

# Curriculum Vitae Lina Motlagh Zadeh

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## Educational Background

2014-2018 **AuD-PhD, Communication Sciences & Disorders**, University of Cincinnati, Cincinnati, Ohio  
[Ohio Audiology License #: A.02489]  
2010-2013 **M.S., Audiology**, Shahid Beheshti University of Medical Sciences, Tehran, Iran  
2005–2009 **B.S., Audiology**, Shahid Beheshti University of Medical Sciences, Tehran, Iran

## Professional Employment

2023 – Present **Assistant Professor**, Department of Communication Sciences and Disorders, University of Cincinnati  
2021 – Present **Research Associate Communication Research Center**, Cincinnati Children’s Hospital Medical Center  
2018 – 2023 **Adjunct Professor**, Department of Communication Sciences and Disorders, University of Cincinnati  
2018 – 2021 **Postdoctoral Research Fellow**, Communication Research Center, Cincinnati Children’s Hospital Medical Center  
2009 – 2014 **Audiologist**, Audiology and ENT clinic, Payambaran Hospital, Tehran, Iran

## PUBLICATIONS & PRESENTATIONS

### Peer-Reviewed Publications

Kojima, K., Lin, L., Petley, L., Clevenger, N., Perdew, A., Bodik, M., Blankenship, C. M., **Motlagh Zadeh, L.**, Hunter, L. L., Moore, D. R., (2023). Childhood listening and associated cognitive difficulties persist into adolescence. *Ear & Hearing* (In Press).

Hunter, L. L., Blankenship, C. M., Shinn-Cunningham, B., Hood, L., **Motlagh Zadeh, L.**, & Moore, D. R. (2023). Brainstem auditory physiology in children with listening difficulties. *Hearing research*, 429, 108705.  
<https://doi.org/10.1016/j.heares.2023.108705>

Lipps, E., Caldwell-Kurtzman, J., **Motlagh Zadeh, L.**, Blankenship, C.M., Moore, D.R., and Hunter, L.L. (2022). Impact of Face Masks on Audiovisual Word Recognition in Young Children with Hearing Loss during the Covid-19 Pandemic. *J Early Hear Detection Intervention*, 6(2), 70-78. DOI: <https://doi.org/10.26077/4fda-c155>

Petley, L., Hunter, L. L., **Motlagh Zadeh, L.**, Sloat, N. T., Perdew, A., Lin, L., Moore, R. D. (2021). Listening Difficulties in Children with Normal Audiograms: Relation to Hearing and Cognition. *Ear & Hearing*, 42 (6) - p 1640-1655 doi: 10.1097/AUD.0000000000001076

**Motlagh Zadeh, L.**, Silbert, N., Swanepoel, D W., Moore D. (2020). Improved Sensitivity of Digits-in-Noise Test to High-Frequency Hearing Loss. *Ear & Hearing*. <https://doi.org/10.1097/aud.0000000000000956>

**Motlagh Zadeh, L.**, Silbert, N., Swanepoel, D W., Sternasty K., Moore D. (2020). Development and validation of a digits-in-noise hearing test in Persian. *International Journal of Audiology*. <https://doi.org/10.1080/14992027.2020.1814969>

Hunter, L. L., Monson, B., Moore, R. D., Dhar, S., Wright, A. B., Munro, J. K., **Motlagh Zadeh, L.**, Blankenship, C., Stiepan, M. S., Siegel, J. (2020) Extended high frequency hearing and speech perception implications in adults and children. *Hearing Research*. <https://doi.org/10.1016/j.heares.2020.107922>

De Sousa, C. K., Moore R. D., **Motlagh Zadeh, L.**, Myburgh, C. H., Swanepoel, D. W. (2019). Do Smartphone Hearing Aid Apps Work?. *The Hearing Journal*, 72 (11), 34-37.

**Motlagh Zadeh, L.**, Silbert, N., Swanepoel, D W., Sternasty K., Moore D. (2019). Extended high frequency hearing enhances speech perception in noise. *Proceedings of the National Academy of Sciences*. 116(47). <https://doi.org/10.1073/pnas.1903315116>

**Motlagh Zadeh, L.**, Silbert, N., Jalilvand Karimi, L. (2018). Bilingualism leads to greater auditory capacity. *International Journal of Audiology*, 57 (11), 831-837 <https://doi.org/10.1080/14992027.2018.1516896>

Silbert, N., **Motlagh Zadeh, L.** (2018). Modeling talker- and listener-based sources of variability in babble-induced consonant confusions. *The Journal of the Acoustical Society of America*, 143, 2780. <https://doi.org/10.1121/1.5037091>

Silbert, N., **Motlagh Zadeh, L.** (2015). Variability in noise-masked consonant identification. *International Phonetic Association*. <https://www.internationalphoneticassociation.org/icphs-proceedings/ICPhS2015/Papers/ICPHS0741.pdf>

### Oral and Poster Presentations

Oral Presentation. American Academy of Audiology. April 2023, Seattle, WA.

Title: "Extended high frequency hearing loss: From speech test materials to clinical manifestations"

**Lina Motlagh Zadeh**, Brian Monson, Sandy Magallan, Mishra Sri

Poster Presentation. American Academy of Audiology. April 2023, Seattle, WA.

Title: "High-Frequency Air-Bone Gaps in Listeners with Normal Hearing and Sensorineural Hearing Loss"

Aparna Rao, Victoria Sanchez, Lisa L. Hunter, Suzannah Boyle, **Lina Motlagh Zadeh**, Amelia N. Wong, Robert H. Margolis

Oral Presentation. Hearing Across the Life Span Conference, June 2022, Lake Como, Italy.

Title: "Mechanisms of association between speech-in-noise and extended high-frequency hearing"

**Lina Motlagh Zadeh**, Chelsea Blankenship, David Moore, Dawn Konrad Martin, Angela Garinis, Patrick Feeney, Lisa Hunter

Oral Presentation. The American Auditory Society's 49th Annual Conference, February 2022, Scottsdale, Arizona, USA.

Title: "Mechanisms underlying the association between speech-in-noise perception and extended high-frequency"

**Lina Motlagh Zadeh**, Chelsea Blankenship, David Moore, Dawn Konrad Martin, Angela Garinis, Patrick

Feeney, Lisa Hunter

Poster Presentation. The American Auditory Society's 48th Annual Conference, March 2021, Online

Title: "Comparison between remote and laboratory digits-in-noise (DIN) testing"

**Lina Motlagh Zadeh**, Veronica Brennan, De Wet Swanepoel, David Moore

Poster Presentation. The American Auditory Society's 47th Annual Conference, March 2020, Scottsdale, Arizona, USA.

Title: "Sound-field speech-in-babble hearing scores in normal and impaired hearing listeners"

**Lina Motlagh Zadeh**, Lianna Duchardt, Jordan Caylor, Veronica Bernnan, David Moore

Poster Presentation. The American Auditory Society's 47th Annual Conference, March 2020, Scottsdale, Arizona, USA.

Title: "Measuring Listening Difficulties in Children with Speech in Noise Tests"

Nathan Clevenger, Jody Caldwell-Kurtzman, Meghan Grojean, **Lina Motlagh Zadeh**,

Audrey Perdew, David Moore

Podium e-talk. British society of audiology e-Conference. December, 2019.

Title: "The Perceptual Significance of Extended High-Frequency Energy in Speech Perception in Noise"

**Lina Motlagh Zadeh**, Noah Silbert, De Wet Swanepoel, Katherine Sternasty, David Moore

Poster Presentation. The American Academy of Audiology Conference, March, 2019, Columbus, Ohio, USA.

Title: "Benchmarking Patient Care through Collaboration with the Auditory Implant Initiative"

Lamiaa Abdelrehim, **Lina Motlagh Zadeh**, Lisa Wenstrup, Theresa Hammer, Brian R. Earl, Ravi N. Samy

Poster Presentation. The American Auditory Society's 46th Annual Conference, March 2019, Scottsdale, Arizona, USA.

Title: "Improved Sensitivity of digits-in-noise test to high frequency hearing loss"

**Lina Motlagh Zadeh**, Noah Silbert, De Wet Swanepoel, David Moore

Invited Oral Presentation. Association for Research in Otolaryngology, the 42<sup>nd</sup> Annual Midwinter Meeting, February 2019, Baltimore, Maryland, USA.

Title: "Benefits of Extended High Frequency Hearing"

**Lina Motlagh Zadeh**, Noah Silbert, De Wet Swanepoel, Katherine Sternasty, David Moore

Oral Presentation. The HEAL Conferences, June 2018, Cernobbio, Lake Como, Italy.

Title: "Extended High Frequency Hearing Contributes to Speech Perception in Noise"

**Lina Motlagh Zadeh**, Noah H. Silbert, De Wet Swanepoel, Katherine Sternasty, David R. Moore

Podium Presentation. The American Auditory Society's 45th Annual Conference, March 2018, Scottsdale, Arizona, USA.

Title: "Extended High Frequency Hearing Contributes to Speech Perception in Noise"

**Lina Motlagh Zadeh**, Noah Silbert, David Moore

Poster Presentation. 174<sup>th</sup> Meeting of the Acoustical Society of America, Dec 2017, New Orleans, Louisiana, USA.

Title: "Developing a remotely deliverable digit triplet in noise test for detecting high frequency hearing loss"

**Lina Motlagh Zadeh**, Noah Silbert, Katherine Sternasty, David Moore

Oral Presentation. Midwestern Conference on Cognitive Science, June 2017, Oxford, Ohio, USA.  
Title: "Modeling Sources of variation in confusion pattern with multilevel general recognition theory"  
Noah Silbert, **Lina Motlagh Zadeh**.

Poster Presentation. 170<sup>th</sup> Meeting of the Acoustical Society of America, Nov 2015, Jacksonville, Florida, USA.  
Title: "Listener characteristics and the perception of speech in noise"  
**Lina Motlagh Zadeh**, Noah Silbert.

Poster Presentation. 169<sup>th</sup> Meeting of the Acoustical Society of America, May 2015, Pittsburgh, Pennsylvania, USA.  
Title: "Talker variation in the perception of speech in noise"  
Noah Silbert, **Lina Motlagh Zadeh**.

Poster Presentation. 169<sup>th</sup> Meeting of the Acoustical Society of America, May 2015, Pittsburgh, Pennsylvania, USA.  
Title: "Effect of Bilingualism on Auditory Capacity"  
**Lina Motlagh Zadeh**, Noah Silbert.

Oral Presentation. 13<sup>th</sup> Iranian Audiology Conference, Dec 2013, Tehran, Iran.  
Title: "A comparison between Bilinguals and Monolinguals Auditory Capacity by Dichotic Consonant-Vowels Test"  
**Lina Motlagh Zadeh**, Leila Jalilvand Karimi.

Oral Presentation. Shahid Beheshti University of Medical Sciences, Feb 2012, Tehran, Iran.  
Title: "Evaluation of Vestibular System in Down Syndrome Children"  
**Lina Motlagh Zadeh**, Leila Jalilvand karimi

Poster Presentation. 9<sup>th</sup> Iranian ENT Congress on Audiology, Jan 2011, Tehran, Iran.  
Title: "Evaluation of Peripheral Auditory System Function in Rheumatoid Arthritis Patients"  
**Lina Motlagh Zadeh**, , Leila Jalilvand Karimi

Oral Presentation. 11<sup>th</sup> Iranian Students Conference on Audiology with Emphasis on Elderly (Aged), Nov 2007, Tehran, Iran.  
Title: "Diagnosis and Rehabilitation of Benign Paroxysmal Positional Vertigo"  
**Lina Motlagh Zadeh**, Leila Jalilvand Karimi

## **Research Experience and Projects:**

### **Ongoing research projects:**

**R21DC020242**

**04/01/2022 – 03/31/2025**

*Investigating the contribution of extended high-frequency hearing loss to poor speech-in-noise perception in clinically normal hearing children and young adults*

Goal: The main goal of this study is to investigate the relationship between extended high-frequency hearing loss and speech perception in noise abilities among listeners with normal standard audiograms. Children and young adults with clinically normal hearing often leave audiology clinics with no diagnosis to explain the difficulty they experience listening in noise. This study will provide valuable insight concerning the role of

extended high-frequency hearing loss in the auditory challenges these individuals experience in their daily communications.

**Role: PI**

Location: Cincinnati Children's Hospital Medical Center- Cincinnati, Ohio

**R01DC017867**

**09/01/2020 – 08/31/2025**

*Prevention of Ototoxicity with Effective Monitoring (POEM) – Pharmacokinetic and Auditory Linkages*

Goal: The long-term goal is to design improved auditory monitoring protocols to prevent hearing deficits due to ototoxicity in patients taking aminoglycoside antibiotics. The objective of this proposal is to determine the effect of AG antibiotics on auditory function in relation to individual measures of drug exposure in patients with cystic fibrosis.

**Role: Research Associate**

Location: Cincinnati Children's Hospital Medical Center- Cincinnati, Ohio

**Completed research projects:**

**Autism Speaks Foundation (Royal Arch Mason Pilot Grant)**

**11/01/2019 – 10/31/2020**

*Neural correlates of auditory processing difficulties (APD) in children with high functioning ASD*

Goal: In this pilot study we will obtain data on peripheral and central auditory function in the children with ASD using the same sensitized measures of hearing function and resting state functional fMRI as we have used in our studies of childhood listening difficulties to identify connectivity patterns between speech and other brain cortical regions. These approaches will pinpoint mechanisms of listening abilities and disabilities in children with ASD, enabling translation into informed clinical assessments and targeted interventions.

**Role: Research Associate**

Location: Cincinnati Children's Hospital Medical Center- Cincinnati, Ohio

**R21DC016241**

**07/01/2017 – 12/31/2019**

*Smartphone based detection and intervention for hearing loss in low and middle income countries*

Goal: Smartphones, unlike healthcare, are widely accessible in low/middle income countries and can deliver speech-in-noise tests of hearing. hearZA is a smartphone app developed by the University of Pretoria, South Africa. This research will develop further functions for hear ZA: testing for unilateral and high frequency hearing loss, development of screening questions and a decision tool to guide further action, and evaluation of apps that provide simulations of hearing aids. We aim to make the smartphone a self-contained solution for hearing health care.

**Role: Research Associate**

Location: Cincinnati Children's Hospital Medical Center- Cincinnati, Ohio

**R01DC014078-01A1**

**08/01/2015 – 07/31/2021**

*Idiopathic auditory dysfunction in children: nature and mechanisms*

Goal: Many children, and their caregivers and teachers, report listening difficulties, even though their hearing is normal. This research will explore two theories proposed to explain such difficulties, that they are based on impaired hearing, not detected by current tests, or that the children have difficulties primarily with cognition or language. The results will help understand and manage this common and important problem.

**Role: Research Associate**

Location: Cincinnati Children's Hospital Medical Center- Cincinnati, Ohio

**R21DC016701-01A1**

**07/20/2018 – 06/30/2021**

*Perceptual interactions and response bias in disordered voice assessment*

**Role: Research Assistant**

Location: University of Cincinnati- College of Allied Health, Cincinnati, Ohio

**TEACHING**

**UNIVERSITY OF CINCINNATI**

*Anatomy and Physiology of the Auditory System*

*Central Auditory Nervous System Disorders*

*Research Methods*

*Audiologic Management and Counselling*

*Advanced Speech and Hearing sciences*

*Neurological Foundations of Communication*

**Honors and Outstanding Achievements**

- 2022 NIDCD Early Career Research (ECR) Award (R21)
- 2021 Resident and Graduate Student Mentored Research Award-American Auditory Society
- 2017 Best poster award. 174th Meeting of the Acoustical Society of America
- 2017 Travel Award- 174th Meeting of the Acoustic Society of America
- 2014 University Research Council Graduate Student Research Fellowship, University of Cincinnati
- 2014 Graduate Incentive award (GIA) funded by the University of Cincinnati
- 2013 Outstanding student award by Exceptional Talent Office at Shahid Beheshti University of Medical Sciences, Tehran, Iran
- 2013 Ranked 9th among 2000 participants in National Entrance Exam for graduate studies in Audiology (MSc Entrance Exam). Tehran, Iran

**Supervision of Student Research**

- 2023-2024 Lamiaa Abdelrehim, PhD student
- 2022-2023 Sarah Doyle, AuD student
- Summer-2022 Carly Scott, Summer Undergraduate Research Fellowship student
- 2021-2022 Hebatalla Hamza, AuD student
- 2021-2022 Caroline Miller, AuD student
- 2021-2022 Katelyn McManus, AuD student
- Summer 2021 Ryan Schuetter, Summer Undergraduate Research Fellowship student
- 2020-2022 Veronica Brennan, B.S. in Psychology student
- 2020-2021 Nicole Hinz, AuD student
- 2019-2020 Lianna Duchardt, AuD student
- Fall-2020 Adam Jones, B.S. in Neuroscience student, Annual Poster Forum
- Summer-2019 Elise Madeline Becker. B.S in Biological Science, SURF program
- Summer-2019 Meghan Gojean, MD students, Annual Poster Forum
- 2017-2018 Katherine Sternasty, B.S. in CSD, Honors research experience
- Summer-2017 Sara Ferguson, B.S. in CSD, Honors research experience

## **Service to Disciplinary and Professional Societies or Associations**

Reviewer, Journal of Speech, Language, and Hearing Research

Reviewer, International Journal of Audiology

Reviewer, Ear and Hearing

Reviewer, Frontiers

Member of Student and Post-Doc Mentoring Committee of the American Auditory Society

Member of Hear in Cincinnati Committee: Communicate, share, and collaborate on research endeavors in the greater Cincinnati area

## **References:**

Lisa Hunter, PhD- *Scientific Director of Research, Division of Audiology, Cincinnati Children's Hospital Medical Center* [Lisa.Hunter@cchmc.org](mailto:Lisa.Hunter@cchmc.org)

David Moore, PhD- *Director, Communication Sciences Research Center, Cincinnati Children's Hospital Medical Center* [David.Moore2@cchmc.org](mailto:David.Moore2@cchmc.org)

Suzan Boyce, PhD- *Program Director, Communication Sciences and Disorders, University of Cincinnati* [boycese@ucmail.uc.edu](mailto:boycese@ucmail.uc.edu)