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<http://caribeanscience.org>

# Caribbean Science Foundation

CARICOM Research Building  
UWI Cave Hill Campus  
Bridgetown, Barbados



**PRESS RELEASE** - August 19, 2014

## 22 SPISE 2014 Students Graduate

Annually, the Caribbean Science Foundation (CSF) offers the 4-week-long Student Program for Innovation in Science and Engineering (SPISE) to the most-gifted Caribbean students in Science, Technology, Engineering and Mathematics (STEM). The goal of SPISE is to groom the Caribbean's next generation of technology entrepreneurs and leaders in science, engineering and business. This year, SPISE served 22 such students from 11 Caribbean countries (Anguilla, Antigua & Barbuda, Barbados, Belize, Dominica, Guyana, Grenada, Jamaica, St. Lucia, St. Vincent and the Grenadines, and Trinidad & Tobago). All of the students successfully completed rigorous university-level courses in calculus, physics, biochemistry, entrepreneurship, Caribbean Unity and Mandarin, as well as hands-on projects in under-water robotics, renewable energy and electronics. In addition, the 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, including Grenadian Nicholas Brathwaite, founding partner of Riverwood Capital. Instructors included faculty from the University of the West Indies and senior management from the U.S. biotechnology industry. SPISE is led by Professor Cardinal Warde of MIT, and is modeled after the well-known and highly successful MITES program at MIT ([web.mit.edu/mites](http://web.mit.edu/mites)) for which Prof. Warde has served as the Faculty Director for over 15 years. All SPISE students participated free of charge, due to generous donations from numerous corporate and individual sponsors.

The SPISE culminated with the students presenting their final projects in robotics, renewable energy, entrepreneurship and Mandarin to the public on August 15th. The audience included Dr. Larry Palmer – the U.S. Ambassador for Barbados and the Eastern Caribbean, Dr. DeLisle Worrell - Governor of the Central Bank of Barbados, Mr. Peter Williams - Managing Director of Light and Power Holdings, Dr. Esther Byer-Suckoo – Barbados Minister of Labour, Social Security & Human Resource Development, Hon. Ronald Jones – Barbados Minister of Education, Science, Technology and Innovation, Dr. Rikhi Permanand from the Trinidad and Tobago Ministry of Planning and Sustainable Development, Mr. Collin Cunningham and Ms. Klao Bell-Lewis of the Caribbean Development Bank, Ms. Petal Jetoo from the Guyana Ministry of Education, and Ms. Jacqui Cuke of Sandy Lane Charitable Trust, and several parents and business professionals.

In the robotics demonstrations, the students designed and built underwater robots (from kits donated by the MIT Sea Grant program) for the task of retrieving floating balls and sunken objects, and placing them into a basket. This was a true test of their ingenuity, and innovative engineering and design skills! The renewable energy demonstrations featured a vertical-axis wind turbine, a solar-powered cell-phone charger, a solar-powered boat, and a circuit that converts stored power in a battery (direct current output) to house-hold alternating-current. For entrepreneurship, teams of students pitched their business plans, and then fielded tough questions from the audience. The students also performed three skits in Mandarin that brought much laughter and applause from the audience. The SPISE students, who on average had 5 hours of homework each night, commented on how much new and difficult material they had learned, and how their confidence was boosted for competing at universities with other students in their age group from any part of the world.

The CSF is an independent, non-profit, non-governmental organization with headquarters in Barbados and representatives in several other Caribbean countries. Key partners in the SPISE are the University of the West Indies Cave Hill campus, the Caribbean Examinations Council (CXC) and Sagicor. Please visit <http://caribeanscience.org/projects/spise.php> for more information about the SPISE, or contact Prof. Cardinal Warde at [warde.csf@gmail.com](mailto:warde.csf@gmail.com) or 1-617-699-1281. Donations to the CSF can be made at <http://caribeanscience.org/donation/>.

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# SPISE 2014 Photos



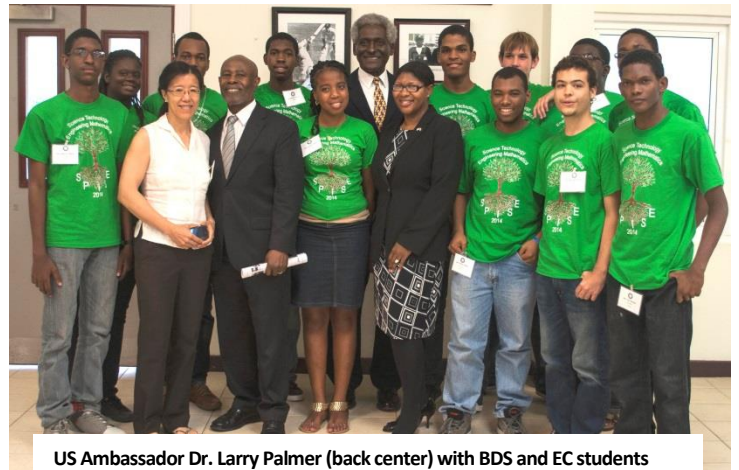
SPISE 2014 students from 11 Caribbean countries



Students assembling control box for their underwater robot



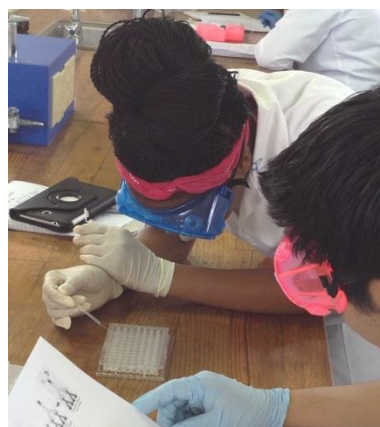
Students assembling a fuel-cell powered car



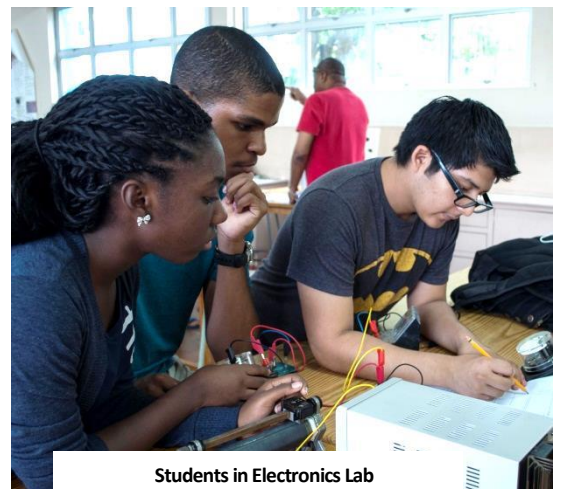
US Ambassador Dr. Larry Palmer (back center) with BDS and EC students



Jacob Smith with wind Turbine



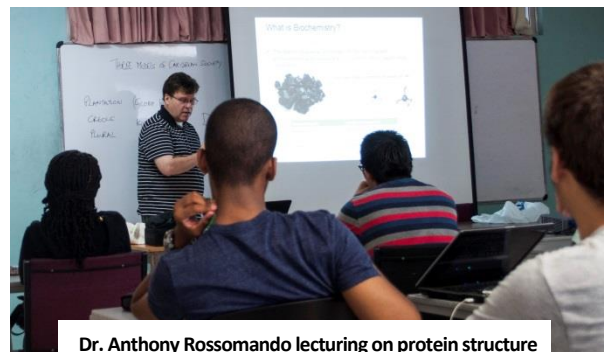
Students pipetting ELISA samples in biochemistry laboratory



Students in Electronics Lab



Mr. Nicholas Brathwaite delivering a SPISE Career Seminar



Dr. Anthony Rossomando lecturing on protein structure