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5 S.A. students up for science prize

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Express-News

Vegetables grown using manure-based fertilizers still are the safest.

That's the conclusion of Samantha Gonzalez, 15, and Danielle Zapata, 14, who did a science fair project at St. Gregory the Great School in which they tested the effects of various fertilizers on vegetables.

"Most of the bacteria, by 72 hours, has died off," Gonzalez said.

That project earned them a chance to compete to become the nation's top scientist at the Discovery Channel Young Scientists Challenge in Washington on Oct. 21-24.

Three other San Antonio students also are competing.

Discovery selected 40 finalists from a pool of 70,000 middle school students nationwide. Texas' five finalists all hail from San Antonio.

It's unusual to have so many from one city, said Michele Glidden, director of science education programs for

Young finalists from Alamo City

These five San Antonio students are finalists in the Discovery Channel Young Scientists Challenge for their work last school year:

- **Evan Cofer,** Keystone School.
- **Samantha Gonzalez** and **Danielle Zapata** from St. Gregory the Great School. They now attend Antonian High School.
- **Rohit Kamat,** Barbara Bush

Middle School. He now attends Jose M. Lopez Middle School.

• **Matthew Mooney,** St. Luke's Episcopal School. He now attends St. Mary's Hall.

Source: Discovery Communications

Washington-based Science Service, co-sponsor of the event.

San Antonio has quite a nine-year track record with the Discovery competition, said Rose Perez, director of the Alamo Regional Science & Engineering Fair, which nominates students for the Discovery competition.

In 2005, Neela Thangada from Keystone School won a $20,000 scholarship and top honors as "America's Top Young Scientist of the Year." She entered a project on cloning potatoes.

In the past school year, the finalists were Gonzalez and Zapata; Evan Cofer, 13, from Keystone School; Rohit Kamat, 13, who attended Barbara Bush Middle School; and Matthew Mooney, 13, who attended St. Luke's Episcopal School.

Kamat, who wants to become a neuroscientist, designed a project focused on the growth hormone DHEA and its ability to regenerate the nervous system after injury.

He did his experiment on tiny freshwater invertebrates called hydra and proved that DHEA helped the hydra, which he cut in half, heal better.

The finding could be helpful to people with paralysis and Alzheimer's disease, Kamat said.

Cofer, who aspires to be a mechanical engineer, wanted to build a better Mars Rover after learning the NASA model got stuck in a ditch. So he built triangular, square and pentagonal robots. He tested them in four mazes and found his "pentabot" worked best.

"This robot can be used for space navigation and navigating through mines," Cofer said.

Mooney, who wants to become a marine biologist, found submerged reef balls, cement shells with holes, worked best to prevent beach erosion.

"They are also great breeding habitats for animals," he said.

On Oct. 21, the San Antonio students will present their projects at the Smithsonian Institution's National Museum of Natural History. Then they will compete in scientific challenges.

"We are really looking for the next science communicator," Glidden said.

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