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Date: January 18, 2022

## **FOR IMMEDIATE RELEASE**

### **Student science experiment to be conducted on International Space Station**

The Innovation Office of Ector County ISD is excited to announce, for the third time ECISD students will send a science experiment to the International Space Station (ISS) through the Student Spaceflight Experiments Program (SSEP) Mission 16. SSEP is an international competition that allows 5th -12th grade students to design authentic experiments for microgravity environments. SSEP mirrors how professional scientists work by having student teams write research proposals that are evaluated by panels of experts.

The winning experiment proposal from ECISD is Swetha Kesavan's proposal studying biofilm in microgravity. Her experiment will undergo further testing on Earth and a final flight safety review before launching to the ISS later this year. Ms. Kesavan, a senior at Permian High School, is working with her teacher facilitator, Gregorio Barajas-Mercado and two faculty from The University of Texas Permian Basin (UTPB) Biology department, Paula Gutierrez and Joanna Hernandez, on this experiment proposal and research.

For this year's Mission 16 competition, 23 communities from all over the United States as well as Canada and the Ukraine submitted entries. The winning experiment from each SSEP community will be ferried to the International Space Station (ISS), and the experiment will be operated by the astronauts in a microgravity environment. Ground control experiments will be conducted by the students on Earth, and then the students will analyze the results from the two experiments. Participating students will also have the opportunity to present their research at the SSEP National Conference during the summer of 2022 planned to be held at the Smithsonian National Air and Space Museum.

The two other experiment proposals selected as finalists for ECISD Mission 16 were:

- "What Will be the Effect of Microgravity in the Reaction of Calcium and Citric Acid?" (Nimitz MS, 7<sup>th</sup> graders Ava Alderson and Zoey Terrazas and 8<sup>th</sup> grader Miguel Iniguez, facilitated by science teacher Azul Purcell)
- "Tardigrade Reproductive Rates in Microgravity" (Nimitz MS, 7<sup>th</sup> graders Kimberly Espinoza, Mohammed Rehan Latheef Adam, and Mateo Sanchez, facilitated by science teacher Azul Purcell)

ECISD students previously sent science experiments to the ISS on Mission 12 which flew in 2018 and Mission 13 which flew in 2019.

An additional component of SSEP is the Mission Patch competition. Students in all grade levels can participate in SSEP by creating mission patch art. Two mission patches will fly to the ISS with the winning team's experiment, and return to Earth certified as flown in space. SSEP is a great way to engage students in a unique and rich

educational STEAM experience, strengthen scientific and engineering process skills, and potentially open up a world of opportunity!

Ector County ISD wishes to thank UTPB, Sibley Nature Center, and Odessa Regional Medical Center for participation on the local review panel. Funding for ECISD's participation in SSEP Mission 16 was provided by Chevron, the Education Foundation of Odessa, and a grant from the Texas Space Grant Consortium.

The Student Spaceflight Experiments Program [or just "SSEP"] is a program of the National Center for Earth and Space Science Education (NCESS) in the U.S. and the Arthur C. Clarke Institute for Space Education Internationally. It is enabled through a strategic partnership with Nanoracks, LLC, which is working with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory.

For more information regarding this press release contact ECISD Communications at 432-456-9019.