



## Sanger Unified Joins America's space program!

Fairmont elementary and sanger high have joined the student spaceflight experiment program mission 12 to the international space station!

Fairmont, alongside Sanger High School, are pioneering the opportunity to provide students an authentic space program experience. Students will participate in a national model STEM education program that will engage hundreds of our students in real microgravity experiment design and proposal writing, and will culminate in one of our student-proposed experiments selected to launch to the International Space Station (ISS) in low Earth orbit, and be operated by the astronauts. The experiment will be part of a payload for Student Spaceflight Experiments Program **Mission 12** to ISS, and will launch on a SpaceX Falcon-9 rocket from Cape Canaveral Air Force Station, FL, adjoining NASA's Kennedy Space Center, in late Spring 2018.

Student Spaceflight Experiment Program, SSEP, will be included within the curriculum in each 5-8th grade class as part of their Science and ELA studies. Over 70 teams will be designing real microgravity experiments with real world constraints imposed by the operation of a flight certified microgravity mini-laboratory, and flight operations to and from low Earth orbit. Teams will be required to write real research proposals and experience a formal proposal selection process. Scientist and Engineers around the world compete to get their experiments up to the International Space Station by participating in the exact same formal proposal review and selection process as our students will be going through. This is a real competition amongst Fairmont student teams, one finalist is selected by the SSEP National Review Board, which meets at the Smithsonian National Air and Space Museum in Washington, DC. This winning experiment will then undergo a 4-month NASA flight safety review at Johnson Space Center, laboratory refinement by the student flight team, handover to NanoRacks in Houston for integration into the experiment payload, and payload integration into the ferry vehicle for flight to International Space Station.

100 excited junior and senior Sanger High School students have volunteered to be project managers to Fairmont student teams. They are giving back to their district and community by mentoring younger students as they journey through creation of their experimental design answering the question, "What physical, chemical, or biological system would we like to explore with gravity seemingly turned off for a period of time, as a means of assessing the role of gravity in that system?" This cutting-edge partnership allows Engineering, Education, and Agriculture

pathway high school students the chance to lead, nurture younger students' skills in critical thinking, creativity, problem solving, enhance communication, and team work.

The winning team will represent our Sanger community by traveling to the Smithsonian to attend their own research conference, reporting on experiment design and analysis of ground truth data, and the flight team reporting on flight results. SSEP will provide students in Sanger Unified an exciting global view, resulting in inspiration and empowerment driven by relevant, meaningful learning.

We thank our sponsors for supporting Fairmont Elementary & Sanger High taking part in Mission 12. Thank you for your assistance in our efforts to get our community into America's Space Program!



We invite you to join us as a community through this exciting experience! Follow Sangers Student Spaceflight Experiment program at [fairmontssep.com](http://fairmontssep.com) or scan the QR reader below.

