

# Jithin Raj Balan, Ph.D.

Dr. Jithin Balan, Ph.D., holds dual-state licensure as an Audiologist in California and Texas and is a full-time faculty member in the Department of Communication Science and Disorders at Sacramento State University. He is a certified Audiologist by the American Board of Audiology (ABA). He obtained his doctoral degree from the University of Mysore, India, in 2019 and subsequently held the position of post-doctoral Research Associate at the University of Texas at Austin from 2022 to 2024. Dr. Balan brings extensive clinical expertise in audiology, with over 12 years of experience as a clinical supervisor at the 'All India Institute of Speech and Hearing,' Mysore—a distinguished federally funded training institute in India. His research endeavors have primarily focused on addressing listening difficulties in individuals with Auditory Neuropathy Spectrum Disorders and exploring speech-in-noise perception among listeners exhibiting normal audiograms and in extended highfrequency hearing loss. His clinical interests encompass Diagnostic Audiology, Electrophysiology, and the application of amplification devices. Dr. Balan is deeply committed to enhancing community well-being by providing compassionate care that fosters active social engagement and improves overall quality of life.

## Contact information.

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#### Pronouns

He/him

American Speech-Language and Hearing Association (ASHA) Certificate of Clinical Competence (CCC) Not applicable

## California Professional License

Type: AUDIOLOGIST Number: 3887

## California Teaching Credentials

Not applicable

## Additional Professional Licensure(s) and Credentials

- American Board of Audiology certified (#3474)
- Texas State License for Audiologist (#81685)
- Member of the American Auditory Society
- Member of the Association for Research in Otolaryngology.
- Rehabilitation Council of India. (A23004)
- Life Member of Indian Speech and Hearing Association (L17093079

## Highest degree earned:

Research doctoral (PhD)

#### Education

Degree Earned	Institution Name	Year Granted	Field of Study

Ph.D.	AIISH, Mysore,	2019	Audiology
	University of Mysore, India.		
M sc.	AWH special college,	2009	Audiology and Speech-language Pathology
	University of Calicut, India.		
B sc.	AWH special college,	2006	Audiology and Speech-language Pathology
	University of Calicut, India.		

## **Employment Status:**

Full-time 12-month

## Academic Rank:

Assistant Professor

#### Role to the department:

Clinical Supervisor Instructional Faculty

## **Tenure Status:**

Non-tenured and on a tenure track

#### Major areas of research interests

Research endeavors have primarily focused on addressing listening difficulties in individuals with Auditory Neuropathy Spectrum Disorders and exploring speech-in-noise perception among listeners exhibiting normal audiograms and in extended high-frequency hearing loss.

#### Publications and papers completed.

- Mishra, S. K., Rodrigo, H., & Balan, J. R. (2024). Exploring the Influence of Extended High-Frequency Hearing on Cochlear Functioning at Lower Frequencies. Journal of Speech, Language, and Hearing Research, 1-10.
- Balan, J. R., Rodrigo, H., Saxena, U., & Mishra, S. K. (2023). Explainable machine learning reveals the relationship between hearing thresholds and speech-in-noise recognition in listeners with normal audiograms. The Journal of the Acoustical Society of America, 154(4), 2278-2288. <u>https://doi.org/10.1121/10.0021303</u>
- Balan, J.R., & Jaisinghani P. (2022) Effect of Sensory Modality on Reaction Time in Individuals with Auditory Neuropathy Spectrum Disorder. *Journal of Communication disorder*, 100, 106278.
- Prakash, P., Sreedhar, A., **Balan, J. R.**, & Varghese, A. M. (2022). Benefit of daily listening with technological advancements: comparison of basic and premium category hearing aids. *European archives of otorhinolaryngology: Head and Neck Surgery*, 1–9. Advance online publication.
- Balan, J.R., & Maruthy, S. (2018). Dynamics of Speech Perception in the Auditory Visual Mode: Empirical Evidence for the Management of Auditory Neuropathy Spectrum Disorders. *Journal of audiology and otology*, 22(3), 1-7.
- Balan, J.R., & Maruthy, S. (2018). The relative contribution of visual cues and acoustic enhancement strategies in improving speech perception of individuals with auditory neuropathy spectrum disorders. *Indian Journal of Otology*, *24*(3), 139.

- Balan, J.R. (2020). Effect of modality and acoustic enhancements on feature transmission index in individuals with auditory neuropathy spectrum disorder. *International Journal of Health Sciences and Research*,10 (12):53-62.
- Jaisinghani, P., & Balan, J.R. (2021). Manifestation of hearing loss in Joubert syndrome: case report. *International Journal of Medical and Health Research*,7(1), 30-32.
- Balan, J.R., & Jaisinghani, P. (2021). Auditory Neuropathy Spectrum Disorder; a Rare Sequela of Typhoid Fever. *International Journal of Rhinology and Otology*, 3(1):112.
- Balan, J.R., & Jaisinghani, P. (2021). Speech Perception in Noise and Cortical Auditory Evoked Potentials in Individuals with Auditory Neuropathy Spectrum Disorders. *International Journal of Rhinology and Otology*, 3 (4):114.

## Presentations completed.

- Balan JR. Effect of Extended High-Frequency Hearing loss on encoding information at the Brainstem. Association for Research in Otolaryngology, Orlando, FL, USA, 2023. Oral presentation
- Poster presentation on Machine learning reveals the importance of extended high frequencies for predicting speechin-noise recognition in listeners with normal audiograms at the International Hearing Aid Research Conference at South Lake Tahoe, California. 2022.
- Extended high-frequency hearing loss and the development of the efferent system at the faculty podium presentation held at the College of Health Professions, Edinburg, Texas, on 25th March 2022.
- Recent Trends in the management of ANSD" for the National Conference of ISHA KSB in India on 26th October 2019.
- Virtual poster presentation during AAA 2020 + HearTECH Expo on the Effect of Modality and Acoustic Enhancements on Speech Perception in Individuals with ANSD on June 2020.
- Served as a resource person for hands-on signal and transducers and method of establishing threshold in the national seminar on basic audiological assessment from 8th-10thOctober 2014 Department of Audiology, AIISH, India
- Served as a resource person for the refresher course on VEMP recording, analysis, and interpretation from 19-20 April 2012, conducted by the Department of Audiology, AIISH. India
- Served as a resource person and presented a video demonstration of electrophysiological assessment of CAPD during the National Symposium on assessment and management of central auditory processing disorder on 19th & 20th August 2011, India
- Paper presented on Joubert syndrome with hearing loss at First National Convention for Severe Intellectual and Multiple Disabilities, Bhimtal (Nainital) 26th-28thJune 2016, India.
- Case presentation -Auditory neuropathy spectrum disorder in the in-house staff enrichment program conducted on 25th May 2016. AIISH, India
- Practical demonstration on real ear and insertion gain measurements and electroacoustic characteristics of hearing aid in the earmold technology workshop conducted on 9th March 2017, India
- Delivered an invited talk on "Importance of Early Identification and Intervention of Pediatric Hearing Loss" on 31st January 2016 at CME on Pediatric hearing, organized by Dept. of ENT, Amala Institute of Medical Sciences, Thrissur. Kerala. India.
- Resource person in the "Workshop on Fine-tuning of digital hearing aids for individuals with hearing impairment" conducted on 24th June 2015, Karnataka, India.
- Attended and served on the Scientific Committee at the 8th ISHA-KSB Conference held on 12th and 13th September 2015, Kerala, India.
- Resource person and preparing questions on the topic causes of hearing loss clinical signs and symptoms in the workshop on preparing a database of questions in Audiology on 25th June 2016, Karnataka, India.
- Vidhya Suresh, Prashanth Prabhu, Jithin Raj B (2017). Development of high-frequency word lists in Malayalam. Presented during the 3rdInternational conference on Audiological Sciences organized by the Department of

Audiology & Speech- Language Pathology, Kasturba Medical College, Manipal University, Mangaluru, from 21st- 23rd September 2017.

# Grants submitted.

Not applicable/ Information not provided.

# Grants awarded.

- Balan, J.R. & Milan, B. (2022). The Role of Amplitude and frequency modulation in speech perception in children. College of Health Professions, the University of Texas Rio Grande Valley, Edinburg, Texas, USA. Faculty Seed Research Grant. Funding Period: May 2022- August 2022. Amount: 5000 USD.
- Prabhu, P. & Balan, J.R. (2016). Development of low-frequency range word lists in Malayalam. AIISH research fund, Karnataka, India. Funding Period: 3/2017-02-18. Amount: 4000 USD.

# Activities related to clinical service delivery.

- February 2022 August 2022 Assistant Professor of Research at the Department of Communication Sciences & Disorders, College of Health Professions, University of Texas Rio Grande Valley, Edinburg, Texas
- May 2010 February 2022 Clinical Audiologist performing routine audiological assessment and management for children and adults with hearing and balance disorders at the All-India Institute of Speech and Hearing Mysore, Karnataka, India.
- Jan 2010- May 2010 Clinical Audiologist routine audiological testing and electrophysiological assessment for children and adults with hearing loss and management at Madras ENT Research Foundation, Chennai, India

# Clinical supervision experience

May 2010 – February 2022 provided clinical supervision for undergraduates and graduates performing routine audiological assessment and management for children and adults with hearing and balance disorders at the All-India Institute of Speech and Hearing Mysore, Karnataka, India.

## Professional development experiences

Not applicable/ Information not provided.

## Professionally related service activities

- Reviewer: Journal of 'The International Archives of Otorhinolaryngology, Journal of Acta Scientific Otolaryngology.
- External Reviewer: Scientific papers in the "International Conference on Communication Disorders and Audiological Practices-ICCAP 2022" conducted at the National Institute of Speech and Hearing, Trivandrum, from 15th to 17th September 2022.
- Reviewer: Scientific papers submitted to conferences organized by the Indian Speech and Hearing Association. 2021.
- Reviewer: The 8th ISHA-KSB Conference was held on September 12th and 13th of September 2015, in Kerala, India.

## Community Partnerships/Community Outreach

Not applicable/ Information not provided.

## Service on Departmental, College and University committees.

• Academic Standards Subcommittee (Fall 2024 through Spring 2026)

## Academic/Professional Honors and Recognition

- ASHA Research Mentoring Pair Travel award (RMPTA) ASHA convention, November 15-18, 2023, Boston.
- New Investigator Travel Award to present the scientific paper 'Effect of Extended High-Frequency Hearing on Cochlear and Brainstem Function' at the 2023 American Auditory Society meeting, March 2-4, 2023, in Scottsdale, Arizona.
- Awarded Audiology/Hearing Science Research Travel Award (ARTA) ASHA convention, November 17-19, 2022, New Orleans.
- IHCON Sig Soli Scholarship for the scientific poster on Machine learning reveals the importance of extended high frequencies for predicting speech-in-noise recognition in listeners with normal audiograms at the International Hearing Aid Research Conference at South Lake Tahoe, August 10-14, 2022, California.
- Best scientific paper award in the 11thISHAKSB conference held in Kerala, India, 2018.

• Best employee of All India Institute of Speech and Hearing, Mysuru, India, 2019

Course	Course Name	Term(s) Taught	Program
Number			
CSAD 630C	Audiology Clinic III.	Summer 2024	Au.D.
CSAD 632	Pediatric and Educational Audiology.	Summer 2024	Au.D.
CSAD 640	Clinical Methods: Current Topics in Audiology.	Fall 2024	Au.D.
CSAD 640C	Audiology Clinic IV.	Fall 2024	Au.D.
CSAD 660	Clinical Methods: Legal and Ethical Issues.	Summer 2024	Au.D.
CSAD 671	Counseling in Audiology.	Fall 2024	Au.D.

# Courses taught at Sacramento State