



Dates to Remember

Tox Away Day

IUPUI

April 17, 2009

Race for the Cure

IUPUI

April 18, 2009

Talk Walk and Run

Ft. Harrison State Park

May 9, 2009

25th Annual Manion-Lingeman Lecture and Research Seminar

ROC Auditorium June 5, 2009

New Resident Orientation

June 30, 2009

94th Annual Anatomy & Histopathology of the Head, Neck & Temporal Bone

July 6–15, 2009

May is Better Hearing and Speech Month

As part of Better Hearing and Speech Month, we would like to share an update on the speech-language pathology, diagnostic audiology, hearing aid, and cochlear implant programs at IU and Riley Hospitals, as well as to discuss a few special projects that are in progress within our division.

Representatives from speech-language pathology, diagnostic audiology, hearing aid, and cochlear implant programs recently gave several presentations at the Indiana Speech-Language-Hearing Association (ISHA) convention in Indianapolis, on March 26 and 27, 2009. The diagnostic audiology team is currently authoring a chapter for inclusion in a pediatric audiology textbook. The following information is intended to provide a more in-depth glimpse at Audiology and Speech-Language Pathology.

Diagnostic Audiology

The diagnostic audiologists at IU and Riley Hospitals have many responsibilities ranging the entire spectrum of audiology practice. The team works diligently to promote early diagnosis and intervention of hearing loss in infants referred from the Universal

Newborn Hearing Screening program. The audiologists collectively see hundreds of these infants each year, and are proud that very few of these infants are ever lost to follow-up thanks to the efforts of not only the audiologists, but our excellent support staff. These evaluations are typically an Auditory Brainstem Response (ABR) evaluation, either with or without the aid of sedation, or in the operating room under anesthesia. As one of the few centers in the state offering ABR testing with sedation, our services are in high demand!

The diagnostic audiology team is also responsible for evaluating hearing and balance for the department's ENT physicians. These evaluations range from a simple behavioral test of hearing to a complex set of tests designed to evaluate the portion of the ear responsible for balance.

The diagnostic audiology team receives hundreds of outside referrals each year for audiological evaluations on older children and adults, and makes every effort to see these patients in a timely manner. The team also works very closely with many departments throughout the hospital, as well as throughout the entire state of Indiana, to provide the best

possible care to those in need of our services. Within our hospital system, these departments/clinics include: Hematology/Oncology (for evaluating children at risk for hearing loss due to the type of chemotherapy they are receiving), Cranio-Facial Clinic, Developmental Pediatrics, and Pulmonary. We also work closely with state programs such as the Early Hearing Detection and Intervention (EHDI) program, Indiana First Steps, and the Indiana Lions Clubs.

Speech-Language Pathology

The speech pathologists at IU and Riley work with many services, including developmental pediatrics, pulmonology, GI, plastics, surgery, psychiatry, general pediatrics, radiology, and ENT. Inpatient SLPs, in both the adult and pediatric hospitals, spend most of their time and energy with dysphagic patients, performing videofluoroscopic swallow studies (VFSS) as well as bedside swallow evaluations and following-up for appropriate treatments and/or diet modifications. Inpatients may also be seen by speech therapists for communication needs, Passy Muir

Speaking Valve use, and patient/family education.

The outpatient therapists work with a diverse population, including children with autism, Down syndrome, voice and resonance disorders, hearing impairments/cochlear implants, dysfluency, apraxia, feeding issues and those in need of alternative forms of communication. Adult patients may be seen for aphasia therapy, cognitive rehabilitation, voice disorders, TEP maintenance, or dysphagia treatments.

Our therapists are also interested in participating in active research studies, and are currently involved in a project designed to standardize the perceptual assessment of patients presenting with VPI.

The SLPs at IU and Riley work hard to develop expertise in a variety of specialty areas so that we can meet the unique needs of our patients. We enjoy working closely with physicians, nurses, dieticians, OTs, PTs, and other service providers to give the best possible care to every patient and family that we treat.

Cochlear Implant Program

The IUMC Cochlear Implant Program consists of a team of professionals who are committed to serving those with severe to profound hearing loss. The team currently serves over 1500 patients who have received or are in the process of being evaluated for cochlear implant technology.

Clinically, the team consists of 2 surgeons, 6 audiologists, and a speech language pathologist who all work together to ensure that each patient receives the best possible care. Each patient is evaluated pre-operatively to determine eligibility for the implant procedure. Once candidacy is determined, the patient and his/her family is counseled extensively regarding the minimum expected benefits, surgery and associated risks, current technology, and rehabilitative needs that are associated with implantation.

Surgeons ensure that the electrode array is placed appropriately within the cochlea. Following surgery, frequent mapping or programming is required to optimize electrical stimulation of the auditory nerve. Aural rehabilitation is provided to ensure that each patient learns to use the new auditory signal. In addition to these primary clinical services, the Cochlear Implant Team must also work closely with other departments and professionals as many of the patients experience other developmental and medical needs.

The Cochlear Implant Team not only ensures that each patient receives the best possible clinical care, but they also actively participate in ongoing clinical research to evaluate and establish efficacy for new technologies. Recent clinical trial participation includes the following: Investigation of the Medel Electric-Acoustic Stimulation; Investigation of the Cochlear Hybrid Device; Investigation of Advanced Bionic's HiFidelity 120 Technology in Adults; and Bilateral Implantation in Children using the Medel Combi 40+ device.

The Cochlear Implant Team also includes an on-site research program. The physicians, psychologists, linguist, and speech language pathologists that work in the DeVault Otologic Research Laboratory and the Infant Language Laboratory continue to examine the various behavioral outcomes of cochlear implantation in infants, children, and adults. Research activities in the laboratories are supported primarily by several grants from NIDCD of the NIH, with substantial support also coming from various other public and private agencies, as well as individual gifts and bequests.

With a longstanding history of quality care and a large patient population including those varying in age (6-months to 92-years), varying in hearing history (pre-, peri-, and post-lingual), varying in communication modalities, and varying in developmental level and cognitive function, the experience and expertise provided by our implant team is invaluable. The IUMC Cochlear Implant Team receives frequent referrals from other

other programs for patient evaluation and consultation and continues to serve patients not only in Indiana, but in many other states, as well.

In recent months, the website for the Cochlear Implant Program has been completed. More information about our program for both professionals and patients can be accessed here:

[www.medicine.iu.edu/
CochlearImplantProgram](http://www.medicine.iu.edu/CochlearImplantProgram)

Submitted by: Monica Burch



Dr. Miyamoto and Doris Ladd at Doris' 40th anniversary celebration

Employee News

Anniversaries

Doris Ladd—40 years

Becky Colson—15 years

Becky Wiley—10 years

New Employees

Julia Sayer—Dr. Moore's nurse

Linda Lee—Hearing Aid Insurance Specialist

Maria Kondaurova—Research

Ann Kalberer—Cochlear Implant team

Atsushi Shimomura—Scientist in Hashino lab

Tammy Paal—Dr. Moore's secretary

Lindsay Stickens—Research

Julie Raash—Billing

Little Arrivals

Katherine Jayne Landrum was born on November 9, 2008 to Angie and Shayne Landrum. She weighed 7lb. 5oz.

Bryan and Becky McRae welcomed baby girl, Julia Lynn on December 17, 2008. She weighed 6lb. 14 oz.

Taylor Lynn Hillman was born on January 10, 2009 to John and Heather Hillman. She weighed 8lbs. 2.5oz.

Posters & Presentations

Influence of Psychiatric Disorders on the Predictive Value of the Reflux Symptom Index, Sam Oyer, medical student/Dr. Halum, podium presentation, COSM.

Neurotoxins for Prevention of Laryngeal Synkinesis After Recurrent Laryngeal Nerve Injury, Bryan McRae/Dr. Halum, podium presentation, COSM.

The Relationship of Restech PH Probe Results with Laryngopharyngeal Reflux Symptomatology and Examination Findings, Lauren Anderson/Sam Oyer/Dr. Halum, podium presentation, COSM.

Voice Impairment Following Calcium Hydroxyapatite(HA) Injection, Jonathan Ting/Dr. Halum, poster presentation, COSM.

Management of a Laryngeal Injection Needle Impacted in the Paraglottic Space, Jonathan Ting/Dr. Halum, poster presentation, COSM.

Connectedness of Conversation Between Deaf Peers: Implications for Social Cognition, Jessica Beer, poster, Society for Research in Child Development Meeting.

Spoken Prosody and Music Production in Children with Cochlear Implants, Tonya Bergeson/Matthew Kuhns/Steven Chin, poster, Society for Research in Child Development Meeting.

Perception of Indexical Information in Infant-Directed Speech Using Cochlear Implant Simulations, Tonya Bergeson/Sara Till/Tessa Bent, poster, Society for Research in Child Development Meeting.

Maternal Speech to Hearing-Impaired Infants Over the First Year of Cochlear Implant Use, Tonya Bergeson/Julie Wescliff/Rachel Manley, poster, Society for Research in Child Development Meeting.

Audiology Clinical Education Partnership: Purdue University, Indiana University School of Medicine and Clarian Health Partners, Kathy Corbin, audiologist/Jennifer Simpson, audiology faculty liaison from Purdue University, poster, 2008 ASHA Convention. We hope to have this displayed in the Riley Research hallway soon.



MAY 9th 2009

**Indianapolis
Fort Harrison
State Park**

5K or 2.3 Miles

Presented By: **Peyton Manning Children's Hospital**
at  **St. Vincent**

The 5K will begin at 9 a.m. and the 2.3 mile Fitness Walk will begin at 9:10 a.m.
There will be a FREE kids fun run as well!

The Post Race Party will begin at 11 a.m. and will include food, music, games and fellowship! Awards will be given to the top race finishers and the top fundraisers. Contact Kristin Vincent at 4-6619 for more information.

You can register for the event at: www.talkwalkrun.net.

Contributions for the newsletter should be submitted to Jane Adamson, RR 132 or email jaadamso@iupui.edu.