



National Black History Month
National Engineering Week is 2/20–2/26
Introduce a Girl to Engineering Day is 2/24

TEP Events

Register for all events of interest
by clicking on the event.

[Sweet Treats: Confectionary Science and Technology](#)

Tuesday, February 8, 2022
6 – 7 pm, ET

Featuring speakers from Hershey

[Learn more](#)

[STEM College & Career Webinar: Manufacturing](#)

Thursday, February 17, 2022
5 – 6:15 pm, ET

Featuring engineers from **Procter & Gamble**
(Consumer Products), **Arconic** (Aluminum) &
Equitrans Midstream (Natural Gas)

[Virtual Bite of Science](#)

Tuesday, February 22, 2022
5 – 6:30 pm, ET

Featuring **Jonas Ketterle**, CEO of **Ora Cacao** & Dr.
Professor of **Hydrogeoscines**

[Stick It: Bio-inspired Adhesives](#)

Tuesday, March 8, 2022
6 – 7 pm, ET

[View TEP Spring Calendar](#)

STEM News

Science

[Compounds made from 'digested'
molecules feeds appetite for greener
pharmaceuticals and agrochemicals](#)

A method of producing vital chemical building blocks for use in the pharmaceutical and agrochemical industries mimics how plants manufacture them.

Technology

[Self-healing nanomaterials usable in solar
panels and other electronic devices](#)

Scientists developed a process where a group of materials called double perovskites display self-healing properties after being damaged by the radiation of an electron beam.

Engineering

[A soft, stretchable thermometer](#)

Researchers have developed a soft, self-powered thermometer that can be integrated into stretchable electronics and soft robots.

Mathematics

[Studying the Big Bang with artificial
intelligence](#)

A neural network has been developed that can be used to study quark gluon plasma - the state of the universe after the Big Bang. Now it is produced by high-energy atomic nucleus collisions, for example at CERN.

A Lesson to Learn

Lockheed Martin STEM Careers

[Talk Techy](#)

Watch our new “Talk Techy” video series to see how Lockheed Martin engineers apply STEM concepts every day in surprising ways.

[Career Predictor](#)

Not sure which STEM career is right for you? Use our career predictor to find out!

Partner Opportunities

Illumina

Get ready for [DNA Day](#) on April 25, 2022! Educators can participate in two ways through the [DNA Day](#) website:

- **Register to receive a free [Strawberry DNA Extraction kit](#)**
[Option A:](#) Contains materials for 32 experiments that can be done in a classroom or sent home for a distance learning environment
[Option B:](#) A single demo kit to do in front of your students
- **Register to match my classroom with an Illumina STEM professional** to learn about their career (this professional could be either a scientist or non-scientist)

TATA Consulting

- [Ignite My Future](#) TECHademy is coming on March 3rd. Register at the bottom of the page to receive updates.

American Society of Human Genetics

- [DNA Day Essay Contest](#) is open to students in grades 9-12 worldwide and asks students to examine, question, and reflect on important concepts in genetics.

Celebrating Engineers! Ursula Burns

Ursula Burns was born on September 20, 1958 and was raised in a low-income housing project on Manhattan’s Lower East Side. Throughout her academic career, she excelled at math. Burns graduated with a degree in mechanical engineering from the Polytechnic



Institute of New York University in Brooklyn in 1980. That same year, Burns started pursuing a master’s degree in mechanical engineering at Columbia University and joined Xerox as a summer intern, which helped to pay her educational expenses.

After completing her master’s degree, Burns joined Xerox as a full-time employee and quickly gained a role in product development. Starting in 1992, she progressed through various roles in management and engineering, eventually becoming senior vice president of corporate strategic services. In this position, Burns oversaw production operations and allowed her to broaden her leadership in the areas of global research, product development, marketing, and delivery. She was named president of Xerox in 2007 and just two years later was named CEO. and she was named president of Xerox in 2007. Two years later she was named CEO, and in 2010 she became chairman of the board.

In 2010, as chairman of the board, Burns started to transform Xerox which was struggling with declining revenue. During this transformation, business shifted focus from products to services and Xerox acquired another company. Unfortunately, Xerox could not be revived and in 2016 Burns began efforts to spin off some of its business services into separate companies. In 2017, she resigned as chairman of the board.

During her time at Xerox, Burns held several government appointments and served on the board of numerous companies. Just last year, she published her memoir “Where You Are is Not Who You Are”. Burn’s career should serve as a role model for all students interested in business or STEM careers.

To learn more: [Lean In](#) & [How I Saved Xerox From a Near-Death Experience](#)