CENTERLINE

Excellence

Center for Excellence in Education

BILL MCINTYRE, *VP Communications*

CEE'S ANNUAL CONGRESSIONAL LUNCHEON CALLS FOR STEM EDUCATION TO BE A PRIORITY

DeVos, Policy-Makers, and Business Leaders Confirm Science and Technology Education Needed To Grow U.S. Innovation

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



CEE alumni with Secretary of Education Betsy DeVos at CEE's Annual Congressional Luncheon on Capitol Hill.



Congressmen Rob Wittman, VA01 (left) and Scott Peters, CA52.

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.

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SCIENCE OF BUBBLES AT CEE LUNCHEON

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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



Congresswoman Jacky Rosen, NV03 (left) and Congressman Anthony Brown, MD04 urge STEM education.

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.



Boston University's Dr. James Bird presents the Science of Bubbles at CEE's Annual Congressional Lunch.

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



Dr. Jack Cook (from left), Dr. Bird and CEE Trustee Dr. Robert Curry.

CEE ALUMNI TAKE 4 OF TOP 10 REGENERON SCIENCE TALENT SEARCH AWARDS

Pour of the top ten Regeneron Science Talent Search (STS) winners are alumni of the Research Science Institute (RSI) sponsored jointly by The Center for Excellence in Education (CEE) and MIT. The program is hosted at MIT in Cambridge, Massachusetts.

Isani Singh, a Cherry Creek High School scholar from Greenwood



Village, CO, placed third, winning \$150,000; **David Wu,** a student at Montgomery Blair High School in Silver Spring, MD,

Isani Singh

landed in fifth place, earning \$90,000; **Vinjai Vale,** a Phillips Exeter Academy pu-

pil in Exeter, NH, earned *David Wu* seventh place, collecting \$70,000, and **Syamantak Payra**, a student



Vinjai Vale

attending Clear
Brook High School
in Friendswood,
TX, ranked ninth,
securing \$50,000.
All four winners are
RSI 2017 alumni.
Forty Regeneron

STS finalists were selected from 1,800 entrants based on their projects' scientific rigor and their potential to become world-changing scientific leaders.
Ten of the 40



Syamantak Payra

finalists were RSI alumni. Finalists each receive a minimum of \$25,000 for education.

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 Acad-



Dr. Feng Zhang

emy 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 current-

ly engaged in a long-term project on the geometry of gerrymandering, an application of mathematics to civil rights. She majored in Lauren Williams Mathematics





Moon Duchin

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



Sitan Chen

he was one year old.

NEXT GEN BIOLOGY SUPERSTARS ANNOUNCED

20 US High School Students Selected for USA Biology Olympiad Finals

TEE announced the names of dents 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 Tsao, 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

BI O lympiad

2018

- 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.

RSI CLASS OF 2018 ANNOUNCED

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:

Macinley Butson, Chantal Kander

Bulgaria Chavdar Lalov, Nikolaj Pashov

Canada

Sarah Kennedy, Mason Xiao

Kaiying Hou, Simon Lam, Bowei Liu, Yuan Qui

India

Tarun Prasad

Kazakhstan

Aknazar Kazhymurat

Hazem Joueidi, Nader Zantout

Saudi Arabia Zaid Albarghouty, Yosef Alsuhaibani

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

South Korea Jiwon Choi

Albert Lopez Bruch, Eloi Fernandez, Roman Via-Dufresne

Julia Berndtsson, Simon Thor

Switzerland Emre Onal

Turkey

Kerim Arioglu, Gizem Incesu

Rlumni! Save The Date



Don't miss out on CEE (35) Anniversary Celebration

Mark your calendar now for a fabulous weekend

Click here for tickets!

OCT.12-14,2018

CAMBRIDGE, MA

Alabama 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

William Ellsworth

Kayson Hansen

Illinois

Karen Ge, Roshni Padhi

Sepehr Asgari, Kevin Liu

Kansas

William Wang

Kentucky Anjali Chadha, Rachel Seevers

Louisiana

Anusha Zaman

Maryland

Navéen 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

Evan Vogelbaum

Oklahoma

Howard Zhong

Divya Amirtharaj, Lauren Li, Anushka Nair

Pennsylvania

Walker Anderson

South Carolina

Guanpeng Xu

South Dakota

Alan Zhu

Tennessee

Gabrielle Liu

Sean Elliott, Jonathan Lu, Phyllis Zhang, Claire Zhou

Alexander Cheng

Virginia

Hassan Osman, Siona Prasad

Washington

Sanjay Raman, Eshika Saxena

Wyoming Qingfeng Li

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