

## VIEWPOINT

# Guest Comment: How Greater Washington companies can help solve the STEM challenge

Oct 6, 2016, 2:00pm EDT  
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Albert Einstein once said that the only real source of knowledge is experience. A new survey from the Amgen Foundation and Change the Equation finds that, once again, Dr. Einstein knew what he was talking about.

The survey of more than 1,500 U.S. high school students finds that young men and women like science and want more engaging, hands-on experience with science in school. Yet the survey also shows that students lack access to real-world science experiences, out-of-school opportunities and professional mentors, which makes them less likely to pursue science as a profession.



U.S. high school students finds that young men and women like...[more](#)

A survey of more than 1,500

That could have real consequences for the Greater Washington economy. Careers in STEM — science, technology, engineering and mathematics — are projected to grow nationally by more than 9 million by 2022 with our region being a growth leader. If we fail to sell students on the transformative power of a STEM career, American businesses will have a shortage of qualified employees.

To correct this course, we believe our local business community must play a more active role showing K-12 students the possibilities of a STEM career. Companies that consistently hire STEM professionals must offer mentorships to high school students and establish multi-year partnerships with local high schools. If real-world exposure to science is most likely to inspire a student, then businesses should offer that experience through visits to research labs, summer internships and class mentorships.

Local companies are stepping up. **Novavax** participates in ATLAS, an annual STEM College and Career symposium hosted by the MdBio Foundation that targets underserved students on college campuses. Employees regularly work with middle and high school students in hands-on activities, talk with students and families about internship opportunities and educate future scientists on what a STEM career can look like. In addition, more than 50 high school and college students participate in Novavax's annual summer internship program.

Gaithersburg-based MedImmune, the biologics unit of AstraZeneca, partners with the USA Science and Engineering Festival in D.C. and employees regularly speak at schools, mentor students and invite high schoolers directly into their labs for tours and Q&A sessions. The company's head, Bahija Jallal, has been a strong advocate for STEM education through speaking

engagements across the globe and her work with the Association for Women in Science.

Emergent BioSolutions invites students each year to meet with employees with science degrees who work in and outside of the labs. These STEM professionals discuss different career paths that could result from a science degree. Students then go on a laboratory tour and interact with scientists who explain their role and showcase the equipment they use and work they perform on a daily basis.

Greater Washington companies increasingly understand that the simple act of networking with a mentor could be the singular moment that transforms a normal high school kid into a future biochemist or cybersecurity engineer. Giving these kids the opportunity to see what life as a STEM professional is like is good for them, good for our companies and good for our region as we seek to remain a knowledge economy leader in the 21st century.

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