U.S. DEPARTMENT of ENERGY | Office of Science

WDTS WORKFORCE DEVELOPMENT FOR TEACHERS & SCIENTISTS

DOE's Abstract and Ignite Off! Competitions Crown the Next Wave of STEM Storytellers

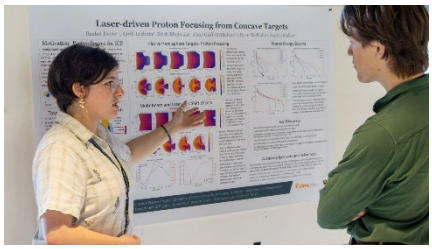
The Department of Energy, Office of Science, Workforce Development for Teachers and Scientists (WDTS) program announced the latest winners of the annual Abstract and Ignite Off! Competitions, designed to help prepare and equip a highly skilled next-generation workforce. While the Abstract competition challenges participants to focus their research into clear, compelling written summaries, Ignite Off! takes that same skill to the stage by challenging participants to share their science verbally, using only photo slides to paint the picture. Both competitions share a common goal: equipping the next generation of scientists with the skills to communicate their discoveries.

Participants in both competitions were selected from two Summer 2025 WDTS programs, the Community College Internships (CCI) and Science Undergraduate Laboratory Internships (SULI). For each competition, one semi-finalist from each of the eleven participating laboratories advanced to the national level.

Ignite Off! Competition

The Ignite Off! competition is hosted by Oak Ridge Institute for Science and Education, spotlighting visionary thinkers who are turning groundbreaking research into real-world solutions. More than 90 participants submitted applications, sharing their science, their story, and their passion for discovery.

"Winning first place in the Ignite Off! is truly such an honor," said Rachel Davis, a SULI participant hosted by Princeton Plasma Physics Laboratory. "I love the work I do, and I find it so fascinating, so being able to share that passion with others means a lot to me."



Davis at her lab poster presentation at Princeton Plasma Physics Laboratory on Laser-driven Proton Focusing from Concave Targets.

Davis is in the process of obtaining her masters in laser plasma physics at University of York and hopes to pursue a PhD in the same field. She attributes participating in Ignite Off! to helping develop her presentation skills and is

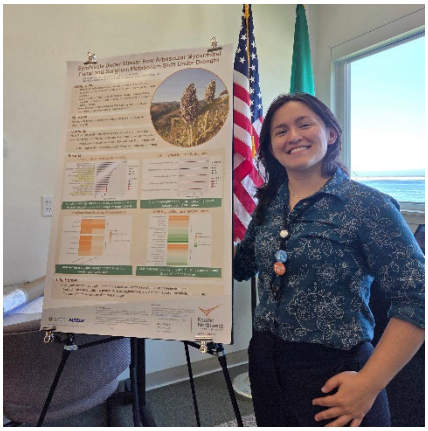
confident she will be able to take on future presentations on her science, technology, engineering, and mathematics (STEM) journey.

With just five minutes, a microphone, and a mission to inspire, the eleven Ignite Off! semi-finalists transformed complex science into compelling stories on stage.

“In my STEM journey, it reaffirmed that people value science, care about its impact, and that my contributions to methanotroph research this summer truly mattered,” said Neleah Aquino, second place Ignite Off! winner and Community College Internships intern hosted by Lawrence Berkeley National Laboratory (LBNL). “Winning second place reminded me of something I had always trusted in myself: my voice.”

Third place Ignite Off! winner Alina Vulcan, a SULI intern hosted by Pacific Northwest National Laboratory, shared that the experience made her stronger and inspired her to continue work in STEM.

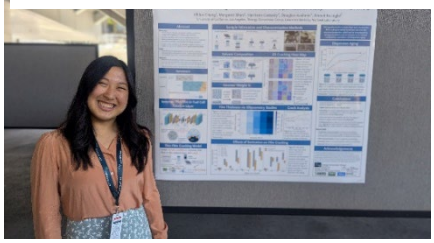
“The process of preparing for Ignite Off! competition made me really appreciate all the work that goes into communicating scientific findings,” said Vulcan. “I also found that I truly enjoyed the process, and I hope in the future to work in roles where I am able to flex both my scientific and communication skills.”



Vulcan beside her lab poster at Pacific Northwest National Laboratory on Symbiosis Under Stress: How Arbuscular Mycorrhizal Fungi and Sorghum Metabolism Shift Under Drought.

Abstract Competition

The Abstract competition required participants to explain their research at a higher level while remaining concise in their messaging. Contestants were encouraged to work with their mentors to strengthen their abstracts and help amplify their research.



Cheng at LBNL beside her lab poster on Parametrization and Characterization of Ionomer Thin Film Cracking for Fundamental and Optimization Study.

“I am very passionate about the intersection between collaborative research via materials science and chemical engineering, and science

writing/communication. Placing in the abstract competition means an incredible deal to me as I pursue my undergraduate, graduate, and post-graduate journey in STEM," said first place Abstract winner, Chloe Cheng, a SULI intern at LBNL.

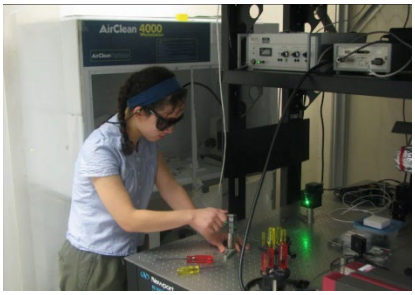
Cheng plans to further their STEM career as a researcher and educator, hoping to impact science, communities, and society. Second place winner Garrett Street, a SULI intern hosted by Oak Ridge National Laboratory, said he plans to pursue dual master of business administration and master of science degrees in business analytics and use his military supervisory skills to help make meaningful decisions in a field that allows him to expand his knowledge of statistical analysis.

"I was never an exceptional student in high school," said Street. "After gaining discipline from pushing myself physically to perform in the United States Navy, I was able to obtain the drive to challenge myself academically in university studies, which is why I decided to attend the University of Tennessee post-military. Winning the competition is more about a reflection of positive self-change to me."

Garrett Street, second place Abstract winner.

Third place winner Penny Duran, a SULI intern at Jefferson Laboratory, shared it was a joy to be recognized for her science writing. As a senior physics major with minors in German studies and professional and technical writing, she plans to pursue a physics PhD program in the fall.

"Given my background in science communication, this competition presented the perfect opportunity to blend my passion for writing with my scientific research," said Duran.



Penny Duran, engaging in laser work at Jefferson Laboratory.

Celebrating Our Winners

Whether writing or on stage, these events challenged the participants to hone their abilities on clarity, connection, and inspiring others with the impact of their work. This new

generation of scientists and engineers are ready to ignite change through sparking curiosity and understanding; transforming complex research into stories that resonate.

See below for a full list of winners.

2025 Ignite Off! Winners

1st – Rachel Davis

2nd – Neleah Aquino

3rd – Alina Vulcan

2025 Abstract Winners

1st – Chloe Cheng

2nd – Garrett Street

3rd – Penelope Duran