Andre Dominic Cropper, PhD

2016 NESS Keynote Speaker

Andre Dominic Cropper, PhD, will be the keynote speaker at the 2016 New England Science Symposium. He is a celebrated electrical engineer whose accomplishments include the development of thin layers of laboratory-produced diamond that could be used in the semiconductor industry. Most of his professional years have been spent in the aerospace/defense sector around Intelligence Surveillance and Reconnaissance (ISR) system requirements, CONOPS, capabilities, development, integration, evaluations and operations. Cropper is currently an engineering fellow at Raytheon Space and Airborne Systems.

Born and raised in Trinidad, Cropper always knew he wanted to be an electrical engineer. He was interested in math and physics from an early age, and used to play around with electronic devices when he was young. He was also a champion swimmer, representing Trinidad and Tobago in Caribbean and international games during the 1970s.

After graduating from Fatima College secondary school, Cropper came to the United States with the goal of attending Howard University. During the 60s and 70s, many respected scholars of Trinidad and Tobago, including the prime minister, had attended Howard, and Cropper believed it offered him the greatest opportunity to prepare for a future in academia in his native country. He lived in the South Bronx for a couple of years until he was accepted at Howard, ultimately receiving a BS and an MS in electrical engineering, with a focus on semiconductor materials. While at Howard, he was on the Dean’s List, Engineering Honor Roll, Tau Beta Pi (Engineering Honor Society) and Beta Kappa Chi (Science Honor Society).

Once he received his master’s degree, Cropper taught at Norfolk State University, School of Technology, mainly to broaden his teaching experience. He received the Teacher of the Year award in 1991.

While he was at Norfolk, Cropper also received a scholarship to attend Virginia Polytechnic Institute (Virginia Tech), where he earned his PhD in electrical/materials engineering in three-and-a-half years. As part of his PhD requirement, he taught and conducted research at Morgan State University in Baltimore.

With his PhD under his belt, Cropper returned to Trinidad as a lecturer in the department of electrical engineering at the University of the West Indies. “This was a lifelong dream,” he says. “I went back to my homeland to teach and to contribute as much as I can.”

Cropper’s intention was to continue to keep the engineering department in Trinidad growing and up-to-date, but a year later he received a call from Corning Incorporated, inviting him to New York for an interview. The company was doing “really exciting research,” he says. The facilities were so impressive and the job so challenging, “I was blown away.”

Twenty-plus years later, Cropper is still living in the United States. From Corning, he moved to Kodak, then to ITT Industries Space Systems Division, where he was the technology development manager for new business and worked with the U.S. Department of Defense and other National Laboratories.

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Where Are They Now?

Marleny Franco, MD

For Marleny Franco, MD, who was born in the Dominican Republic and moved to Boston when she was nine, her current position as an emergency medicine pediatrician at Children’s Hospital of Philadelphia and faculty member at Perelman School of Medicine at the University of Philadelphia is the culmination of a dream that began when she was in high school. She credits the Biomedical Science Careers Program and Project Success, and several mentors along the way, with helping her attain the dream.

In high school at Boston Latin Academy, Franco was very interested in science. A science teacher introduced her to a post-doctoral student at Harvard Medical School and told her about Project Success. Franco attended the 1998 Biomedical Science Careers Student Conference, which led to a research position at Harvard Medical School.

“T’m really, really grateful to Project Success and BSCP,” she says. “I’m certain I wouldn’t be here if it weren’t for them. Without the experiences, exposure and people supporting me, I would not have gotten into a school like Brown [University, where she attended college]. To be able to do bench research at Harvard Medical School in high school from the inner city,” she says, sounding almost incredulous all these years later. “That’s crazy.”

At Brown, Franco majored in community health, attending her second BSCP conference in 2000, when she was a freshman. She also studied Italian and spent a semester during her junior year in Italy, a country she had always wanted to visit. She had studied Latin in high school and wanted to see all of the ancient Roman landmarks she had learned about.

Though Franco had known since high school that she wanted to be a physician, she worked as a research assistant for a couple of years after college, investigating childhood asthma at a lab in Rhode Island.

“My attitude was, ‘I’m going to do medicine for the rest of my life.’ I wanted to take the opportunity to learn other skills and do other things,” she says.

With “no connections whatsoever” to Cleveland or Ohio, Franco attended Case Western Reserve University School of Medicine. “It ended up being a wonderful decision. I felt really challenged and supported,” she says.

Franco arrived at pediatric emergency medicine almost by accident. Though interested in pediatrics, “I didn’t really know pediatric emergency medicine was a field until I was in medical school,” she confides. During a one-month elective at

Opportunities

NIH Workforce Diversity Initiative

In a development that underscores the ideals of the BSCP, the National Institutes of Health (NIH) has named two longtime advocates for bringing underrepresented minorities into bioscience as principal investigators (PIs) in grants under its “Enhancing the Diversity of the NIH-Funded Workforce” program.

David Burgess, PhD, professor of biology at Boston College (BC), will be the lead PI on a five-year, $19-million grant to build a National Research Mentoring Network (NRMN). Renato Aguilera, PhD, director of the Border Biomedical Research Center at the University of Texas El Paso (UTEP), is one of six PIs on a five-year, $22.6-million grant aimed at creating a consortium of 19 research and feeder institutions in the Southwest called Building Infrastructure Leading to Diversity: Southwest Consortium of Health Oriented Education Leaders and Research Scholars (BUILD).

From the NRMN administrative center at BC, Burgess will lead a team of PIs at the University of Wisconsin, Madison; the University of North Texas Health Sciences Center; the University of Minnesota; and the Morehouse School of Medicine to disseminate information about the proven benefit of mentoring to guide underrepresented minority students in biomedical disciplines. The center at BC will coordinate the national effort and serve as the regional hub for programs in the northeast and Puerto Rico. Mentor training for participants will be coordinated at the University of Wisconsin. The University of North Texas Health Sciences Center will lead programs that connect mentors and mentees. The University of Minnesota will offer professional development programs to help mentees at various stages of their careers across a wide range of biomedical disciplines. And the Morehouse School of Medicine will coordinate the network’s programs at historically black colleges and universities.
13th Biennial Biomedical Science Careers Student Conference
April 1–2, 2016

It’s time to pre-register for the 13th biennial Biomedical Science Careers Student Conference, which will take place Friday, April 1 and Saturday, April 2, 2016 at The Westin Copley Place Boston. Attendees — research and clinical postdocs; medical, dental and graduate students; post-baccalaureates; college and community college students; and high school seniors and juniors (particularly African-American, Hispanic/Latino or American Indian/Alaska Native students/fellows) — will have the opportunity to meet mentors, network with peers and attend a wide range of workshops. "I was humbled and privileged to be among great scientists and mentors, most of which I still stay in touch till today ... As a result of the BSCP Student Conference, I was awarded an academy fellowship at the National Institutes of Health," wrote Jacob Fohtung, a student who attended the 2014 conference.

Keynote speakers in 2016 will include Deborah Dunsire, MD, president and CEO, FORUM Pharmaceuticals; Gary H. Gibbons, MD, director of NIH’s National Heart, Lung and Blood Institute; and Susan L. Lindquist, PhD, member of the Whitehead Institute for Biomedical Research, professor of biology, Massachusetts Institute of Technology and investigator at the Howard Hughes Medical Institute. Lindquist will be presented with the 2016 H. Richard Nesson, MD, award.

Workshops are geared to each academic level, with some repetition across levels. Highlights for postdocs include Networking and Career Discussion, Fellowships and Postdoctoral Training, and Other Biomedical-Related Career Opportunities. Residency Training and Beyond is specifically for medical students. Getting into Medical/Graduate/Professional School is geared towards post-baccalaureates and college students. All attendees should be able to benefit from sessions on Funding and Research Opportunities, Technology in Science and Medicine, and Science Careers in Industry.

A Resource Room session will allow students and fellows to interact with local and national organizations and institutions. Participants in 2014 included American Student Assistance College Planning, Association of American Medical Colleges, Biogen, Boston University, Boston University School of Medicine, the Broad Institute, Dana-Farber/Harvard Cancer Center, Geisel School of Medicine at Dartmouth, Genzyme, a Sanofi company, Harvard Medical School, Harvard T.H. Chan School of Public Health, Harvard University, MCPHS University, Massachusetts General Hospital, MGH Institute of Health Professions, National Institutes of Health, New England Board of Higher Education, Novartis Institutes for BioMedical Research, the George Washington University School of Medicine, Tufts University School of Medicine, University of Connecticut Health Center, University of Massachusetts Medical School, University of Vermont Graduate College and Warren Alpert Medical School of Brown University.

There is no registration fee for the conference, but pre-registration is required. The application deadline is February 3, 2016 (December 15, 2015 for high school students). To request an application, please forward your academic level and preferred postal mailing address to lise_kaye@hms.harvard.edu.

Electronic applications are not available.

15th Annual New England Science Symposium
Sunday, April 3, 2016

The 15th Annual New England Science Symposium (NESS) will take place Sunday, April 3, 2016, at The Joseph B. Martin Conference Center at Harvard Medical School. The event is sponsored by Harvard Medical School’s Minority Faculty Development Program, Biomedical Science Careers Program and Harvard Catalyst | The Harvard Clinical and Translational Science Center. It promotes careers in biomedical sciences by providing an opportunity for research and clinical postdocs; medical, dental and graduate students; post-baccalaureates; and college and community college students (particularly African-American, Hispanic/Latino or American Indian/Alaska Native students/fellows) to share their research, exchange ideas and network.

This year’s keynote speaker will be Andre Dominic Cropper, PhD, engineering fellow at Raytheon Space and Airborne Systems (see related story, page 1).

Awards will be given for outstanding oral presentations and scientific posters, outstanding cancer-related oral and poster presentations, outstanding poster presenta-
SAVE THE DATES

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Sunday, April 3, 2016
The deadline to submit abstracts is January 7, 2016. To submit an abstract or to register, go to www.NewEnglandScienceSymposium.org.

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But with all of his success in industry, Cropper returns to his native country often, speaking at primary and secondary schools and other organizations involved in science, technology and youth development. He is a frequent speaker at schools and professional organizations in this country as well. “I believe that education is the key and you never stop learning,” he says. “I try to find every opportunity to be an educator and to continue my education in all aspects of my life.” ■

WORKFORCE DIVERSITY INITIATIVE
CONTINUED FROM PAGE 2

Aguilera’s Texas campus will be the hub for efforts to build a tight educational pipeline through a network of 19 southwestern institutions. The BUILD plan is to identify talented underrepresented minority students in high school or junior college, encourage their scientific interests, prepare them for higher-level study and recruit the best to study at UTEP tuition-free in a collaborative, technology-rich program with strong mentoring support. The program will also coach UTEP faculty, graduate students and postdocs on becoming more effective instructors and mentors. ■

MARLENY FRANCO, MD
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Brown, she attended a lecture for pediatric residents. The dynamic speaker turned out to be a toxicologist and emergency medicine pediatrician.

After returning to Case Western Franco, who was about to start her fourth year of medical school, “groveled and begged” her way into an emergency medicine sub-internship at a county hospital in Cleveland. She worked mostly with children, and was inspired to pursue a fellowship in pediatric emergency medicine. She finished the fellowship, at Brown, in June 2015. Now, after 10 years of training, she has reached her dream.

In addition to a focus on pediatrics, the other constant for Franco has been the importance of mentors. Her first was assigned to her through Project Success, “and I still keep in touch with her.” Her second, at the lab in Rhode Island, became a clinical mentor to her and they are still very close. “I think mentorship was pivotal to what I was able to accomplish,” she says. “Having someone to call and relate to is key … That was a privilege I had.”

And she is paying the privilege forward. In her position at Children’s Hospital of Philadelphia, Franco is working with residents, “particularly underrepresented minority residents who need mentorship.” ■