical Society of America](#)*, 107(5–2): 2916 (139th meeting of the Acoustical Society of America).
 40. [Sun, X.-M.](#), Ota, Y., Dolan, D.F. (2000) Alteration of the efferent suppression of cochlear responses in acoustically induced cochlear insult. *Abstracts of the 23rd [Annual Midwinter Meeting, ARO](#)*, p.278.
 41. [Sun, X.-M.](#), Kim, D.O. (1999) Effects of contralateral stimulation on distortion product otoacoustic emissions in CBA and C57 mice of various ages. *Abstracts of the 22nd [Annual Midwinter Meeting, ARO](#)*, p.97.
 42. [Sun, X.-M.](#), Kim, D.O., Parham, K. (1998) Effects of stimulus parameters on distortion product otoacoustic emissions in the CBA mouse model of age-related hearing loss. *Abstracts of the 21st [Annual Midwinter Meeting, ARO](#)*, p.79.
 43. Kim, D.O., [Sun, X.-M.](#) (1998) Efferent-mediated adaptation of 2f1–f2 distortion product otoacoustic emission in mice. *Abstracts of the 21st [Annual Midwinter Meeting, ARO](#)*, p.151. [Cited: 3]*
 44. [Sun, X.-M.](#), Kim, D.O., Jung, M.D., Leonard, G. (1997) Distortion product otoacoustic emissions in full-term and pre-term infants: normal range, effects of age and gender and input-output functions. *The ASHA Leader*, (2)15: p.128. The Annual Convention of [ASHA](#).
 45. Kim, D.O., [Sun, X.-M.](#), Jung, M.D., Leonard, G., Bhatnagar, N., Pappagallo, M., Rowe, J.C. (1997) A new method of measuring distortion product otoacoustic emissions using multiple tone pairs: Study of human infants. *The ASHA Leader*, (2)15: p.128. The Annual Convention of [ASHA](#).
 46. [Sun, X.-M.](#), Kim, D.O., Jung, M.D., Randolph, K.J., Parham, K. (1997) Optimal stimulus level and level difference for the distortion product otoacoustic emission test of sensorineural hearing loss. *Abstracts of the 20th [Annual Midwinter Meeting, ARO](#)*, p.24. [Cited: 2]*
 47. Parham, K., Gerber, A., McKowen, A., [Sun, X.-M.](#), Kim, D.O. (1997) Distortion product otoacoustic emissions of the DBA/2J mouse with early-onset progressive hearing loss. *Abstracts of the 20th [Annual Midwinter Meeting, ARO](#)*, p.194. [Cited: 13]*
 48. Kim, D.O., [Sun, X.-M.](#), Jung, M.D., Leonard, G. (1997) A new method of measuring distortion product otoacoustic emissions using multiple tone pairs: Study of human adults. *Abstracts of the 20th [Annual Midwinter Meeting, ARO](#)*, p.23.
 49. [Sun, X.-M.](#), Parham, K., Kim, D.O. (1997) Effects of stimulus parameters on distortion product

otoacoustic emissions in the c57bl/6j mouse with age-related hearing loss. *Abstracts of the 20th [Annual Midwinter Meeting, ARO](#)*, p.101. [Cited: 5]*

50. **Sun, X.**, Parham, K., Kim, D.O. (1996) Distortion product otoacoustic emissions of an animal model of presbycusis, the CBA/J mouse. *Abstracts of the 19th [Annual Midwinter Meeting, ARO](#)*, p.25. [Cited: 3]*
51. Parham, K., **Sun, X.**, Kim, D.O. (1996) Examination of optimal stimulus parameters for distortion product otoacoustic emissions in mouse models of presbycusis. *Abstracts of the 19th [Annual Midwinter Meeting, ARO](#)*, p.26. [Cited: 5]*
52. **Sun, X.**, Kim, D.O., Jung, M.D., Randolph, K.J. (1995) The performance of distortion product otoacoustic emission test of sensorineural hearing loss in humans: Comparison of stimuli with $L_1 > L_2$ and $L_1 = L_2$. *Abstracts of the 18th [Annual Midwinter Meeting, ARO](#)*, p.125. [Cited: 3]*
53. **Sun, X.**, Chen J. (1988) Functional status of Eustachian tube in otitis media with effusion. The First Meeting of the Central and South China in Otolaryngology and Head-Neck Surgery, ZhuZhou, P.R. China, July 24–29.

* The number of times cited by other articles, according to *Google Scholar* citations in May 2023.

Other Research Presentations (Local conferences; Underlined, student co-authors; [Hyperlink](#) to abstracts)

1. Reese, E., **Sun, X.-M.** (2024) Simultaneous binaural measurements of transient evoked otoacoustic emissions in adults, The Annual Conference of Kansas Speech-Language-Hearing Association ([KSHA](#)), Wichita, KS, Sept. 26-27.
2. Reese, E., Carlsen, M., **Sun, X.-M.** (2024) Simultaneous binaural measurements of transient evoked otoacoustic emissions in adults, The 20th Annual Symposium on Graduate Research and Scholarly Projects ([GRASP](#)), Wichita State University, April 26.
3. Keithly, A., **Sun, X.-M.** (2023) Contralateral Masking in Air-Conduction Auditory Brainstem Response Recordings: A Literature Review, The 19th Annual Symposium on [GRASP](#), Wichita State University, April 14.
4. Derby, B., **Sun, X.-M.** (2020) Response Criterion for Determining Ipsilateral and Contralateral Acoustic Reflex Thresholds Using a 1000-Hz Probe Tone. The 16th Annual Symposium on [GRASP](#), Wichita State University, April 26.
5. Jiang, J., **Sun, X.-M.** (2019) Comparison of ipsilateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults, The 15th Annual Symposium on [GRASP](#), Wichita State University, April 26.
6. Holt, D., **Sun, X.-M.** (2019) Comparison of contralateral wideband and single-frequency acoustic reflex thresholds in normal-hearing adults, The 15th Annual Symposium on [GRASP](#), Wichita State University, April 26.
7. Burdine, R., **Sun, X.-M.** (2016) Ipsilateral and Contralateral Wideband Acoustic Reflex Thresholds in

Adults, The Annual Conference of Kansas Speech-Language-Hearing Association ([KSHA](#)), Topeka, KS, Sept. 29-Oct. 1.

8. [Frye](#), M.D., **Sun, X.-M.** (2014) Contralateral wideband acoustic reflex thresholds: Normative study and test-retest reliability, The Annual Conference of [KSHA](#), Overland Park, KS, Sept. 18-20.
9. [Bian](#), J.H., **Sun, X.-M.** (2014) Effects of air pressure change rate in the ear canal on 1000 Hz tympanograms, The 10th Annual Symposium on [GRASP](#), Wichita State University, April 25.
10. [Burdiek](#), L.M., **Sun, X.-M.** (2013) Effects of repetitive measurements of wideband tympanometry on energy absorbance, The Annual Conference of [KSHA](#), Topeka, KS, Sept. 12–14.
11. [Burdiek](#), L.M., **Sun, X.-M.** (2013) A normative study on wideband tympanometry and energy reflectance in humans ears: Effects of repetitive measurements, The 9th Annual Symposium on [GRASP](#), Wichita State University, May 8.
12. [Burdiek](#), L.M., **Sun, X.-M.** (2013) A normative study on wideband tympanometry and energy reflectance in human ears: Effects of repetitive measurements, The 10th Annual [Capitol Graduate Research Summit](#), Topeka, KS, Feb. 14th.
13. [Caveness](#), R.D., **Sun, X.-M.** (2012) Wideband energy reflectance measurements and non-pathological variables: posture and probe insertion depth, The Annual Conference of [KSHA](#), Wichita, KS, Sept. 27–29.
14. [Eldridge](#), K.R., **Sun, X.-M.** (2011) Resonant frequency in self-induced negative middle-ear pressure, The Annual Conference of [KSHA](#), Overland Park, KS, Sept. 15–17.
15. [Nguyen](#), K., **Sun, X.-M.** (2010) Effects of negative middle-ear pressure on auditory steady-state responses: a preliminary study, The 6th Annual Symposium on [GRASP](#), Wichita State University, April 23.
16. [Harader](#), J., **Sun, X.-M.** (2009) Tympanometric measures in human ears with negative middle-ear pressure, The 5th Annual Symposium on [GRASP](#), Wichita State University, May 1.
17. [Popp](#), A., **Sun, X.-M.** (2008) A survey on the application of otoacoustic emission measures in newborn hearing screening in the Midwest, The Annual Conference of [KSHA](#), Overland Park, KS, Oct. 2–4.
18. **Sun, X.-M.** (2006) Distortion product otoacoustic emission measurement with multiple tone pairs, The Annual Conference of [KSHA](#), Wichita, KS, Sept. 28–30.
19. [Kanekama](#), Y., Liu, C., **Sun, X.-M.** (2006) Preliminary study on hearing in noise and auditory efferent function, The Annual Conference of [KSHA](#), Wichita, KS, Sept 28–30.
20. **Sun, X.-M.**, [Zhang](#), F. (2003) The time course of distortion product otoacoustic emissions with contralateral acoustic stimulation in human ears. The 10th Annual Research Forum of University of South Alabama, Mobile, AL, April 21 – 25.

Research Grants/Awards

Wichita State Univ., Award for Research /Creative Projects in Summer (2011), “Simultaneous testing of auditory brainstem responses and transient evoked otoacoustic emissions: a preliminary study in clinical patients”, PI, \$4,000.

Wichita State Univ., University Research/Creative Projects Award (2009), “Application of wideband acoustical measurements in assessing human middle-ear function: a preliminary study”. PI, \$4,500.

Wichita State Univ., Award for Research /Creative Projects in Summer (2006), “Preliminary study on a new method of measuring the distortion product otoacoustic emission contralateral suppression in clinical application”, PI, \$4,000.

Wichita State Univ., University Research/Creative Projects Award (2005), “Effects of the auditory efferent and middle-ear muscle reflexes on distortion product otoacoustic emissions in humans”, PI, \$4,500.

[American Speech-Language-Hearing Foundation](#), New Investigator Research Grant (2004), “Compensation of negative middle ear pressure in distortion product otoacoustic emission measurement”, PI, \$5,000.

Univ. of South Alabama, USA Research Council Grant (2001–2002), “Effects of stimulus frequency ratio of otoacoustic emissions on the suppression measurement”, PI, \$4,400.

[American Federation For Aging Research](#)/[Glenn Foundation For Medical Research](#), Scholarship for Research in the Biology of Aging (1996), “Optimal stimulus parameters for the measurement of distortion product otoacoustic emissions in a mouse model of presbycusis”, PI, \$5000

Grants in Progress or Accepted/Scored but not funded:

National Institutes of Health, Academic Research Enhancement Award, 2010, “Wideband Reflectance Measurements and Otitis Media with Effusion”. PI, \$250,000.

National Institutes of Health, Academic Research Enhancement Award, 2009, “Wideband Reflectance Measurements and Otitis Media with Effusion”. PI, \$250,000.

Other Grants/Awards

Wichita State Univ., Sabbatical leave (Dissemination of research outcomes), Fall 2014.

Wichita State Univ., College of Health Professions’ Human Capital Development Fund, 2010 (\$500); 2011 (\$1000); 2012 (\$1000); 2013 (\$1000); 2014 (\$1000).

Grants Applied (not funded):

[American Speech-Language-Hearing Foundation](#), New Century Scholar Program Research Grant, 2014, “Wideband Acoustic Reflex Measurements: Test-Retest Reliability and Effects of Middle Ear Pressure and Compensation Procedure” PI, \$10,000.

[American Speech-Language-Hearing Foundation](#), New Century Scholar Program Research Grant, 2012, “Wideband

Energy Reflectance Measurements in Adults: Effects of Non-Pathological Variables and Normative Data”
PI, \$10,000.

Deafness Research Foundation, Hearing and Balance Science Research Grant, 2010, “Auditory steady-state responses and effects of negative middle-ear pressure”. PI, \$24,980.

Deafness Research Foundation, Hearing and Balance Science Research Grant, 2009, “Auditory steady-state responses and effects of negative middle-ear pressure: A pilot study”. PI, \$24,711.

American Speech-Language-Hearing Foundation, New Century Scholar Program Research Grant, 2009, “Auditory steady-state responses and negative middle ear pressure: a pilot study” PI, \$10,000.

National Organization for Hearing Research Foundation, Research Award, 2008, “A study on the function of the cochlea and the medial olivocochlear efferent system in aged human ears”. PI.

Wichita State Univ., Regional Institute on Aging, Gridley-Hoover Pilot Research Program, 2008, “Influence of Aging on the Cochlea and the Auditory Efferent System in Humans”. PI.

American Speech-Language-Hearing Association, Advancing Academic-Research Careers Award, 2006. PI.

Deafness Research Foundation, Research Grant, 2002, “Effects of Negative Middle-Ear Pressure and Its Compensation on Distortion Product Otoacoustic Emissions”. PI.

American Hearing Research Foundation, Otologic Research Grant, 2001, “Effects of Negative Middle Ear Pressure and Its Compensation on Distortion Product Otoacoustic Emissions”. PI.

Honors and Awards

The [Alpha Eta](#) National Allied Health Honor Society (2006)

National Research Service Award (1999) National Institutes of Health, T32 DC000011–20 postdoctoral training grant.

Travel Award (1995) Univ. of Connecticut Research Foundation, A presentation at the Association for Research in Otolaryngology Middle Winter Meeting.

Pre-doctoral Fellowship (1992–1998) Graduate School, Univ. of Connecticut.

University Scholarship for International Students (1992–1995) Graduate School, Univ. of Connecticut.

Excellent Employee of the Year (1990) Hunan College of Chinese Medicine, P.R. China.

Excellent Employee of the Year (1989) Hunan College of Chinese Medicine, P.R. China.

Scholarship for Education in Medical Specialties (1984–1987) Ministry of Education, P.R. China.

Medical Education Scholarship (1978–1982) Department of Education, Hunan Province, P.R. China.

Professional Affiliation

[American Auditory Society](#) (2009–present)

[Acoustic Society of America](#) (2003–present)

[American Speech-Language-Hearing Association](#) (2000–present)

Member, ASHA Special Interest Group 6,

Hearing and Hearing Disorders: Research and Diagnostics

[Association for Research in Otolaryngology](#) (1994–present)

[American Academy of Audiology](#) (1997–2005)

National Association for Integration of Chinese and Western Medicine/Hunan Chapter,
Otolaryngology Council, P.R. China (1988–1992)
Hunan Otolaryngology Association of Chinese Medicine, P.R. China (1984–1992)
Hunan Association of Young Medical Professionals, P.R. China
Member (1987–1992).
Associate Secretary-General and Member of the Standing Committee, (1989–1992).

V. **SERVICE**

Professional Services

Journal Editorial Board:

Current Advances in Otorhinolaryngology Diseases and Therapy (NorCal Open Access
Publications, Santa Clara, CA, USA)
Journal of Communication Disorders, Deaf Studies & Hearing Aids (OMICS International Ltd.
Gachibowli, Hyderabad, India)
Journal of Otorhinolaryngology Disorders and Treatments (Sci Forschen Inc.,
Milpitas, CA, USA)
Journal of Communication Disorders and Assistive Technology (Aster Publications, Green Bay,
WI, USA)

Journal Reviewer:

Acta Oto-Laryngologica (Taylor & Francis, Stockholm, Sweden)
Audiology & Neurotology (S. Karger AG, Basel, Switzerland)
Ear and Hearing (The American Auditory Society, Philadelphia, PA)
Hearing Research (Elsevier, Amsterdam, Netherlands)
International Journal of Audiology (Informa Healthcare, Stockholm, Sweden)
International Archives of Otorhinolaryngology (Thieme Publishers, São Paulo/SP, Brazil)
Journal of the American Academy of Audiology (American Academy of Audiology, Reston, VA)
Journal of Communication Disorders, Deaf Studies & Hearing Aids (OMICS International Ltd.,
Gachibowli, Hyderabad, India)
Journal of Otology (Elsevier, Singapore)
Journal of Speech, Language, and Hearing Research (American Speech-Language-Hearing
Association, Rockville, MD)
Journal of the Acoustical Society of America (The Acoustical Society of America through the
American Institute of Physics, Melville, NY)

Open Access Animal Physiology (Dove Medical Press Ltd, Auckland, New Zealand)

PLOS One (Public Library of Science, San Francisco, CA)

Scientific Reports (Nature Research, Springer Nature, London, UK)

Trends in Hearing (Sage SAGE Publications, Thousand Oaks, CA)

Professional/Research Education

American Speech-Language-Hearing Association, [Mentoring Academic-Research Careers \(MARC\) program](#). Mentor to PhD students (2017)

University Services

Wichita State University

University Services:

Graduate School [Doctoral Program Sub-Council](#), 2008–2011, 2013-2016

[University Research Council](#), 2010- 2019

WSU Faculty Grievance Pool. 2009–2011

WSU Training & Technology Team ([T3](#)) Resource Panel, 2006–present

(Technology consultation/advice in areas: Physiological Assessment Techniques)

Judge for Poster Presentations,

The 20th Annual Symposium on Graduate Research & Scholarly Projects, April 26th, 2024.

The 19th Annual Symposium on Graduate Research & Scholarly Projects, April 14th, 2023.

The 18th Annual Symposium on Graduate Research & Scholarly Projects, April 29th, 2022.

The 17th Annual Symposium on Graduate Research & Scholarly Projects, April 2nd, 2021.

The 16th Annual Symposium on Graduate Research & Scholarly Projects, May 1st, 2020.

The 15th Annual Symposium on Graduate Research & Scholarly Projects, April 26th, 2019.

The 13th Annual Symposium on Graduate Research & Scholarly Projects, April 28th, 2017.

The 12th Annual Symposium on Graduate Research & Scholarly Projects, April 29th, 2016.

The 10th Annual Symposium on Graduate Research & Scholarly Projects, April 25th, 2014.

The 9th Annual Symposium on Graduate Research & Scholarly Projects, May 8th, 2013.

College Services:

Academic Affair Committee, 2006–2008, 2013-2015, 2017–present

Faculty/Staff Affairs Committee, 2012–2013

Technology Committee, 2008–2012

Departmental Services:

Standing Committees:

Academic Affairs Committee, 2006–2008, 2013–2015, 2016–present

Admissions Committee, 2016–present

Doctoral Committee, 2007–present

Faculty/Staff/Students Affairs Committee, 2008–2013

Tenure, Promotion, & Annual Review Committee, 2016– 2018, 2020–present

AuD Standing Committee, 2005–2006

AuD Curriculum Committee, 2004–2005

Graduate Audiology Admission Committee, 2004–2005

Ad hoc Committee:

Faculty Activity Record (FAR2018) Review Committee, 2019

Faculty Search Committee, 2021

Faculty Search Committee (two positions), 2016–2017

Faculty Search Committee (two positions), 2015–2016

Faculty Search Committee (two positions), 2014–2015

CSD Administrative Assistant Search Committee, 2011.

Faculty Search Committee (two positions), 2008

Ad Hoc Committee on Undergraduate Basic Science Curriculum, Fall 2007

Awards Committee, 2005–2006

Non-committee activities:

Transfer to a new course record data tracking system CLAPSO (2013)

AuD program curriculum revision (research projects, comprehensive exam, admission to candidacy, residency requirements) (2012, 2014)

Participate in AuD program revision (4-year to 3-year) and curriculum revision (four courses: CSD806, 808, 851, 866) (2011–2012)

Completed all course records in the implemented SAMS system to monitor student competencies (fall 2008).

Participate in curriculum development of the AuD program (2007–2008).

Editing the AuD Program Student Handbook (2006 –2007)

Participate in developing, documenting, and reviewing students' performance-outcomes/competence, as required for national accreditation (2009).

University of South Alabama

Departmental Services:

Budget Committee, 2000–2001,

Capital Expenses Committee, 2000–2004

Academic & Admissions Committee, 2001–2004

Faculty Search Committee, 2000–2001, 2002–2003

Department Chair Search Committee, 2000

AuD Program Development Committee, 2000–2003

Audiology Graduate Coordinator, 2002–2004

Community Services

Faculty Advisor, Chinese Students and Scholars Association, Wichita State Univ., Wichita, KS. (2006–2007)

Faculty Advisor, Chinese Students and Scholars Association, Univ. of South Alabama, Mobile, AL. (2003–2004)

VI. PEER REVIEWS & REFERENCES

External Peer Review of Research (2017)

1. **Kathryn Bright**, PhD, Professor & Audiology Graduate Coordinator
Dept. of Audiology and Speech-Language Sciences, University of Northern Colorado
2. **Cynthia G. Fowler**, PhD, CCC-A, Professor
Dept. of Communication Sciences & Disorders, University of Wisconsin–Madison
3. **Dan C. Halling**, PhD, CCC-A, Professor and Chair
Dept. of Communication Sciences & Disorders, Grand Valley State University
4. **Beth A. Prieve**, PhD, CCC-A, Professor
Dept of Communication Sciences & Disorders, Syracuse University
5. **Jacek Smurzynski**, PhD, Professor and Audiology Program Coordinator
Dept. of Communicative Disorders, East Tennessee State University

External Peer Review of Research (2009)

1. **Randall C. Beattie**, PhD, CCC-A, Professor & Undergraduate Advisor
Dept of Communicative Disorders, California State University Long Beach
2. **Patricia A. Chase**, PhD, CCC-A, Associate Professor
Director of Clinical Education & Coordinator of Graduate Study (Audiology)
Dept of Audiology & Speech-Language Pathology, East Tennessee State University
3. **M. Patrick Feeney**, PhD, CCC-A, Associate Professor & Chief of Audiology
Department of Otolaryngology - Head & Neck Surgery, University of Washington
4. **Beth A. Prieve**, PhD, CCC-A, Associate Professor
Dept of Communication Sciences & Disorders, Syracuse University
5. **Brenda M. Ryals**, PhD, CCC-A, Professor & Director of Auditory Research Laboratory
Dept of Communication Sciences & Disorders, James Madison University
6. **Li Xu**, MD, PhD, Associate Professor
School of Hearing, Speech and Language Sciences, Ohio University

References