GENERAL SCIENCE

Top Two of Forty Winners

Measurer of helium atoms, Saul Sternberg of New York won the \$2,800 award. Tennessean Donald McCormick, plant gall student, received the \$2,000 scholarship.

See Front Cover

A DARK-HAIRED, 16-year-old Bronx, New York, aspiring physicist, Saul Herbert Sternberg (at left), won the \$2,800 Westinghouse grand science scholarship as the nation's top teen-age scientist in the ninth annual Science Talent Search. Saul, who lives at 245 East Gunhill Road, is a senior at the High School of Music and Art in Manhattan.

Second place in the nationwide competition for science-talented young people, carrying with it a \$2,000 Westinghouse science scholarship, went to tall, 17-year-old Donald Bruce McCormick (at right), of 205 Outer Drive, Oak Ridge, Tenn., who plans to be a biochemist after graduation from the University of Tennessee. The two top scholarship winners are shown on this week's cover of the Science News Letter.

The awards were announced at the closing banquet of the Science Talent Institute at the Hotel Statler, at which Dr. J. Robert Oppenheimer, atomic scientist and director of the Institute for Advanced Study at Princeton, N. J., delivered the principal address.

Young Sternberg, whose father is principal of New York City Public School 611, is an inventor and student of biology in addition to his major interest in nuclear physics.

In preparation for entering the Science Talent Search, Saul undertook the very careful measurement of the tracks made by helium atoms across a photographic plate.

He calculated the energy released by cyclotron bombardment of this non-fissionable element. The helium was produced when the element boron was bombarded with neutrons. To get this effect Saul used photographic plates impregnated with boron, then persuaded Washington University in St. Louis to bombard them with neutrons in their cyclotron.

Saul has designed and built an electronic metronome, and is planning a new one which will signal the musician by tapping him. He also has made detailed plans for an electric page turner for music. Saul plays the violin and piano, and has organized a violin trio.

In the field of biology, the young scientist raised white rats to study their reaction to dietary and other changes, and has also done considerable dissection.

Donald McCormick, who ranks third in his class of 248 at the Oak Ridge High School, has been studying the abnormal growths, or galls, often found on goldenrod plants. He wanted to learn not only their causes and make-up, but was interested to learn whether, like oak galls, they would have any commercial value by reason of their tannic acid content. Because certain galls have been shown to be a definite type of plant cancer, Donald thinks that their study may lead to helpful knowledge in the conquest of cancer.

Donald has his own home lab, likes to work physics problems, and is interested in bird census work. Donald's father, J. A. McCormick, is a chemist.

First among the winners of the \$400 scholarships, and named alternate to receive the \$2,000 scholarship if the winner is unable to use it, is Malcolm Stephen Gordon, 16, of New Utrecht High School, Brooklyn, New York. He is on the staff of the school publication and stands sixth in his senior class of 600. His essay for the Science Talent Search, on a summer's survey of shallow-water fishes at Coney Island, already has been published in a magazine of the American Museum of Natural History and presented at the Museum's fifth annual high school congress. His studies at Coney Island, concentrated in the shallow

waters around the 32nd St. jetty, involved almost daily seine hauls between June 25 and Sept. 9, 1948. His studies resulted in the description of a hitherto unknown function of a structure of small fresh-water fish.

Dr. Harlow Shapley, director of the Harvard College Observatory and chairman of the board of judges of the Science Talent Search, presented the scholarship awards.

The awards banquet was presided over by Watson Davis, director of Science Service, which conducts the Science Talent Search through Science Clubs of America. A. C. Monteith, chairman of the Westinghouse Educational Foundation which supports the Search, and vice president of the Westinghouse Electric Corporation, welcomed the winners and outlined the role of his company in the conduct of the Search.

The 40 trip winners were chosen by a panel of four judges after a nationwide competition in which top-ranking seniors in public, parochial and private schools throughout the United States participated. Entrants, representing all 48 states and the District of Columbia, totaled 13,585, of whom 2,245 completed the stiff science aptitude examination, submitted recommendations and scholarship records and wrote an essay on "My Scientific Project."

The scholarships may be used at any college, university or technical school of the winners' choice so that they may continue their training in science or engineering. Chosen for ability and aptitude, with no regard to geographic distribution, the 40 scholarship winners come from 15 states.

Science News Letter, March 18, 1950

GENERAL SCIENCE

Winners of Scholarships

GRAND SCHOLARSHIP OF \$2,800 Sternberg, Saul Herbert, New York, N.Y.

\$2,000 SCHOLARSHIP AND ALTERNATE

McCormick, Donald Bruce, Oak Ridge, Tenn.

ALTERNATE FOR \$2,000 Gordon, Malcolm Stephen, Brooklyn, N.Y.

SCHOLARSHIPS OF \$400

Detenbeck, Robert Warren, Kenmore, N.Y. Gordon, Malcolm Stephen, Brooklyn, N.Y. Gunter, William Dayle, Jr., Bellingham, Wash. Malone, Dennis Philip, Kenmore, N.Y. Reeves, William John, Jr., Springfield, Oreg. Taylor, Lenore Yvonne, Utica, N.Y. Tifft, William Grant, Seymour, Conn. Wyeth, Cynthia Walton, Philadelphia, Pa.

ALTERNATES

1st alt. Jackson, Patricia Alice, New York, N.Y. 2nd alt. Jackson, Cynthia Betty, New York, N.Y. 3rd alt. Wawszkiewicz, Edward John, Woonsocket, R.I.

SCHOLARSHIPS OF \$100

Beaver, William Thomas, Albany, N.Y. Cohen, Paul J., New York, N.Y.

Elliott, Noel Penney, Kellogg, Idaho Feinberg, Gerald, New York, N.Y. Finegan, Joel Dean, Gary, Ind. Franchere, Julie Victoire, Portland, Oreg. Fuchs, Ronald, Pasadena, Calif. Glashow, Sheldon Lee, New York, N.Y. Korenman, Stanley George, Brooklyn, N.Y. Krongelb, Sol, Jersey City, N.J. Jackson, Cynthia Betty, New York, N.Y.
Jackson, Patricia Alice, New York, N.Y.
Lubell, David, Brooklyn, N.Y.
Lubkin, Elihu, New York, N.Y. Markhoff, Nicholas George, Huntington, N.Y. Martin, Donn Robert, Cincinnati, Ohio McKinney, Alice, Phoenix, Ariz. McPortland, Winifred, Dorchester, Mass. Piskule, Donald Frank, Kimball, S. Dak. Posner, Edward Charles, New York, N.Y. Rippon, John Willard, Sylvania, Ohio Rosen, Victor Joseph, Jr., Beverly Hills, Calif. Rosler, Lawrence, Brooklyn, N.Y. Siegel, Jerome, Brooklyn, N.Y Steiner, Lisa Amelia, Forest Hills, N.Y. Sussman, Alan, New York, N.Y. Warren, Alice Janet, Ithaca, N.Y. Wasserman, Edel, Brooklyn, N.Y. Wawszkiewicz, Edward John, Woonsocket, R.I. Zeidenberg, Phillip, Brooklyn, N.Y. Science News Letter, March 18, 1950