

Two Maryland Initiatives for Career Exploration by Homeschoolers and Baltimore City Girls in STEM

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Background

Baltimore area homeschool families endeavor to expose their children to different career options, and University of Maryland School of Pharmacy (UMSOP) alumni tapped their connections for an exciting day. Similarly, the after-school science, technology, engineering, and math (STEM) club coordinator for Baltimore City's all-girls Mother Mary Lange Catholic School (MMLCS) sought an opportunity for students to learn more about pharmacy and physician assistant professions.

Objective

To inspire pre-college homeschoolers and girls in Baltimore City to consider careers in science, pharmacy practice, and allied health professions.

Methods

The families of Baltimore area homeschool students, who range from elementary age through high school, frequently tap their connections to expose their children to different career options. Past industry spotlights have included entrepreneurship, cybersecurity, and agriculture, and alumni of the UMSOP reached out to ensure that health care and pharmacy were included as well.

The after-school STEM program coordinator, a retired veterinarian turned educator at the all-girls Mother Mary Lange Catholic School, which is located across from Pharmacy Hall on Martin Luther King Jr. Blvd., reached out to the School for an end-of-year field trip. The students are all members of the MMLCS Girls in STEM club, which is designed for young women with an interest in science, technology, engineering, and math.



Results

For nearly 20 home schooled students, the Spring 2023 UMSOP visit consisted of a lab tour, discussions with faculty, and interactive activities. Jace Jones, PhD, Assistant Professor in the Department of Pharmaceutical Sciences and Associate Director of the Mass Spectrometry Center, led a tour the center while discussing lab scientist careers.

During the activity portion, JuliAna Brammer, MBA, Director of PharmD admissions, led the group in compounding a lip scrub. Cherokee Layson-Wolf, PharmD, BCACP, FAPhA, Associate Dean for Student Affairs and Professor in the Department of Practice, Sciences, and Health Outcomes Research, helped the students create a mock intravenous (IV) solution. The students also had a surprise visitor – Dean Natalie D. Eddington, PhD, FAAPS, FCP – who asked them about what they learned and their career aspirations.

The 17 MMLCS girls' visit to UMSOP in the spring started with a short presentation from several women University of Maryland Baltimore (UMB) health professionals, who discussed the education and training required to be a pharmacist, a physician assistant, and a simulationist. Students shared that they have limited exposure to these professions in school. After the presentations, the students went to the simulation rooms where they were each given their own stethoscope to practice checking the pulse, respirations, and blood pressure of the mannequins, just like the health profession students do in their classes. After checking out the simulation labs, the students took a tour of UMSOP's pharmacy practice labs, where pharmacy students practice filling prescriptions, providing medication education, and compounding IV bags.

Each MMLCS student left with a UMB swag bag which contained information about STEM careers and school supplies that they can use to continue learning. Organizers say that they are excited to have the Girls in STEM students – several of whom expressed an interest in pursuing a career in pharmacy – back for another visit in 2023.

Implications

Pharmacy programs should partner with other health professions to promote science and health care careers to homeschoolers and students in religious and charter schools as well as more typical pre-college student audiences.