

GENERAL SCIENCE

Science Scholarships

Iowa girl and New York boy chosen for the \$2,400 Westinghouse Grand Science Awards. Two girls and six boys given \$400 each. Others get \$100.

See Front Cover

► A PRETTY, petite blonde from the Midwestern prairies and a tall, studious youth from a New York City suburb were selected through the Second Annual Science Talent Search, as winners of the two top honors scholarships worth \$2,400 each, to carry them through any college of their choice in the nation. They are pictured on the front cover of this week's SCIENCE NEWS LETTER.

The top scholarship winners are Miss Gloria I. Lauer, 17, of Ames, Iowa, and Ray R. Schiff, 16, of New Rochelle, N. Y. They were selected from among 40 top-ranking high school seniors who were given free all-expense trips to Washington after being selected from some 15,000 entrants in a nation-wide contest through rigorous examinations. The 40 young people spent five days in Washington, D. C., dividing their time between a Science Talent Institute, in which they heard addresses by some of the country's leading scientists, and sight-seeing tours around the city, with special emphasis on the museums and research laboratories. Their trips wound up at an interview with Vice President Henry A. Wallace, who had an established reputation in biological research before he entered public life.

The Science Talent Search, which has been going on for the past four months, was made possible through the financial support of the Westinghouse Electric & Manufacturing Company. Joint sponsors are the Science Clubs of America, operating under the auspices of Science Service.

Dr. Harlow Shapley, director of Harvard Observatory, vice president of Science Service, presented the awards of \$11,000 in scholarships. Receipt of one of the scholarships does not prevent the winner from accepting other awards that may be made by colleges or universities.

In addition to the two top prizes, eight four-year scholarships, worth \$400 each, and 30 one-year scholarships, worth \$100 each, were distributed. Thus, every one of the 40 young people who were invited to Washington received some kind of scholarship award.

A man of distinction in science was father to each of the top winners.

Ray

Ray Schiff is the son of the late Dr. Fritz Schiff, bacteriologist, formerly of the Friedrichshain Hospital, near Berlin, Germany. Dr. Schiff was an expert on blood groups and was the discoverer of a new hereditary characteristic of blood which he called the H factor. He was one of the intellectual refugees from Germany in 1936 and later was head of the Department of Bacteriology of the Beth Israel Hospital in New York.

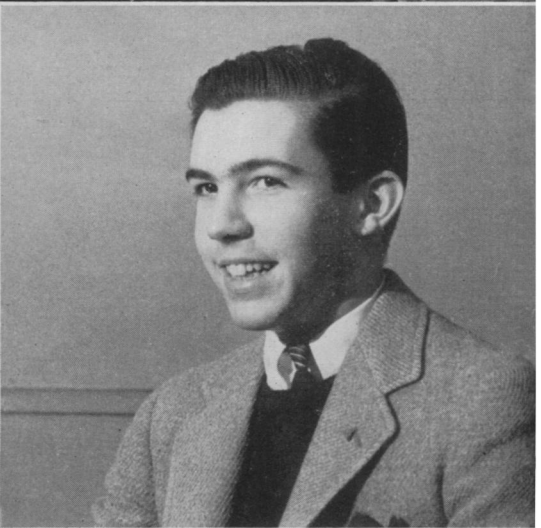
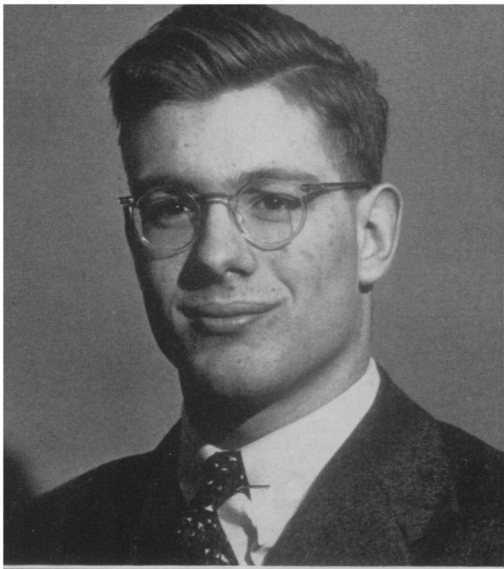
Ray Schiff, now only 16, stood first in his high school senior class of 250. He has tutored others in mathematics, physics, Latin and English, and last summer served as a counsellor at a boys' camp. He is a member of the National Honor Society. He won first place in an oratorical contest sponsored by the American Legion and won fourth prize in the National League of Nations Examinations. He is an editor of his school paper.

Gloria

Gloria Lauer is the daughter of a psychologist, Prof. Alvhh R. Lauer, of Iowa State College. Prof. Lauer is a member of the American Psychological Association. He has made a special study of the psychology of automobile driving, the analysis of accident proneness, motor coordination, safety and the factors involved in vocational success and teaching and success in academic work.



VISIT TO CAPITOL—The Science Talent Search winners visited the scientist-statesman Vice President Henry A. Wallace. Left to right, seated, front row: Gloria Lauer, Judith Cassidy, Marguerite Killingbeck, Catherine Ens. Second row, seated: Elizabeth Lean, Virginia March, Howard Haftel, Thomas Quermann, Claron Robertson, Joseph Green, Murray Rosenblatt, Wayne Boop, Donald Harris, John Gill. Next row, standing: Robert Palombi, Wanda Wojciechowski, Joan Kunkel, Charles Sargent, Arthur Ortenburger, Jr., Vice President Wallace, Constance Sawyer, Leonard Kurfuerst, William Piper. Back row: Josiah Macy, Jr., Roy Willcockson, (a Representative), Ray Schiff, Donald Penderson, Charles Perot, Robert Folger, Elizabeth Foster, Joseph Fox, Bernard Strehler, Eberhardt Rehtin, Robert Mark, Henry Kohl, Milton Lauenstein, Hillman Dickinson, William Hammerle.



Westinghouse Science Scholarships Winners

GRAND SCHOLARSHIPS OF \$2,400

Lauer, Gloria Indus, Ames, Iowa
Schiff, Ray (Reinhart), New Rochelle, N. Y.

ALTERNATES

Lean, Elizabeth Ann, Shorewood, Wis.
Perot, Charles Poultney, IV, Lancaster, Pa.

SCHOLARSHIPS OF \$400

Lean, Elizabeth Ann, Shorewood, Wis.
March, Virginia Ellen, Madison, Wis.
Harris, Donald Rosswell, Johnstown, Pa.
Kohl, Henry Hiram, Exeter, N. H.
Macy, Josiah, Jr. Concord, N. H.
Perot, Charles Poultney, IV, Lancaster, Pa.
Piper, William Weidman, Columbus, Ohio
Quermann, Thomas Richard, Clarksburg, W. Va.

ALTERNATES

Kunkel, Joan Lillian, Garden City, N. Y.
1st—Folger, Robert Lancaster, Winter Haven, Fla.
2nd—Peterson, Donald Penhallegon, Geneva, N. Y.

SCHOLARSHIPS OF \$100

Cassidy, Judith Mary, Irvington, N. Y.
Ens, Catherine Clara, Dayton, Ohio
Foster, Elizabeth Jane, Oak Park, Ill.
Killingbeck, Marguerite Grace, Nyack, N. Y.
Kunkel, Joan Lillian, Garden City, N. Y.
Ronder, Joan Leslie, New Rochelle, N. Y.
Sawyer, Constance Bragdon, Bethel, Me.
Wojciechowski, Wanda Clara, Bridgeport, Conn.

Boop, Wayne Ellsworth, Matamoras, Pa.
Dickinson, Hillman, Independence, Mo.
Folger, Robert Lancaster, Winter Haven, Fla.
Fox, Joseph Milton, Philadelphia, Pa.
Gill, John Ellis, Las Cruces, N. M.
Green, Joseph M., Los Angeles, Calif.
Haftel, Howard William, Irvington, N. J.
Hammerle, William Gordon, Athens, Ohio
Kurfuerst, Leonard Charles, Philadelphia, Pa.
Lauenstein, Milton Charles, St. Louis, Mo.
McLoughlin, James Gray, Rome, N. Y.
LeLievre, William Boyd, Shaker Heights, Ohio
Mark, Robert Burton, Trenton, N. J.
Ortenburger, Arthur Irving, Norman, Okla.
Palombi, Robert Edmund, Chicago, Ill.
Pederson, Donald Penhallegon, Geneva, N. Y.
Rechtin, Eberhardt, Redondo Beach, Calif.
Robertson, Claron Atherton, Carbondale, Ill.
Rosenblatt, Murray, New York, N. Y.
Sargent, Charles Philip, Lakeville, Conn.
Strehler, Bernard Louis, Johnstown, Pa.
Willcockson, Roy, Tulsa, Okla.

Judges: Dr. Harlow Shapley; Dr. Steuart Henderson Britt; Dr. Harold A. Edgerton.

SCIENCE TALENT INSTITUTE

—Alternates for the \$2,400 scholarship are shown on the top row of the facing picture page: left, Charles Perot and, right, Elizabeth Lean. Center, Dr. Edwin G. Conklin, addressing the Institute. Second row left, Surgeon General Thomas Parran with Gloria Lauer and Ray Schiff. At right is Dr. Hugh S. Taylor, Princeton, with some of the winners. Next row: William Piper, Virginia March, Josiah Macy, Jr. Bottom row: Donald Harris, Thomas Quermann and Henry Kohl.

Gloria, 17, has assisted her father in some of his safety studies, and plans to study some branch of science in college. Music is, however, a major interest for her. A violinist, she won first place in a state music contest and tied for first place in a music contest sponsored by the Julliard School of Music, New York

City. She has played in the Iowa State Symphony orchestra for five years. An artist as well, she won first place in a district American Legion Poppy Poster contest. But some of her talents are very practical; she can operate a simple lathe, drill press, and band saw. In her high school class of 159, she ranks first.

Science News Letter, March 13, 1943

ASTRONOMY

Stars Are International

By DR. HARLOW SHAPLEY

Director of Harvard College Observatory

Address before the Science Talent Institute.

► "I AM the little brother of the Sun," said recently a distinguished artist who works in the medium of stained glass windows. He went on to point out that without this cooperation of man and stars, of artist and sunlight, the contribution of stained glass to beauty and to the lift of the human spirit would be of little value.

When you listen to the radio you cooperate with a phenomenon of the natural world. You are working with the electric machinery in the earth's atmosphere. You use the radio roof to bring to you a voice from a great distance. When we utilize the radio we are the children of the ether waves.

The brotherhood of man and stars and atmosphere is interesting but it is not so easily appreciated as the association of man with other men in their efforts to learn about stars and atmospheres, or about plants, rocks, and man himself. I should like to discuss this world wide community of scientific effort, and show that world wide action is the most efficient way to advance in many of our intellectual enterprises.

Let's start with a total eclipse of the sun. Most of you have never seen one. You know, of course, that a total eclipse is one of the most stupendous natural spectacles that man can ever hope to see. But probably you and a total solar eclipse have not been in the same place at the same time. They are indeed so rare, and frequently so hard to get to, that we remain ignorant about many of the features of that remarkable upper atmosphere of the sun, called the corona, which flashes forth for a minute or two when the moon gets exactly between us and the sun and the total eclipse is in operation. It turns out, therefore, that scientists who seek knowledge of this upper atmosphere of the sun in the hope

of finding more about its relationship with the earth, generally form international groups. The important narrow path of totality on the earth's surface may fall almost anywhere, without respect to nationality. Frequently most of the path is over the open oceans, or in the Arctic or Antarctic regions; frequently the path of totality crosses inaccessible mountain ranges, or goes through regions disturbingly rich in clouds and rain.

But if the eclipse path is at all accessible the scientists of a dozen countries are likely to be strewn along its path, with their elaborate specialized instruments for the study of the solar corona and other eclipse phenomena.

Astronomers from twenty nations observed the total solar eclipse of 1936 which passed from Southeastern Europe across Russia, Siberia, all the way to Japan and the open Pacific Ocean. Methods of observation were intercompared before the eclipse, and the results intercompared afterwards. Men of half a dozen different nationalities sometimes cooperated in a single eclipse camp.

In recent years there have been important eclipses in Sumatra, Brazil, Canada, Mexico, Peru, and Australia. Each one attracted scientists from many countries and thus helped to emphasize that science is international.

Some years ago a Swiss astronomer, working with American equipment on a total solar eclipse most suitably observed from Western Australia, provided another example of the internationalism of the various sciences. His main job was to make photographs of stars in the vicinity of the sun during the total solar eclipse in order to check the truth of the theory of relativity. The weather, by the way, was good; his very elaborate eclipse camera operated successfully, and the resulting photographs were highly important in establishing the correctness of the theory proposed by Einstein. He checked the deduction that light rays