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Impact

New tool detects reading problems early, allows for early intervention

A researcher studying the brain waves of children developed a way to detect reading problems before they become evident allowing for earlier interventions

Kids wearing EEG caps.
Credit and Larger Version (/impacts/impact_images.jsp?cntn_id=243233&org=NSF)

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Reading disabilities affect millions of Americans and can have long-term effects from childhood into adulthood. Dyslexia alone affects 5 to 10 percent of the U.S. population.

An NSF-funded researcher has developed a tool that uses a child's brain waves to predict reading problems before they start. This is important because interventions for children are effective, but they need to start early.

The researcher is now developing a diagnostic tool that can double or even triple the time window for implementing an intervention.

NSF Directorate(s):
Directorate for Social, Behavioral & Economic Sciences

Locations
New York

Related Awards

#1252975 CAREER: NEURAL-COMPUTATIONAL ANALYSIS OF READING (AND READING IMPAIRMENT) IN INDIVIDUALS (/awardsearch/showAward.do?AwardNumber=1252975)

Related Websites

Neuroscience research into dyslexia leads to 'brainprints': https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=138315 <https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=138315>

Brain prints reveal children's reading difficulties: https://www.nsf.gov/news/special_reports/science_nation/brainprints.jsp <https://www.nsf.gov/news/special_reports/science_nation/brainprints.jsp>

Neuroscientist receives NSF CAREER grant: https://www.nsf.gov/cgi-bin/good-bye? https://www.binghamton.edu/inside/index.php/inside/story/5582/neuroscientist-receives-nsf-career-grant/ <https://www.nsf.gov/cgi-bin/good-bye? https://www.binghamton.edu/inside/index.php/inside/story/5582/neuroscientist-receives-nsf-career-grant/>

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