

---

---

**STOCKTON UNIVERSITY  
ANNUAL REPORT FOR  
2020 INITIATIVES PROJECT**

---

---

|                           |   |
|---------------------------|---|
| <b>PROJECT LEADER(S):</b> | Peter Straub, Tara Luke, Norma Boakes, Pam Cohn, Jason Shulman, Melissa Zwick |
| <b>PROJECT TITLE:</b>     | Student <del>Sp</del> 2018  |
| <b>CC:</b>                |   |

- *The boxes below expand as needed to accommodate your notes. You may also include/submit appendices or attachments, if needed.*
- *Email a copy of this completed form to Jessica Kay, Data Analyst & Assistant to the Chief Planning Officer at: \_\_\_\_\_*

**Please provide a summary of the project and your experience.**

This project provides an authentic research competition to undergraduate students with the goal of generating enthusiasm for students in Science, Technology, Engineering and Mathematics (STEM) disciplines. Students engaged in experimental design and testing with small groups and faculty mentors to advance microgravity research proposals through a two-stage review

Please attach a copy of your original proposal or list your stated objectives and expected outcomes.

Learning: Primary- Deliver high value-added learning experiences and promote scholarly activity (S1).  
Secondary-

patch designs were received from three elementary( grades 2-5), two middle (grades 6-8) and one high school (grades 9-12) in four school districts including Atlantic City, Galloway Township, Mays Landing and Toms River, NJ. Participating K-12 schools were the William Davies Middle School, Chelsea Heights School, Absegami High School, J.A. Citta Elementary School, Tom Rivers Intermediate School and West Dover Elementary School. The winning patch designs which flew on Mission 11 to the ISS were from Stockton physics student Nick Coppola and Toms River Intermediate (grade 7) student Achilles Emnace.

Given the success of the project in engaging students in the creative process of scientific research, the proposal team decided to apply in May 2017 for Mission 12 of the Student Spaceflight Experiments Program and was accepted. Although this 2020 grant was only supposed to cover activities for SSEP Mission 11, the team felt that the experience was of high value and demonstrated the use of a high impact learning strategy. Part of the 2020 project FY18 awarded funds (\$3000) were invested in continuing the project into Mission 12 (flight operations) as well as supporting Mission 11 student post-flight analysis of the "Spores in Space" experiment which returned to earth from the ISS in mid-September 2017 for laboratory analysis at Stockton. Additionally, the Stockton STEM Collaborative (also a 2020 project) decided to support Mission 12 (flight operations and travel) as well as the School of Natural Sciences and Mathematics (flight operations and travel).

Mission 12 kicked off in September of 2017 and included 14 students enrolled in GNM 2800 Student Spaceflight Experiments Program Independent Study. Additionally, Dr. Maritza Jaugerui, Associate Professor of Sustainability joined the project. These students produced seven proposals for local scientific review. Three of the Stockton proposals were forwarded to the SSEP national review panel and the winning Stockton props fd0 wa-3.2 (l)-3.3 (s)\*5 (S)1.5 (E)8.10.7 (P)2(u)-0a f)7.5 S1-3 (d)6TT2 .00f1 Tc 0.003 Tw 19.0873

Building on the success of the first two Missions (11 and 12), the Stockton team decided to apply for SSEP Mission 13 and were accepted. The Mission 13 team has sought out additional funding from the NJ Space Grant Consortium and the School of Natural Sciences and Mathematics as well as other fundraising. Mission 13 is scheduled for a June 2019 launch.

Please list any follow-up actions (publications,emam (s)-4.e5 (c)-1.9 (l)2.87.2 (tn)3.7 8ma1a-3 8 (,)-6.3.1 (e)-3 v(i)-lu.87

6) Press coverage:

*[Note: continuation proposals must be approved and incorporated into the appropriate budget process.]*

We are recommending continuation of this project into a third year. Funds will be raised for the flight operations, experimental activities and travel associated with the project.

**FINANCES: Based on your proposal, please outline below how the award has been spent.**

|   | Amount         | Notes/Comments |
|---|----------------|----------------|
| <b>Beginning Budget Balance as of: 7/1/2016</b> | <b>\$ 7000</b> |                |
| Salary Expenditures                             |                |                |
| • Stipends                                      | \$             |                |
| • Full-time staff salaries                      | \$             |                |
| • Full-time faculty salaries                    | \$             |                |
| • TES salaries                                  | \$             |                |
| • Fringe Benefits                               | \$             |                |
| <b>Total Salary and Fringe Expenditures</b>     | <b>\$</b>      |                |
|   |                |                |

Non-Salary

|  |       |
|--|-------|
|  | Total |
|--|-------|