



ACS Virginia Section Minority Affairs Report 2019 Annual Report

Committee Co-Chairs: Charlene Crawley (VCU) and Hyacinthe Yarabe (Pfizer)

Executive Committee Mtg – Jan 25, 2020; VCU

Minority Affairs Mission Statement:

The mission of the Minority Affairs Committee of the ACS-VA section is to serve, increase the representation of, communicate interests of, and establish programming for persons under-represented in the chemical and engineering sciences. This mission is advanced via the following **GOALS**:

- 1) Attracting minority students (K-12 and College) to the chemistry and STEM-related professions.
- 2) Creating programs that provide mentoring to minority students via liaisons with VA universities and industries.
- 3) Identifying and supporting best practices for recruitment, retention, career development, resumes writing, and evaluate programs for the advancement of minority programs.
- 4) Establishing links with other STEM minority serving groups, such as the National Organization for the Professional advancement of Black Chemists and Chemical Engineers (NOBCChE)
- 5) Developing partnerships with minority friendly educational institutions and businesses.
- 6) Creating programming and initiatives to increase the participation and membership of minority STEM students and professionals within the ACS VA Section.

2019 ACS Minority Affairs Committee Initiatives: (Total Requested Budget - \$1500)

Two projects were planned for 2019 to support **Goals 1,2,3,5, and 6** with a focus on increasing and strengthening the participation of under-represented and economically challenged student populations in STEM across the state:

2019 Project) Supporting SOL Performance and Student Mentoring in Richmond Community Schools (\$1500 Budget) :

– Collaborative efforts between the VA-ACS, VCU'S undergraduate student NOBCChE (*National Organization of Black Chemist and Chemical Engineers*) chapter (*President -Monica Miles-VCU Chemistry*), a grant from the VA Science Museum (*Allison Drezek*) spearheaded by Denise Walters (Pfizer), and Dr. Mychal Smith (*VCU Chemistry Prof*) were made to enhance elementary 4th and 5th grade students awareness in STEM and assistance with their SOLs using interest and performance enhancing activities. The target school in 2019 was the **J. L. Francis Elementary School** in Richmond which has a large low income and predominantly African American and Hispanic middle school student population. The following two activities were accomplished:

Activity 1 - J.L.Francis Middle School Trip to the Science Museum: As none of the students had indicated ever visiting a science museum, a field trip to the VA Science Museum, that included the Exhibits and a Dome 'Live Universe Exploration' viewing sponsored for about **81** students including parents and teacher-chaperones including the provision of a 'fun' lunch catered by Lees Chicken on **March 27, 2019**. Without discount the projected cost for this event would have been ca. **\$1500**, which included the cost of individual tickets for students in their age group of \$13.50/person for a total cost of **\$910** and lunch costs of **ca. \$300** and photography and videography documentation (given to the school) costs of **\$300**. These costs were defrayed by a grant from the VA Science Museum of **\$650**, and



payment requested and made to date by the VA-ACS section of **\$260** (leaving a remaining balance of **\$590 for a total 2019 ACS VA-Section expenditure cost of \$850**)

The energy and excitement of the students at the event were documented in the following 1-min video along with onsite pictures taken and produced by AmorJay Photography (click on link below to view) and the attached photos, as well as the following commentary by **J.L. Francis Elementary Asst Principal, Cordell Apollo Watkins, M.Ed.:**

“Thanks for making the trip happen for our students at Francis! I heard that it was a once in a lifetime experience for many of our students. I’m hopeful that we have found a way to inspire more students to become scientists!!”

- 1-Min Video Science Museum Trip– (Note, as these are minors, the student faces could only be filmed and shown for students having signed parent consent forms):

https://drive.google.com/file/d/1xQpiYYdNB1yaXz5_U-hJJRwX2Pf-VaWL/view?usp=sharing

- Selected Museum Onsite Pictures:



Activity 2: J. L. Francis Middle School Career Day: VCU NOBCChE and ACS Student Affiliates, along with other VCU students from Dr. Mychal Smith's STEM Service-Learning Class participate in the J. L. Francis School's Career Day Assembly on **April 17, 2019** which also included a tour of the VCU Siegel Center, as well as a tour of the VCU Chemistry department. This visit also included a science activity with Dr. Smith's college chemistry class where his students also shared with them their career goals in STEM. NOBCChE President, Monica Miles, also helped to facilitate an on-site visit with the 5th grade students at S. Francis, as indicated by pictures shown below:



Dalila Medrano, Site Coordinator at J.L. Francis Elementary, Communities In Schools of Richmond offered the following comments regarding the impact that the Assembly and other efforts made from Dr. Smith's efforts at the school:

“Thank you so much for reaching out and for the work you do to help the next generation of students. We have been very fortunate to have Dr. Smith's partnership and have seen behavior and academic improvement in the 5th grade students he's had his class work with.”



2020 ACS Minority Affairs Goals: (Total Requested Budget - \$1500 – on hold until 2021)

Activity 1: College Minority Student Summit– There is continued interest in supporting joint efforts between the VA State University’s ACS student chapter and the VCU ACS and NOBCChe chapters to host a second Minority Student Summit with invitations to other students in the state. Meetings were held with students at VCU and VSU for an event to be hosted at VSU. However, student leaders from both groups have graduated and additional time is needed to rebuild the membership. Therefore, we are requesting funds to be on hold for use in 2021 for this initiative. We are planning to invite **Dr. Shirley M. Malcolm**, Head of Education and Human Resources Programs at the American Association for the Advancement of Science (AAAS) to be the keynote speaker for this proposed 2-day event with a similar training program as we conducted during the Fall 2017 Dr Christine Darden Event, i.e. workshops on Academic Success, Networking, Mentoring, Internships, and Career Planning.

Activity 2: Submission of NSF Proposal to Increase Engagement and Learning in STEM for At-Risk Youth in Richmond Community Middle Schools: A new focus in the 2020 year would be to purchase 15 ‘Zspace’ computers with teaching software to inspire and engage students at the **Thomas C Boushall Middle School** in Richmond as spearheaded by Mr. Renee Pierce (Boushall Middle School Teacher). As a school of students from predominantly low income under-represented minority families with minimal support for learning tools, especially in STEM, there are few chances to ignite and inspire students in STEM. The use of ‘state-of-the-art’ technology in these environments is an unaffordable luxury that would have immeasurable impact on student engagement and inspiring student learning in the sciences. Zspace computers can greatly enhance student interaction and collaborative learning as described in the following video:

<https://zspace.com/videos/the-new-zspace-for-education>

Each computer costs ca. \$1400 including software and allows 2 students to work interactively. We will seek funding to purchase 15 computers, and employ college ACS and NOBCChe students to serve as in-school mentors.