Dr. Tommie Y. Turner, Director Dr. Carmen R. Charleston, Newsletter Editor Dr. Lateef Adelani, Dean of College of Arts & Sciences



2011 Science & Mathematics Academy

Fall 2011 Volume 2

Contents

Director's news
Science, expanding the mind
Giving back
Congratulations



"Mad Scientists & Mathematicians" 2011 Homecoming Float

Greetings,

Whew, the fall semester has been an exciting and busy time for the 2011 Science and Mathematics Academy students! These scholars have covered a vast amount of academic territory since their first day of classes as Harris-Stowe State University freshmen. The students have taken full advantage of their HSSU college experience including attending the "Deadly Medicine" lecture and travel exhibition sponsored by Washington University School of Medicine, participating in the annual HSSU homecoming parade, hosting guest scientists on campus and volunteering for the 2011 World Food Day. Open our newsletter and read about our many science explorations.

It is time to celebrate and congratulations are definitely in order! First of all, congratulations to the 2011 Science and Mathematics Academy students for receiving their academy certificates and stipends. Second, congratulations to both Tayona Lewis (Dr. Anbreen Bashir) and Dalvin Morrow (Mr. Ken Bowman) for presenting their summer academy science projects at the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Midwest regional conference at Eli Lilly & Company in Indianapolis, Indiana.

Watch out world, here come the Harris-Stowe State University 2011 Science and Mathematics academy scholars!

Best,

Dr. Tommie Turner

Director

Science, expanding the mind

Deadly Medicine-Creating the Master Race

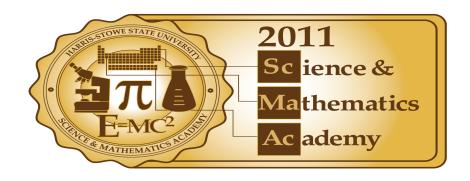
The scholars' first science adventure for the 2011 fall semester was viewing the historical "Deadly Medicine: Creating the Master Race" U.S. Holocaust Memorial Museum traveling exhibition at the Bernard Becker Medical Library at the Washington University School of Medicine in St. Louis. As a related educational event to the exhibition, the scholars also attended Dr. Stephen Lefrak's lecture on "Medicine Gone Awry" and learned that "National Socialist Germany was a biological state that sought humankind's perfection through racial and biological selection." Both the "Deadly Medicine: Creating the Master Race" lecture and exhibition was an enlightening experience revealing how historically medicine and biology can be used in a negative light.

Scientists, the Unsung Heroes

Dr. Matthew Ndonwi, a staff scientist in the Department of Internal Medicine at Washington University in St. Louis, was a delightful and informative guest scientist on campus. He spoke to both the 2011 Science and Mathematics Academy students and the HSSU Biology Club members about "Scientists, the Unsung Heroes" in society and the diverse opportunities in science, technology, engineering and mathematics (STEM) careers. Dr. Ndonwi is the founder of the inspirational and motivational Winning Young Hearts and Minds for Science (WYHMS) program where he shares his personal story of growing up in a remote West African village, his educational history and the scholarship pathway that he took to become a scientist at Washington University School of Medicine. Through his interactive presentation, Dr. Ndonwi reminded the students that "through the value of education, any child can grow up to become a scientist."

Conducting Research at the World Aquarium

Mr. Leonard Sonnenschein, president of the World Aquarium and Conservation for the Oceans Foundation came to campus to discuss undergraduate bench research opportunities for both the 2011 Science and Mathematics Academy students and the HSSU Biology Club members. Mr. Sonnenschein, a conservationist, presented an informative power point presentation on the various World Aquarium research projects that involve aquaculture of fish species, shrimp species and coral reef culture. Mr. Sonnenschein and the staff at the World Aquarium are also involved in researching agricultural waste products, pathenogenic protection methodology for aquacultural species and biodiversity sustainability studies associated with global ecosystems. After the presentation, students expressed an interest in the different research opportunities at the World Aquarium. Thank you Mr. Sonnenschein for sharing the conservation research information.



2011 HSSU Homecoming Parade. Congratulations to Martika Green (captain) and her outstanding homecoming float committee members Malik McClendon, Shaunta Johnson and Amanda Jackson for designing a "mad scientist" laboratory and mathematics lecture classroom float. The scholars definitely showed the St. Louis community that science and math rock!



2011 World Food Day at the Donald Danforth Plant Science Center. The 2011 Science and Mathematics Academy students and the HSSU Biology Club members joined forces to help feed the world! These students volunteered at the Danforth Center's 2011 World Food Day Commemoration and helped package fortified rice/soy protein meals to send to Tanga in Tanzania.

As part of the event, the students had an opportunity to participate in the Danforth Center's "Bring Science to Life" interactive exhibits and activities, learn about cutting-edge plant science research by a cadre of global scientists, tour green houses and taste soy, rice and cassava samples.

The Danforth Center is the largest, independent, non-profit plant science research institution in the world.



Congratulations are in order. Smiles, smiles and more smiles! Below are just a few examples of those 1,000-watt smiles. The big day for the scholars to receive their 2011 Science and Mathematics academy certificates and \$1,000 stipends finally arrived this semester. Scholars, it's time to celebrate!



2011 NOBCCHE Conference at Eli Lilly & Company. A final note of congratulations goes to Tayona Lewis and Dalvin Morrow for participating in the student poster competition during the 2011 National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Midwest Region Health Science and Biotechnology Conference in Indianapolis, Indiana. Both Tayona and Dalvin presented their summer science fair projects under the direction of Dr. Anbreen Bashir and Mr. Kenneth Bowman, respectively. Tayona's poster was on "Saturated Fats versus Unsaturated Fats." Dalvin's poster was on "Robotic Arm Construction." Also, Dalvin was nominated by Dr. Paul Ardayfio, NOBCChE-Indy chapter president, to receive the American Chemical Society (ACS) Travel award. Dalvin's nomination is pending. Wow, way to go!

