In November CEE hosted a public service Zoom session, “Taking a Drug from Idea to Market.” Dr. Michelle McMurry-Heath, MD/PhD, President & CEO, Biotechnology Innovation Organization (BIO), presented the keynote address and answered questions from participants. A medical doctor and molecular immunologist by training, Dr. McMurry-Heath received her MD/PhD from Duke’s Medical Scientist Training Program, becoming the first African-American to graduate from the prestigious program. She spent 12 years working at the research bench before taking policy and leadership roles in government and industry. In her keynote, she noted that since joining BIO she has focused on how to expand access to all of the great promise that science is delivering. “Biotech entrepreneurship is one of the most complicated, demanding and rewarding career paths that you could possibly choose. But choosing it puts you in the driver’s seat to make the kind of change that you want to see in our industry and in the world,” she said.

Panelists included accomplished scientists:

Laura Bloss, PhD, is Executive Director, Global Regulatory Affairs, at Amgen Inc. She is Amgen’s Global Regulatory Therapeutic Area Head for the inflammation, metabolic, and endocrine product portfolio and the department head (Continued on Page 2)

USA BIOlympiadiad 2020

Kudos to 70 USABO Alums who made the 2020 USABO Semifinalists the same as the experience they had experienced. In less than a month, alums developed an online Semifinal exam and online proctoring system powered for 400 Semifinalists that identified 20 National Finalists. In less than a week, alums organized a 10-day National Finals complete with lectures, labs, distinguished speakers, socials, study sessions, opening and closing ceremonies, online theoretical exam, and online practical exams. CEE’s USA Biolympiad Team, a delegation of four competitively chosen scholars, was named to compete in the International Biology Olympiad Challenge 2020 (which replaced the 31st IBO in Nagasaki, Japan). All four members received medals. Nearly 10,000 students from 500 schools, 43 states, and 11 International Schools registered in the U.S. high school competition. (Continued on Page 3)

RESEARCH SCIENCE INSTITUTE

Applications are being accepted to CEE’s 2021 Research Science Institute, collaboratively sponsored with the Massachusetts Institute of Technology (MIT) in Cambridge, MA on its campus or virtually. Students may apply at www.cee.org/apply-rsi. The deadline for U.S. students to apply is Jan. 16, 2021. The deadline for international students is Feb. 13, 2021.
Mariana Pestana, Executive Assistant to CEE’s president since its founding in 1983, has retired. She dedicated her career to CEE and provided exceptional attention to excellence throughout her 37 years, and she consistently made herself available to help CEE team members. Mariana arranged Board meetings and handled all logistics for national and international engagements. Joann DiGennaro expressed sincere thanks to Mariana for her loyalty that helped CEE and its President to effectively and professionally maintain its excellence. She will be sorely missed.

Dr. William T. Stuart, a consultant to CEE who helped Admiral Rickover and Joann DiGennaro to establish the RSI and USABO, passed away this summer. His assistance over the years provided invaluable guidance to the success of CEE’s STEM programs. He served as the first director of the Research Science Institute, Director of the USA Biolympiad, and as Director of the Research Science Institute in Saudi Arabia. Dr. Stuart conducted extensive research in the Middle East, Latin America, Central and Southern Africa, Eastern Europe and Oceania. Dr. Stuart received his PhD from the University of Oregon in Eugene. He was an Assistant Professor at the University of Maryland, Department of Anthropology, and was awarded for several years the University’s Outstanding Teaching commendation. At CEE’s 30th anniversary celebration, Dr. Stuart received the Rickover Medal for outstanding leadership and commitment to educational excellence.
2020 USA Biolympiad Team IBO Gold Medalists are: Judson Lam, Naperville North High School, Naperville, Illinois; Nithin Parsan, Clements High School, Sugar Land, Texas; and Albert Zhang, North Hollywood Senior High School, North Hollywood, California. 2020 USA Biolympiad Team IBO Silver Medalist is Derrick Liang, Thomas Jefferson High School for Science and Technology, Alexandria, Virginia.

CEE is gearing up for the 2021 USA Biolympiad. The competition and National Finals may be held in-person or virtually.

“This is an exciting time of year,” said Michelle King, PhD, new program Manager of the USA Biolympiad. “It’s wonderful to see the thousands of students who sign up to take the exam.” While completing her PhD in Microbiology at Oklahoma State University, Dr. King coordinated a number of outreach events to foster a love of microbiology in her community and home state. She is thrilled to use her extensive experience mentoring and teaching students for the USABO.

More than 100,000 high school students have participated in the annual USABO since 2002. Nearly 10,000 students register annually to participate in this prestigious opportunity. The USABO mission concentrates on stimulating young scholars’ intellectual curiosity and developing their critical thinking in laboratory skills and biological reasoning to propel them to careers of excellence and leadership in science and technology.

CEE continues to provide high quality educational resources for remote education for STEM educators during this unprecedented time to support teachers’ efforts to engage their students in virtual STEM learning. Additionally, TEP’s Lab Bench website has been reorganized to make presentations and content more accessible. The Lab Bench includes a new section, “Webinars & Digital Learning,” for educators and administrators to support STEM education in their virtual or hybrid classrooms.

This fall, TEP continued to connect teachers with leading experts from industry and academia to explore cutting-edge research with real world connections for students’ classroom learning through a virtual Bite of Science. In the first half of the school year, TEP has engaged teachers in California, Florida, Pennsylvania, Texas and Virginia, with additional virtual Bite of Science events scheduled for Indiana, Maryland and West Virginia.

CEE’s Parent Committee works to forge meaningful connections with all RSI and USABO parents through outreach activities to support the sustainability of the Center. In support of RSI and USABO, the Parent Committee sponsored a Thank You email to over 22,000 CEE teachers, thanking them for working on the front lines of education. The email forwarded virtual teaching links for use in the classroom. The Committee is led by CEE Trustee Doug Himberger.
### DONORS $100,000 AND ABOVE

- **RTI International**

### DONORS $50,000 - $99,999

- Akamai Technologies
- Citadel Securities
- Mr. Alexander Clark
- Claude Moore Charitable Foundation
- Dr. and Mrs. John A. Paulson

### DONORS $25,000 - $49,999

- Amgen, Inc.
- Arconic
- Mr. Sanjay Palsamudram and Ms. Sangna Lakshmi
- Virginia Department of Higher Education

### DONORS $10,000 - $24,999

#### Anonymous
- Dr. Minmin Cai and Dr. Jing Jing
- Drs. Fred and Sherleen Chen
- Mr. Sidney O. Dewberry

#### Fairfax County
- Ross A. Grossman, Ph.D.
- Jane Street Capital, LLC
- Drs. Daniel Lee and Lisa Park

#### Drs. Tom Leighton and Bonnie Berger
- RBC Capital Markets
- Spark Therapeutics, Inc.
- Two Sigma Investments, LP

### DONORS $5,000 - $9,999

#### Admiral William A. Owens (USN, Ret.)
- Mr. and Mrs. Roger Pellegrini

#### The Honorable Clarine Nardi Riddle
- TE Connectivity
- Feng Zhang, Ph.D.
- Mr. and Mrs. Robert Zou

### DONORS $1,000 - $4,999

#### Mr. William R. Becklean
- Mr. Peter L. Beebee
- Edward Boas, M.D., Ph.D.
- Mrs. Adriana M. Boeka
- Mr. and Dr. Rohit Bora
- Mr. Dong Chen and Ms. Jin Cheng
- Mr. Simon W. Choi and Dr. Hyesun H. Oh
- Joann P. DiGennaro
- Mr. and Mrs. Tony and Sue Eltringham

#### Mr. and Mrs. Brian M. Fairchild
- Mr. David Galkowski
- Ms. Helen Han
- Mr. Axel R. Hansen
- Doug Hulmerger, Ph.D.
- Dr. and Mrs. Thirumaleshwara P. Kanchana
- Mr. Gintautas Kerge and Ms. Jolanta Kergiene
- Dr. Howard and Mrs. Tina Kesselheim

#### Mr. Raymond C. Kubacki, Jr.
- Dr. Yueh Lee
- Mr. and Mrs. Laurence X. Li
- Mr. and Mrs. Brent T. Lin
- Mr. Guofeng Liu and Ms. Nengzi Jiang
- Dr. J. Michael McQuade
- Dr. and Mrs. Peter Meindl
- Dr. Michael C. Mintzer and Ms. Alla R. Zaprudsky
- Mr. and Dr. Sat Nagar

#### Nordson Corporation
- Mr. and Mrs. Sheldon Quan
- Mr. and Mrs. Robert M. Shellenbarger
- Mr. and Mrs. John F. Simon
- Ms. Bonnie Simpers
- Mr. Robert Sinnott

#### Mr. and Mrs. Rajesh Iyer
- Dr. and Mrs. Sanjay V. Khare
- Mr. Changwoo Lee and Ms. Seulki Kim
- Dr. Jian Y. Li and Dr. Guiyan Xu
- Dr. and Mrs. Ashutosh Limaye
- Mr. Jiajun Liu and Ms. Tong Zheng
- Vandana L. Madhavan, M.D., M.P.H.
- Dr. Vladimir A. Mandelshtam and Dr. Svetlana Y. Jitomirskaya
- Dr. and Mrs. Neelesh A. Patankar

#### Mr. and Mrs. Neil Todreas
- Mr. Dewei Tsao and Dr. Vivian Lu
- Mr. Xiaojun Wang and Dr. Liwei Wang
- Mr. and Mrs. James Yee
- Dr. Joe Zhu and Dr. Yao Chen
THANK YOU CEE DONORS!

DONORS $100-$499
Mr. & Mrs. Joaquin and Maite Ballesteros
Rachel J. Beane, Ph.D.
Dr. and Mrs. William S. Beebee
Mr. and Mrs. Ray and Kate Bemish
Meghana A. Bhatt, Ph.D.
Dr. and Mrs. Philemon Dang
Mr. and Mrs. Mel Chaskin
Shamik Das, Ph.D.
Mrs. Julia Davis
Ms. Eve P. Egelhof
Mr. Charles M. Farmer
Mr. and Mrs. F. Joseph Feely, III
Adam A. Friedman, M.D., Ph.D.
Ms. Noa Glaser
Ms. Suzanne N. Golomb
Ms. Joan Grossblatt
Mrs. Julia Davis
Shamik Das, Ph.D.
Chaskin

DONORS Up To $99
Ms. Molly Allen
Mr. and Mrs. George Au
Mr. and Mrs. Ken Aull
Ms. Jessica Bailey
Dr. Bin Lin and Dr. Xiangfei Zeng
Mr. Huan Liu
Mr. Stanley Liu and Ms. Fangping Chen
Drs. Jed and Cecile Mocasco
Adam G. Matthews, Ph.D.
Christie Nelson, Ph.D.
Ms. Styliana Pantela
David Patrick, Ph.D.
Mr. Xiaomin Peng and Mrs. Angela Fu
Dr. and Mrs. James Pittelman
Dr. and Mrs. Roger Rains
Mr. Rajiv Ranjan and Mrs. Sangeeta Prasad
Emily E. Riehl, Ph.D.
Mr. Vivek Sahota
Dr. and Mrs. Raymond Scalettar
Mr. and Mrs. Thomas K. Scelfo
Evan M. Schwartz, Ph.D.
Mr. and Mrs. Sebastian SebaRaj
Mr. and Mrs. Christopher Sedlock
Dr. and Mrs. Kenneth Seever
Adam Shaywitz, M.D., Ph.D.
Mr. Parth Sheth and Ms. Da Lin
Mr. Huanqiang Shi and Ms. Xiaoli Zhao
Drs. R. Todd and Catherine Snowden
Mr. and Mrs. Richard W. Steyer
Dr. and Mrs. Hengming Tai
TAP Supply, INC
Mr. Biju Thomas and Ms. Parvathi Saraswathyammal
Mr. and Mrs. James Topping
Mr. and Mrs. Prakash Upadhyayula
Mr. Albert Z. Wang
Mr. and Mrs. Jack Wang
Drs. Sanwu Wang and Mei Wu
Mr. and Mrs. Herb Wolas
Mr. Yun Xiao and Ms. Lin Jin
Mr. Fujun Xu and Dr. Xianglei Chen
Dr. and Mrs. Rakesh Yadav
Dr. Bin Yang and Ms. Bowman Xu
Ms. Anne Z. Ye
Oliver L. Yeh, M.D.
Mr. Zhong Yi and Ms. Lijun Zou
Mr. Xiaobiao Yin and Ms. Jing Zuo
Mr. Yuqing Zhang
Mr. David Zhu
Ms. Julia Zhu
Mr. and Mrs. Steven Zhu

Happy Holidays and Grateful Thanks to All of Our Friends and Supporters!

RSI, USABO, or TEP are the gifts that keep on giving. Alums of CEE’s programs enjoy years of camaraderie, including college recommendation letters, professional opportunities with major cutting edge corporations and networking events throughout the United States. CEE’s commitment to nurture careers of excellence and leadership in science and technology continues to prosper with your help! Contributions to the Center are tax-deductible. Your gift can kindly be made online at www.cee.org/donate, by phone (703) 448-9062, or mail to: Center for Excellence in Education, 8201 Greensboro Drive, Suite 215, McLean, VA 22102. CEE is a 501(c)(3) charitable organization.
## LIEBERMAN Awardees

CEE is pleased to announce the 2021 Joseph I. Lieberman Awardees for Outstanding STEM Achievement. The awards will be presented at the Center’s spring event.

**Mark Kantrowitz** (RSI ’84) is former Publisher and VP of Research, Savingforcollege.com. He is a nationally-recognized expert on student financial aid, scholarships and student loans. His mission is to deliver practical information, advice and tools to students and their families for them to make informed decisions about planning and paying for college. He earned Bachelor of Science degrees in Mathematics and Philosophy from MIT and a Master of Science degree in computer science from Carnegie Mellon University.

**Lauren K. Williams** (RSI ’94) is Dwight Parker Robinson Professor of Mathematics at Harvard and Sally Starling Seaver Professor at the Radcliffe Institute. She is known for her work on cluster algebras and tropical geometry. She earned an A.B. in Mathematics from Harvard University and a PhD in Mathematics at the Massachusetts Institute of Technology.

Both Mark and Lauren are exemplary models of students supported by the Center’s programs. The Awardees are chosen on alternate years by a vote of CEE’s Board of Trustees.

The Lieberman Award includes a $10,000 stipend. It acknowledges significant STEM and business accomplishments and recognizes Senator Lieberman’s longtime support as a CEE Trustee.

## CEE Alumni accolades

**Brad Hargreaves** (USABO ’03, ’04) has been named by the Ernst & Young LLP (EY US) as Entrepreneur Of The Year® New York. He is the Founder & CEO of Common, the leading residential brand and operator that designs, leases, and manages multifamily properties. Previously, he co-founded General Assembly, a global education institution with campuses in more than 15 cities worldwide. He was a Venture Partner at Maveron, General Assembly’s lead investor. Brad has been named to Vanity Fair’s “The Next Establishment, ”Inc. Magazine’s “30 Under 30,” and Business Insider’s “Silicon Alley 100.” He holds a B.S. in Molecular Biology and Economics from Yale. Mr. Hargreaves represented the U.S. in 2004 as a member of Team USA at the 15th Annual International Biology Olympiad in Brisbane, Australia, where he was a Gold medalist. A video of Brad speaking about his work ethic is here.

**Aaron Kesselheim** (RSI ’91), M.D., J.D., M.P.H. Professor of Medicine, Harvard Medical School, has been elected the National Academy of Medicine (NAM). Election to the Academy is considered one of the highest honors in the fields of health and medicine. The Academy recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Dr. Kesselheim received his election citation for his national leadership in studying how prescription drugs and medical devices interact with regulatory practices and the law to affect patient health outcomes. Blending rigorous empirical and policy analysis, his research shapes the understanding of how to improve the safety, effectiveness, and affordability of medical product. Dr. Kesselheim received his A.B. from Harvard, an M.D. and J.D. at the University of Pennsylvania and his M.P.H. at Harvard School of Public Health.
Ela Ben-Ur (RSI ’92) is Founder, Innovators’ Compass, as well as Principal, Innovation Coach and Consultant, i2i Experience, and Adjunct Assistant Professor of Design at Olin College of Engineering. She holds a B.S. and M.S. in Mechanical Engineering from MIT.

Eric Ford, PhD (RSI ’95) is Professor of Astronomy & Astrophysics at Penn State University. He holds an S.B. in Physics & Mathematics from MIT and a PhD in Astrophysical Sciences from Princeton.

Zack Gold, PhD (USABO ’10) is a Postdoctoral Researcher at Cooperative Institute for Climate, Ocean, and Ecosystem Studies at the University of Washington & NOAA Northwest Florida State College. He earned a B.S. in Marine Biology at Stanford and a PhD in Ecology and Evolutionary Biology at UCLA.

Sara Goldhaber-Fiebert, PhD (RSI ’92) is Clinical Professor, Anesthesiology, Perioperative and Pain Medicine and Co-Director Evolve Simulation Program at Stanford University School of Medicine. She earned an A.B. and MD at Harvard.

George Hansel (RSI ’07) is Sr. Hardware Engineer at Lyft, and Principal, Epsilonic Utility. He earned a Bachelor’s Degree in Physics and a Master’s Degree in Aeronautics and Astronautics, both at MIT.

George Ho (RSI ’90) is Global Value Investor, Managing Member and CIO, NIV Asset Management LLC. He earned an A.B. in Applied Math/Economics at Harvard College and an MBA at Harvard Business School.

Cedric Hobbs (RSI ’90) is Chief Architect, Anwansi, Inc. He earned a B.S. in Engineering & Applied Science at Caltech and an M.S. Mechanical Engineering at Stanford.

Katie Lilencamp Byl, PhD (RSI ’86) is Associate Professor, Dept. of Electrical and Computer Engineering at University of California Santa Barbara. She earned a B.S., M.S., and PhD in Mechanical Engineering at MIT.

Albert Lin (RSI ’91) is Software Engineer at Google. He earned a B.S. and an M.Eng. from MIT.

Helena Fu Orlick (RSI ’97) is Senior Policy Advisor at the White House Office of Science and Technology Policy. She holds a B.S. in Urban Studies and Planning from MIT and an MPP, Public Policy from Harvard.

Rajesh P.N. Rao, PhD (RSI ’87) is the CJ and Elizabeth Hwang Professor in the Paul G. Allen School of Computer Science and Engineering and Department of Electrical and Computer Engineering at the University of Washington (UW), Seattle. He also is the Director of the Center for Neurotechnology (CNT). He earned a Bachelor’s degree at Angelo State University in Computer Science and Mathematics. His M.S. and PhD degrees were gained from the University of Rochester.

Petra Reyna Harmon One Hawk (RSI ’90) is Director at Standing Rock Sioux Tribe Nutrition for the Elderly/Caregiver Support Program. She earned a Bachelor’s Degree in Biology/Biological Sciences at The University of North Dakota and a Masters Degree in Public Health at North Dakota State University. She also completed 3 years of medical school at the University of South Dakota, Sanford School of Medicine.

Amrit Saxena (RSI ’10) is Founder & CEO of SaxeCap, an AI transformation and PE investment firm that conducts AI-levered buyouts and transforms enterprises. He is an angel investor in data, AI, and enterprise software companies. He holds a B.S. in Computer Science (AI), M.S. in Management Science & Engineering, and an MBA from Stanford.

Charlotte Seid, PhD (USABO ’05) is the manager of the Benthic Invertebrate Collection at Scripps Institution of Oceanography at UC San Diego. She received a B.A. in Chemical and Physical Biology from Harvard and a PhD in Biology from MIT. She instructed the 2018 and 2019 National Finalists of the USABO at UC San Diego in Benthic Invertebrates.

Dr. Rachna T. Shroff (RSI ’95) is Associate Professor of Medicine and Chief, GI Medical Oncology at the University of Arizona Cancer Center. She is Director of UACC’s Clinical Trials Office and is Vice Chair of Clinical Research for the Department of Medicine. She earned a B.S. in Biochemistry from Brown. Dr. Shroff completed her fellowship in medical oncology at the University of Texas MD Anderson Cancer Center, where she simultaneously obtained a master’s degree at the Graduate School of Biomedical Sciences. She earned an M.D. at Thomas Jefferson Medical College in Philadelphia.

Joseph Subotnik, PhD (RSI ’95) is Edmund J. and Louise W. Kahn Endowed Term Professor of Chemistry at University of Pennsylvania School of Arts & Sciences. He earned a B.A. in Physics and Math at Harvard and a PhD in Biophysics at UC Berkeley.
The Center for Excellence in Education nurtures high school and university scholars to careers of excellence and leadership in STEM and encourages collaborations between and among leaders in the global community. CEE sponsors the Research Science Institute, the USA Biolympiad, and the Teacher Enrichment Program. Founded in 1983 by the late Admiral H.G. Rickover and Joann DiGennaro, President of the Center, the organization's programs help keep the U.S. competitive in STEM and encourage international collaboration with scientific and technological leaders in the global community.

CEE’s programs are open to students and teachers, at no cost to them, regardless of race, color, creed or economic background; the only criterion is academic excellence. Follow CEE on social media: