President’s Message

Spring is finally here, and we are halfway through the semester. I hope everyone had a wonderful spring break. The ASSP ECU student chapter met February 7th for a technical meeting. Dr. Mike Behm presented his findings on the design of urban greenery in Singapore. February 23rd ECU held the 2019 ECU Greenville Regional Science Olympiad Tournament. Two on-campus students participated as judges and proctors for various events. The NC OSHA Department held a hands-on session featuring the use of industrial hygiene equipment. Pat Curran and Dr. Dylan Hardison, co-instructors of the MSOS Industrial Hygiene course, also attended the event. On-campus students attended the AIHA Conference in Charlotte. They had an opportunity to present their toxicology posters. Other volunteering opportunities include students tutoring at Wellcome Middle School every Wednesday and Thursday. Students participated in STEM day at Wellcome, by discussing future careers in Safety and Engineering. Students are continuing to assist The V Foundation for Cancer Research. On March 13th Floyd O’Connell and Bahirah Siddiqi presented a resiliency plan for the nonprofit organization. The student section continues to utilize the New Student Center for meetings and study sessions. They hope to recruit more students in upcoming events, such as Barefoot on the Mall in April.

Thanks,
Bahirah
The New Student Center at East Carolina University opened January 7, 2019. This project started 12 years ago. The goal was to remodel the old student center, Mendenhall. It was estimated that $30 million was needed to renovate Mendenhall. However, Dean Smith, current Director of Finance and Administration for Student Involvement and Leadership office said that it would be beneficial to have a new facility. The New Student Center was a $160 million-dollar project. This project began in 2006. At the time, East Carolina University was the fastest growing school in the UNC school system. ECU hired various architects to give feedback on the best design for the building. The ideology behind the building was to make it a “living room” for students. To achieve this concept, designers looked closely at what students wanted. The building is about 220,000 square feet. The Student Center represents the fundamentals of East Carolina University. The ASSP student chapter enjoys frequent meetings in the new facility. Students meet in lounges or study rooms for ASSP meetings. The building is divided into three levels. Each floor represents a certain aesthetic. The first floor is the most social and the third floor is administrative offices and has study areas. There are many places to sit in the building. The Dowdy Student Store is on the first floor along with six dining options. Also, on the first floor is The Black Box Theater. Where keynote speakers and guests listen and participate in current social issues. There is a gaming area to provide students with entertainment. A new feature is the elegant ballrooms. The ballroom is 14,000 square feet. The ballrooms allow students to enjoy social, career networking events. The most innovative piece of technology must be the jumbo Tron also known as Pirate Vision Digital Display. This screen is on the outside of the building, which faces Joyner Library. It includes updates on weather, events on campus, and the news. The new student center furniture is ergonomically friendly. When deciding on furniture, it was noted how long students could sit and study. Desks are versatile, students can study or eat comfortably. The concept of this student center was to be open and visible. The glass windows have a new technology that tints when exposed to direct sunlight. There is also a remote that one can use to adjust the window shade. Overall, the New Student Center has attracted a lot of attention. Many alumni are visiting with their family and friends. Most can be seen on the third-floor sky deck overlooking campus, while enjoying Simply Creamery ice cream.

-Bahirah
Dr Dylan Hardison and Mr. Pat Curran, invited students of the ECU MSOS program to meet North Carolina Department of Labor’s Industrial Hygienists in Raleigh, NC. During this visit, the students learned the basic techniques of calibrating several industrial hygiene (IH) sampling equipment, collecting samples, and analyzing sampling data. There are many different types of sampling equipment that are used based on what the IH specialist is sampling for such as: inhalable or respirable dust, mist, fumes, and noise. An IH specialist must understand how to use NIOSH and OSHA sampling methods, calibrate several types of instrument, and use these different types of instruments and meters work so that the specialist can get the most accurate readings. There are specific ways to sample and monitor various contaminants or physical elements that require specific sampling flow rates and media. This science is important in obtaining a valid sample so that the IH specialist can give the best recommendations for mitigating the exposures to workers.

-Neil
I was given the wonderful opportunity to present my toxicological research poster about carbon monoxide this past week at the AIHA Carolinas Spring 2019 PDC. This is my second time attending the AIHA Carolinas Spring PDC: last year as an undergraduate and this year as a graduate student. As a student, one of the many things that I enjoy about these PDCs are the conversations from professionals in various industries. For this year's PDC, I had the opportunity to have insightful conversations with Industrial Hygiene (IH) professionals from DOL, DOT, and consultants about things they liked and disliked about their job. The only "tough" question I had for every IH professional that I spoke to at the conference was, "If you could, what education/career path choices would you correct or do differently to get to where you are today?". As a young professional in the safety field, listening is one of the most important tools I need to utilize as I continue to meet other safety professionals in the field.

Special Thanks to: Department of Technology Systems, John "Pat" Curran, and Mary Carol Curran for this wonderful opportunity. I look forward too many more opportunities like this in the near future.

-Kong
Carbon Monoxide is listed as one of the most toxic chemicals causing acute inhalation injuries due to its colorless, odorless, and tasteless property. It is the result of incomplete combustion in materials containing carbon such as gasoline, oil, and coal. Known as the “silent killer”, studies indicate that it was responsible for the death of about 500 people and hospitalizing approximately 15,000. These deaths were attributed to the poor warning properties of an overexposure to carbon monoxide. Once inhaled, carbon monoxide causes asphyxiation to a person by binding to an oxygen transporting protein, hemoglobin, that causes flu-like symptoms at low concentrations which are often excused by individuals as work-related fatigue. Some of the best practices and prevention methods for carbon monoxide poisoning are; educating workers, having efficient ventilation systems, and the use of carbon monoxide alarms.

Vinyl Chloride (VC) is a flammable, colorless gas with a sweet odor. It is classified as a group A human carcinogen to humans by the EPA and is directly linked to a rare form of liver cancer called angiosarcoma. Human exposures to vinyl chloride mainly occur via inhalation or orally in drinking water that may have passed through polyvinyl chloride (PVC) pipes. VC mostly effects workers in the vinyl chloride and PVC processing industries. Acute effects of VC exposure to humans at high levels have resulted in effects to the central nervous system (CNS) with symptoms that include dizziness, headaches, and drowsiness. VC is also an irritant to eyes and respiratory system of humans and extremely high levels of exposure have caused unconsciousness. Chronic effects of exposure to VC in high levels may cause liver damage from both inhalation and oral exposure. 98% of VC in the US is used to make PVC, and smaller amounts have been used to make products like furniture, automotive parts and upholstery, and wall coverings. ACGIH TLV-TWA and OSHA PEL-TWA for VC is set at 1 PPM/8hr and the OSHA STEL is set at 5 PPM/15 minutes, the FDA and EPA has regulations for the amount of VC that is used in the plastic packaging of foods and liquids for human consumption as well as the amount that needs to be reported to authorities if there is a release into the environment.

On March 13, the V Foundation launch the V Foundation Resiliency Plan to crowd of 35 employees. Bahirah and Floyd took turns talking to the crowd about active shooter and fire and emergency preparedness. The main subject of the presentation was how to deal with threats both inside and outside of the V Foundation. Index cards were handed out so that any missing information could be added later. At first it was difficult speaking to a crowd of strangers, but by the end I felt like I was part of their group.

-Floyd
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