



# Student's algorithm solves real-world problem

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## Jordan Medlock wins supercomputer challenge with his algorithm that automates counting and analyzing of plaques

The winner was Jordon Medlock from Albuquerque's Manzano High School. He won for his computer algorithm that automates the process of counting and analyzing plaques (substances in the blood such as fat and cholesterol) in magnetic resonance images of persons diagnosed with Alzheimer's disease. The program vastly speeds up the process of identifying the very small and difficult to see plaques. Cole Kendrick, from Los Alamos Middle School, took second place.

In all, 60 teams representing elementary, middle, and high schools in New Mexico, had an opportunity to take part in tours, talks, and demonstrations with Laboratory scientists and researchers. It took more than 100 LANL employees to help make the Supercomputing Challenge a success

"The mission of the Supercomputing Challenge is to teach students how to use powerful computers to analyze, model, and solve real-world problems," said David Kratzer of the Laboratory's High Performance Computer Systems group and the Supercomputing Challenge coordinator.

The goal of the year-long competition is to increase knowledge of science and computing, introduce students and teachers to computers and applied mathematics, and instill an enthusiasm for science in the students, their families, and the community. The Challenge is project-based learning, geared to teaching participants a wide range of skills, including research, writing, teamwork, time management, oral presentations, and computer programming. Any New Mexico elementary, middle-school, or high-school student is eligible to enter.

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