

# Oregon EHDI Newsletter

Winter/Spring 2014



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## New Hearing Screening Clinic Opens at Pacific University!

Pacific EarClinic, Pacific University's on-campus audiology clinic, is scheduling appointments for Automated ABR hearing screenings at a low cost (\$35). At this point, the clinic cannot take insurance, although that may be offered in the future.

The clinic's first screening day will be **Thursday, February 27** from 10am-3pm. Future screening days are being planned for **March 4** and **April 24**. Parents of infants and toddlers who need a hearing screening or need a screening re-test are welcome. You must make an appointment, though. Here is the contact information:

Pacific EarClinic

Tuality Seventh Avenue Medical Bldg

333 SE 7th Avenue, Suite 4150

Hillsboro, OR 97123

Phone #: 503-352-2692

Email: [earclinic@pacificu.edu](mailto:earclinic@pacificu.edu)



### Why get your baby's hearing screened?

- Hearing loss is hard to identify without testing – it can be subtle, yet serious.
  - Babies must be able to hear soft sounds at many different pitches in both ears to develop speech and language normally.
  - Responding to a parent's voice, while a good sign, does not definitively rule out hearing loss – it is best to be sure!
- Hearing loss is very common, affecting 3 out of every 1,000 babies.
  - That's more common than the diseases screened for by the heel stick test, combined.
- 90% of these babies' parents have normal hearing and no history of hearing loss in their family.
- Most babies have no risk factors for hearing loss – it comes as a complete surprise.
  - Even healthy babies can have hearing loss.

# New Developments in Cochlear Implants May Eliminate External Hardware While Increasing Rechargeable Convenience

by Larry Hardesty, MIT News Office

**A cochlear implant that can be wirelessly recharged would use the natural microphone of the middle ear rather than a skull-mounted sensor.**

CAMBRIDGE, Mass. — Cochlear implants — medical devices that electrically stimulate the auditory nerve — have granted at least limited hearing to hundreds of thousands of people worldwide who otherwise would be totally deaf. Existing versions of the device, however, require that a disk-shaped transmitter about an inch in diameter be affixed to the skull, with a wire snaking down to a joint microphone and power source that looks like an oversized hearing aid around the patient's ear.

Researchers at MIT's Microsystems Technology Laboratory (MTL), together with physicians from Harvard Medical School and the Massachusetts Eye and Ear Infirmary (MEEI), have developed a new, low-power signal-processing chip that could lead to a cochlear implant that requires no external hardware. The implant would be wirelessly recharged and would run for about eight hours on each charge.

The researchers describe their chip in a paper they're presenting this week at the International Solid-State Circuits Conference. The paper's lead author — Marcus Yip, who completed his PhD at MIT last fall — and his colleagues Rui Jin and Nathan Ickes, both in MIT's Department of Electrical Engineering and Computer Science, will also exhibit a prototype charger that plugs into an ordinary cell phone and can recharge the signal-processing chip in roughly two minutes.

“The idea with this design is that you could use a phone, with an adaptor, to charge the cochlear implant, so you don't have to be plugged in,” says Anantha Chandrakasan, the Joseph F. and Nancy P. Keithley Professor of Electrical Engineering and corresponding author on the new paper. “Or you could imagine a smart pillow, so you charge overnight, and the next day, it just functions.”

Want to learn more? [Read on.](#)

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## Recording of American Academy of Pediatrics (AAP)

### EHDI LTF/D Webinar Now Available

If you were unable to participate in the January 17 *Early Hearing Detection & Intervention: AAP Tools for Medical Home Providers to Address Lost to Follow-Up/Documentation (LTF/D)* webinar presented by Jack Levine, MD, FAAP and Rachel St John, MD, FAAP, the recording is now available online at <http://youtu.be/F3LctwiiEQk>. The webinar outlined the role of the medical home in helping reduce rates of LTF/D and introduced the newly released AAP resources.

To access the AAP resources, visit [here](#) and scroll down to the “Loss to Follow-up” section of the web page.



## Audiologists - Are You Aware of These Oregon EHDI Reporting Recommendations?\*

### Reporting Method:

The primary mechanism for reporting audiologic testing and reviewing screening results is the Oregon Early Hearing Detection and Intervention Information System (EHDI IS). Any audiologist who serves children under three years of age is eligible for a secure EHDI IS account. If you are eligible for an EHDI IS account, please e-mail Oregon EHDI's Follow-up Specialist at [julie.a.hass@state.or.us](mailto:julie.a.hass@state.or.us), and she will be happy to establish an account for you.

Note: Faxing audiologic test results to the EHDI fax at 971-673-0251 is acceptable only in cases when access to the online data system is unavailable. However, if you are having difficulty finding a child's record in the EHDI IS, you should feel free to e-mail the EHDI program at [Oregon.EHDI@state.or.us](mailto:Oregon.EHDI@state.or.us) or call us toll-free at 1-888-917-4327 and a staff member will assist you.

1) Any testing performed by an audiologist should be entered into the "Diagnostics" tab of the child's EHDI IS record, unless it is the child's initial screening.

a. Example: the infant was born at home, and seeks an outpatient newborn screening as his initial screening. This should be entered into the "Screening" tab.

2) Appropriate screening follow-up requires knowledge of screening equipment type.

a. AABR initial screening MAY NOT be followed by an OAE re-screen.

3) The date, location, audiologist and test results fields are required.

4) If a child under three years of age moves to Oregon and is found to have a hearing loss not identified by their birth state, the audiologist must create a new client record in EHDI-IS prior to entering test results.

5) If a child under three years of age moves to Oregon with a confirmed hearing loss, a new client record must be created.

a. This information helps the Oregon EHDI program ensure that children identified by another state's EHDI program receive the appropriate services.

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\*This is only a portion of the Oregon EHDI Audiologic Reporting Protocol, currently in draft form. Once the protocol is finalized, audiologists will be notified and the protocol distributed to all approved diagnostic facilities. At that time, EHDI recommendations will become requirements. If you would like to see the entire protocol, or have questions or comments, please e-mail EHDI Audiologist Shelby Atwill at [shelby.n.atwill@state.or.us](mailto:shelby.n.atwill@state.or.us).

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## Eight-Month-Old Baby Hears Sound for the First Time After Cochlear Implants Are Activated

For those of us who have never had the experience of being in the room when a child hears for the first time after Cochlear Implants are activated, videos like [this one](#) on You Tube can bring it home to us in a big way.

As explained on the web site, this baby became deaf after contracting bacterial meningitis at 4 months. His parents were given a choice as the disease rapidly ossified his cochlear and would have made him deaf within weeks. Watch the moving moment as his cochlear implant is activated and he hears sound for the first time, and his mother's voice.

# Hearing Impaired Girl Writes Thank You Note to Seattle Seahawks' Derrick Coleman

By Katie Kindelan (published on 1/22/14 on <http://abcnews.go.com>)

The Seattle Seahawks' fullback who became a viral star after a Duracell commercial showed his unlikely path from legally deaf child to NFL superstar will have two extra special fans cheering him on at next Sunday's Super Bowl.

Riley and Erin Kovalcik, identical 9-year-old twin sisters from New Jersey, are also hearing impaired and now are also viral stars after their dad, Jake Kovalcik, tweeted a letter Riley wrote to the Seahawks' Derrick Coleman.

"I know how you feel," Riley wrote to Coleman. "I also have hearing aids. Just try your best. I have faif [sic] in you."

Riley and Erin first learned about Coleman, 23, through his Duracell commercial, in which Coleman describes being picked on and told he would never succeed in football.

"They told me it couldn't be done. That I was a lost cause. I was picked on. And picked last," Coleman says in the commercial. "They gave up on me. Told me I should just quit."

"I like that he actually can understand about being bullied and he actually knows more, you know, stuff like if you have problems, he's a guy you can come to," Riley said today on "Good Morning America."

Riley's dad says he was inspired to tweet his daughter's letter to Coleman because he was so pleased that his daughters finally had a hearing impaired person in the public spotlight to look up to.

"There's not a whole lot of really high-profile people or even athletes out there that are deaf that kids like Riley and Erin can look up to... that show that if you work hard, adversity really doesn't matter," Kovalcik said on "GMA."

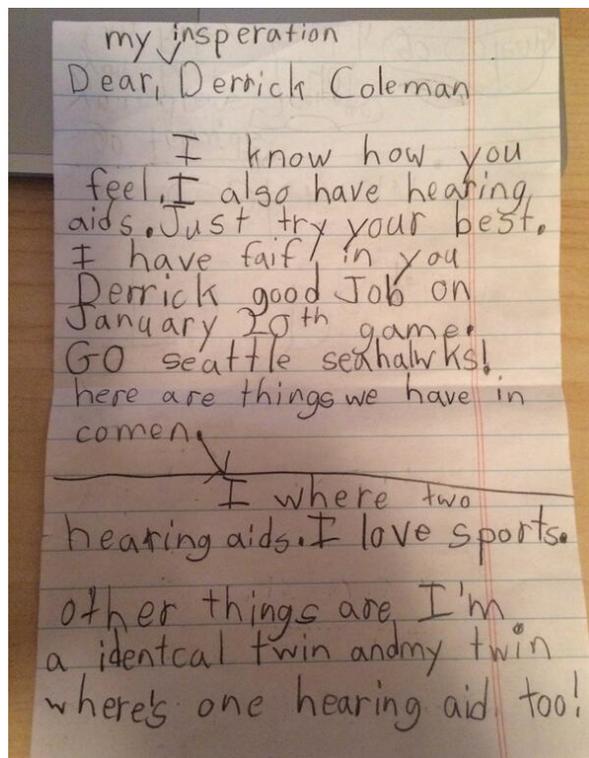
"Just that she was able to put that stuff into words and talk to how she felt about it, it was amazing," he said of his daughter.

Since seeing the Duracell commercial, Riley and Erin have become Seattle Seahawks' fans, and Riley even included a sentence of congrats to Coleman on his team's defeat of the San Francisco 49ers to make it to the Super Bowl.

"Good job on the January 20th game," she wrote, while also adding the things the two share in common, namely that they both love sports and wear hearing aids.

And when it comes to next Sunday, Feb. 2, when the Seahawks take on the Denver Broncos at New Jersey's MetLife stadium for Super Bowl XLVIII, Riley and Erin said they will have only two words.

"Go Seahawks," both girls said in unison on "GMA."

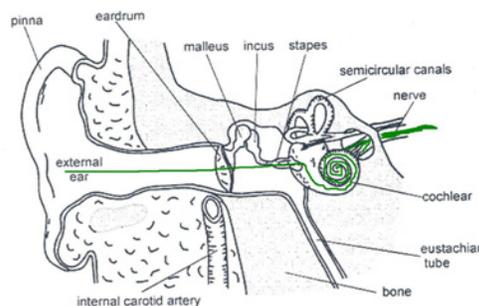


## Tips & Reminders for Audiologists & Hospital Newborn Hearing Screening Coordinators

### Inappropriate Screening Follow-Up:

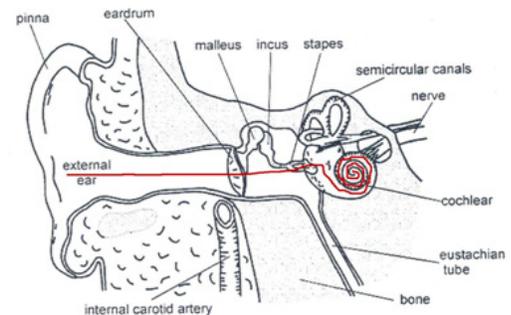
The Joint Committee on Infant Hearing (JCIH) recommends never following an initial Automated Auditory Brainstem Response (AABR) screening with an Otoacoustic Emissions (OAE) re-screening. The rationale for this recommendation is to avoid missing neural hearing loss, including Auditory Neuropathy Spectrum Disorder (ANSD). Infants with neural hearing loss should refer on an AABR, but may pass an OAE if the preceding structures are functionally intact.

**AABR:** Reflects the status of the peripheral auditory system, the eighth nerve, and brainstem auditory pathway.



**OAE:** Reflects the status of the peripheral auditory system extending to the outer hair cells of the cochlea.

ANSD, a rare type of hearing loss, affects babies in the NICU more often than in the general population. Babies in the NICU must receive an AABR screening, due to the increased risk of neural hearing loss. Babies in the well-baby nursery may be screened with OAE and/or AABR.



Infants who do not pass AABR testing should NOT be re-screened by OAE, because such infants are at risk of receiving a diagnosis of ANSD. Re-screening babies with OAE after referral on AABR gives families a false sense of security, delaying diagnosis and treatment.

Hospitals using AABR should offer an outpatient re-screening whenever possible. Hospitals should direct families only to facilities where they can get appropriate follow-up. Hospital coordinators can find this information by visiting the “Facilities” section of [the EHDI website](#).

If a baby is inadvertently scheduled at a facility without the necessary equipment, that audiologist is ethically responsible for referring the family to a facility with AABR or ABR equipment. Audiologists should familiarize themselves with the screening equipment used at nearby hospitals by visiting the “Facilities” section of the EHDI website.

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The EHDI program welcomes your contributions to the new **Tips & Reminders** section of our newsletter! Share with us your tips, tricks, and suggestions, or submit questions to generate discussion regarding protocols, outcomes, and techniques. Let's learn from each other!

## NICHQ Website Offers Helpful Information for Improving Hearing Screening & EHDI Programs\*

The National Initiative for Children’s Healthcare Quality (NICHQ) website includes information on the Improving Hearing Screening and Intervention Systems (IHSIS) project (see [www.nichq.org/our\\_projects/newborn\\_hearing.html](http://www.nichq.org/our_projects/newborn_hearing.html)) and also an article on Family and Patient Engagement in Quality Improvement, which includes a video that features Oregon EHDI’s own Helen Cotton-Leiser (see [www.nichq.org/how\\_we\\_work/family\\_engagement.html](http://www.nichq.org/how_we_work/family_engagement.html)).

The NICHQ Web site also includes an invitation to “Join the Conversation” via a NICHQ blog called *The Improvement Quotient*. As of this writing, there are no blog entries on deafness, hearing loss, or newborn hearing screening, but it would be great if something were written on these topics.

*\*Many thanks to Victoria Keetay of Pacific University for contributing this content.*

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### Contact Oregon EHDI

**EHDI Program Questions? Call Toll Free: 1-888-917-HEAR (4327)**

**Website: Type [healthoregon.org/ehdi](http://healthoregon.org/ehdi) in your browser’s address bar.**

**Submit newsletter contributions to [julie.a.hass@state.or.us](mailto:julie.a.hass@state.or.us)**

The EHDI newsletter is published periodically by the Oregon Early Hearing Detection and Intervention (EHDI) program to provide information and resources to a wide audience, including parents, hospital staff, screening and diagnostic facilities, midwives, and EI service providers at the county and regional program levels.

This document can be provided upon request in alternative formats for individuals with disabilities. Call EHDI at 1-888-917-HEAR (4327) to arrange for the alternative format that will work best for you.