



# National Youth Science Foundation

*A Beacon of Light Since 1963!*

Producing the National Youth Science Camp, a tradition since 1963, that introduced gifted youth from across the nation to West Virginia while stimulating their interest in STEM and now offering STEAM programming for West Virginia students utilizing valuable alumni connections and facilities of the National Youth Science Foundation and it's partners.

**West Virginia student programs are in full swing this spring!** To date, we have offered four 1-hour virtual seminars to WV students via Zoom. Thus far, we have engaged with three dozen STEM classrooms across 20+ counties, some tuning in to the seminars live and others using the recorded versions afterward. Topics have ranged from the life cycle of brain-infecting parasites to the statistical analysis of chocolate chips in a cookie. Our partners at the WV Department of Education and the June Harless Center have been instrumental in helping us promote the series and foster engagement with the educational community in the state. The seminar series will begin again in fall 2021 with another series of four lectures plus Q&A sessions, probably still in a virtual format to maximize accessibility to all students around the state and potentially beyond.

In partnership with the West Virginia Higher Education Policy Commission (WVHEPC), West Virginia Science

Adventures, Marshall University, and the Clay Center for the Arts and Sciences, we will be offering three STEM day camps at three

different locations around the state. The camps will be a computer coding camp, a LEGO robotics camp, and a microbiology camp. The camps will be each offered for free for one week in Huntington, Charleston, and Davis to a cohort of 8-10 middle school-ages campers. All instructors are fully vaccinated, and groups are being kept small to maximize distancing while indoors and to eliminate the need for sharing of equipment by providing each camper with their own set of gear the entire week. For the week the camp is being in Davis, we have partnered with the Youth Leadership Association at nearby Camp Horseshoe to provide lodging for our instructors. To help make this opportunity available for students of all economic levels, we will offer free lunch to campers and transportation to and from camp upon request.

Plans are being made to begin offering one and two-day field trips based out of the NYSCenter beginning as early as summer 2021. For the summer, we are considering options to take advantage of our 111 acres of forested wilderness near the NYSCenter by offering day trips of guided nature hiking with a focus on one of several natural history topics,

e.g., bird watching, plant identification, mountain hydrology, etc., followed by a day spent interpreting what was learned using our Makerspace and by enlisting a member of the local Thomas arts community to offer a scientific illustration workshop. In the fall, we will utilize the nearby Corridor H to offer a roadside geology field trip that would be paired with a day of fossil hunting at various local sites in the region.

Ike Kahler and I were trained to serve as Project WET and Project Learning Tree (PLT) facilitators for the region, which will enable us both to then go on to train pre- and in-service WV teachers how to implement units and lesson plans to educate their students about their environment. The final component of the training is an in-person two-day workshop with our regional coordinators and the other facilitators-in-training this June. As part of our effort to foster continuing education for teachers, we will host this two-day workshop at the NYSCenter.

~Ryan Haupt

To learn more and apply to upcoming WV programming, visit [www.nysf.com/programs](http://www.nysf.com/programs)

## STEM Seminar Series - Guest Lecturers Presented this Spring to WV Students:



Dr. Kelly Weinersmith, Rice University  
Careers in Parasitology, and Nature's Zombie Makers



Dr. David Trowbridge, Marshall University  
Using Technology to Connect the Public to History, Art, and Science: An Introduction to Clio



Jacob Stump, Club Scientific  
Engineering is for Everyone: A day in the life of different engineers



Dr. Herbie Lee, University of CA, Santa Cruz  
Learning with Statistics: from chocolate chip cookies to rocket science

## NYSCenter Updates

(Riverstone Rd, Davis)

Our summer schedule at the NYSCenter is filling up fast. We have staff training, visits from over 100 local students and teachers, three day camps and, as always, the work of upgrading and improving everything from IT to building security.

In early June, Dr. Kinghorn, Dr. Haupt and myself headed out to the Otter Creek Wilderness for three days of training in the bush with Appalachian Expeditions (APEX, a non-profit educational program where participants learn essential camping skills, ecological concepts, and Leave No Trace [LNT] principles). This was an opportunity for those of us conducting outdoor programming to improve our outdoor skill sets while working out details for a more robust outdoor programming near the NYSCenter in Davis. More staff training for Dr. Haupt and myself will be done with Project Wet, which will qualify us as facilitators for Project Wet activities that introduce students to Ecology and the extreme importance of water as a resource.

Later in June, a group of 30 students will be visiting the NYSCenter on a trip sponsored by Camp Horseshoe and Tucker County Chamber of Commerce. These students will be presented with a talk on career opportunities within STEM fields and will include a tour of the NYSCenter facilities.

Separately, we will be hosting a group of 80 elementary school students and their teachers from Tucker County. I will give a talk on the importance of Mathematics in all STEM fields and

Dr. Haupt will share some of his research on prehistoric sloths. Afterwards, students will be given a tour of the facility and will go on a fossil hunt with Dr. Haupt!

Later in the summer, we will have trail building opportunities for interested students and families and even offer star-gazing with one of our telescopes. Plans are also underway to host a highly intensive STEM boot camp through Academies of Loudon. This will be a 2 -3 day long program to include environmental science projects, activities on water quality, microscope training, as well as training for their staff.

Conversion of the waste water treatment machine is moving forward. The health inspector will be visiting in late June to discuss the feasibility of redirecting the wastewater to allow the re-tasking process to begin. In the meantime, we have a population of fish living in the greenhouse as an experiment. They have been surviving there for a month without needing to be fed. Interested parties, including Friends of the Blackwater and APEX have shown interest in partnering with us to use that facility for agricultural / aquaponics educational programming.

In other news, NYSCenter building systems are being updated and replaced. The new firewall from SonicWall (Founder, Bill Conner is NYSCamp Alumni) has been installed and is providing Internet security for our network and a new and upgraded server is scheduled to be installed.

More upgrades and improvements to our building and infrastructure will be ongoing this summer so be looking for more exciting news about program happenings in the near future!

~Ike Kahler



**National Youth Science Foundation**  
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*Address Service Requested*

**Welcome! It is a pleasure to introduce new members of the Board of Trustees!**



Michael Stark

Melissa Bucci Laue is a Charleston, West Virginia native who now resides with her husband and daughter in Atlanta, Georgia. Melissa has remained interested and active in West Virginia educational entities. In 2004, Melissa and her husband, Jeff, started N3-LLC, an international technology-enabled digital marketing firm with offices in a dozen countries that is now a division of Accenture. Melissa sees high value in increasing and encouraging ethical STEM outreach to students from West Virginia, across the United States, and from other countries.

Michael Stark (NYSCamp delegate; MO 1984) is and Administrative Law Judge in Milwaukee, Wisconsin. He holds a BS in Math from Truman State University and a law degree from Washington University in Saint Louis, Missouri where he was recognized for his scholarship and outreach skills. His NYSCamp service as a key staff member spans 15 years!



Melissa Bucci Laue

*In addition to adding two new strong Trustees, the NYSF is proud to report the programming for both West Virginia students and the National Youth Science Camp will this year reach a record number of students. I also want to recognize the outstanding support of WV Superintendent of Schools, Clayton Burch and the WVDOE staff that have supported new NYSF STEAM programming. ~Ron Pearson*

**Connect, Mentor, Share the Memories... Join the NYSF Collaboratory Today!**  
**nysfcollaboratory.org**



# 2021 Virtual National Youth Science Camp

Due to the ongoing global COVID-19 pandemic, the NYSCamp will be virtual this summer. Thanks to a U.S. State Department grant received in response to doubling the number of international delegates, Brian Kinghorn (NYSCamp Director) was able to hire two assistant directors (Kristen Fitzgerald Biondich and Kevin Rabinovich), 14 cabin leaders, and three tech support staph to facilitate the camp this year. We will be virtually hosting 140 delegates from across the nation and 12 countries across the Americas from June 28 to July 21, 2021.

Shiva Ragagopal (NV 2011), an embedded software engineer at Google Fitbit, has been selected to give the Martha Werhle Opening Lecture on Monday June 28. STEM professionals who are on the cutting edge of discovery and innovation across the nation will present synchronous online lectures with follow-up Q&A sessions about their work, fields of study, and scientific passions and interests. These lecture topics include NASA programs, CRISPR, Vaccine Development, Global Health Initiatives, 21st Century Energy Grids, Language Development, Statistics, Microbiology, Ocean Exploration, STEM in Business, Innovation, and Communicating Science. West Virginia Senators

Manchin and Capito have prerecorded welcome messages for delegates, and Hershel "Woody" Williams, the last living WWII Medal of Honor recipient, will speak to the delegates about civic responsibility to commemorate Independence Day. We will also host special events including a Peter Mulvey concert, the AAAS Science Policy Panel, a virtual tour of the Greenbank Observatory, and daily Laura Dill's Porch discussions on qXtro, a platform created by Ernie Ting (NJ 1972). To better align with the spirit and outdoor nature of camp, we have decided to forgo virtual programming on the weekends and encourage delegates to get outdoors to explore, spend quality time with family and friends, and take a break from screens for a couple of days.

Even though our delegates will be unable to join us in the beautiful mountains of West Virginia, we are confident that their NYSCamp experiences will be life-changing as they take the opportunity to engage with the camp staph, other delegates, and our amazing lecturers and presenters.

~Brian Kinghorn, Director, NYSCamp

**National Youth Science Foundation is a tax-exempt 501 (c)3 organization**  
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THANK YOU!