

TEACHERS IN SPACE

A Project of the Space Frontier Foundation

<http://tis.spacefrontier.org/>

MAY 2014

UPDATE: ALS TO THE ISS (March Issue)

By Amy McCormick
Teachers in Space Participant

On March 5, 2014, the reaction was initiated by astronaut Mike Hopkins onboard ISS. The reaction was terminated three days later, on March 8th by astronaut Kiochi Wakata. The experiment was then sent to Kazakhstan via Soyuz capsule on March 11th, overnighed to Houston, and then arrived in Melbourne, Florida for testing and analysis.

Student Luke Redito opened the package from ISS with Jason Whitworth at our March ALS support group meeting. The patients were very excited and passed the fluid mixing enclosure (FME) around the room to inspect it.

"Getting a chance to fly an experiment on board the International Space Station is a once-in-a-lifetime opportunity. I would like to thank everyone who has helped make this possible." said Carissa Sage a senior at West Shore Junior/Senior High School.

Students Carissa Sage, Genna Owen, and Hannah Scroeter performed Biuret tests on the FME samples to detect protein levels. Samples were then tested in a spectrophotometer to determine absorption values for each. The students are presently performing analysis of the data and will present their findings at May's Brevard Support Group meeting.

"This has been an amazing experience. I learned a lot about the disease Amyotrophic Lateral Sclerosis and raising public awareness, along with the proper protocol for preparing an experiment for space-flight." said Genna Owen a Senior at West Shore Junior/Senior High School.



Pictured Above: 1) Luke Redito opened the package from ISS with Jason Whitworth during our monthly ALS support group meeting. Also pictured, Jason's wife, Gayle. 2) Genna Owen running samples through the spectrophotometer; Carissa Sage prepping samples. 3) Carissa Sage prepping samples for analysis in spectrophotometer. 4) Hannah Scroeter empties FME into test tube to begin Biuret test

For more information about flying student experiments to the ISS please contact Amy McCormick at jaegerdoggy@hotmail.com

How can you support TIS?

Teachers in Space is always looking for more supporters. Below is an outline of costs and how many we need of each to keep funding the program.

- ⇒ \$50 covers 1 night accommodation for a team member at Flight Experiments Workshop (30 needed)
- ⇒ \$400 covers a team member flight to / from workshop (6 needed)
- ⇒ \$1000 covers 2 weeks program administration (26 needed)
- ⇒ \$3000 covers 1 day production of Flight Experiments Workshop (5 needed)
- ⇒ \$12,000 covers ½ cost of SSEP M7 launch to ISS for fall 2014 contest (2 needed)

If you or your company would like to donate to the Teachers in Space program please contact Elizabeth Kennick at liz@escapeguesthouse.com

Faces in the Crowd

Name: Jim Kulh

From: Syracuse, NY

How long has he been teaching? 35 years

Teaches: 6th Grade Earth Science at Central Middle School

Favorite part about teaching: "Teaching the Earth Science content. The best part is working with children because you never know what to expect. When I work with children I always encounter the unexpected, the surprising, and the rewarding."

Why did he choose teaching? He started as a meteorology major, but in that time technology, as we know it today, was non-existent. Teaching gave him the ability to interact with people and by teaching Earth Science he was able to continue his involvement with meteorology.

How did he find out about TIS? At an National Science Teachers Association (NSTA) conference in Boston

How long has he been involved with TIS? He is one of the original Pathfinders that were chosen in 2009.

How does he use the learning experiences from TIS in his classroom? Everything he teaches has a connection to space. He teaches them the trainings he has been involved in and the science behind them.

