



# ASHA KIRAN 2015



ASIAN INDIAN CAUCUS(AIC) ANNUAL NEWSLETTER

NOVEMBER 2015

## About Asian Indian Caucus

The Asian-Indian Caucus (AIC) is one of the six multicultural constituency groups of the American Speech Language and Hearing Association (ASHA). AIC was established in 1994 to address the professional, clinical and educational needs of persons of Asian Indian origin residing in the United States in the area of communication sciences and disorders. Asian Indians, otherwise known as South Asians, refer to persons who trace their origin to the Indian subcontinent, including, but not limited to the following countries (in alphabetical order): Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

### AIC OBJECTIVES

- \* To serve as a resource to meet the needs of clients of Asian Indian origin.
- \* To provide a forum for interaction and collaboration among clinicians, researchers, and students of Asian-Indian origin in the field of communication sciences and disorders.
- \* To promote initiatives to increase the body of knowledge pertaining to Asian- Indian individuals as it relates to the field of communication sciences and disorders, and to compile and disseminate this body of knowledge.
- \* To enhance cultural competence among ASHA-certified professionals and increase cultural sensitivity regarding Asian Indians.
- \* To serve as a networking and mentoring resource for the general ASHA membership serving individuals of Asian-Indian origin with communication disorders.
- \* To work closely with ASHA, it's Office of Multicultural Affairs (OMA), and it's Multicultural Issues Board (MIB) in initiatives pertaining to the above objectives.

**WANT TO KNOW MORE ABOUT AIC?**

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<http://goo.gl/kgCqK>

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### My Dear Fellow AIC Members,

I am happy to connect with you all again at this time of the year!!!! The term 2015 has been an exciting period full of rigor and enthusiasm as I took over as the President of AIC, following the same energetic footsteps of our past president Mr. Arun Biran. I have been fortunate to have a very supportive and dynamic executive team, whose contributions have shaped the goals for this term. We have restructured our mission goals based on the discussions and feedback received from attendees of 2014 ASHA convention at Orlando, Florida. Some of the main objectives focused were: AIC collaboration with Indian Speech and Hearing Association (ISHA), creating a database of multilingual resource materials for assessment and treatment of speech, language and hearing disorders and most importantly AIC funding support.

We actively worked towards achieving some of these objectives through our monthly-organized telephonic meetings and here is the progress we have made so far: **a) AIC and ISHA collaboration:** The Vice President of Professional Development, Dr. Nandakumar Radhakrishnan with input from Priya Sudarsanam, Member of Multicultural Issues Board of ASHA has established contacts with Prof. Rangasayee, Ms. Aparna Nandurkar and ISHA Secretary in developing mentorship program catering to the needs of students and professionals visiting India and USA. We are hoping to expand and develop this program for the benefit of students and professionals in both India and USA. **b) Database of Multicultural Resources:** Prabu Eswaran, Vice President of Public Relations and Ranjini Mohan, Secretary have compiled a resource check list of assessment and treatment materials in Indian languages for different disorders. This is a work in progress and when completed we are hoping to have URL links to the materials on AIC Google site with respective author's permission . **c) AIC Funding/Sponsorship:** With the advent of newer AIC goals and objectives and based on previously established bylaws of AIC, we have decided to increase AIC funding through reinstatement of membership fees, seeking corporate sponsors and donations. A membership fee of \$20.00 for general members and \$10.00 for student members is being reinstated from the year 2016. AIC members are thus encouraged to go to AIC Google page to pay their membership dues by March 2016. Additionally, we have also decided to accept corporate sponsorship and donations to improve our financial status. The funds obtained will be utilized towards achieving AIC mission and objectives including but not limited to scholarships and grants for qualified students, clinician and researchers, sponsoring CEU events in ASHA conventions and development of resource materials in Indian languages. A committee has been formed to come up with rules and regulations for receiving corporate sponsorship and reviewing the sponsors for quality assurance. **d) Volunteer Members:** We have come up with a new system of accepting qualified volunteers to help our executive team achieve its mission and objectives. We encourage all members (clinicians, researchers and students) to contact us if you are interested in volunteering opportunities . **e) AIC Newsletter-** Our editors Sharmila Biran and Saradha Ananthakrishnan have diligently worked to put together a very resourceful newsletter comprising of articles from our AIC members and affiliates. Hope you enjoy reading them.

Last but not the least, I would like to end my note with a sincere request encouraging members to actively participate in all AIC related mission and objectives. "It takes a whole village to raise a child". AIC is still a child trying to achieve its milestones and it requires more than an executive committee to raise it. Please support and nurture AIC, so that we all can rejoice over its achievements collectively!! Looking forward to seeing you all at Denver, Colorado!!!!

Best,

Akila Rajappa, MS, CCC-SLP, BCS-S,  
President

## Message from the President



Akila Rajappa

# MEET OUR EXECUTIVE BOARD

## **President– Akila Rajappa**

Akila Rajappa is a Board Certified Specialist in Swallowing and Swallowing Disorders (BCS-S) with over 15 years of clinical experience in the treatment of swallowing, cognitive, and communication disorders with adult/geriatric population. She is currently pursuing her PhD in Speech-Language Pathology at Columbia University, NY. Akila has a passion for dysphagia rehabilitation and her interests lie in understanding neural mechanisms of airway protective behaviors. She is a member of the Public Relations Committee of American Board of Swallowing and Swallowing Disorders (ABSSD). She is actively involved in serving the Asian Indian community through her outreach educational initiatives on healthy aging for seniors, voice consultation programs for Indian Classical singers and also conducting Indian cultural events in the NY/NJ metropolitan area. She is currently working as a Lead Speech Pathologist for Genesis Rehabilitation Services at Inglemoor Center, NJ. She can be contacted at [atr2123@tc.columbia.edu](mailto:atr2123@tc.columbia.edu)



## **Vice President (Public Relations) - Prabhu Eswaran**

Prabhu Eswaran is currently working as a school-based speech-language pathologist in Los Angeles, California. His areas of interest include child language disorders, communication disorders in culturally and linguistically diverse populations and technology in special education. He can be contacted at [prabhuslp@gmail.com](mailto:prabhuslp@gmail.com)



## **Vice President (Professional Development)- Nandhu Radhakrishnan**

Nandhu Radhakrishnan is an assistant professor in the Department of Speech and Hearing Sciences, Lamar University, Beaumont, Texas. His areas of expertise include clinical, occupational, and performance voice. He can be contacted at [nandhu@lamar.edu](mailto:nandhu@lamar.edu)



## **Secretary- Ranjini Mohan**

Ranjini Mohan is a final year doctoral student at Purdue University, West Lafayette, Indiana. Her professional interests include Gerontology and adult communication disorders. She can be contacted at [ranjini25@gmail.com](mailto:ranjini25@gmail.com)



**Co-Editor– Sharmila Biran:** Sharmila Biran is currently working as a Speech Language Pathologist in Atlanta, Georgia.. She has over 17 years of experience working primarily with adult/geriatric population. Her interests include swallowing, cognitive and communicative disorders. She can be reached at [shamibiran@yahoo.com](mailto:shamibiran@yahoo.com)

## **Co-Editor– Saradha Ananthakrishnan**

Saradha Ananthakrishnan is an assistant professor in the Department of Audiology, Speech Language Pathology and Deaf Studies at Towson University, Maryland. She teaches a mix of graduate and undergraduate courses in speech language pathology and audiology, and her research focuses on auditory electrophysiology.





## From the Editor's Desk

SARADHA  
ANANTHAKRISHNAN &  
SHARMILA BIRAN

### Greetings from the Editorial Board of AIC 2015!!!

Greetings and welcome! We are very excited to bring you the 2015 edition of ASHA-KIRAN, showcasing the voices and work of several distinguished researchers and clinicians in the speech and hearing sciences. This year, the newsletter offers a well-balanced and diverse array of interesting contributions, drawing equally from clinicians and researchers, as well as from speech language pathology and audiology.

The newsletter begins with a “Spotlight” feature on Dr. Rahul Shrivastav, who was recently appointed as the Vice President of Instruction at the University of Georgia. Dr. Shrivastav, who has an outstanding record as an academic in the areas of teaching, scholarship and service, shares the highlights of his professional journey, while also providing insights on speech language pathology as a career, being an administrator and a mentor.

The “Clinical Innovations” section showcases the novel work of Dr. J. Tilak Ratnanather, who shares with the readers the motivation, development and initial implementation of “Speech Banana”, an exciting iPad-based application offering aural rehabilitation for adults.

The “Research Notes” section exudes a strong audiology theme this year, with excellent contributions focused on the role of auditory electrophysiology in multilingual clinical settings (Dr. Shruti Balvalli Deshpande) and the relationship between cochlear implants and tinnitus (Dr. Aniruddha Deshpande).

The audiology-heavy research section of the newsletter is somewhat counterbalanced by the “Clinicians’ Corner” section, which features in-depth articles exploring the role of telehealth in dysphagia treatment (Ms. Cagla Kantarcigil) and the Importance of mentoring for families of individuals with autism (Dr. Sivapriya Santhanam). Also in this section, Dr. Pinky Khatri, an audiologist in private practice, discusses the necessary groundwork as well as her experiences and recommendations for others who wish to explore the route of private practice.

Finally, in the “Personal Twist” section, Ms. Rinki Varindani Desai shares with the readers her professional journey from India to the United States as a medical Speech Language Pathologist.

We are also very happy to include in the newsletter our felicitations to Dr. Tilak Ratnanather on his White House Honor, Dr. Kalyani Mandke on being recognized by ASHA for her outstanding contributions in international achievement this year and Dr. Rajalakshmi on the release of her new book—many congratulations! Additionally, readers will find information within the newsletter on the Asian Indian Caucus (AIC) meeting to be held during the ASHA convention in November 2015.

We are most grateful to all the contributors, as well as the executive board of the Asian Indian Caucus, who assisted us in shaping the newsletter this year! We hope you enjoy reading the newsletter as much as we enjoyed preparing it! As always, we welcome any suggestions and thoughts from the readers. Happy reading!

Saradha Ananthakrishnan and Sharmila Biran

# AIC SPOTLIGHT

## Dr. Rahul Shrivastav

### **1. Tell us about yourself- where you are from, your educational background, what drew you to this field.**

I was born in Madhya Pradesh, India but have lived in a number of places in India and abroad. I joined a boarding school fairly early on, so I really grew-up with a few hundred other children at that school. I completed my B.Sc. and M.Sc. at the All India Institute of Speech and Hearing, Mysore, then went to Indiana University, Bloomington to do my Ph.D. in Speech and Hearing Sciences with a minor in Cognitive Sciences.

### **2. You have excelled at various roles: researcher, mentor, faculty, scientist etc. Tell us about your journey and some of the challenges that you faced.**

I have been very fortunate to have several professional opportunities. I completed my CFY while I was in my doctoral program. This focused primarily on patients with voice disorders. I also started an “accent modification” program during this time. After my Ph.D., I joined the University of Florida as an Assistant Professor. There I continued my research on voice disorders and later opened some new lines of research including those related to cochlear implant and hearing aid fitting, dysarthria and the perception of indexical properties in speech (age, emotions). I had the opportunity to work very closely with several renowned experts in voice disorders, neurogenic speech disorders, dysphagia, psychoacoustics and digital signal processing. Their help and mentorship allowed me to learn new things and to expand my own work considerably. I also had the opportunity to work closely with excellent students, which always brought new energy and fresh perspective to my own work. The work on cochlear implants was eventually commercialized (and is now owned by Cochlear Corp.). Work is continuing on several other projects.



*Dr. Rahul Shrivastav Ph.D., CCC-SLP is one of the leading figures in the Speech, Language Pathology and Audiology profession. He has an exemplary record of academic leadership, research and administrative excellence. Dr. Shrivastav was recently named as the Vice President of Instruction at the renowned University of Georgia. His office oversees all instructional activities across the University, which includes 17 colleges with over 170 majors and serving over 36,000 students.*

*Rahul Shrivastav was honored as an ASHA Fellow in 2014. He also joined the Academic Leadership Program as CIC Fellow for the year 2014-2015*

*Hard work and Perseverance always pays off...*

# AIC SPOTLIGHT

CONTINUED.....

In 2012, I was hired as the Department Chair at Michigan State University and was charged with rebuilding a department that was on the verge of being eliminated from the University. With the help of my colleagues there, we were able to revise the undergraduate and graduate offerings, update the classes to include new pedagogical approaches, establish new research laboratories, hire faculty, and create new opportunities for students and faculty.

Earlier this year, I stepped into my new role at the University of Georgia, where I am charged with continuous improvement in student success and the teaching mission across the entire University. This includes managing several offices such as those related to admissions, financial aid or the registrar, as well as several University-wide programs such as an office for faculty development, service learning, or online programs.

As for challenges faced – I think the biggest challenge has been to learn all the new things that different professional roles bring up. For example, efforts to commercialize some of our research needed me to learn things like finance strategy, marketing and software development. Taking on the role of a department Chair required knowledge of various regulations and administrative policies. In my current role, I am learning a lot about enrollment management, as well as a very wide range federal/state regulations and policy. But, these are the kinds of challenges I enjoy the most, so I don't have much to complain about!

*He was recognized for creative inventions at the "Celebration of Innovation", Office of technology Licensing, University of Florida (2009). He was also awarded the Colonel Allan R. and Margaret G.Crow term Professorship at the University of Florida in recognition of his achievements (2009).*

Dr. Rahul Shrivastav



*Embrace  
opportunities  
when you find  
them...*

# AIC SPOTLIGHT

CONTINUED....



Dr. Shrivastav was chief scientist and co-founder for a start-up company called Audigence, Inc that developed novel fitting approaches to improve outcomes for cochlear implant as well as hearing aid users.

**3. You currently hold the prestigious post of "Vice President of Instruction" at the University of Georgia. What are your expectations with this job? What advice do you have for aspiring clinical and academic professionals in our field to take up on such management goals?**

In my current role, I oversee the instructional or teaching related functions for the entire University. The University of Georgia is a highly ranked public University (ranked as the #21 public University by the US News and World Reports) with over 36,000 students and almost 2900 faculty that teach in about 170 majors or academic programs. I oversee the operations of all offices, personnel and programs that support teaching across the entire University. This includes offices such as those for Admissions, Financial Aid, Registrar and Curriculum. It also includes oversight of our smaller campuses, special programs such as one in Washington D.C., online learning, academic honesty, student advising, and several others. We are also responsible for ensuring that the University meets various regulations and accreditation benchmarks. My responsibility is to ensure smooth functioning of all these operations, faculty development and the promotion of innovative practices in all aspects of instruction. Much like several other domains, higher education is constantly changing and my offices support – and promote – these changes.

### ***Advice for Speech and Hearing Professionals:***

*There are many opportunities for you to make a difference. Keep an open mind and take these on. The skills you have from the speech and hearing field can help you with many other things that you might be interested in. Embrace the opportunities when you find them.*

# AIC SPOTLIGHT

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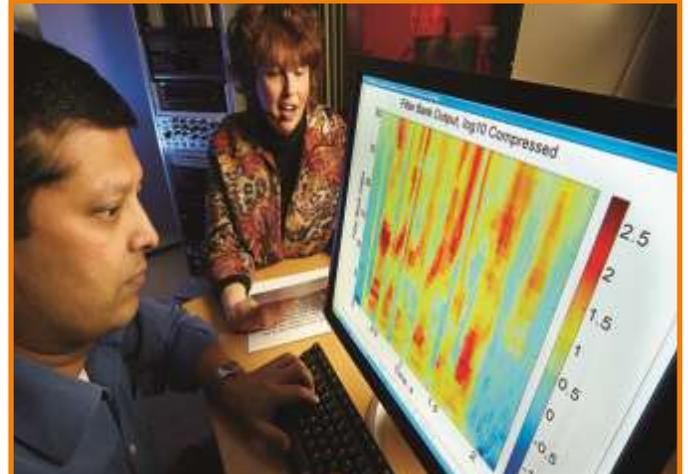
As a few examples, we are leading the implementation of an “experiential learning” initiative that will require all undergraduate student at UGA to complete at least one “hands-on” learning experience prior to graduation. Earlier this year, we launched a major initiative to make our classes smaller to promote a more engaging and interactive learning experience for students and faculty. We are trying to develop novel predictive analytics models to improve student success. And we are rolling out a new student advising process throughout campus.

Dr. Shrivastav has been invited around the world and has presented on a variety of topics. The latest ones include:

- \* Research in Communication Sciences and Disorders, presented to The Rotary Club, Lansing, MI (2014),
- \* International Healthcare Systems: India, Indiana University, IN n (2014),
- \* Psychoacoustics of dysphonic voice quality: implementation and outcomes. 10<sup>th</sup> Pan European Voice Conference, Prague, Czech Republic (2013),
- \* Speech changes and neurodegenerative diseases. Michigan State University (2013),
- \* Voice quality measurement: New approaches and impact on clinical care” Laryngology Conference Guangzhou, PR China (2012),
- \* Psychoacoustic modeling of voice quality perception: A new solution to an old problem. Pan European Voice Conference Marseilles, France (2011).

# AIC SPOTLIGHT

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**4. You have had mentors and have been a mentor yourself. How have these experiences affected you? In regards to this, what suggestions do you have for students, clinicians and researchers in our field?**

I have had a number of mentors who have really helped me throughout my career. They have always proven to be incredible resources who have helped think through problems, make necessary connections and open doors when needed. Find a few mentors through formal or informal programs. Take advantage of their experience, knowledge and connections. Most people are very happy to help – all you have to do is ask. As you grow into new roles and take on new responsibilities, find new mentors to help you.

**5. What has been the most rewarding experience of your career?**

That's a difficult one to pinpoint. I always enjoy doing different things and being able to move from one challenge to the next has been very rewarding. I would say working with my students – especially the ones who have spent time in my lab – has been one of the most rewarding experiences for me. It has been great to watch them grow and succeed in their own careers and more broadly in their personal and professional lives.

*Dr. Shrivastav was awarded the Research Mentoring Pair Travel Award (RMPTA) by the American Speech-Language & Hearing Association in 2011.*

*He was also nominated for Outstanding Teacher by CLAS scholars at the University of Florida.*

# AIC SPOTLIGHT

CONTINUED....



*Dr. Rahul Shrivastav continues his contribution to our field. He serves on the Advisory Board for The Voice Foundation, Philadelphia, PA and also on the Executive Board for Advances in Quantitative Laryngology. His laboratory studies speech perception abilities as well as speech production deficits in people with various diseases. This information is used to design better healthcare and commercial applications such as measurement systems for treatment outcomes, improved hearing aids, cochlear implants and mobile phones, or assessment and screening tools for a variety of diseases.*

Dr. Shrivastav was honored as Fellow of the American Speech-language and Hearing Association(2014). He received the Meritorious Poster Award to poster entitled “Real-world intelligibility deficits in patients with Parkinson’s Disease” at the ASHA convention in 2011. He is the coauthor for several Poster Board presentations this year.

- \* **Topic Area:** Voice and Alaryngeal Communication
- \* **Session Number:** 8333 **Poster Board** 623
- \* **Title:** The Effect of Voice Use Feedback on Silence Accumulation, Voice Accumulation, & Voice Quality
- \* **Session Format:** Poster
- \* **Day:** Thursday, November 12, 2015
- \* **Time:** 4:30 PM – 6:00 PM
- \* **Authors:** Lisa Kopf (Author who will be presenting at the session), Simone Graetzer (Author, but will NOT be presenting at the session), Pasquale Bottalico (Author, but will NOT be presenting at the session), Rahul Shrivastav (Author, but will NOT be presenting at the session), Eric Hunter (Author, but will NOT be presenting at the session)
  
- \* **Topic Area:** Neuroanatomy and Neurophysiology of the Auditory and Vestibular Mechanisms
- \* **Session Number:** 6420 **Poster Board** 120
- \* **Title:** Evaluating Listening Effort Using Event-Related Brain Potentials
- \* **Session Format:** Poster
- \* **Day:** Saturday, November 14, 2015
- \* **Time:** 11:00 AM – 12:30 PM
- \* **Authors:** Amy Kemp (Author who will be presenting at the session), David Eddins (Author, but will NOT be presenting at the session), Rahul Shrivastav (Author, but will NOT be presenting at the session), Amanda Hampton Wray (Author who will be presenting at the session)
  
- \* **Topic Area:** Voice and Alaryngeal Communication
- \* **Session Number:** 8754 **Poster Board** 560
- \* **Title:** Using Videos to Promote Awareness & Behavior Change for Voice in Parkinson’s Disease
- \* **Session Format:** Poster
- \* **Day:** Friday, November 13, 2015
- \* **Time:** 2:30 PM – 4:00 PM
- \* **Authors:** Lisa Kopf (Author who will be presenting at the session), Simone Graetzer (Author, but will NOT be presenting at the session), Rahul Shrivastav (Author, but will NOT be presenting at the session), Xiaoming Liu (Author, but will NOT be presenting at the session), Jina Huh (Author, but will NOT be presenting at the session)

## CLINICAL INNOVATIONS

### Speech Banana: a mobile platform for auditory training for adults with hearing loss

In Spring 2012, I took the long awaited step of getting a cochlear implant (CI). Hitherto, I had severe-to-profound bilateral hearing loss since birth. Thanks to early diagnosis and early intervention which prompted a move to London from Sri Lanka in the mid-1960s, I benefited from auditory-oral education at two schools for the deaf that resulted in university education in mathematics. A chance conversation at a conference on deaf education in a side-trip during a visit to Bell Labs led to an invitation to Johns Hopkins University where I have been since October 1991. There I pursued research in cochlear micro-mechanics and in 1998 moved to brain mapping. Currently I am pursuing projects in several areas including the primary and secondary auditory cortices in babies and adults with hearing loss. I decided to get a CI to pre-empt the onset of age-induced loss of residual hearing despite functioning well with bilateral hearing aids. It was also timely to see whether the amplification provide by the CI could exploit the foundations placed by my parents, teachers and speech therapists. So I had weekly auditory training (AT) at The Listening Center at Johns Hopkins. Thus I went through the classic sequence of detection, discrimination, identification and comprehension. Now I have a foundation by which some comprehension albeit in quiet is possible. However, given my audiological history (AT with analogue hearing aids and greater emphasis on auditory-oral than auditory-verbal), it is a lifelong process that uses the remarkable neuroplasticity of the brain.

For me, the cost of AT has been only partly covered by insurance which underscores the fact that reimbursement is problematic for CI centers in the US (Sorkin, 2013). Also, many contemporaries with CI in the UK do not get regular sessions except for twice a year during their mapping appointments (Raine, 2013). So many adults are literally left to their own devices! Contrast this with the best practices for babies and children most of whom are able to acquire language and speech skills at near-normal rates (Niparko et al., 2010). Granted that clinics absorb costs and raise funds (Sorkin, 2013), many adults go without AT, rendering the CI sub-optimal. While weekly sessions are ideal, adults have conflicts with work and home, i.e. "time is money". Fortunately, there are a number of applications (apps) developed to replace and supplement in-person AT, but their focus is limited to words and phrases, cultivating skills relevant to the app but not necessarily to everyday life. Additionally, many of these are not portable, as they work solely on desktop or laptop computers and are geared toward children.

For two years, I led a team of undergraduates who developed "Speech Banana" as an inexpensive, portable, and effective option in the form of an iPad AT app; please see <http://speechbanana.jhu.edu>. Our hope is that adults with hearing loss will be able to learn speech comprehension at least in quiet settings, reducing the frequency of clinic visits. Thus clinics would allow more patients to receive the targeted training they need. Between visits, clinics could receive data from app use, allowing for personalized training of each individual. Real-time data could then be recorded to justify increased private and public insurance funding toward AT.

Dr. J. Tilak  
Ratnanather



*Tilak Ratnanather is an Associate Research Professor in the Department of Biomedical Engineering at Johns Hopkins University. He obtained his BSc and DPhil degrees in mathematics at University College London and University of Oxford in 1985 and 1989 respectively. After a brief postdoctoral stint at City University London, he was a postdoctoral fellow in the Departments of Otolaryngology-Head & Neck Surgery (1991-94) at Johns Hopkins University School of Medicine and Biomedical Engineering (1994-1998). He has been affiliated with the Center for Imaging Science and Institute for Computational Medicine since 1998 and 2005 respectively.*

# SPEECH BANANA: A MOBILE PLATFORM FOR AUDITORY TRAINING FOR ADULTS WITH HEARING LOSS

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The use of tablet-based auditory training is relatively new. In fact, tablets are emerging as technology for rehabilitating aphasia patients (Des Roches, Balachandran, Ascenso, Tripodis, & Kiran, 2015), as mentioned in the previous issue of ASH-KIRAN. While AngelSound is the first of the desktop-based technologies to be made available for the tablet, it was developed for basic and clinical science research (Fu & Galvin, 2012). In contrast, SpeechBanana is a tablet derivative of a classic approach based on conversational speech pioneered in the first golden age of AT just after WW2. The design is a) modular to allow for implementation in other languages; b) functional to allow for a combination of bottom-up training and top-down testing; c) distributional to allow for mobile usage; and d) structured to facilitate targeted clinical sessions.

The name Speech Banana refers to the shape of the spectrum of speech sounds across the frequencies as visualized in an audiogram. The basic design is based on a book "Auditory Training for the Deaf" (Whitehurst & Monsees, 1952) which is now in the public domain. The app consists of 38 lessons, reflecting the scheme presented in the original book. Each lesson is comprised of a passive exercise where both visual and auditory stimuli are provided i.e. bottom-up training, and an interactive quiz where sentences with these words are presented in auditory form only i.e. top-down testing (Fig. 1). Lessons 1-5 provide an orientation such as numbers, colors, questions, etc. Lessons 6-1, 12-17 and 18-21 respectively deal with easy vowels, vowels with high frequency components and vowels with diphthongs. Lessons 22-38 focus on consonants progressing from easy to hard ones; some lessons contrast voiced and unvoiced (with high frequency components). In the app, the user types the sentence heard using the native keyboard (Fig. 2) and receives feedback that determines correctness of the answer (Fig. 3). The lessons may be used in any order, allowing the user to focus on challenging sounds as needed. Users may also customize gender of the voice and the volume of the background noise. Current limitations included readability of text and ease of typing, storage of high quality sound files, and production of stimuli through the iPad speakers. Clear speech is adopted as recommended (Picheny, Durlach, & Braida, 1985).

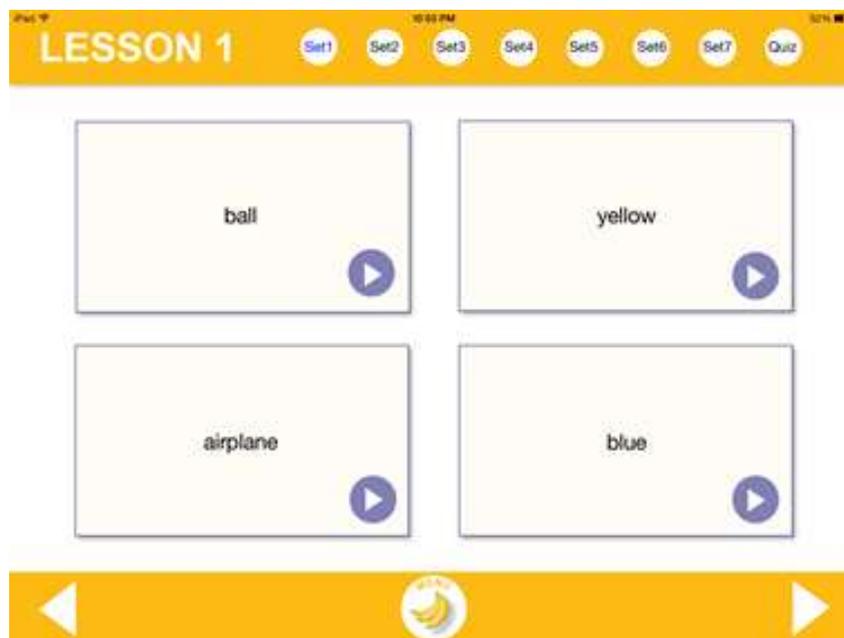


Figure 1: A typical lesson.

# SPEECH BANANA: A MOBILE PLATFORM FOR AUDITORY TRAINING FOR ADULTS WITH HEARING LOSS

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The project was hampered by the difficulties in dealing with verification by Apple which prompted us to adopt an infrastructure to compile versions for other platforms such as Android and web-based browsers in the near future. Since January 2015, there have been more than 800 downloads with some feedback. This confirms the need to expand and harden the mobile platform. In addition, with the increase in the number of adults with age-related hearing loss, it will be imperative to maintain the platform and adapt to any new emerging technologies.



Figure 2: A typical quiz

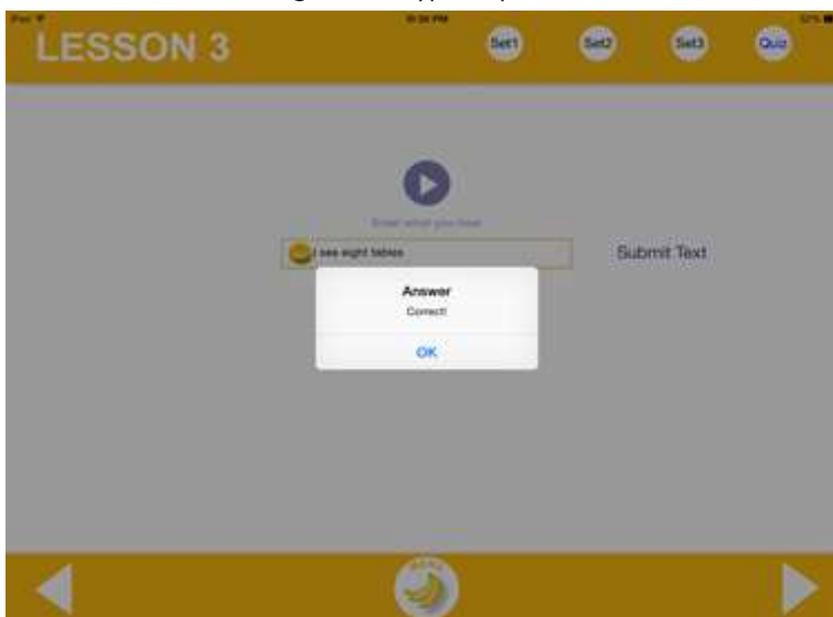


Figure 3: A typical response

## SPEECH BANANA: A MOBILE PLATFORM FOR AUDITORY TRAINING FOR ADULTS WITH HEARING LOSS

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We are addressing a weakness in the scoring which records the percentage of correct words and sentences. This may be unhelpful when the user got most of the words correct but none of the sentences correct. In fact, therapists use more meaningful measures such as the number of correct phonemes in a word or sentence. We also wish to provide proactive feedback to the user. So for a targeted session at the clinic, the “cloud” could be used to classify the user’s perception of consonants and vowels based on the placement of the tongue and the state of the vocal tract respectively. Also, we are planning clinical evaluation as there are concerns about robustness of computer-based AT (Henshaw & Ferguson, 2013) and the modest amount of improvement using such software (Bronus, El Rafaie, & Pryce, 2011).

We have received requests for British English, French, German, Turkish, Arabic, Spanish, Hindi, Tamil and Sinhalese versions. Two students and therapists in Korea are implementing a Korean version; one alumna plans to develop a Polish version as part of her Fulbright Fellowship work in Poland. In addition, a proactive gaming version could be developed in collaboration with the NSF Engaged Learning Network. Extensions for auditory working memory, children and HA users will be consistent with improving access to hearing health care worldwide.

Finally I would like to acknowledge Margo Heston, Rohit Bhattacharya, Lindsey Fernandez, Jo Eun Song, Hong Seo Lim, and the encouragement of Dr. Howard Francis and Kristin Ceh.

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## RESEARCH NOTES

### The role of auditory electrophysiology in multi-linguistic clinical settings

Objective measures such as auditory evoked potentials have a critical role in clinical audiology. Research has indicated the importance of measures such as the auditory brainstem response, auditory steady state response, frequency following response and cortical potentials to assess hearing sensitivity in individuals with normal hearing and hearing loss (Deshpande, Houston, & Keith, 2013; Lightfoot & Kennedy, 2006; Picton, Dimitrijevic, Perez-Abalo, & Van Roon, 2005; Stapells & Oates, 1997; Vander Werff, Brown, Gienapp, Clay, & Kelly, 2002). Additionally, research has indicated that these electrophysiologic measures also play an important role in the evaluation of complex speech perception, music perception and auditory processing abilities in difficult-to-test users of hearing prostheses such as hearing aids and cochlear implants (Brown et al., 2008; Dimitrijevic, John, & Picton, 2004; Kral & Sharma, 2012; Krishnan, Bidelman, Smalt, Ananthakrishnan, & Gandour, 2012).

Over the past several years, there has been an increase in the availability and use of objective measures in the clinical audiology settings in Asia (Nemes, 2011). Researchers are creating community based models incorporating electrophysiological measures to provide better access to hearing assessments for individuals in remote areas through facilities such as tele-audiology (Ramkumar, Hall, Nagarajan, Shankarnarayan, & Kumaravelu, 2013; Ramkumar, Nagarajan, Kumaravelu, & Hall, 2015; Swanepoel et al., 2010). This effort is commendable and is an important clinical need. Another need of the hour is to be able to tap the utility of objective hearing tests not only to assess hearing sensitivity, but also to assess everyday speech perception and auditory processing. This is an important research endeavor for two reasons: (1) Neural synchrony in the central auditory nervous system is an important predictor of speech and language outcomes (Firszt, Chambers, & Kraus, 2002; Kubo, Yamamoto, Iwaki, Matsukawa, Doi, & Tamura, 2001; McKay, 2005; Shepard, Clark & Black, 1983). Objective electrophysiological measures help study neural synchrony and thereby constitute an important link in assessing speech perception outcomes in difficult-to-test populations. (2) In evaluating diverse, multi-linguistic individuals such as those of the Asian-Indian origin, the development and utilization of standardized, subjective, language-specific tests is often a challenge (Balvalli & Bantwal, 2011). Developing protocols that include objective measures to assess speech perception and auditory processing could, therefore, be potentially helpful.

### Dr. Shruti Balvalli Deshpande



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*When not working, she enjoys travelling, cooking, camping, playing with her Labrador retriever - Cymba, and discussing audiology with her husband, Dr. Aniruddha K. Deshpande.*

## THE ROLE OF AUDITORY ELECTROPHYSIOLOGY IN MULTI-LINGUISTIC CLINICAL SETTINGS

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To this end, my colleagues and I are in the process of conducting a series of studies investigating the relationship between electrophysiological measures and speech perception abilities in pediatric cochlear implant users of Asian origin. In a recent study, we (Wang, Pan, Deshpande, & Ma, 2015) evaluated 40 pediatric cochlear implant users exposed to Mandarin in their home and school environments. We investigated the relationship between measures of the electrically evoked auditory brainstem response (EABR) such as wave V threshold, wave V latency, and input-output functions and auditory performance and speech intelligibility outcomes measured using parental rating scales such as the Chinese versions of the 'Categories of Auditory Performance (CAP)' and 'Speech Intelligibility Rating (SIR) scale' respectively. A significant negative relationship was found between wave V thresholds and speech intelligibility outcomes measured by the SIR. Children with better auditory performance outcomes as measured by the CAP tended to have lower wave V thresholds than those with poorer auditory performance outcomes. Also, children with earlier age at implantation tended to have better auditory performance outcomes.

This study and several others (e.g. Firszt et al., 2002; Gallego, Frachet, Michey, Truy, & Collet, 1998; Jeon et al., 2013) indicate that electrophysiological measures can be a potentially useful index for assessing complex auditory and speech perception in individuals of diverse linguistic and cultural backgrounds. Further research in this area could have numerous applications for assessing and managing the audiological needs of people of Indian origin, considering the challenge involved in developing tests in numerous Indian languages and dialects. While subjective tests provide vital information, objective measures to assess everyday auditory processing and speech perception could serve as an invaluable adjunct in the audiological armamentarium in the multi-linguistic Indian context.

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## RESEARCH NOTES

### Cochlear Implants and Tinnitus

Sixty five to ninety percent of cochlear implant (CI) recipients experience tinnitus before surgery (Aschendorff, Pabst, Klenzner, & Laszig, 1998; De Coninck et al., 2006; Ito, 1997; McKinney et al., 2002). As many as 92% of these recipients report a reduction or complete elimination of tinnitus post-implantation (Tyler & Kelsey, 1990; Tyler, 1994; Kompis et al., 2006). This effect is observed in unilateral (Blasco & Redleaf, 2015) as well as bilateral CI users (Ito & Sakakihara, 1994; Myers & Ito, 1997; Ruckenstein et al, 2001; Quaranta et al, 2008; Tyler, 1995). Cochlear implantation has a positive effect on both tinnitus loudness and annoyance due to tinnitus (Kompis et al., 2011). In some patients, this effect is markedly pronounced when specific auditory stimuli are presented to the implant via direct audio input. Currently, cochlear implants are not prescribed as a treatment for tinnitus. Additionally, large variability is observed in individual preference and effectiveness of different auditory stimuli in reducing tinnitus loudness and annoyance. Hence, there is a need to study these effects in both laboratory as well as natural settings. Our long-term aim is to optimize auditory parameters for use in either existing CIs or implants specialized for tinnitus such that the stimuli: a) reduce tinnitus loudness, b) reduce annoyance due to tinnitus and c) are acceptable for daily listening. The aim of the following two projects was to evaluate the effectiveness of different auditory stimuli on individual tinnitus suppression in controlled laboratory as well as natural everyday settings.

Laboratory trials have explored the effects of auditory stimuli presented via CI (e.g. McKerrow et al., 1991). Our first project focused on tinnitus suppression and individual sound preferences in the laboratory setting. Eight CI recipients who experienced tinnitus participated in this project and listened to different auditory stimuli through a sound file player connected to their implants. The CI microphone was not switched off during this presentation. The stimuli encompassed pure tones, noises and environmental sounds. Participants were asked to choose 2-3 stimuli that resulted in greatest tinnitus suppression while providing listening comfort. Tinnitus loudness, tinnitus annoyance and sound acceptability measurements were performed multiple times over three and a half minutes of each stimulus presentation – including 30 seconds before stimulation ('pre'), 120 seconds during presentation ('during') and up to 60 seconds after stimulus offset ('post') (see Figure 1). All participants chose the 'ocean' sound as one of the preferred stimuli. A comparison of tinnitus loudness pre vs. during stimulus presentation revealed a 100% reduction (complete suppression) in 4/8 (50%) participants, the mean reduction being 63.1%. A similar comparison of annoyance due to tinnitus pre vs. during stimulus presentation revealed a complete suppression in 5/8 (62.5%) participants, the mean reduction being 63.7%. The effects

### Dr. Aniruddha K. Deshpande

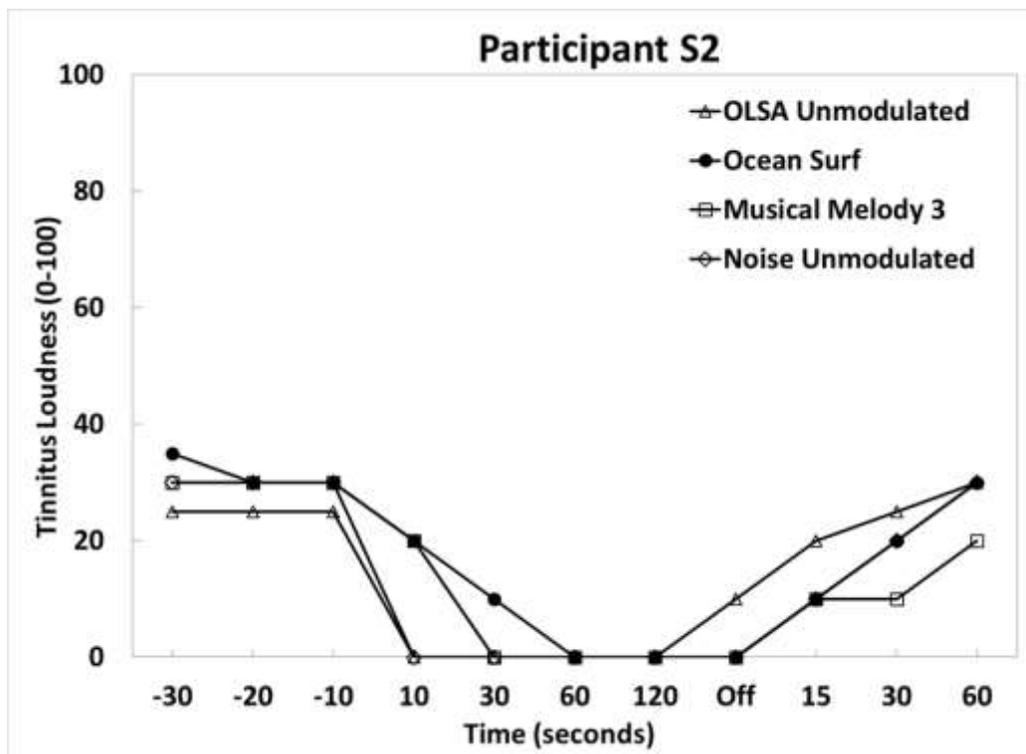


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## COCHLEAR IMPLANTS AND TINNITUS

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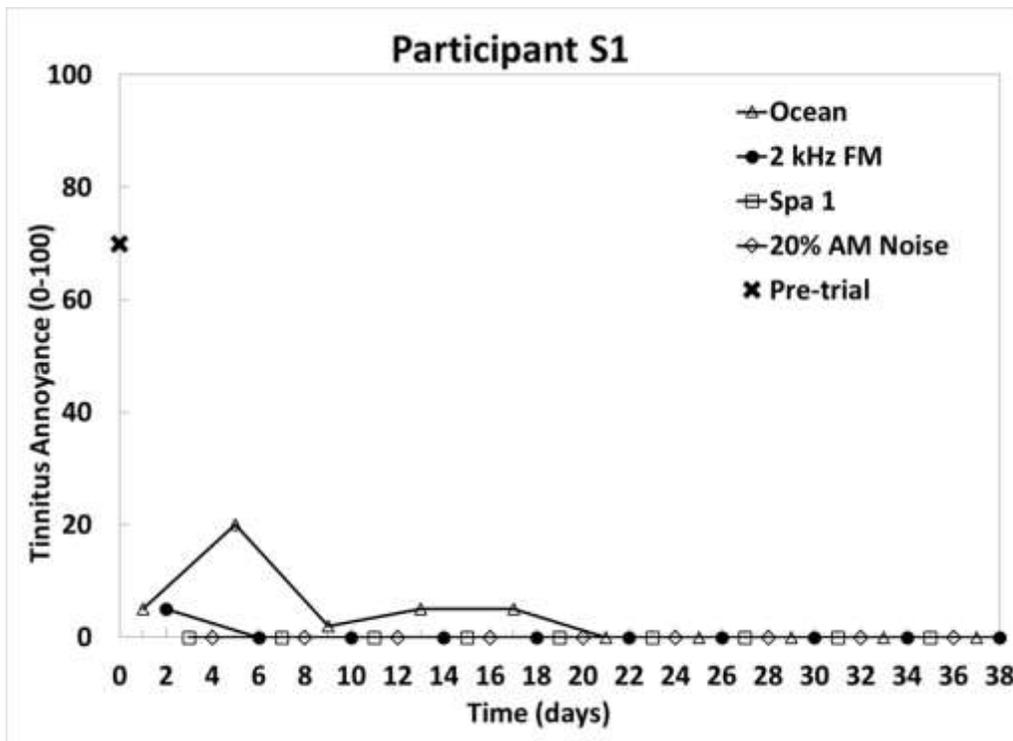
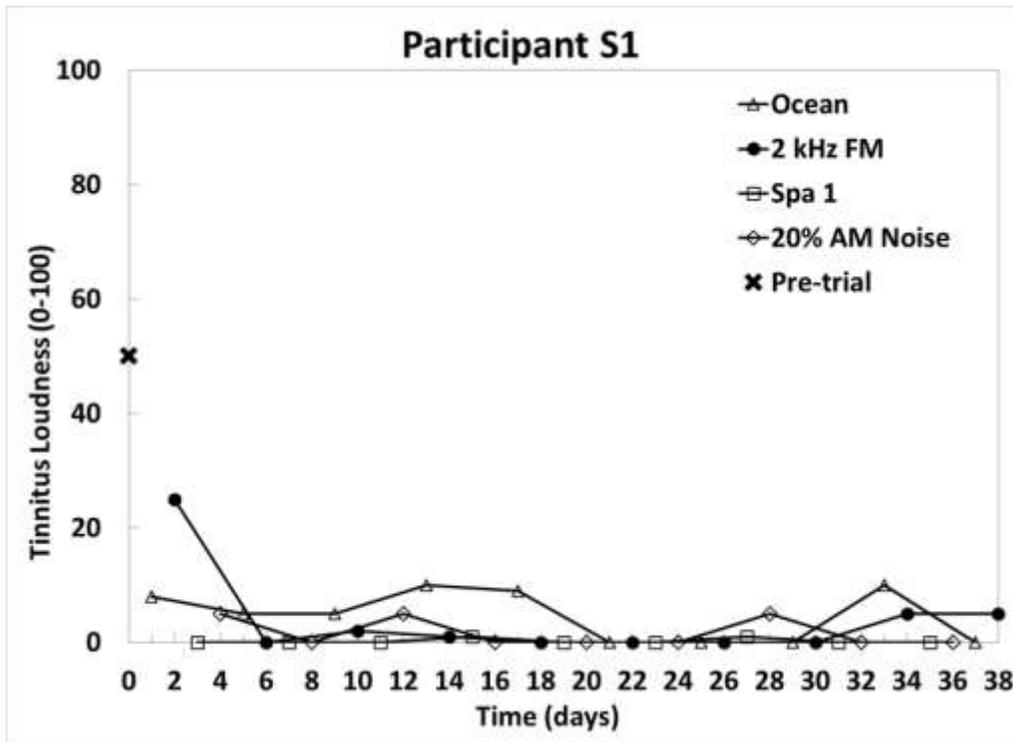
of auditory stimulation were observed even after cessation of stimulus presentation, albeit at reduced levels. The mean pre vs. post change for the most effective stimulus was 36% for tinnitus loudness and 21% for annoyance due to tinnitus.



'Field trials' are important as they allow tinnitus sufferers to evaluate effectiveness of devices and protocols in more natural settings, where they plan to use the devices on a regular basis. In the second project (Tyler et al., 2015), we investigated the effect of background sounds on tinnitus loudness and annoyance in CI users with tinnitus. A similar methodology was employed wherein participants (n=7) chose 2-4 stimuli that reduced tinnitus loudness and annoyance as well as were acceptable for continuous listening throughout the day. Selected stimuli were uploaded to a portable sound file player with a gapless loop playback function. As with the previous study, participants listened to these stimuli in addition to the sounds through the CI microphone. Participants were instructed to listen to a different stimulus every day until they had listened to all selected stimuli and then repeat the procedure for one month. They were also instructed to record tinnitus loudness, annoyance and sound acceptability at the end of each day (see Figure 2). Pre-post comparisons revealed the average tinnitus loudness reduction for the three most commonly selected background stimuli was 25% while the average tinnitus annoyance reduction for the same stimuli was 28%. In terms of sound acceptability, six out of the seven participants selected one of the environmental sound presented in the study (e.g. ocean or spa music).

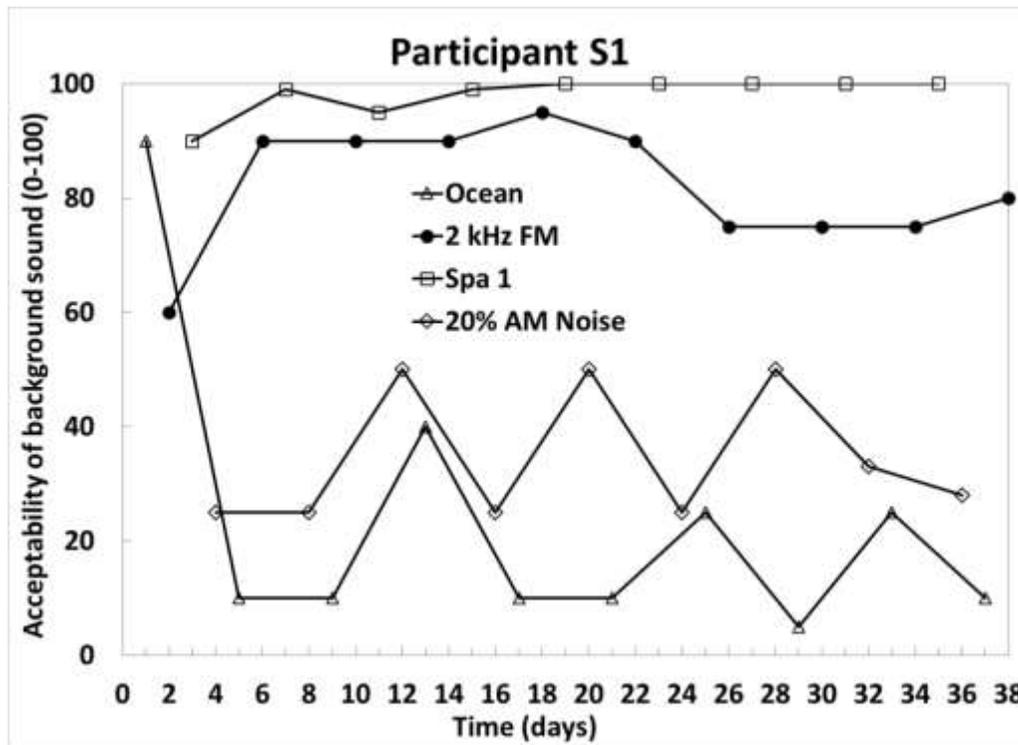
# COCHLEAR IMPLANTS AND TINNITUS

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## COCHLEAR IMPLANTS AND TINNITUS

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Various guidelines (e.g. Tunkel et al., 2015; for a summary see Deshpande & Tyler, 2015) and questionnaires (e.g. Tyler et al, 2015; Tyler & Deshpande, 2015) exist for assessment and management of the tinnitus patient. However, there is no cure for tinnitus. The results of the above studies specifically delineate effects of auditory stimuli presented via CI on tinnitus loudness and annoyance. They also provide an insight about individual preferences for different sounds. These findings will help optimize parameters for tinnitus reduction using auditory stimulation via CIs. Additional studies will be needed to investigate whether these effects last beyond a month; whether background sounds are needed to sustain these effects; whether presentation of non-auditory stimuli (e.g. pulse trains) results in greater tinnitus suppression; and whether the effects can be replicated on a larger sample.

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## CLINICIAN'S CORNER

### USING TELEPRACTICE FOR REMOTE EVALUATION OF DYSPHAGIA

Telehealth is the use of electronic health information and telecommunications technologies to support long-distance clinical health care, and patient and professional medical education.<sup>1</sup> Over the last decade, telehealth has been gaining acceptance and momentum among service providers and patients globally. Various medical specialties including radiology, dermatology, mental health, and rehabilitation have incorporated telehealth into their clinical practice.<sup>2-6</sup> Telehealth services are typically offered in synchronous or asynchronous modalities.<sup>7</sup> The term synchronous refers to all real time interactions between a healthcare provider and a patient, or between two healthcare providers.<sup>7</sup> On the other hand, asynchronous (i.e., store-and-forward) services refer to interactions that do not occur in real time and include sharing still images, video recordings, emails, and text files.<sup>7</sup> The hybrid model is often a combination of these two modalities and is commonly used by providers as well.<sup>7</sup>

Research has identified numerous benefits of telehealth. These include easier access to services, decreased wait and travel time, improved health outcomes, and better quality of care.<sup>8-10</sup> Telehealth can also be valuable in connecting healthcare providers with one another for supervision, mentorship, or consultations.<sup>10,11</sup> Given the shortage of speech and language pathologists, especially in remote and rural areas, the use of telehealth has potential benefits for patients and clinicians as it provides the opportunity to connect with specialists who are not available in their community.<sup>12</sup> To address the needs of the people who live in underserved areas, speech and language pathologists have started utilizing telehealth for the management of speech, language, voice, and swallowing disorders in children and adults.<sup>13</sup> Recent studies demonstrate that these remote services are comparable to the face-to-face services and patients are satisfied with the outcome.<sup>14-16</sup>

#### Evaluation of Dysphagia via Telehealth

Swallowing disorders or dysphagia is an area in speech and language pathology in which challenges with service delivery are frequently reported in underserved areas.<sup>12,17</sup> These challenges often result from the limited number of dysphagia experts who work in rural areas or from the lack of physical resources in these areas.<sup>12,17</sup>

Due to the potential life-threatening consequences of dysphagia, including weight loss, dehydration, and aspiration pneumonia, timely evaluation of swallowing function is extremely important.<sup>18</sup> However, since the rehabilitative and specialty services are typically sparse and maldistributed in rural or remote areas; these patients, then, do not receive

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## REMOTE EVALUATION OF DYSPHAGIA

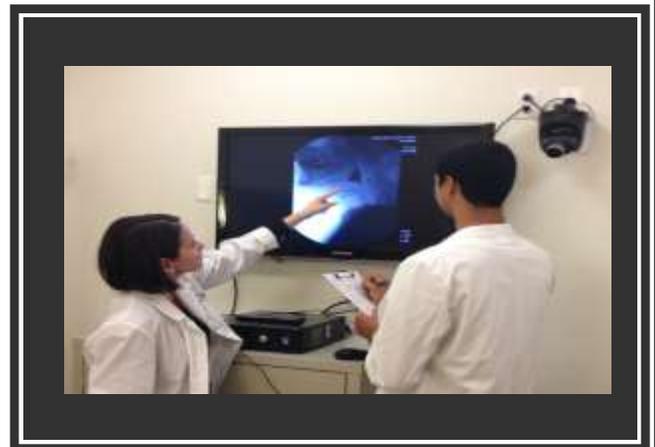
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high-quality services in their community.<sup>17</sup> Often, patients have to travel long distances for a face-to-face consultation with the closest healthcare provider such as a speech and language pathologist.<sup>12,17</sup> As a result, telehealth emerged as a viable alternative to the traditional service delivery.

Despite the emergent need in improving the evidence base in the remote management of dysphagia, there are only a small number of studies that examined its feasibility and effectiveness and most of these studies have focused on evaluation of dysphagia in adults.<sup>10,14,19–21</sup> Current evidence suggests that telehealth could be a feasible and reliable alternative for these patients.<sup>10,14,19–22</sup> The results of the studies that examined the effectiveness of conducting clinical swallowing evaluations via telehealth indicate a high degree of clinical agreement between the face-to-face and remote clinicians despite severity of dysphagia.<sup>20,22</sup>

Similarly, substantial agreement between the face-to-face and remote clinicians in subjective severity ratings, Penetration-Aspiration scale ratings, and treatment recommendations was reported in conducting Videofluoroscopic Swallowing Evaluations (VFSS) remotely.<sup>10,21</sup> Despite the overall promising results of these studies, some challenges with connectivity and image quality were also reported.<sup>10,22</sup>

A study conducted by Malandraki and her colleagues examined the effectiveness of a teleconsultation model in conducting VFSS remotely.<sup>10</sup> The evaluations were conducted by a clinician in a Greek hospital and the videos were uploaded on a secure website.<sup>10</sup> An expert speech and language pathologist in the United States conducted asynchronous evaluations from a distance and provided suggestions for treatment.<sup>10</sup> The results of the study showed good agreement between the two clinicians on most diagnostic indicators.<sup>10</sup> Furthermore, the authors also noted that teleconsultation model improved the quality of care for more than half of the patients.<sup>10</sup>



In conclusion, throughout the world, people living in rural and remote areas experience difficulties accessing high-quality services in their communities.<sup>10,12,17</sup> Telehealth has the potential to bridge the gap in a number of ways. This service delivery modality may not only be used to connect healthcare providers with underserved patients, but also be a resource between two healthcare providers to collaborate on multiple issues.<sup>10,11,20,23</sup> As the evidence base grows, telehealth can play a role in diminishing the social inequalities in healthcare and improve health outcomes for patients.

## REMOTE EVALUATION OF DYSPHAGIA

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## REMOTE EVALUATION OF DYSPHAGIA

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## CLINICIAN'S CORNER

### FOLLOWING MY DREAM: BUILDING MY AUDIOLOGY PRIVATE PRACTICE

My interest in audiology had gained impetus during my undergraduate studies at Sri Ramachandra Medical College. During my internship I had a stint of postings with pre-school children who had hearing impairment. This is where I found that my special interest lies in clinical audiology. For years, I have dreamt of starting my own audiology practice. My journey began with the audiology program at Texas Tech University Health Science Center. Since I graduated I have been working as a full time audiologist in a variety of clinical settings including private practice, ENT clinic and the school system. Working in a private practice gave me an insight into the business side of running a practice, motivated me to reach out to different private practice owners, hearing aid manufacturers and the Academy of Doctors of Audiology.

The first question I asked myself was: Do I start from scratch? Do I buy an existing practice or start a Franchise? The Franchise model provides good resources for practice development and used and tested marketing material. But, this business model can be binding and the ownership decisions are restricted. If there is an established practice and there is a transition due to retirement of the current owner, that is the best case scenario since you have established patients. To start a practice from scratch, there are a lot of factors to consider, including the location, using used vs buying new equipment, the accessibility for elderly and handicapped, the competition and the capital needed to start a practice. 70% of the revenue in an audiology practice is through hearing aid sales and it is important to consider short and long term goals for the practice in terms of unit sales, projected revenue and obtaining direct referrals from physicians.

**Dr. Pinky Khatri**



*Dr. Pinky Pradeep Khatri, Au.D., CCC-A received her undergraduate degree from Shri Ramachandra Medical College and completed her Doctorate program in Audiology from Texas Tech University Health Science Center.*

*Dr. Khatri is currently based in Mclean, VA and has multiple practice locations. Her professional experiences include working in a variety of settings medical, school systems and private practice. She has assisted pediatric, adult and geriatric population using the latest hearing aid technology and assistive listening devices.*

## FOLLOWING MY DREAM: BUILDING MY AUDIOLOGY PRIVATE PRACTICE

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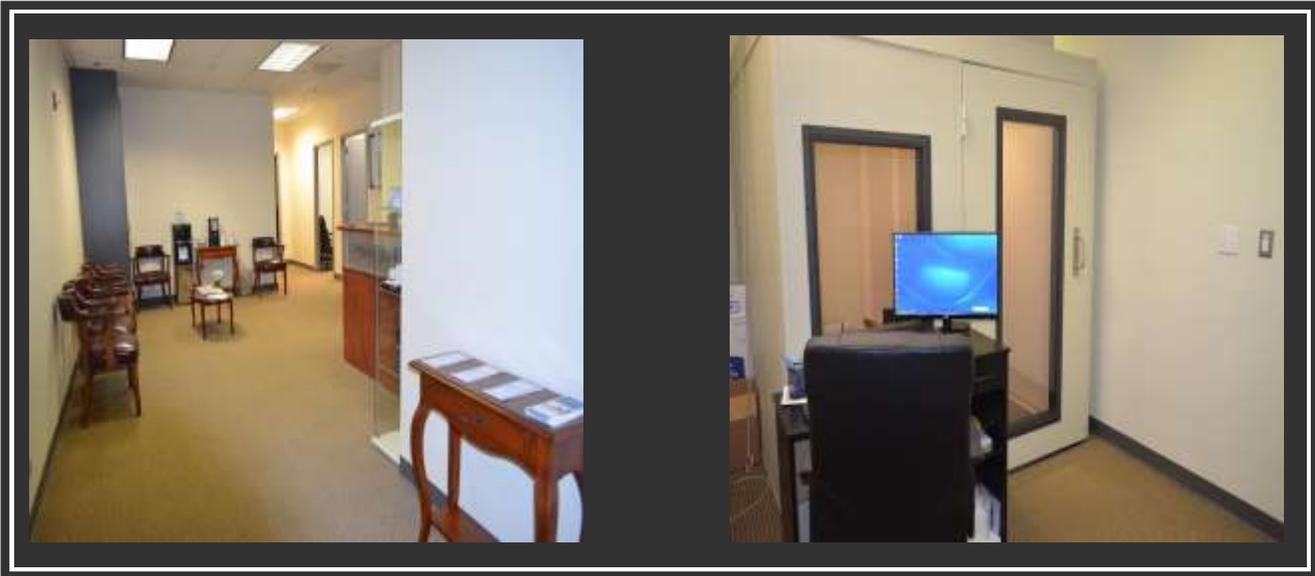
The American Academy of Doctors of Audiology has a mentorship program that partners audiologists in the process of building their practice with established practices. I was able to connect with four practice owners and visit a couple of their offices and learn about how they run their practice and what type of marketing has worked best for them. Below is a guideline that I used to calculate starting expenses.

<b><i>Start-up requirement</i></b>	
Start-up Equipment	35,000
Hearing aid inventory	7,000
Initial marketing (first 3 months)	\$13,500
Consultation Fees (Insurance credentialing and attorney fees)	\$6,000
Property Improvement (renovation, furniture, etc..)	\$8,500
Rent Deposit	\$5000
Office Supplies (computers, printers, lab supplies)	\$5500
Miscellaneous Expenses	\$1,000
Operating expenses for first 6 months	\$70,000
<b>Total Start-up Expenses</b>	<b>\$155,000</b>

My hearing aid reps have been tremendous sources of information and research. Each hearing manufacturer has a practice development team and that is where I recommend starting the process. They are the eyes and the ears of the industry. They are able to do some research on the demographics and the competition in the area and also assist with building a marketing plan and a revenue goal.

## FOLLOWING MY DREAM: BUILDING MY AUDIOLOGY PRIVATE PRACTICE

...CONTINUED



In terms of obtaining capital for the startup, there are several resources as well. Some manufacturers and buying groups have loan options. The best bet for me was to go through a SBA loan through the bank so I am restricted with one manufacturer, I do like to work with multiple hearing aid manufacturers. This opens up my office for several client types.

It is important to have an open mind while starting a private practice. I strongly recommend: Being open to doing everything that is needed to get the name of your practice out in the community. Take advantage of what the hearing aid manufacturer's offer (For example: Unitron in collaboration with Hearing HealthCare Marketing offers a Fast Track program for physicians marketing, If you dispense Phonak, Resound or Oticon products you can be part of the VIP group with Educated Patients and get help with hiring and training front desk staff and practice development). IT is important to network with local entrepreneurs and physicians in the area and be involved in the community. This has helped me tremendously as within the past six months I have 12 primary care physicians and 3 ENT physicians in the area that consistently refer patients to my office. Networking and being involved in the community builds trust and helps to set your practice apart. Remember, you are the brand that your business offers, it is not the products you sell but the kind of service you as an individual provide.

## CLINICIAN'S CORNER

### A MENTORING PROGRAM FOR FAMILIES OF INDIVIDUALS WITH AUTISM

Families of individuals with autism have several needs ranging from understanding what "autism" means to their family and child, knowing how to support their child's learning, identifying hobbies and activities that their child would enjoy, and understanding how to transition from high school to college and work environments.

Sometimes, families simply need a person with similar experiences to talk to. Despite the advancement in diagnostic testing, intervention methods, and biomedical research in autism, we have a limited understanding on how to support the families of individuals with autism through their everyday routines and interactions. Strong peer and professional support has been identified as one of the effective ways to cope with the everyday challenges of living with an individual with autism (Benson, 2012; Meadan, Halle, & Ebata, 2010). In a qualitative study, the coping strategies used by 16 mothers of preschool-age children with autism were investigated. All mothers reported that talking to another parent of a child with autism was most beneficial to them (Santhanam & Hewitt, 2014).

In my time as a student, clinician, and researcher working with families of individuals with autism spectrum disorders (ASD), I realized that much of my work stayed within the confines of the research labs, clinics, and classrooms. I recognized the need to reach out to the community around me and extend my knowledge and work. With this goal in mind, in January 2015, I helped initiate the "Connecting Families with Autism", a parent mentoring program, at the Autism Society of Colorado. The team includes a mother of a 12-year-old boy with autism, two committed staff from the Autism Society, and myself. The "Connecting Families with Autism" program is intended to guide families through next steps in assessment and intervention and provide emotional support to the families. Professionals guide the families through several steps in the process such as identifying and navigating insurance, planning for IEP (Individualized Education Plan) meetings, understanding the different interventions available, and helping families advocate for the child.

Dr. Sivapriya  
Santhanam



*Sivapriya Santhanam is a post-doctoral fellow at the LEND (Leadership Education in Neurodevelopmental and Related Disabilities) program at University of Colorado, Denver.*

*Her research interests include understanding the effects of early intervention on later social communication development of young children with autism; investigating the impact of a child with autism on caregiver responsiveness, and developing strategies to support college-age adults on the autism spectrum.*

***A MENTORING PROGRAM  
FOR FAMILIES OF INDIVIDUALS WITH AUTISM***

...CONTINUED

Mentors are parents or professionals who are willing to offer educated guidance and support to a family affected by autism. Mentees include parents of children with autism who seek help. Once a month, mentors and mentees participate in a workshop on a topic of relevance (eg; navigating insurance in Colorado). Following the workshop, the mentors and mentees attend a social hour during which they interact with other mentees and mentors in the room. In addition to the monthly meetings, mentors and mentees connect via email, phone call, video chats, or in person meetings when they need someone to talk to or listen to. The program completed its pilot phase in September 2015 with 10 mentor and mentee pairs. Families provided feedback on how they benefited from the mentoring programs, and what modifications they liked to see as the program progresses to its next phase.

As professionals who work closely with families having individual with disabilities, we have a huge responsibility to step out of our academic, research, and clinical roles, and engage in community initiatives and outreach activities that address various societal needs around disability. Such efforts are valuable not only for the families we serve, but also for the development of our field.

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**Siva Priya Santhanam**



*Clinically, Ms. Santhanam specializes in interdisciplinary assessment and intervention of individuals on the autism spectrum across all ages.*

# PERSONAL TWIST

## East Meets West

*“Two roads diverged in a wood, and I - I took the one less traveled by, and that has made all the difference.”*

These powerful words by Robert Frost aptly describe my journey as a Medical Speech-Language Pathologist, from India to the United States. I left home at a very young age to pursue a relatively unknown career path in an unknown country. The years that followed have been the most challenging, albeit rewarding years of my life. Often times, it's hard to believe, it has been a decade since this journey began...

### Academic Training

Born and brought up in the city of Mumbai in India, I was among the majority of people who had never heard about the field of 'Speech-Language Pathology' ever before. That changed in the year 2005, when I was serendipitously introduced to it through a family member with Cerebral Palsy. I knew instantly, I had found my calling. I went on to pursue a Bachelor of Science degree in Audiology and Speech-Language Pathology at the Ali Yavar Jung National Institute for the Hearing Handicapped in Mumbai. As time went by, I found nothing to be more exciting and challenging clinically, as rehabilitating adults with cognitive-linguistic impairments. Wanting to become an Adult Medical SLP soon became my solitary goal.

Due to the dearth of specialized graduate SLP programs in India, I decided to pursue my higher studies abroad. In 2009, I was accepted into one of the top 5% of graduate SLP programs in the United States; at the distinguished UT-Dallas Callier Center for Communication Disorders. The holistic academic, clinical and research training I received at UTD renewed a spark in me, which had lit ever so lightly in 2005. By 2011, that spark had turned into a flame, which was now shining brighter than ever.

### Clinical Experience

On 10<sup>th</sup> August 2011, as the only international student in a class full of excited SLPs, I walked across the podium at UTD to receive my Master of Science degree in Communication Disorders. It was a moment that will forever remain etched in my memory. Soon, I was offered an SLP-CFY position at an extended acute care hospital in Dallas, where I practiced full-time for four years. Working exclusively with adults with complex medical conditions, critical illnesses, trach/vent dependence and multiple co-morbidities enabled me to develop a unique skill set and grow tremendously as a Medical SLP. By the end of 2012, I was excited to be able to sign off as Rinki Varindani, M.S.,CCC-SLP.

### Professional Endeavors

Since the majority of my caseload involved working with patients with dysphagia, it is something I started to enjoy tremendously and soon, I aspired to become a BCS-S (Board Certified Specialist in Swallowing and Swallowing Disorders). The last 3 years of dedicated efforts towards this pursuit are finally coming to fruition this year. The BCS-S journey encouraged me to push my limits as a clinician and to expand my horizons.

## Mrs. Rinki Varindani Desai



*Rinki Varindani Desai, M.S.,CCC-SLP is a Medical Speech-Language Pathologist, specializing in the rehabilitation of speech, cognitive-linguistic and swallowing disorders in adults. Originally an SLP from Mumbai, India, she is currently practicing in Rochester, New York. She is the creator and administrator of the Medical SLP Forum on Facebook. Rinki is presently pursuing Board Certification as a Specialist in Swallowing and Swallowing Disorders (BCS-S), Certification as a Brain Injury Specialist (CBIS) and is an active member of ASHA's SIG 13. Follow her Medical SLP updates on Facebook, Twitter or contact her via www.rinkislp.com.*

## EAST MEETS WEST

....CONTINUED

It drove me to complete a number of Continuing Education courses and Certifications in dysphagia (for which I recently received my first ASHA [ACE Award](#)). Additionally, it has been a great honor for me to be selected to present an hour long seminar at the 2015 ASHA Convention on the 'Aging Swallow' along with a poster on the 'Relevance of Lab Values for the Medical SLP'.

### Combining Passions

As I got busy pursuing my professional goals, I found myself left with very little time to do the things I loved outside of work; activities that involved reading, writing, being creative, utilizing technology and public speaking to name a few. Soon enough, instead of trying to pick one thing to do, I made a conscious decision to work towards crafting a career that would allow me to incorporate ALL my passions into one. That decision has been a turning point in my life; it spurred the creation of several projects that have given me immense satisfaction in recent years.

One such project is the development of the [Medical SLP Forum](#). I created it two years ago, with the intention of producing a platform for clinicians around the world to contribute, collaborate and communicate about all things Medical SLP related. It has 9,000 members and counting. Around the same time, I also developed a personal [Medical SLP Blog](#) and [Medical SLP Page](#), where I continue to share relevant updates in the field with a global audience. A more recent project I am really enthusiastic about is the Dysphagia Therapy Mobile App. Being so passionate about the use of technology in our field and working with dysphagia, I spent the better half of 2015 combining those interests together and co-authoring an app called Dysphagia Therapy, which will be released via Tactus Therapy Solutions in the latter part of 2015. Our goal is to equip clinicians with an all-encompassing dysphagia toolbox in the palm of their hands. Finally, as someone who is deeply passionate about writing, I have also taken up freelance writing in the field of Medical SLP and have written several posts on pertinent issues for popular SLP blogs such as Dysphagia Café, Gray Matter Therapy, The ASHA Leader and Tactus Therapy to name a few. In this past year, volunteering (as a guest lecturer, S.T.E.P mentor, peer reviewer and beta tester) and advocacy (for better [dysphagia graduate preparation](#) and more competent dysphagia care) have been particularly important endeavors for me as well.

Somewhere along the way, as I was combining passions and blurring these lines between personal and professional pursuits, some of my work started getting acknowledged. My '[East Meets West](#)' story was published in The ASHA Leader and selected to be featured as part of the [International Communication Project 2015](#) campaign. More recently, it was an honor to be interviewed for Jeff Stepen's podcast '[Conversations in Speech Pathology](#)', where I shared my experiences as an International Medical SLP.

### Future Direction

My overarching goal is to start a speech, language and swallowing rehabilitation center for adults in India. I hope to amass all that I learn as an SLP in the West, carry it forward and use my training for a higher purpose, in a part of the world where millions need these services. I am sincerely grateful for all the inspirational colleagues and mentors I have met along my SLP journey from East to West and for all the unforgettable experiences we have shared. I hope that by sharing some my experiences today, someone reading this might get motivated to pursue the road less travelled as well... and leave a trail behind for the next young clinician to follow.

## CONGRATULATIONS!!!!

AIC is proud to acknowledge the following achievements!



Dr. Tilak Ratnanather received the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring for his work in recruiting and mentored deaf and hard-of-hearing individuals into science, technology, engineering, and math fields. Dr. Ratnanather received an award of \$10,000 in addition to being honored at the White House. Congratulations, Dr. Ratnanather!

*Tilak Ratnanather is an Associate Research Professor in the Department of Biomedical Engineering at Johns Hopkins University. He obtained his BSc and DPhil degrees in mathematics at University College London and University of Oxford in 1985 and 1989 respectively. After a brief postdoctoral stint at City University London, he was a postdoctoral fellow in the Departments of Otolaryngology-Head & Neck Surgery (1991-94) at Johns Hopkins University School of Medicine and Biomedical Engineering (1994)*

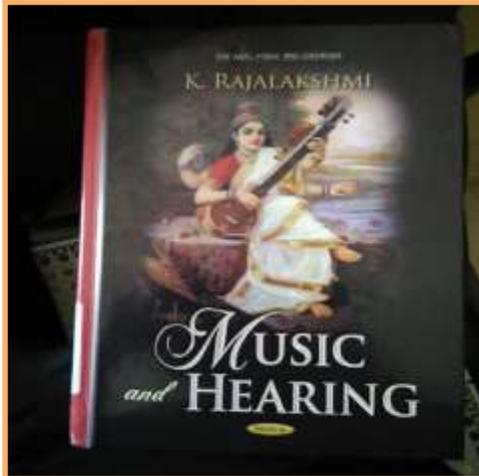


Congratulations to Dr. Kalyani Mandke who will receive the Certificate of Recognition for outstanding contribution in International Achievement by the American Speech and Hearing Association (ASHA). The award will be conferred on 13th Nov 2015 at Denver, Colorado during the ASHA Convention. Dr. Mandke was also recognized for the Best e-poster presentation at the 12th European Symposium for Pediatric Cochlear Implant held earlier this year-June 2015 at Toulouse, France, receiving a cash prize of €1500.

*Dr. Mandke is a renowned audiologist and the founder of Mandke Hearing services, Pune India. She started the first exclusive Audiology Private Clinic in India which now has a strong database of over 50,000 customers. She completed her Ph.D from The University of Pune, India(1991) and also completed her Clinical Doctorate in Audiology from Distance Learning at Pennsylvania, College of Optometry, PA, USA(2007). She has the distinction of being one of a few audiologists in India to hold the ASHA certificate for clinical competence with an Au.D. She is a Member on the International Issues Board of ASHA(2015-2017). She has various credits including Diversity Champion Award, ASHA 2009, first Indian resident on the Council for Clinical Competence in Audiology and speech Pathology at ASHA(CFCC) etc.*

## CONGRATULATIONS!!!!

AIC is proud to acknowledge the following achievements!



The AIC family congratulates Dr. Rajalakshmi on the publication of her new book " Music and Hearing". This book is published by the Nova publishers New York, under the category of Fine Arts, Music and Literature in the year 2015. .

"I was born in a small town called HASSAN and grew up with my maternal grandparents. I grew up in a rich environment of love, happiness, contentment and simplicity. Education in the convent school with the best teachers, sisters and friends contributed to my becoming a successful student. I used to write essays and poems as a young girl. One of my teachers in the school sprinkled a lot of love and constructive criticism for my creative writing. Subsequent to my school life in Hassan, I studied at Marimallappa's college, Mysore. This institution fine-tuned my skills in science from where I reached All India Institute of Speech and Hearing, Mysore. This is where I became a professional of Speech and Hearing Sciences. My writing skill which was dormant was waiting for an opportunity to surface. The research projects and dissertations I guided and my writing skills provided me this chance to author a book. At present I am preparing the manuscript for a second book".



*Dr. K. Rajalakshmi Ph. D. (Speech and Hearing) is a distinguished Professor of Audiology at the All India Institute of Speech and Hearing, Mysore, India. Her interests include psychoacoustics, sign language, amplification devices and auditory processing disorders. She is one of the recognized guides for the Ph.D. program at AIISH.*

**SHARE YOUR ACHIEVEMENTS WITH US!!!**

*AIC would like to feature any recent awards, titles, publications, scholarships and media coverage received by our members in the "PEOPLE'S SECTION" of ASHAKIRAN '16 newsletter. This is a great way to showcase your accomplishments and share insights about your work and vision among our patrons. If you are interested in sharing any news about your recent professional achievements, please send us an email ([asianindiancaucus@gmail.com](mailto:asianindiancaucus@gmail.com))*

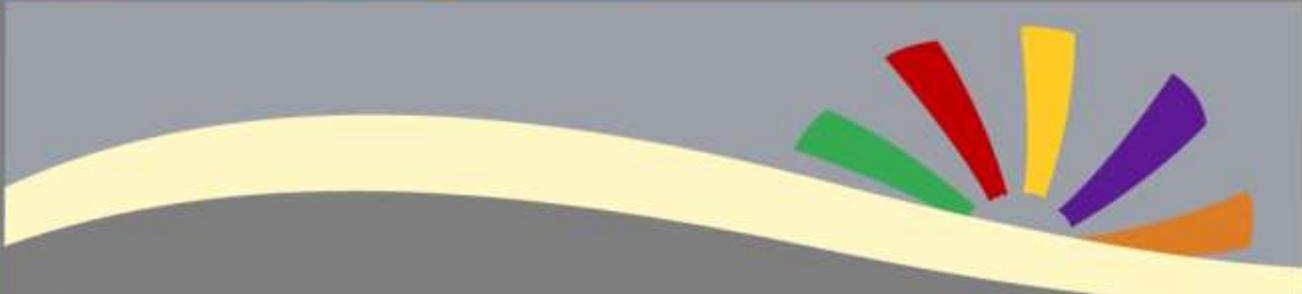
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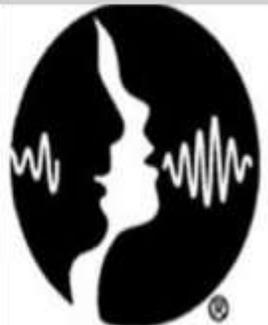
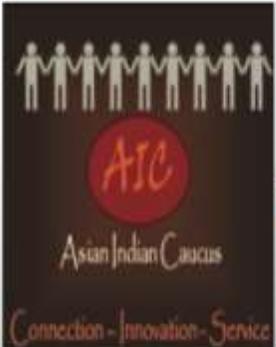


ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ.

Welcome ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ. ಸ್ವಾಗತ ಸಭಾಕಾರ್ಯಕ್ರಮದ ಬಗ್ಗೆ ಮಾಹಿತಿ ನೀಡುತ್ತಿದ್ದೇವೆ.



# ASHA 2015 - AIC MEET & GREET



## OBJECTIVES

- ◊ Learn about services rendered
- ◊ Subscribe to newsletters
- ◊ Learn to get involved and contribute
- ◊ Continuing education support
- ◊ Online profile management
- ◊ Social networking
- ◊ Meet the executive board

**Date: November 13th, 2015, Friday**  
**Time: 11:30am-1:00 pm**  
**Where: CC, 706, Denver, Colorado**

Contact : Akila Rajappa (Email: akilat@yaho.com; Ph:646-270-1296)  
 Arun Biran (Email:arunbiran@gmail.com; Ph: 423-457-0973)



