

GENERAL SCIENCE

Awards Await Winners

The Ninth Annual Talent Search will be climaxed by the awarding of scholarships to the forty winners for further development of their science talent.

By MARGARET E. PATTERSON

► A BOY or girl in the senior class of the high school near you may be a future Einstein or Curie.

Those neighborhood kids you have watched grow up with their model airplanes, experimental animals, homemade telescopes, whining electronic gadgets and chemical conglomerations may be the ones who will be changing our world of the future.

A great search for youngsters with inventive flare and creative genius in science is now on.

Finding Scientists

You can help find these scientists of tomorrow by telling the talented boys and girls you know that scholarships for further training in science are waiting for them.

Like hundreds of others before them they may be nationally recognized and speeded along to scientific productiveness by winning in the Science Talent Search for the Westinghouse Science Scholarships, conducted annually by Science Clubs of America, administered by Science Service.

A total of 320 young scientists have been discovered through this search since 1942. These winners, along with 2,080 named as honorable mentions, are now enthusiastically pushing back science frontiers.

Youthful Scientists

Do high school seniors seem too young to be taken seriously as scientists? During the eight years of the Science Talent Search the records, made by the young scientists named for honors, have convinced scientists and the public in general that a high school senior with a talent for science is a rare and very valuable individual.

As a sample of their accomplishments let's look at the records of eight typical winners, only a few months or a few years removed from their high school graduation.

H. S. Graduate 1949—During three summer vacations a high school boy roamed on foot and by boat studying and collecting mollusks (clams, snails, etc.) on a tiny island off the Atlantic coast. When he wrote the results of his diligent explorations he had raised the number of known species on the island from 46 to 120. His careful analysis of the mollusks that once lived on that island and those that do now is so highly respected by authorities in the

field that the work is being published by a large eastern university. The 17-year-old boy, Dwight Taylor, is now a freshman at the University of Michigan, continuing his study of paleontology.

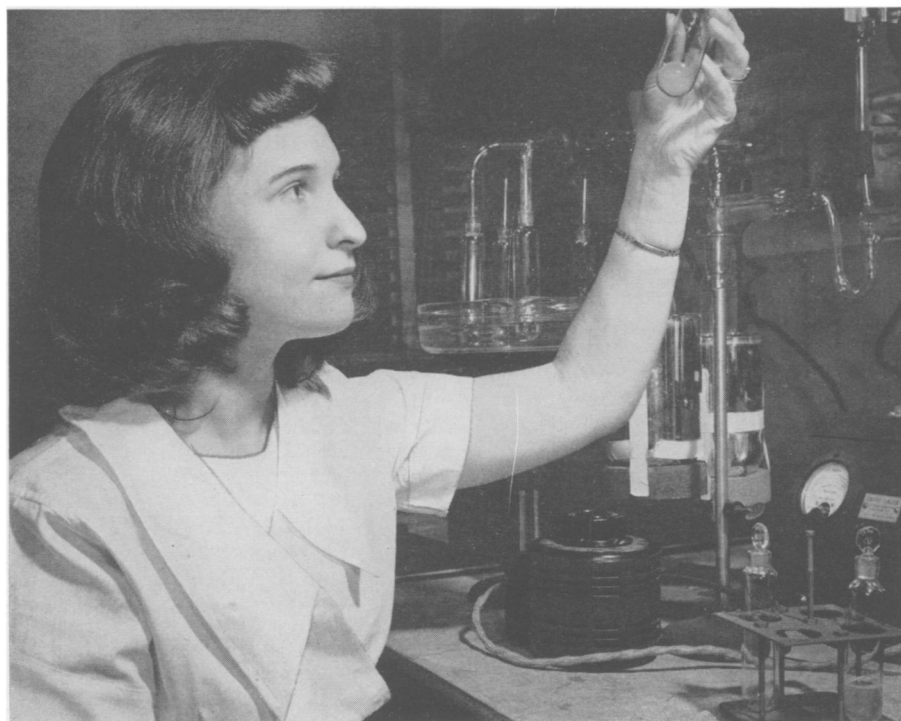
H. S. Graduate 1948—Making organic chemicals combine may be dangerous because of the constant threat that the reagents used can explode. A high school boy, whose hobby has been chemistry since he came to the U. S. A. from Hungary as a child, was intrigued by this problem. In 1948 he announced success in his quest for chemicals to replace the dangerous ones in a paper so important it was reported in full in two national magazines for professional chemists. The 17-year-old, Andrew Kende, is now a sophomore at the University of Chicago, majoring in organic chemistry.

H. S. Graduate 1947—At an age when most girls are still playing with dolls, one was learning about microscopic plants and animals. By the time she was a high school

senior her knowledge of *Drosophila melanogaster* (fruit flies to you) was so advanced she was the working partner of a college professor of genetics. Today ability like hers with micro-techniques assures you safety if you are prescribed either of two still rare, new antibiotics. All this past summer she has painstakingly standardized the reactions of bacteria to chloromycetin and neomycin at the Cold Spring Harbor station of the Carnegie Institution of Washington. She is Rada Demerec, 19-year-old junior at Swarthmore College, majoring in biology and considering medicine as a career.

H. S. Graduate 1946—Nuclear physics has interested one young man as long as he has known about science. By the time he was a high school senior, he had built his own cosmic ray counting apparatus and could compare its results favorably with that of equipment available commercially for many times the price.

When he entered the University of California at Berkeley he began to help in the Radiation Laboratory on assignments far beyond those usually given to a college freshman. Now a senior there, he holds the position of senior lab technician in the same laboratory where he has worked



RESEARCH CHEMIST—Mrs. Joan Kunkel Tanner, M.S., a winner in the 1943 Search, is a chemist for Eastman Kodak Company. Here she works with high-vacuum apparatus to remove solvents from gelatin solutions in her research to improve photographic film.



COMET DISCOVERY—The Harvard team which discovered the Bappu-Bok-Newkirk Comet examine the photographic plate of the new comet. They are Vainu Bappu (standing left), graduate student from India, Gordon Newkirk (standing right), 21-year-old college senior, 1946 winner, and Dr. Bart Bok, associate director of the Observatory.

off hours and summers for his whole college career.

The work David Cudaback does for an Atomic Energy Commission project is on the classified list so we can only guess at the seriousness of it.

H. S. Graduate 1945—On July 1, 1949, the USS Norton Sound left the West Coast bound for six weeks in the Pacific. On board, a party of scientists, jointly sponsored by Princeton University and the Office of Naval Research, was seeking information about cosmic rays in order to

shed further light on nuclear burst processes. Among them was Kirby Dwight, Jr., 21-year-old graduate physicist from Princeton, getting his first taste of in-the-field atomic research, and helping to find one more key to the riddle of atomic power.

H. S. Graduate 1944—Graduating from high school at 14 is looked upon with some wonder but when a boy does that and also wins one of the big scholarships in a national competition for young scientists the wonder grows.

An Alabama boy in 1944 had done such advanced work with thioplastics that even the judges of the Science Talent Search were amazed. He went on at his rapid stride to graduate at 17 from Massachusetts Institute of Technology and to accept a job with DuPont.

By going to school at night, he earned a master's degree at 18 from the University of Delaware. Then getting a leave of absence from his job he enrolled at Caltech. In August, 1949, at 20 he is Dr. Rodman Jenkins, Ph.D. in chemical engineering, to prove that promise at 14 can be a reality at 20.

H. S. Graduate 1943—Mathematics is basic to all sciences and often is so basic to new discoveries that it must be kept secret. This is true of projects like one being done for the Office of Naval Research at Cornell University. Working on it is Dr. Murray Rosenblatt, 23-year-old Ph.D. in mathematics from Cornell.

H. S. Graduate 1942—At the Lewis Flight Propulsion Laboratory of the National Advisory Committee for Aeronautics in Cleveland, Ohio, fuels adequate for jet planes must be perfected. Selecting, synthesizing and testing new and better hydrocarbons is the job of men like Dr. Wolf Karo, 25-year-old Ph.D. from Cornell University. Since his arrival from Germany shortly before World War II, he has never deviated from his goal of becoming an organic chemist.

New Search Begins

The Ninth Annual Science Talent Search, now on, will locate other young scientists like these spotted during the past eight years.

The 16,000 boys and girls expected to enter the competition this year have been busy with practical experience in science during their vacations and are now back at their high school studies. Seniors in public, private and parochial schools will report on the results of their investigations and experiments in a 1,000-word essay on "My Scientific Project," one of the requirements of the Science Talent Search which ends Dec. 27, 1949.

The 40 chosen as winners will be announced early in 1950 and will be invited to the five-day all-expenses paid Science Talent Institute in Washington, D. C., in March. Here one boy or girl will be selected to receive a Westinghouse Grand Science Scholarship of \$2,800; one of \$2,000 will go to the runner-up. Other trip winners

will receive scholarships ranging from \$100 to \$400, all made available through the Westinghouse Educational Foundation.

In 15 states where State Science Talent Searches have been set up to run concurrently with the national competition, the fortunate entrants will have a double chance of placing in the national or state contest and are thus assured of additional opportunity for college educations.

Successful Experiment

The Search was started as an experiment by Science Service and the Westinghouse Electric Corporation to provide an adequate supply of promising young scientists for the continuing development of American science.

The experiment has indicated clearly that talented young scientists can be located by the time they are high school seniors. Scholarships and recommendations have made it possible for hundreds of boys and girls, who might not otherwise have had the incentive or financial assistance, to continue their education in science and to develop further their rare gifts of science talent.

With this country thrust more and more into a position of world leadership in science this successful experiment is of even greater value to the strength and security of the United States than when it was originally planned.

Young Scientists Everywhere

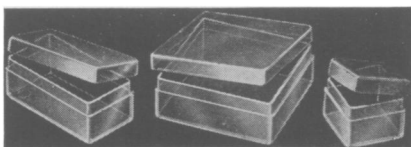
Size of school and its geographical location seem to have very little to do with winning in the Science Talent Search. Promising young scientists appear to be almost everywhere in the U. S.

Winners receive handsome bronze plaques to present to their schools. Forty proud high school seniors will be giving them to their schools next spring at commencement time. Perhaps that high school near you will be getting one for the first time or adding a new one to its collection. They will signify 40 more boys and girls launched on careers of service through science.

Complete details of the Ninth Annual Science Talent Search may be obtained by writing to Science Clubs of America, 1719 N St., N. W., Washington 6, D. C.

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