

UNIVERSITY OF ROCHESTER LABORATORY FOR LASER ENERGISTICS

SUMMER HIGH SCHOOL RESEARCH PROGRAM

July 6–August 28, 2026
8:30 AM–4:30 PM 250
East River Road Rochester,
New York 14623

Imagine Yourself Here

A Churchville-Chili High School student conducts an experiment in LLE's magneto-inertial fusion electrical discharge laboratory as part of his summer research project.

Experience cutting-edge scientific research in a university laboratory!

The University of Rochester's Laboratory for Laser Energetics (LLE) offers a summer research program for highly motivated high school students from the Rochester and surrounding areas who have just completed their junior year.

Research

Students who are accepted into the program will be assigned to a research project of current scientific interest and supervised by a scientist or engineer. These projects are an integral part of LLE's research program and are related to LLE's OMEGA and OMEGA EP lasers, two of the world's most powerful laser systems.

Projects

Projects span a wide range of disciplines, including diagnostic development; generation of data for hydrodynamics simulations; implosion simulation and machine-learning implosion analysis; computer modeling of experiments planned for the National Ignition Facility and the proposed NSF OPAL laser system; physical and computational chemistry; optical microscopy; optics fabrication and cleaning; and debris minimization in the target chamber. One project even adapted techniques used at LLE to model crystal formation in white dwarf stars.

Compensation

Participants conduct research up to 35 hours each week and are compensated for participation in the program.

Eligibility

Open to Rochester and surrounding area high school students currently in their junior year. Students must be available for the full eight-week duration of the program, which begins after July 4.

To Apply

Students must:

1. Submit a transcript, a recent report card, and a letter of recommendation.
2. Write a short letter and an essay describing their interest in science and technology.
3. Fill out an application at www.lle.rochester.edu.

Visit our website for more information or to apply.



<https://www.lle.rochester.edu/education/summer-high-school-research-program/>

Questions? Contact:

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