Nearly 150 alumni, business leaders, policy-makers, international education officials, and scholars attended the Center for Excellence in Education’s (CEE) Annual Congressional Lunch in Washington, DC. Celebrating 35 years of success through its STEM-based programs, CEE’s President Joann DiGennaro promoted the importance of the Research Science Institute (RSI), the USA Biology Olympiad (USABO), the Department of Defense Internships, and the Teacher Enrichment Program (TEP).

“We all want our country to be leading in the global community, and we all want to maximize opportunities for all of our students,” said DiGennaro.

Secretary of Education Betsy DeVos praised CEE’s mission and accomplishments. “I really admire the work of this organization. You were promoting STEM before STEM was cool,” she said. Secretary DeVos and Members of Congress from both parties were united in highlighting the importance of making STEM education a priority for all students to grow U.S. innovation and business. Congressman Scott Peters of California described how innovation in science, technology, engineering, and math are creating the next wave of jobs in his congressional district. He specified that investing in STEM ensures students are prepared to fill those positions. Congressman Rob Wittman of Virginia predicts a huge demand for a STEM-trained workforce. “In the future, 85 percent of the jobs that will be out there will require some form of science, technology, engineering, and math,” he said.

Representative Anthony Brown of Maryland said there are 40,000 cybersecurity jobs that are unfilled today in this country. “I make the argument that the non-defense investment in education is a national security issue because when we invest in education that’s what’s going to generate the workforce that’s going to fill those national security jobs,” he stated.

Congresswoman Jacky Rosen of Nevada is a former software developer. She praised CEE for its programs making STEM education more accessible. “Across the country, we’re continuing to see a huge demand for workers in STEM fields…but despite these increasing opportunities, not enough Americans have the STEM skills and STEM education. So it’s organizations like [CEE] that are rising to the challenge by providing thousands of under-served students with access to that kind of education,” she said.

(continued next page)
Keynote speaker, Dr. James Bird, Professor at Boston University’s College of Engineering, presented “The Science of Bubbles.” His address discussed many of the applications of drops and bubbles for disease control, defense, mining, food production, energy, and medicine. “There’s some really new, promising research suggesting that these same ideas can be used to bring drugs across the blood-brain barrier. Using acoustics and bubbles to kind of create this transfer is otherwise quite difficult to do,” he said.

CEE is a nonprofit dedicated to nurturing leadership and excellence in STEM education through national and international programs for students and teachers.

Engaging Students in STEM
Hands-On Learning and Real World Applications

CEE’s Teacher Enrichment Program (TEP) will host “Engaging Students in STEM – Hands-On Learning & Real World Applications” on June 26 in McLean, VA. The event will help teachers, and their students, to see the interdisciplinary value of STEM readiness in most careers. “Many teachers and students only think about engineering when they think about STEM. But a STEM-ready workforce is needed for almost any career,” said Kim Edwards, CEE’s TEP Education Programs Outreach Manager. “Careers in finance, health, software development, environment, agriculture, architecture, medicine, video gaming, robotics, and many other fields need employees who are competent in science, math, or technology – STEM is interdisciplinary,” she added.

The half-day seminar and workshop will focus on presentations and hands-on activities that are low-cost and bring to life the real world applications of STEM skills for most career paths. Teachers can register here.
RSI ALUMNI EARN TOP DISTINCTIONS

Four CEE RSI alumni recently have earned extraordinary distinctions. RSI ‘99 alumnus and a Member of CEE’s Board of Trustees since 2017, Dr. Feng Zhang, was elected to the National Academy of Sciences (NAS) for distinguished and continuing achievements in original research. “CEE’s RSI program helped me learn how to turn curiosity about the natural world into scientific experiments that allowed us to ask and answer questions in the lab,” he said.

Harvard University’s Math Department hired Lauren Williams (RSI ‘94) as a senior professor, ending a six-year streak in which the department boasted not a single woman of that rank and only the second time in Harvard’s history to do so. Williams won a full tenured professorship at UC Berkeley in 2016 and has written extensively about cluster algebras and tropical geometry.

Moon Duchin (RSI ‘92) was named a John Simon Guggenheim Fellow. Duchin is a mathematician at Tufts University. She is currently engaged in a long-term project on the geometry of gerrymandering, an application of mathematics to civil rights. She majored in Mathematics and Women’s Studies at Harvard and received her Ph.D. in Mathematics from the University of Chicago.

Sitan Chen (RSI ’11) was awarded the 2018 Paul and Daisy Soros Fellowship for New Americans to support work towards a Ph.D. in Theoretical Computer Science at MIT. The fellowship for New Americans program honors the contributions of immigrants and children of immigrants to the U.S. Chen immigrated from China when he was one year old.

NEXT GEN BIOLOGY SUPERSTARS ANNOUNCED

20 US High School Students Selected for USA Biology Olympiad Finals

CEE announced the names of the 20 top high school students who will compete in the 16th Annual USA Biology Olympiad (USABO) National Finals at UC San Diego, June 23 to July 5. “These students are some of the highest achieving biology students from this country,” said Joann DiGennaro, CEE President. Nearly 10,000 talented students nationwide registered for the USABO. Ultimately, four students are competitively chosen to represent the USA at the International Biology Olympiad in Tehran, Iran. USABO earned the coveted #1 Team in the World in 2017, 2015, 2013, and 2011. The USABO is jointly sponsored by CEE and UC San Diego.

USABO 2018 Finalists:

- **California:** Allen Huang, Canyon Crest Academy; Charles Huang, Lynbrook High School; Alexander Tso, Troy High School; Helen Yang, Northwood High School
- **Michigan:** Jason Zhang, Troy High School
- **Minnesota:** Lucy Chen and Kimberly Shen, Mounds View High School
- **New Jersey:** Atharv Oak, West Windsor Plainsboro High School - South; Jason Yang, West Windsor Plainsboro High School North; Lucy Zou, East Brunswick High School
- **New York:** Jessica Woo, Kappa Academy
- **Pennsylvania:** Bhav Jain, Franklin Regional Sr. High School
- **Tennessee:** Henry Shen, Oak Ridge High School
- **Texas:** Edward Lee, LASA High School; Shree Mohan, Dulles High School; Nithin Parsan, Clements High School
- **Virginia:** Derrick Liang, Sabrina Cai, Eugene Lee, and Wenbo Wu, Thomas Jefferson High School for Science & Technology.
CEE announced the high school scholars selected to attend the 35th annual RSI summer research program jointly sponsored with MIT. “RSI offers high-ability math and science students the opportunity to experience graduate-level research and camaraderie with other academically talented STEM scholars,” said Joann P. DiGennaro, President.

RSI Class of 2018:

Australia
Macinley Butson, Chantal Kander

Bulgaria
Chavdar Lalov, Nikolaj Pashov

Canada
Sarah Kennedy, Mason Xiao

China
Kaiying Hou, Simon Lam, Bowei Liu, Yuan Qui

India
Tarun Prasad

Kazakhstan
Aknazar Kazhymurat

Lebanon
Hazem Joueidi, Nader Zantout

Saudi Arabia
Zaid Albarghouty, Yosef Alsuhaibani

Singapore
Jing Wesley Leong, Jing Ni Ng, Javén Yih Ruay Tän, Yong Yi Tan, Ian Rongde Tay, Faith Kai En Teo

South Korea
Jiwon Choi

Spain
Albert Lopez Bruch, Eloi Fernandez, Roman Via-Dufresne

Sweden
Julia Berndtsson, Simon Thor

Switzerland
Emre Onal

Turkey
Kerim Arioglu, Gizem Incesu

RSI Class of 2018:

Australia
Macinley Butson, Chantal Kander

Bulgaria
Chavdar Lalov, Nikolaj Pashov

Canada
Sarah Kennedy, Mason Xiao

China
Kaiying Hou, Simon Lam, Bowei Liu, Yuan Qui

India
Tarun Prasad

Kazakhstan
Aknazar Kazhymurat

Lebanon
Hazem Joueidi, Nader Zantout

Saudi Arabia
Zaid Albarghouty, Yosef Alsuhaibani

Singapore
Jing Wesley Leong, Jing Ni Ng, Javén Yih Ruay Tän, Yong Yi Tan, Ian Rongde Tay, Faith Kai En Teo

South Korea
Jiwon Choi

Spain
Albert Lopez Bruch, Eloi Fernandez, Roman Via-Dufresne

Sweden
Julia Berndtsson, Simon Thor

Switzerland
Emre Onal

Turkey
Kerim Arioglu, Gizem Incesu

Alaska
Aditi Limaye

Arizona
Saba Zerefa

California
Anika Cheerla, Hangyul Lyna Kim, Jonathan Ko, Benjamin Liu, Catherine Wu

Connecticut
Rahul Subramaniam, Roanna Zou

Florida
Roshan Warman

Georgia
William Ellsworth

Idaho
Kayson Hansen

Illinois
Karen Ge, Roshni Padhi

Indiana
Sepehr Asgari, Kevin Liu

Kansas
William Wang

Kentucky
Anjali Chadha, Rachel Seevers

Louisiana
Anusha Zaman

Maryland
Naveen Durvasula

Massachusetts
Shashvat Srivastava, Charles Xu

Michigan
Matthew Tan

Nebraska
Vighnesh Subramaniam

Nevada
Yatin Chandar

New Jersey
Harshal Agrawal

New York
Sebastian Baez, Liam Parker

North Carolina
Albert Gong, Sara Zangi

Ohio
Evan Vogelbaum

Oklahoma
Howard Zhong

Oregon
Divya Amirtharaj, Lauren Li, Anushka Nair

Pennsylvania
Walker Anderson

South Carolina
Guanpeng Xu

South Dakota
Alan Zhu

Tennessee
Gabrielle Liu

Texas
Sean Elliott, Jonathan Lu, Phyllis Zhang, Claire Zhou

Utah
Alexander Cheng

Virginia
Hassan Osman, Siona Prasad

Washington
Sanjay Raman, Eshika Saxena

Wyoming
Qingfeng Li

Your contribution to CEE is greatly appreciated!

Your gift can kindly be made online at www.cee.org/donate or mail to:
CEE is a 501(c)3 charitable organization. Your contribution is tax deductible.

CENTER FOR EXCELLENCE IN EDUCATION | SPRING/SUMMER 2018