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STMHS Students Among Those To Talk To ISS Commander [VIDEO]

Daniel Burbank fields questions from four schools, including New London's Science and Technology Magnet High School, on Thursday

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[◀ Back to Article](#)



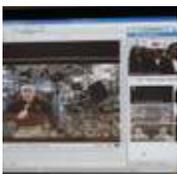
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Daniel C. Burbank, commander of the International Space Station, fields a question about antimatter studies on Thursday.

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The commander of the International Space Station fielded questions from four schools along the East Coast on Thursday, including the [Science and Technology Magnet High School of Southeastern Connecticut](#).

Daniel C. Burbank spoke briefly with students at the school, which is located in New London and serves as a regional magnet school focusing on science, technology, mathematics, and engineering subjects. He also answered questions from the Friendship Academy of Engineering & Technology in Baltimore, Md.; Coretta Scott King Young Women's Leadership Academy High School in Atlanta, Ga.; and the Maritime and Science Technology Academy in Miami, Fla.

Lou Allen, director of STMHS, said the link-up with the ISS occurred as a result of the school's partnership with the [Coast Guard Academy](#). Burbank is a graduate of the academy and later served as a professor there, and [spoke with cadets last week](#).

"We're a STEM school, they're a STEM school; it was just a natural progression," said Allen.

Putting together the inquiries was no simple task, however. Students had to come up with a question for Burbank and write an essay justifying why it should be asked during the roughly 20-minute window open for the question-and-answer period. Students then alternated their questions in groups, speaking to Burbank via video chat.

During the conversation, Burbank said the experiments on the ISS include the effects of prolonged weightlessness as well as efficiency in fuel and resources. No day is a "typical day," he said.

STMHS students asked Burbank about studies into both antimatter and animal life conducted on board the ISS. Burbank said the station has gathered significant amounts of data on the former subject through its Alpha Magnetic Spectrometer. He said only a small fraction of the universe's matter is visible, and that the rest is made up of mysterious dark matter.

"It's going to take a long time, and a lot of processing that data to be able to figure out the kinds of questions, the big questions, that that machine is designed to answer," he said.

Burbank said some animal studies have been done, such as how the weightless environment affects a spider's construction of a web. He said there have also been numerous studies on microbial life in space.

"For some reason, it's not entirely clear, a lot of microbes become more virulent and more hazardous to humans in a weightless environment," he said.

Burbank said this data has been used to work with teams on the ground to design drugs to fight salmonella poisoning. He said similar work might also be done with staph infections.

The brief window of time meant not every student got to ask his or her question, but they were excited about the event.

"I feel like it was a once in a lifetime opportunity," said sophomore Jailene Clinton-Ortiz, who did not get to ask a question but would have inquired about the readjustment to Earth gravity after so long in space.

"You want to ask your question and get the answer, but at the same time you're nervous to be on TV," said sophomore Bianca Timpano, whose question would have been about the astronauts' free time and recreation activities.

Khairi Qadir, a freshman, was one of the students asking about animal studies on the ISS.

"I really enjoyed asking the question, because I got to talk with a real astronaut," he said.

Burbank is the commander of Expedition 30, which consists of a six-man crew from the United States, Russia, and the Netherlands. The crew has been on the ISS since Nov. 16 and will return to terra firma on March 15.

"Keep up the great work and down the road, if you'd like, we'd love to have you join the space program," Burbank concluded.