

Cherokee Scout

Murphy High science students experiment with DNA

Students learn about careers in science

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Murphy – Some students from Lynn Deweese and Jason Sickle's advanced placement science classes tasted phenylthiocaramide, or PTC, on strips of paper. Other students did not.

The strips were part of an experiment pharmacogenomicist Dr. Christy Ahn from the University of North Carolina at Chapel Hill's School of Medicine used to teach students about genetic differences Monday.

Pharmacogenomics is the study of medicines and their effects on different genetic strands.

The experiment taught students how genetics and environmental factors can cause different people to react to the same medicines in different ways.

The students tasted the PTC to determine whether they were nontasters, tasters or supertasters based on their reaction from the strips. They then used food coloring to dye their tongues and count the receptors for bitter tastes.

Students hypothesized that most students who were supertasters had more receptors for bitter tastes. The results were unclear.

Pharmacogenomics is being used to develop a new treatment for some forms of breast cancer.

That was the most interesting part for sophomore Ryan Torres.

"I didn't really think about DNA before I got into biology," freshman Kimberly McBee said.

The study was part of North Carolina's DNA day, which started last year to teach students about careers in science.

Several organizations in North Carolina are spending this week touring 177 schools to teach students about different aspects of DNA as part of National DNA Day on Friday.

In addition to teaching students about medicines, Ahn also taught sophomores in introductory biology about farming and biotechnology.

Many farmers are using genetically modified seeds to produce higher crop yields and crops that are resistant to pests.



SCOTT WALLACE/Cherokee Scout
Murphy High School senior Lauren Gentry (right) looks for receptors for bitter tastes on sophomore Katie Bailey's tongue during an exercise on genetic differences Monday afternoon. The test determined Bailey was a supertaster.

From the students' evaluations, Ahn said they have learned that, "Science can be pretty exciting and fun."

They also learn new things and new ways of thinking about DNA, Ahn said.