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## Yale to Use \$5M for Dyslexia Genetics Studies

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**Newsletter:** [GenomeWeb Daily News](#)

NEW YORK (GenomeWeb News) – The Yale School of Medicine has landed a \$5.2 million foundation grant to conduct a large genomics study that will investigate genes involved in dyslexia.

The long-term goal of the research, which is supported by a grant from the Manton Foundation, will be to develop a gene-based diagnostic test for dyslexia that could help catch the disease earlier in life and enable children to gain the benefits of accessing specialized reading treatments sooner.

The research will be led by Jeffrey Gruen, an associate professor at the Department of Pediatrics, Genetics, and Investigative Medicine at Yale, who has discovered the DCDC2 gene, which appears to be involved in dyslexia.

The study will compare the complete genomes of 1,000 dyslexic children with those of 1,000 fluent readers to gather "a fine-grained view of genes that are known to play a role in leading disabilities, and possibly to identify new genes that confer a risk of developing dyslexia," the university said.

"Studies have shown that the number of loci — areas in chromosomes where there is an effect — is very limited," Gruen said in a statement. "So we're not talking about hypertension, cancer or schizophrenia where there may be 100 genes at work. We're talking about, maybe, 10. I think it's likely that these four genes, or even two of the four, will be found to have very large effects."

Gruen said that many dyslexic children could be greatly aided "by the creation of a simple, inexpensive dyslexia screening test that would apply to the general American population, including groups who have been excluded from dyslexia research up to now.

"We now have the knowledge and the capability to develop such a test," Gruen added, by studying the group of four genes most involved in language the he terms "the human lexinome."

A banner advertisement for Datamonitor. On the left, the word "DATAMONITOR" is written in white on a black background. To the right, the text "RNA therapy: the next big thing after monoclonal antibodies?" is displayed in white. The background of the banner features a blue and purple abstract graphic with glowing lines and dots, resembling a molecular or data structure. Below the banner, there is a small blue logo with a white icon and the word "Drupal" in white text.