



Teacher Enrichment Program November 2021 International Radiology Day Nov. 8th

Fall 2021 TEP Events

Educators are encouraged to register for all events of interest regardless of location. Click [here](#) for additional event and speaker information.

STEM College & Career Webinars

Help your students to find their place in STEM. Join to hear local STEM industry professionals and colleges share insights into STEM careers and educational pathways.

Event	Date	Time
Maryland	Nov 16	5-6:15, ET
Central Florida	Nov. 30	5-6:15, ET
Panhandle Florida & Alabama	Dec. 2	5-6:15, ET
California	Nov 4	5-6:15, PT



Learn more about the interdisciplinary nature of STEM, the real-world applications of STEM skills and how STEM intersects with our daily lives. Events from 5—6:15 pm, ET.

Event	Date
Changing the Game: The Technological Revolution of Sports	Nov 9
To Infinity & Beyond: The Implications of Civilian Space Travel	Dec 14

Event Recordings Available!

[Super Snouts: The Olfactory Excellence of Man's Best Friend College & Career Webinars](#)
[Virtual Bites of Science](#)

Did You Know?

22 of CEE program alums currently work in Radiology?

They include:

- Dr. Boas (RSI '94) & Dr. Lee (RSI '95) are radiologists at City of Hope
- Dr. Prabhaker (RSI '95) & Dr. Zurkiya (RSI '95) are radiologists at Massachusetts General Hospital
- Dr. Kamath (RSI '92) is a radiologist at Fairfax Radiology
- Dr. Milla (RSI '91) is a Pediatric Radiology at Children's Healthcare of Atlanta
- Dr. Shih (RSI '93) is Chief of Neuroradiology at Walter Reed Medical Center
- Dr. Srinivasan (RSI '90) is a Radiology Director & professor at the University of Michigan

STEM News

Science

[Natural mineral hackmanite enables new method of x-ray imaging](#)

Researchers have discovered a new method of X-ray imaging based on the coloring abilities of the natural mineral hackmanite.

Technology

[Cell labelling method from microscopy adapted for use in whole-body imaging](#)

Researchers develop imaging methods to examine bodily processes from the individual building blocks to the whole system.

Engineering

[Modern simulations could improve MRIs](#)

Engineers find more efficient models to analyze contrast agents that identify disease.

Mathematics

[New artificial intelligence tech set to transform heart imaging](#)

A new artificial-intelligence technology for heart imaging can allow doctors to examine hearts for scar tissue while eliminating the need for contrast injections.

RSI & USABO Deadlines

The Center for Excellence in Education offers two STEM programs at no cost to high-performing high school students: the Research Science Institute ([RSI](#)) & United States Biolympiad ([USABO](#)).

Research Science Institute (RSI)

The application for RSI opens mid-November. Dates and additional information to be announced.

United States Biolympiad (USABO)

The USABO is the nation's largest biology education and testing program. Explore the world of Biology through the USABO. Registration for the USABO is currently open!

For more information about programs and how to register or apply, visit program websites ([RSI](#) & [USABO](#)).

A Lesson to Learn



*Making Science Interesting & Attainable
using Pop Culture, Comics and Science
Fiction*

[Starship's Windows: Sci-Fi Materials Meet the Real
World?](#)

[Science Class: The Flash's Hypothermia](#)

[WandaVision and the Cosmic Microwave
Background Radiation \(CMBR\). What's the CMBR?](#)

CEE Partner's teacher opportunities

US Dept. of Energy's Albert Einstein Distinguished Educator Fellowship Program is accepting applications for the 2022-2023 Fellowship.

- **Deadline: Nov. 18, 2021 at 8:00 PM, ET**
- This program provides a unique opportunity for accomplished K-12 STEM educators to spend eleven months working in Federal agencies or in U.S. Congressional offices to apply their extensive knowledge and classroom experiences to national education programs and/or education policy efforts.
- [Find out more here](#)

National Ecological Observatory Network (NEON) is a continental-scale observation facility operated by Battelle and designed to collect long-term open access ecological data to better understand how US ecosystems are changing.

- The [Learning Hub](#) offers educational resources including online tutorials, teaching modules and materials (advanced classes) and videos about a wide variety of topics.

Celebrate Radiology! Rosalyn Yalow

"The world cannot afford the loss of the talents of half of its people if we are to solve the many problems which beset us."

Rosalyn Yalow, Ph.D. was born in the South Bronx in 1921. As a smart but poor New York City girl, Yalow attended Hunter College, a highly competitive free women's college. Her parents wanted her to study to become a teacher, but she wanted to be a physicist. She became Hunter's first physics major, graduating early and with honors.



Yalow almost didn't pursue a doctoral degree in physics for fear that graduate schools would not accept her or offer financial aid because she was a woman. But her professors persisted and the physics department at University of Illinois at Champaign-Urbana offered Yalow a teaching assistantship. Yalow received her Ph.D. in 1945 and was the only woman in a faculty of 400 professors and teaching assistants.

Yalow joined the Veterans Administration Hospital in the Bronx to develop the Radioisotope Service, a department that would explore medical applications of radioactive isotopes. She converted a janitor's closet into her first laboratory. Then in 1950, Solomon Berson joined her small team at the VA, kicking off a 22-year research collaboration. Yalow and Berson first attempted to use radioisotopes to estimate blood volume more accurately. Soon they applied their methods to insulin, as purified insulin was easy to obtain and work with.

Yalow and Berson's method – using radioactively tagged substances to measure antibodies produced by the immune system – would make biological research possible on a whole new level. Radioimmunoassay, or RIA, as they called it, could detect extremely low concentrations of substances, far lower than ever before. This was a big discovery for the treatment of diabetes. But it was an even greater discovery for the future of medical research.

For her work, she was recognized with the Albert Lasker Prize for Basic Medical Research and the following year she was awarded the Nobel Prize with Andrew V. Schally and Roger Guillemin for their work on radioimmunoassay. Her long time research partner Berson was not recognized, as he died before the award was announced.

Learn more: [Nobel Prize](#) & [Hunter/CUNY](#)