Greetings,

This newsletter provides information on various STEM programs and professional opportunities for teachers and students. In addition, we have a variety of fun and educational activity options compiled on our website available to K-12 students and their families. We encourage you to share these resources and opportunities with anyone that may find them beneficial.

Well wishes to your family and our communities,

The Center for Educational Outreach
BIOMEDICAL ENGINEERING INNOVATION

Biomedical Engineering Innovation (BMEI) is a fully online course offered year-round that introduces biomedical engineering concepts to high school students. Students participating in this course model biological systems and design experiments to test their models and use engineering principles to solve design problems that are biological, physiological, and/or medical. Students model human efficiency and the cardiovascular system. They use the content they learned in high school math, physics, and biology to solve practical problems encountered in biomedical engineering.

Click HERE for more information and contact ei@jhu.edu for any questions.

EXPLORE ENGINEERING INNOVATION (ONLINE OR IN-PERSON)

Explore Engineering Innovation (EEI), formerly called Engineering Innovation, is an exciting, college-level, summer program for motivated high school students with an aptitude in math and science and an interest in (or curiosity about) engineering. Students complete hands-on projects in a variety of engineering disciplines (civil, electrical/computer, chemical, materials, and mechanical) and learn to think and problem-solve like engineers. Participating students have the opportunity to earn Johns Hopkins University (JHU) credit.

Click here for more information about our in-person and online programs and contact ei@jhu.edu for any questions.
NORTHROP GRUMMAN FOUNDATION TEACHERS ACADEMY 2022

The Northrop Grumman Foundation Teachers Academy is beginning its sixth year and is now accepting applications for 2022. The program—designed specifically for middle school teachers (grades 5-8) was established to help enhance teacher confidence and classroom excellence in science, engineering and technology, while increasing teacher understanding about the skills needed for a scientifically literate workforce. The teachers will be immersed throughout the year in a host of blended professional learning opportunities in science, technology, and engineering, and as a teacher leader they will share their learning across their school and district.

For more information click HERE and for any questions contact Wendy Binder. To apply click HERE.

BOAST PROGRAM UPDATE

BOAST is launching its pilot year this November with six participating Baltimore City public high schools. Students from Vivien T. Thomas, Western, and Digital Harbor were randomly selected to receive the full program and will refine their Algebra skills while solving real-world engineering challenges. Students from Forest Park, Renaissance, and Green Street Academy, as well as those schools mentioned above, will watch inspiring videos of real, diverse, local engineers and take surveys on their attitudes towards STEM careers. Data collected as part of this educational research grant will be used to measure the overall effectiveness of the online program. Additional job opportunities will be available to teachers and school staff next year as we look to expand the program to more city high schools. Stay tuned for more updates.

For more information on BOAST click HERE.