



# SSEP

## Student Spaceflight Experiments Program

### SSEP Mission 14 to ISS: *Apollo* Experiments Flying on SpaceX-23 Payload Summary

Contact: Dr. Jeff Goldstein, SSEP National Program Director, 301-395-0770, jeffgoldstein@ncesse.org

#### 3 Experiments from the SSEP Mission 14 to ISS *Apollo* Payload Flying on SpaceX-23

|   | Community                                 | Experiment   | Team   | Grades    | At Launch |
|---|---|--|--|-----------|-----------|
| 1 | Redlands, CA                              | Microgravity's Effect on the Germination and Early Growth of the Seeds of <i>Cymbopogon citratus</i> | 1 Principal Investigator, 3 Co-Investigators | 10 and 11 |           |
| 2 | WNY STEM – Buffalo/Nigara, NY             | The Effects of Microgravity on The Mating Habits of <i>Hypsibius Dujardini</i>                       | 3 Co-Principal Investigators, 1 Investigator | 10 and 11 |           |
| 3 | Pittsburgh, PA – University of Pittsburgh | Effects of Microgravity on the Oxidation of 3-D Printed Aluminum with Unique Topography              | 2 Co-Principal Investigators                 | 15        |           |

The Student Spaceflight Experiments Program (SSEP) is a program of the National Center for Earth and Space Science Education (NCESSE) in the U.S. and the Arthur C. Clarke Institute for Space Education internationally. It is enabled through a strategic partnership with DreamUp, PBC and NanoRacks, LLC, which are working with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory. SSEP is the first pre- college STEM education program that is both a U.S. national initiative and implemented as an on-orbit commercial space venture.



# SSEP

## Student Spaceflight Experiments Program

### SSEP Mission 15 to ISS: *Skylab* Experiments Flying on SpaceX-23 Payload Summary

Contact: Dr. Jeff Goldstein, SSEP National Program Director, 301-395-0770, jeffgoldstein@ncesse.org

#### 3 Experiments from the SSEP Mission 15 to ISS *Skylab* Payload Flying on SpaceX-23

|   | Community                | Experiment  | Team   | Grades | At Launch |
|---|--------------------------|---|--|--------|-----------|
| 1 | Hillsborough County, FL  | The Effect of a Microgravity Environment on the Germination Rates and Growth Development of German Chamomile ( <i>Matricaria chamomilla</i> ) Seeds | 1 Principal Investigator, 2 Co-Investigators | 5      | X         |
| 2 | Bandera, TX              | The Effects of Microgravity on Lavender Germination   | 5 Co-Principal Investigators                 | 6      | X         |
| 3 | iForward- Grantsburg, WI | If Grape Seeds were in Microgravity, Would they still be able to Germinate?   | 4 Co-Principal Investigators                 | 7      |           |

The Student Spaceflight Experiments Program (SSEP) is a program of the National Center for Earth and Space Science Education (NCESSE) in the U.S. and the Arthur C. Clarke Institute for Space Education internationally. It is enabled through a strategic partnership with DreamUp, PBC and NanoRacks, LLC, which are working with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory. SSEP is the first pre- college STEM education program that is both a U.S. national initiative and implemented as an on-orbit commercial space venture.