E77 Benefit or Burden?: Forensic Science K-12 Outreach

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The goal of this presentation is to acquaint attendees with forensic science outreach efforts in the K-12 population. This presentation will emphasize that forensic science outreach in the K-12 population is not only a benefit but is also essential for planting the seeds of success for the future of forensic science. Not only does forensic science outreach educate the general community as a whole, but for those hoping to pursue forensic science, it will also result in higher-education students who are more knowledgeable and prepared for their studies in forensic science and ultimately in their careers.

This presentation will impact the forensic science community by highlighting the benefits of operational forensic science facilities participating in K-12 outreach. To aid in alleviating the difficulties many facilities face when attempting to implement outreach activities, attendees will be offered numerous outreach activity examples that can be used at their own places of employment.

Additionally, as a result of this spike in interest, forensic agencies, laboratories, and educational institutions are being inundated with calls and email requests to shadow forensic scientists and/or visit their location for demonstrations and presentations. Unfortunately, with staffing limitations and workload demands facing many operational forensic facilities, it can be difficult to grant these requests. With limited time to plan, implement, and execute these requests, they can be quite burdensome.

The George Mason University College of Science created a novel program, the Science, Technology, Engineering, and Math (STEM) Accelerator, which among many responsibilities addresses the outreach needs of our community. The STEM Accelerator program was created in 2011 with a focus on the success of students in STEM at all levels from K-16. In particular, the program is tasked with four major goals of increasing the number of STEM majors: (1) improving retention rates of STEM students; (2) reducing their time to graduation; (3) helping them join the STEM workforce; or, (4) continue their education upon completion of their Bachelor's degree in STEM disciplines. Created as an interdisciplinary unit, this division consists of faculty members from multiple departments who have special responsibilities besides teaching that includes coordinating and promoting STEM activities that help achieve the four primary goals. Currently, the program includes faculty from mathematical sciences, chemistry, biology, physics, astronomy, computational sciences, atmospheric ocean and earth sciences, and forensic science.

To help fulfill the goal of increasing the number of STEM majors, the faculty of the STEM Accelerator program are actively involved in K-12 outreach. Due to the high level of interest in the community, most STEM Accelerator outreach events include a forensic science component. Activities were created for events such as Cub Scout and Girl Scout badges, the STEM Mania camp for third to fifth graders, the Females of Color and those underrepresented in STEM (FOCUS) camp for middle school girls, the Envision Law and Crime Scene Investigation (CSI) conference for high school students, various STEM days (all levels), elementary forensic science after-school clubs, and several others.

Outreach, STEM Education, CSI Effect