

Press release

## Children with Dyslexia Can Benefit From Hearing Assistance

### *FM Devices May Improve Reading Skills*

**Stäfa, Switzerland (October 3, 2012) – For children with dyslexia, FM systems not only allow them to hear better while the device is in use, but it can also mean long-term improvement in phonological awareness and reading skills – even beyond the use of the device, according to a recent study published in the journal, [Proceedings of the National Academy of Sciences](#).**

“With the FM approach, the teacher wears a microphone and the student wears a behind-the-ear FM receiver, which effectively pipes the teacher’s voice into the ear, which allows a child to be more focused,” explains Nina Kraus, Principal Investigator of The Auditory Neuroscience Laboratory at Northwestern University and the study’s co-author. “When we measured the brain’s response to speech sounds, the kids who wore the device responded more consistently to the very soft and rapidly changing elements of sounds that help distinguish one consonant from another (cat, bat, pat etc.). That improved stability was linked with reading improvement based on standardized measures of readability – which, as a long-term benefit, points to brain plasticity and makes this study incredibly exciting.”

The study, partially funded by a Phonak grant, was conducted by [Auditory Neuroscience Laboratory](#) at Northwestern University, was spearheaded by Kraus and her colleagues, who sought to understand the relationship between listening devices and dyslexia in children.

They worked with 38 children between the ages of eight and 14 all attending a school for children with reading problems. Half of the children did not wear devices and served as the control group. The other 19 students wore an assistive listening device throughout each school day for the entire academic school year. The ear-level FM receivers used in this study were Phonak EduLink products. (The products used were precursors to Phonak iSense)

“Improving a child’s auditory processing of sound in this way gives children a better chance to make associations between what they hear and what these sounds mean. Then they can connect that information to what they see on paper,” added Kraus.

To read the study in full visit: [http://www.soc.northwestern.edu/brainvolts/documents/FM\\_PNAS12.pdf](http://www.soc.northwestern.edu/brainvolts/documents/FM_PNAS12.pdf)

#### **About Phonak**

Headquartered near Zurich, Switzerland, Phonak, a member of the Sonova Group, has developed, produced and globally distributed state-of-the-art hearing systems and wireless devices for more than 60 years. The combination of expertise in hearing technology, mastery in acoustics and strong cooperation with hearing care professionals allows Phonak to significantly improve people’s hearing ability and speech understanding and therefore their quality of life.

Phonak offers a complete range of digital hearing instruments, along with complementary wireless communication systems. With a worldwide presence, Phonak drives innovation and sets new industry benchmarks regarding miniaturization and performance.

For more information, please visit [www.phonak.com/fm](http://www.phonak.com/fm) and or contact:

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