



PRESS RELEASE, August 23, 2013

Confidence and Performance in STEM Significantly Boosted for SPISE 2013 Graduates

Each year, the Caribbean Science Foundation (CSF) runs the Student Program for Innovation in Science and Engineering (SPISE). In the 2013 SPISE the CSF served 16 students from 10 Caribbean countries (Antigua & Barbuda, Barbados, Belize, Dominica, Guyana, Grenada, Jamaica, St. Kitts & Nevis, St. Lucia, and Trinidad & Tobago). These students have just successfully completed a busy 4-week schedule comprising courses in university-level calculus, physics, biochemistry, entrepreneurship, humanities (one Caribbean concept) and Mandarin, as well as laboratory work in robotics/electronics and biochemistry. In addition, students participated in a career seminar series where they heard first-hand about the career paths, decisions and experiences of six eminent professionals in science and engineering from the Diaspora and the Region. Instructors included faculty from the University of the West Indies and senior management from the US biotechnology industry. Key partners in the SPISE are the University of the West Indies–Cave Hill campus, and the Caribbean Examinations Council (CXC).

The SPISE, led by the Interim Executive Director of the CSF, Professor Cardinal Warde, is modeled after the well-known and highly successful Minority Introduction to Engineering and Science program at the Massachusetts Institute of Technology (web.mit.edu/mites). All SPISE students participated free of charge, due to generous donations from sponsors, including Scotiabank East, the United States Embassy-Barbados and the Eastern Caribbean, Light and Power Holdings, Neal & Massy Foundation, Central Bank of Barbados, Caribbean Development Bank, Belize Telemedia Limited, the Belize Public Utilities Commission, Trinidad and Tobago Ministry of Education, Division of Education Youth Affairs and Sport of Tobago, Namilco, Friends of Guyana, Friends of Jamaica, the Caribbean Diaspora for Science, Technology and Innovation, the family of Linda Su-Nan Chang Sah and Mr. Nicholas Brathwaite's PETNA Foundation.



The SPISE culminated with the students presenting their final projects in robotics and entrepreneurship to the public. In the robotics competition, the students modified underwater robots (donated by the MIT Sea-Grant program) in order to retrieve floating balls on the water surface and place them into a basket. This was a true test of their innovation, ingenuity and engineering design skills! For entrepreneurship, teams of students pitched their business plans, and then fielded tough questions from the audience which included Mr. Peter Williams, Managing Director of Light and Power Holdings and Dr. DeLisle Worrell, Governor of the Central Bank of Barbados. Even under such intense pressure

and scrutiny from these eminent business experts, the students held their ground. Members of the audience were given fake money to invest in the teams they found most persuasive, and thus the winner was determined. In addition, the students performed two skits entirely in Mandarin to showcase their skills in their newly-learned language. The two skits, "The Crazy Waitress" and "Shopping Day Gone Awry", brought much laughter and applause from the audience. These performances were especially impressive since the Mandarin instruction comprised only 12 hours in total over a 3 week period. Overall, the students found the SPISE experience to be invaluable, as reflected in their exit interview comments on how much new and difficult material they had learned, and how their confidence to compete at university with other students in their age group from any part of the world was boosted.

The SPISE is one of CSF's education reform initiatives with the long-term goal of helping to diversify the economies of the Region by stimulating more technology-based entrepreneurship within the Region. It is anticipated that students who complete the SPISE will eventually attend some of the best science and engineering universities in the world, and become scientific, engineering and business leaders in academia and industry within the Caribbean. For more information about the CSF and SPISE, including sponsorship of students for SPISE 2014, please contact Prof. Cardinal Warde (warde.csf@gmail.com or 1-617-699-1281) or visit <http://caribbeanscience.org>.

More SPISE 2013 Photos



16 SPISE 2013 students from 10 Caribbean countries



Student pipetting ELISA samples in biochemistry laboratory



US Ambassador Dr. Larry Palmer delivering sponsorship for two students to Prof. Cardinal Warde



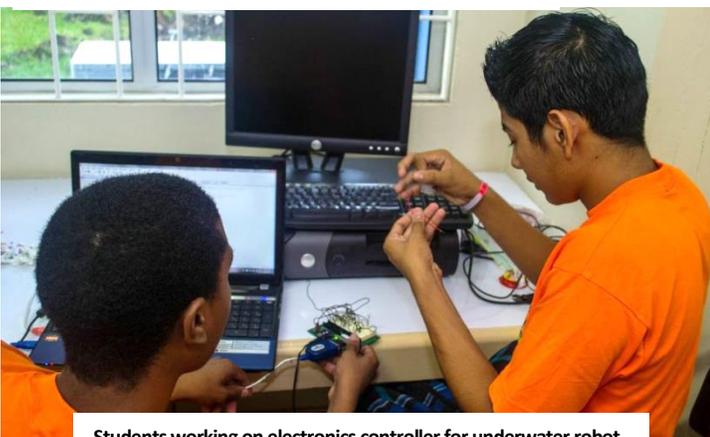
Students assembling their underwater robots



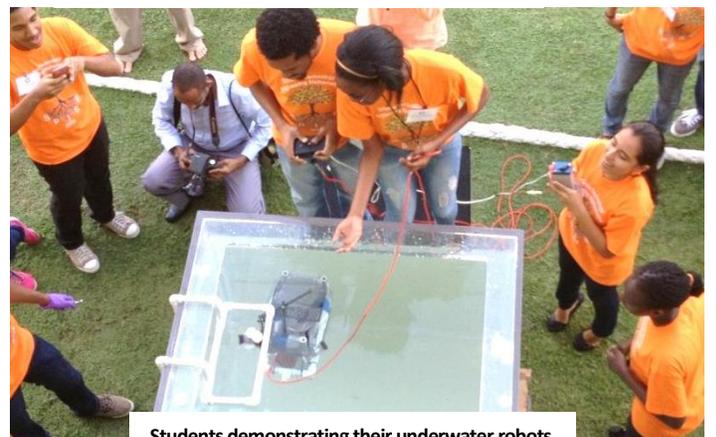
Mr. Stephen Mendes assisting students with electronics circuits



Dr. Anthony Rossomando lecturing on protein structure



Students working on electronics controller for underwater robot



Students demonstrating their underwater robots