November 19, 2014

Mid-Atlantic CIO Forum Board of Directors
Towson University Foundation
8000 York Road
Towson, Maryland 21252

Dear Members of the CIO Forum Board of Directors,

Funding Request Amount: $5,150
Purpose: Fund expansion of the Cyber Science Program at Loyola Blakefield

This grant will allow Loyola Blakefield to fund an education program in the area of Cyber Science and will allow Loyola Blakefield to build a comprehensive Cyber Science program to operate for years to come. The requirement for such a Cyber Science program is widely evident as new threats of cyber attacks against our country's critical infrastructure arise every day. Each and every industry holds personal – or otherwise important or classified – data online that must be protected and secured from the hands of wrong-doers. The behaviors of cyber attackers continue to change, and these industries require a workforce with a cyber security knowledgebase that has the ability to protect against each new threat. The Loyola Blakefield program strives to do this for our students by providing what several cyber industry leaders, such as Marian Merritt of Symantec, describe as a "university-level" course in high school. This program allows students the opportunity to obtain cyber certifications and provides sufficient knowledge to pursue a career immediately after high school, or one further-enhanced by a college degree. With the threat of cyber hacking growing substantially each year, we must guarantee our students are not only knowledgeable with current computer and networking technologies, but also that they will use their knowledge for good purposes.

Morality remains a high priority in teaching young adults to understand and use technology to its full functionality and purpose: to more easily store, process, and make accessible information for the specified user. Knowledge of computers and networking technology can be used to protect this data or use it illegally. At Loyola Blakefield, our Jesuit background instills ethical values in our young students, which will ensure the use of their knowledge for good intentions. Our program requires that our students take an ethics of computers course (Certified Ethical Hacker Curriculum), which further certifies that their practice of technology is being conducted in good nature. The program has also earned its students great esteem and proven its worth by awarding its students many praise-worthy internships (Northop Gruman, Cyber Point, and Exelon Energy), its placement in many competitions, and its awarding of several accolades (1st in Cyber Maryland 2014, 1st in Cyber Maryland 2013, 1st in Global Cyber Challenge 2013, 3rd in Cyber Maryland 2012, Maryland State Champ in AFA Cyber Patriot May 2014, 3rd in Mid-Atlantic Region AFA Cyber Patriot May 2014).

Furthermore, the Loyola Blakefield Cyber Science program will not only provide well-trained students to one field or industry, but a vast majority of industries and government entities, as cyber security efforts are required to protect against the threat of data loss in every industry. Our program provides an ever-growing skill-set to a diverse group of students. Each high school grade level is represented in our program, along with the eighth grade. Our students range from the athlete to the band musician, and also the traditional computer "geek." This diversity in our program proves that the students involved in cyber science do not have the same interests, but have a wide range of interests that will bring our students, capable of speaking the language of Cyber Science, to a variety of fields and work places, all of which require computer and data security.

Our program, given the ability to do so, will allow this knowledge of cyber security to be brought to several fields. The program needs additional equipment to sustain a large number of members, a number that only increases year-by-year. Our program provides the course to forty-three consistent members and an average of eighteen members per day. The proposed grant will support this number of students now and more students in the following years. The Cyber Science program currently houses 14 machines (7 relatively new and 7 which are nearly a decade old that cannot fully execute many required applications). With the proposed grant, the program strives to deliver a more consistent technology base to our students and provide a larger set of images (operating systems) with which to experiment. This would require the replacement of the 7 aged computers with newer machines capable of running the course materials.

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Anticipated Budget:
-7 Desktops following the Cyber Science program's requirements
   ($735 per desktop, to be purchased in parts and assembled as a project) $5,150

Grand Total of Proposed Grant $5,150