CONSOLIDATED INDEPENDENT SCHOOL DISTRI

RSS Health Science Academy

It may look like a scene from CSI, but discovering the "cause of death" of fictional character Anna Garcia is a challenge to the 44 Ross S. Sterling High School Health Science Academy students one they take seriously.

Students arrived in Greg Smith's Principles of Biomedical Sciences class on the first day of school to find a mannequin on the floor, and they were told that this was the "body" of Anna Garcia. They quickly began conducting research and experiments to discover why the subject died.

"So far, we know it's a natural cause, but we don't know if it was her diabetes, her sickle cell anemia, or her heart," said Symrin Jhagroo, a freshman whose interest in cardiology is a result of her grandmother's heart problems.

Jhagroo and the other students work together in class to research each disease or problem they discover to find out how it could have caused Garcia's death.

"We take a disease and do a whole unit over it to see how it affects people and how it is treated," said Bryce Putnam, a baseball player whose previous issues with tendonitis led him to an interest in sports medicine. "Like with diabetes, we show how insulin binds to the receptor and the glucose transport protein opens, allowing glucose to go into the cell. It's all interesting and cool!"

In its inaugural year, the Health Science Academy at Ross S. Sterling High School provides numerous opportunities for participants. Academy students benefit from integrated curriculum, job shadowing, speakers from industry, academyspecific field trips, dual credit opportunities, certification opportunities and a Public Service Endorsement.

Freshmen take Principles of Biomedical Sciences and Business Information Management (BIM) for Health Careers.

Sophomore students enroll in Human Body Systems, while juniors take Biomedical Interventions. Seniors choose Biomedical Innovations or the Health Science Practicum. Some of the classes use the Project Lead The Way Curriculum, which involves modules that simulate experiences.

"The Sterling Health Science Academy is running very smoothly," said Michelle Duhon, Career and Technology Education (CTE) academy specialist at RSS. "Students really seem to like their academy classes, especially the Principals of Biomedical Sciences, since it is so interactive."

Although Sterling houses the Health Science Academy, Goose Creek Memorial High School offers both freshmen classes, and Robert E. Lee High School offers BIM and will add Principles of Biomedical Sciences next year.



Michelle Duhon (right), Career and Technology academy specialist, watches as freshmen Bryce Putnam (left) and Symrin Jhagroo put on their gloves to prepare for an experiment.

"One hundred students have applied for the Health Science Academy for next year," said Michelle Duhon, Career and Technology Education (CTE) academy specialist. "Forty-five from Sterling will be selected, and 15 total from GCM and Lee will be accepted. The district will provide transportation. It will work the same way with the academies at GCM and Lee."

The Health Science Academy has benefitted from the sponsorship of Houston Methodist San Jacinto Hospital, which created a logo and donated shirts for students and teachers to wear for academyrelated activities. The hospital provides guest speakers each six weeks from various areas of medicine.

"Typically, when students think about going into medicine, they think in general terms. They want to be a doctor, nurse or vet, said Duhon. "They are learning through the guest speaker series that nurses specialize much like doctors do.

Students have had the opportunity to listen to doctors of podiatry, pediatrics, anesthesia and orthopedics, along with nurse practitioners, emergency room nurses and pediatric nurses. This helps them realize that there are many careers in health sciencerelated fields. Academy students will visit Houston Methodist San Jacinto Hospital in May to tour the facility and speak with some of the hospital staff.

A field trip to Baylor College of Medicine is in the works for later in the year. Baylor College of Medicine works closely with NASA in studying the effects that space has on the human body, so students will be able to tour the facility, listen to and interact with several astronauts and work on robotics activities.

The research is still going on, but, hopefully, by the end of the year, these diligent students will come to a conclusion about the cause of Anna Garcia's "death," because a new group of students will be ready to begin their academy experience with the same enthusiasm next school year.

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