

Out-of-this World Real Science In Houston ISD

Houston, we have a student experiment going to space!!! Two HISD schools, Johnston middle and Parker elementary, compose one of only 12 communities nation-wide to be selected to participate in Mission One to the International Space Station (ISS) through the Student Spaceflight Experiments Program (SSEP.) One student experiment will be chosen from an anticipated field of over 400 completed scientific proposals from over 1,000 students. That experiment will fly to the ISS aboard a Soyuz rocket in spring 2012.

Students in grades 5-8 at both schools are being exposed to science as it relates to our nation's quest to live in space and to understand micro-gravity's effects on everything from bacteria to plant growth. They are actively researching in the classroom and going through the scientific process, working with their teachers to learn real science.

The Houston scientific community is getting on-board with researchers, scientists, biologists, physicists, geologists, and many others actively engaged with the student participants. Among them are: Gregory Vogt, Baylor College of Medicine, Robert Dempsey, Jess Tramaglino, and Keith Todd, NASA, Christopher Johns-Krull and Jeff Chancellor, Rice, Lawrence Pinsky and George Fox, UH, Alamelu Sundaresan, Terrell Gibson and Charles Glass, TSU, Ann Martin, geologist, Bruce Thornburgh, bio-medicine.

At the school level, students are being supported by teachers and administrators alike. All of whom are dedicated to providing support, instruction and guidance so students can be part of this once in a lifetime experience.

At the district level, board members Larry Marshall and Micheal Lunceford both have dedicated time and effort into making this happen from day-one. Houston, we have a team. Houston, we have a mission. Houston, we have something special going on.

This is truly an out-of-this world experience for these young students turned researchers and an amazing opportunity for the Houston community to prove that we really are the nation's "Mission Control." For more information about this opportunity, please visit www.ssep.ncesse.org. To get involved contact: Lanena Berry, lberry1@houstonisd.org or Amber Pinchback apinchba@houstonisd.org.

The Student Space Flight Experiments Program (<http://ssep.ncesse.org>) is undertaken by the National Center for Earth and Space Science Education (NCESSSE; <http://ncesse.org>) in partnership with Nanoracks, LLC. This on-orbit educational research opportunity is enabled through NanoRacks, LLC, which is working in partnership with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory.

Announcement:
SSEP Finalists from:
Johnston Middle and Parker Elementary Schools
Southwest Houston

Out of over 250 completed proposals, three finalists have been selected.

1. Aunjane Cooper, 8th grade AVID and IPC, Johnston Middle School
Aunjane's experiment proposal is titled, "Insulin's Molecular Structure in Microgravity." Aunjane's family has a history of diabetes as well as involvement with NASA innovation, so she chose to study whether insulin would be effective in space as we explore further and further. Aunjane is a member of AVID, orchestra, swim team and Kick Start at JMS. She holds a blue belt in Karate and is interested in all aspects of STEM.
2. Emily Soice, 8th grade IPC, Johnston Middle School
Emily's experiment proposal is titled, "Hepatocyte Development in Bioscaffolds infused with TGFB3 in Microgravity." Emily hopes her research will help scientists provide a way to replace damaged or worn organs and joints in space. Emily is in her third year of playing first violin for the JMS Advanced Orchestra as well as being an award winning actress and singer in HISD. She is Girl Scout Cadet, a volunteer at the Houston Humane Society, and a competitive athlete in swimming. Science has always been her favorite subject and she is a former science fair winner at JMS.
3. Michael Prince, Maxx Denning and Aaron Stuart, 5th grade, Parker Elementary School.
Their experiment proposal is titled, "Will Vitamin C Help Preserve Bone Density in Microgravity?" They felt this was a significant question because it is known that astronauts cannot leave our atmosphere for long periods of time without losing a measure of bone density.

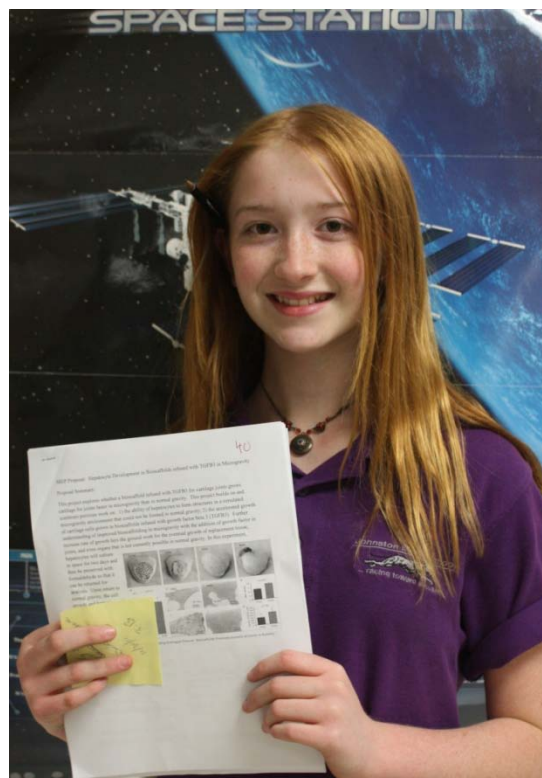
Maxx is in the performing violin group and advanced chorus at Parker. A few of his extracurricular activities include baseball, skateboarding and hanging out with his friends.

Michael is also in the performing violin and advanced chorus ensembles. He recently began a karate program and is active in YMCA basketball. In his very rare free time, Michael enjoys playing baseball and riding his bike!

Aaron Stuart, the principal investigator in the experiment, is a member of Parker's advanced band and is also involved in karate. He is also a proud member of Boy Scout Troop 242. Aaron claims that science is and will always be his favorite subject. He believes his test can help astronauts plan exercise programs both in space and on earth.



(Left to right) Michael Prince, Maxx Denning and Aaron Stuart coauthored the proposal titled "Will Vitamin C Help Preserve Bone Density in Microgravity?" as part of the Student Spaceflight Experiments Program efforts of Parker Elementary School in Houston, Texas.



Emily Soice authored the proposal titled “Hepatocyte Development in Bioscaffolds Infused with TGFB3 in Microgravity” as part of the Student Spaceflight Experiments Program efforts of Johnston Middle School in Houston, Texas.



Aunjane Cooper authored the proposal titled “Insulin’s Molecular Structure in Microgravity,” as part of the Student Spaceflight Experiments Program efforts of Johnston Middle School in Houston, Texas.