

ABOUT US

Under Worcester Polytechnic Institute's American Institute for Aeronautics and Astronautics (AIAA) chapter, the University Student Launch Team is a group of passionate undergraduate students devoted to the research and development of space launch vehicles and deep space exploration. The USLI team's goal is to use hands on learning to introduce members to a learning experience they wouldn't be able to get in the classroom and apply this education to a real-world engineering setting. USLI follows NASA's research and development procedures for constructing a launch vehicle and payload.







GOALS

WPI's states their project-based learning approach "helps students become better collaborators, critical thinkers, public speakers, and communicators...". Not only do we wish to succeed at NASA's USLI competition in the spring of 2020, but we wish to expand our knowledge and understanding of science, technology, engineering and mathematics (STEM). NASA instructs USLI teams to provide a certain amount of community engagement, with the hope that our engagement events advance knowledge of STEM fields with young people. Aside from these external engagement events, frequent learning opportunities are scheduled by USLI officers to educate other USLI team members, such as modeling and equipment sessions. Learning experiences and USLI project milestones create unique opportunities for team members to learn the specifics of mission design and execution.



OUTREACH



WPI's USLI team has many great opportunities this year in STEM outreach. We will be working with the Pre-Collegiate Outreach Programs (POP), to help run 'STEM Saturdays'. This is held on WPI where young students come participate in egg drops, experiments, mini rocket launches, etc. We will also be working with the Women in Aerospace Collaboration, Introduce a Girl to Engineering, STEM Week, Big Brothers Big Sisters, and some of our members have taken on the commitment of becoming a 'big', or mentor to young students in the Elm Park Elementary School area in Worcester MA. Any student participating in this must schedule an hour out of each week to spend with their little to set goals, chat, and play games. One of USLI's most important goals is to engage with younger students and help them learn, we hope to spend as much time with them as possible in the coming year.



COMPETITION DETAILS

In April of 2020 we will be traveling to Huntsville Alabama to Marshall Space Flight Center to compete in the 2020 USLI competition. We have been tasked with designing and building a rocket-payload system capable of reaching a predicted apogee and deploying the payload upon safely landing. Deployment and landing will be completed with ejection charges and parachutes. Upon landing, a foldable UAV will launch and collect a soil sample from one of several sites in the launch area. The UAV will then need to carry the soil sample a set distance from its original location.





SPONSORSHIP INFORMATION



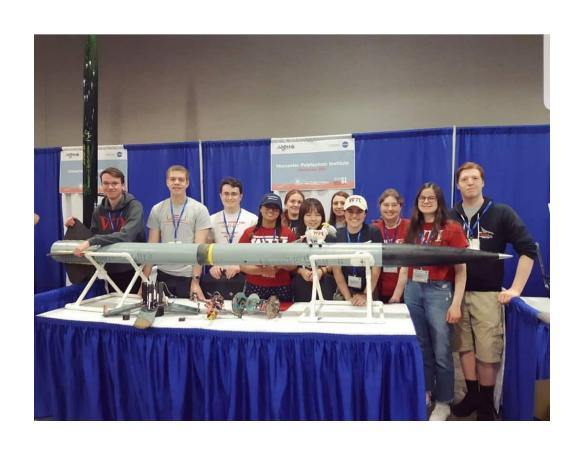
What We Need

In order to support the goals of the WPI USLI team, we need an undetermined amount of funding. Funding needs include travel expenses, outreach events (organizational fees, equipment, and resources, etc.), team exercises (test launches, team meetings, etc.), building material and resources (rocket parts, motors, electrical components), and team apparel. Any excess funding will be saved for the 2020-2021 USLI fund. Below is a table of sponsorship levels, each increasing level compounds the previous contributor benefits.

SPONSORSHIP PACKAGES

Level	Amount	Benefits
Bronze	\$500 and less	Logo/company name on website, use of team photos
Silver	\$1,000	Promotion during outreach events, Logo on team photos (for social media)
Gold	\$1,700	Company name on rocket fin, team tour of company facility
Platinum	\$2,500	Name on main rocket body, sponsor mentioned in publications, presentation to engineering department

ADDITIONAL BENEFITS INFORMATION



There will be many opportunities for our sponsors to get publicity during and prior to the competition. During our outreach events we connect with dozens of people, while hundreds of people see our rocket during the rocket fair, and during competition. Many of these people speak with us personally to gather more information about our project, we make sure our sponsors are a very important part of this interaction, to get them the best publicity possible. Many of these people are engineering students from universities across the country and NASA representatives.



Contact:

Philanthropy Officer:

Adrianne Curtis

aecurtis@wpi.edu

(860)930-4257

INTERESTED?

