VIRTUAL
PROFESSIONAL DEVELOPMENT WORKSHOPS

Teacher Research Academies

TRA

Lawrence Livermore National Laboratory

Aligned with NGSS Disciplinary Core Ideas & Scientific and Engineering Practices

SUMMER PROGRAM 2020

The Teacher Research Academy (TRA) offers middle school, high school, and community college faculty unique professional development experiences at Lawrence Livermore National Laboratory (LLNL).

TEACHER OUTCOMES:

- Gain increased understanding of science, technology, engineering, and math aligned with NGSS requirements
- Understand science in a real world context
- Improve ability to guide student research

ACTIVITIES:

- Meet LLNL scientists online
- Virtual tours of research facilities
- Learn how to apply Common Core technical communication skills
- Use cutting edge science processes and practices found in research laboratories

Continuing education credit available—CSU Chico

TIME: 8:30 am – 2:30 pm daily

FEE: All virtual workshops are **FREE.**

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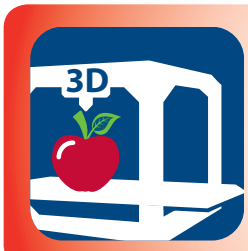
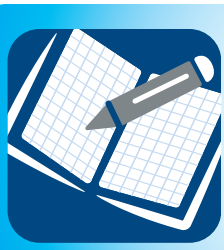
REGISTER ONLINE:
EDUCATION.LLNL.GOV



3D PRINT & DESIGN

Incorporates modeling, design, and three-dimensional printing for introduction to curriculum, learn to print everyday objects from computational models using Tinkercad.

July 13 – 17



TECHNICAL WRITING

Prepares teachers to build students' technical-writing skills toward CCSS goals to improve lab instruction, technical literacy, lab notebooks, abstracts, and science posters.

June 15 –17

BIOSCIENCE

Emphasizes overview of the field with instruction on basic skills to include DNA and protein analysis through inquiry and virtual experimentation.

July 6 –10

MODELING FOR SCIENCE & MATH

Introduces concepts of computer modeling and simulation using programming with NetLogo to apply towards STEM curriculum using real-world applications.

June 15 –19

FUSION/ASTROPHYSICS

Focuses on properties of electromagnetic radiation, spectroscopy, gravitation, and nuclear physics using tools employed in research laboratories through online activities.

June 8 –12

PHYSICS WITH PHONE SENSORS

This workshop focuses hands-on activities designed to use science and engineering practices to explore core disciplinary ideas in physics using sensors in your smartphone.

June 22 –26

Sponsored by the University Relations & Science Education Program
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