# WHAT IS PROJECT SPARC?

Project SPARC (Space Research Center) was founded in 1962 during the height of the Space Race as a partnership between the School District of Philadelphia and NASA in order to foster increased interest in science and math at the high school level.

Today the program has morphed into a STEM after school program in which students compete in robotics and engineering competitions across the city. In addition, we have students who learn computer coding, become first aid and CPR certified, and provide pathways to career opportunities for those interested in the medical field.

"Helping high school students to learn more about science, math, and technology through teamwork."



### **NEHS Project SPARC Boosters**

Twitter: https://twitter.com/projectsparc
Facebook: https://www.facebook.com/groups/ProjectSPARC/photos/

#### A MESSAGE FROM OUR DIRECTORS

Project SPARC would like to introduce our new director and assistant directors, Mr. Andrew Adams and Mr. Jeremy Cress.

"As an alumni of Project SPARC, I cannot begin to describe how thrilled I am to be directing and guiding the institution into a premier 21st century STEM program. It is a responsibility I do not take lightly. Since I've taken over the position in January of this year, I've witnessed students captivated by science and engineering, and it's infinitely rewarding to provide an outlet for those students who are scientifically inclined. I am forever grateful to our generous donors and business partners that allow this program to continue. I am honored to present this year's spring flight as a testament to our young engineer's dedication to Project Sparc."

- Mr. Adams

"As Mr. Adams and I look towards the future of Project SPARC, I am excited to modernize SPARC in order to to inspire and prepare our members to become leaders in 21st century STEM fields." -

-Mr. Cress



#### A SPECIAL THANKS TO ...

MR. BURTON DICHT | MS. CAROLE NIEMIC | MR. JOSEPH
CONNELLY | NEHS CLASS OF 1966 | NEHS ADMINISTRATION |
MR. CHRISTOPHER | MR. FRANK CAUTHORN | MS. BONNIE
TAYLOR | MS. MARGARET KARPISKI | INSTITUTE OF
ELECTRICAL AND ELECTRONICS ENGINEERS

PROJECT SPARC SPRING SPACE FLIGHT SIMULATION



### PROJECT SPARC

SPRING SPACE FLIGHT SIMULATION



June 2nd, & June 3rd, 2016 1601 Cottman Ave. Philadelphia, PA 19111 Telephone: (215) 728-5018

### MEET THE **MANAGERS**

HOW DID PROJECT SPARC BENEFIT YOU?



**ANTHONY GARCIA FLIGHT** Junior, Flight 2013-Present Enabled him to learn new skills as well as help direct mock missions.

**ROBOTICS EVAN CAREY** Senior, Robotics 2012-2016. Cairn University '20, Music & Worship Gained opportunity to work with and lead a team



**AMY LAM ADMINISTRATION** Senior, Administration 2013-2016, Temple University '20, College of Engineering Able to spearhead a group of diverse members, leaving comfort zone

MEDICAL ELIZABETH MEKLER Senior, Medical 2012-2016, Drexel

University '20, Pre-Med Program, Learned that her goal in life is to be a doctor and impact others lives.



LUIS COLON-WYNNE MEDICAL Senior, Medical 2014-2016, Community College of Philadelphia, Obtained knowledge, organization, and leadership skills through help from peers.

**ENGINEERING CAMERON ROVAR** 

Senior, Engineering 2012-2016, Marines, The importance of a teamwork is hard work and dedication





#### **SPRING FLIGHT 2016**

Four student astronauts will be launching from Mars to the Martian moon of Phobos where they will construct a recon station to control drones that will be roaming Mars. As they progress through their mission, a problem will arise where their food supply is going to unexpectedly run low. Faced with starvation and death, the student astronauts will come up with a plan to construct a greenhouse to grow food. Their idea is initially a success but then the astronauts will face a new crisis when the unaccounted for oxygen created by the plants will cause an explosion in the areenhouse.

Again faced with grave danger, SPARC engineers on Earth will construct a new vessel equipped with a photonic propulsion engine which will reach Mars in about 3 days. The payload brings food and supplies to sustain the astronaut's lives.

#### 2015-2016 PROGRAM **ACCOMPLISHMENTS**

- Over 100 boxes of military canine supplies sent overseas
- State Champions First Tech Challenge 2016
- Top 10 in Mate (Marine Advanced Technology Education) Competition 2016
- Engineering placed 2nd in National Rube Goldberg Machine Contest 2015



### MEET THE **ASTRONAUTS**

HOW DID SPARC BENEFIT YOU?



#### MARLENE WIJAYA **ADMINISTRATION**

Junior, Administration 2013-Present Earned CPR certification in Medical, and learned to work with a variety group of people.



**EVAN SEITZ** 

**ROBOTICS** 

#### **KEVIN HUANG ROBOTICS**

Junior, Robotics 2013-Present Permitted him to study programming and build as well as controlling a robot.



## **ZHUO KUANG (IVY)**

**ENGINEERING** Junior, Engineering 2014-Present, Experience space exploration from being an astronaut her second time, including properties of physics.



work in harmony with his peers.

