Experience cutting-edge scientific research in a realistic environment!

The Laboratory for Laser Energetics (LLE) at the University of Rochester holds a summer research program for up to 16 highly motivated Rochester-area high school students 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 staff scientist or engineer at the Laboratory for Laser Energetics. These projects form an integral part of LLE’s research program and are related to LLE’s 60-beam OMEGA laser, one of the world’s most powerful fusion lasers, and the four-beam OMEGA EP laser.

Projects

Projects in recent years covered a broad range of scientific topics including experimental diagnostic development, computer modeling of implosion physics, plasma physics simulations, cryogenic target characterization, experimental design, irradiation uniformity, physical chemistry, laser physics, optical engineering, optical materials characterization, future laser design, machine learning, and scientific data management. The program culminates with a symposium at LLE at which students present the results of their projects.

Compensation

Participants work 40 hours per week and receive the current minimum wage.

Eligibility

Only Rochester-area high school students currently in their junior year are eligible.

To Apply

Students must submit a transcript, recent report card, and letter of recommendation; write a short essay describing their interest in science and technology; and fill out an application at www.lle.rochester.edu. The application deadline is March 11, 2024. Visit our website for full instructions and project reports from previous years.

Questions? Contact

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