

Local Boy Scouts Prepare To Send STEM Experiment To International Space Station

By ohtadmin | on August 10, 2017

After winning a contest sponsored by the Center for the Advancement of Science in Space (CASIS) for the past two years, Boy Scout Troop 209 AMES has been preparing to send an experiment to Space.

The Scouts created a project that will be brought to the International Space Station to study the rate of mutation of DNA in microgravity. The experiment could impact the future of cancer and tissue growth research.

The team of 12-18-year-old Scouts from Palatine, Buffalo Grove and Hoffman Estates spent over 5,000 hours on the project.

“These incredible Scouts brainstormed, problem solved, and worked as a team involving multiple STEM disciplines to resolve design issues,” said community volunteer and Engineering Manager John Marks, “They showed grit and determination in the face of countless challenges to create a truly unique design to benefit science.”

The team led by adult leaders, the primary adult lead for the project Norm McFarland, volunteer leader Kathy Cassady, and Scout lead Andrew Frank, have completed their project and are waiting for the official launch date of Sunday, Aug. 13 when their experiment will join other science experiments in the SpaceX CRS12 flight. The team has been fundraising for the Scouts, and their experiment, to travel to the Kennedy Space Center in Florida to be part of the launch activities.

“This is truly the opportunity of a lifetime for these young men,” said Cassady, who is part of the STEM committee interfacing with the troop. “After all their hard work and dedication, we would love to see them experience the Kennedy Space Center and watch their project rocket into outer space and become part of the scientific community.”

As the launch dates approach, 10 Scouts and nine adult mentors couldn't be more excited. They each have reflected on the experiences of the last two years.

"I think it's really fun, and I learned a lot from it. I like learning more than anything, and I like hanging out with everyone. So much cool stuff that we got to do!" said Frank.

"I have learned a ton from this experiment," added Logan Bayer. "I learned how to solder, debug basic code, put together electronics, run an Ames test and scientific problem solving. Most importantly, I had an opportunity to work with engineers, programmers and scientists who were passionate about scientific inquiry."

McFarland, who is a Signal Hill District-STEM committee chair and retired Siemens engineer said, "I am just so proud of this team. We started with young students and they have developed into young engineers, building testing, resolving issue by issue until we have reached a final solution. We are now looking forward to running our test both on the International Space Station and on the ground to determine if DNA mutates at a different rate in space than on earth."

At a relatively young age, these Scouts understand how this experience will benefit them in the future.

"A lot of the project is engineering and coding and a lot of jobs are available in that area," said Scout Stephen Ma. "They need people to fill the slots, that's really good."

Visit their GoFundMe page atgofundme.com/troop209amesforspace. Proceeds will go toward travel to the Kennedy Space Center in Cape Canaveral, FL.

The Boy Scout AMES Space Travel Experiment is supported by the Men's Club of First United Methodist Church, Palatine (the troop's charter organization), Center for the Advancement of Science in Space, Texas A&M University, NanoRacks, and Sparkfun.