



### Calendar of Events

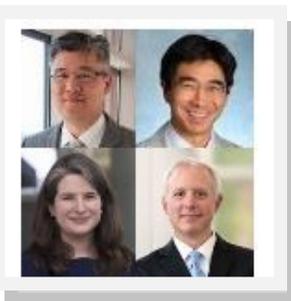
#### Virtual Bite of Science



CEE and TEP are delighted to offer everything you love about our signature Bite of Science experiences this fall, in a new virtual format! More information is coming your way very soon!

#### CEE Special Event

CEE recently released a unique look at the “[Newest Developments in Medical-related Fields](#),” featuring RSI Program Alumni who are now specialists in respective medical fields. Watch the replay [here](#).



#### Focus Groups

TEP is conducting virtual ‘Focus Groups’ throughout August to explore the needs of STEM educators to best implement remote education.

Educator input helps TEP develop and provide resources that support STEM teachers in implementing efficient and engaging virtual classrooms. For additional information email [kedwards@cee.org](mailto:kedwards@cee.org).

### Community in STEM Science

#### Why the Global Science Community Must Work Together Beyond the Coronavirus Pandemic

*Dr. Mukhisa Kituyi, Secretary-General of UNCTAD*  
Worldwide COVID outbreaks have made clear the critical need for open access to data, research outcomes, and research infrastructure. Embracing a global, open access approach also helps address the needs of developing countries that often rely on [global collaborative processes](#) for medical care.

#### Technology & Mathematics

Justin Graves, [a 17-year-old senior student from Oxon Hill, Maryland, won 1st place in the Regional Network for Teaching Entrepreneurship Challenge.](#)

Despite obstacles, the year-long challenge took place on time and online. Justin will advance to the national competition in September to compete for a \$12,000 prize.

Another notable project came from Julia Tan, age 16, of Falls Church, Virginia, who took 3rd place for her product design: “‘District Helper,’ which provides parents with an easy way to hire service providers at a reasonable rate.”



#### Engineering

[SpaceX](#) Two months ago, TEP shared and the scientific community celebrated the launch of SpaceX’s Crew Dragon vehicle. On Sunday, August 2nd, the Crew Dragon was the first capsule to splash down in nearly half a century.

## The Lab Bench



The [Lab Bench](#) is currently “under construction” as drawers are made more teacher-friendly. Materials, new and old, will now be organized by content area. Two new spaces, including “Webinars & Digital Learning,” will support our Virtual Bite of Science program. The enhanced site will be ready for use in August.

## CEE Programs USABO Feature

On July 21, CEE announced the names of the high school biology scholars who earned medals at the 18th Annual USA Biolympiad (USABO) National Finals. Nearly 10,000 students from 500 schools, 43 states, & 11 International Schools registered for the competition.

### Gold Medalists

**Judson Lam, Naperville, Illinois**

**Derrick Liang, Alexandria, Virginia**

**Nithin Parsan, Sugar Land, Texas**

**Albert Zhang, North Hollywood, California**

Gold medalists participate as a team in **IBO Challenge 2020** (a virtual substitute for this year’s international gathering), which provides scholars an opportunity to showcase abilities and encounter new and dynamic trends in biology. For more information, including silver and bronze medalists, visit the [press release](#).

The scholars & academic staff are overseen by: Michelle King, Ph.D., Manager, USABO & Kathy Frame, USABO Advisor & Consultant.

## Celebrating the Scientific Community

Peter Tsai, a Taiwanese American materials scientist and inventor with expertise in nonwoven fabric, is also the inventor of the N95 mask. Tsai, who grew up on a family farm in Taiwan, would eventually become a professor of Material Science and Engineering at the University of Tennessee. Credit: Rianna Paciorka USA Today



As COVID spread and PPE supply could not meet demand, particularly for healthcare workers, Tsai ultimately came out of retirement after being called up to work with the scientific collective N95DECON.

Tsai immediately set up a makeshift laboratory in his home and began experimenting. He found that the N95 masks could be heated to 158°F for 60 minutes for purposes of decontamination for re-use. He eagerly shared his findings, along with suggesting other nonwoven fabrics to use for mask-making, such as car shop towels.

Tsai’s colleagues say despite being a pioneer in the field of filtration, he is humble.. Tsai has shared many touching thoughts throughout his many recent interviews: “If I can have this opportunity to help the community, then it will be a good memory for the rest of my life,” Tsai said. “I’m happy to do it.”

Regarding his contributions, Tsai’s friends have joked that he could be making a fortune, now that his knowledge is in high demand. He retorts that money has never been his primary motivation. “If I could choose, I would rather save 100 million lives than make 100 million dollars,” he said.

In recognition of his efforts, Tsai was chosen for UTRF’s Innovator Hall of Fame Award in 2019, having also previously received the 2006 B. Otto and Kathleen Wheeley Award for Excellence in Technology Transfer, UTRF’s most prestigious honor.

## Timeless STEM

“You don’t learn to walk by following the rules. You learn by doing, and by falling over.”

-Sir Richard Branson - Investor, Author, Philanthropist -  
As educators prepare to begin (or continue) virtual, in-person, or hybrid model school years, remember to be kind to yourselves and patient with others as STEM education ventures through uncharted waters.