

New Mexico: New Mexico Institute of Mining and Technology
Dr. Burrell Wood, Prof. of Chemistry, New Mexico Institute of Mining and Technology, Socorro

North Carolina: North Carolina Academy of Science
Dr. Herbert Speece, Dept. of Mathematics, North Carolina State College, Raleigh

North Dakota: North Dakota Academy of Science
Dr. R. E. Dunbar, Dean, School of Chemical Tech., North Dakota Agricultural College, State College Station, Fargo

Oklahoma: Oklahoma Science Service
Dr. Horace H. Bliss, Assoc. Prof. of Chemistry, University of Oklahoma, Norman

Oregon: Oregon Academy of Science
Mr. Raymond E. Barrett, Educ. Dir., Oregon Museum of Science and Industry, 4015 S.W. Canyon Road, Portland 1

Pennsylvania: Pennsylvania Academy of Science
Dr. William Uricchio, Head, Dept. of Biology, Mount Mercy College, Pittsburgh 13

Rhode Island: Brown University
Dr. J. W. Kling, Dept. of Psychology, Brown University, Providence 12

South Carolina: South Carolina Academy of Science
Dr. Richard H. Gadsden, Asst. Prof. of Chemistry, Medical College of South Carolina, Charleston

South Dakota: South Dakota State College
Mr. Kenneth E. Howard, Asst. Prof. of Chemistry, South Dakota State College, Brookings

Tennessee: Tennessee Academy of Science
Mr. James L. Major, Chemistry and Physics Teacher, Clarksville H. S., Clarksville

Texas: Texas Academy of Science
Mr. Jack Pemberton, Chm., Texas Jr. Acad. of Science, La Porte H. S., La Porte

Utah: Utah Academy of Sciences, Arts and Letters
Dr. Russell H. Hendricks, 2626 Beverly Dr., Salt Lake City

Vermont: University of Vermont
Dr. G. Chapman Crooks, Prof. of Chemistry, University of Vermont, Burlington

Virginia: Virginia Academy of Science
Mr. J. C. Holmes, Research and Development Dept., Philip Morris, Inc., P. O. Box 1895, Richmond

Washington: Whitworth College
Dr. James E. Brathovde, Chm., Dept. of Chemistry, Whitworth College, Spokane

West Virginia: West Virginia Academy of Science
Mr. Douglas B. Williamson, Asst. Prof. of Physics, West Virginia University, Morgantown

Wisconsin: Wisconsin Academy of Science
Dr. Daniel Q. Thompson, Assoc. Prof. of Biology, Ripon College, Ripon

HONORS GROUP IN THE 19th ANNUAL *Science Talent Search[®]* for the Westinghouse Science Scholarships and Awards



SCIENCE CLUBS OF AMERICA
Administered By Science Service
1719 N STREET N. W. ★ WASHINGTON 6, D. C.

1960

HONORS GROUP

IN

THE 19th ANNUAL

Science Talent Search[®]

for the

Westinghouse Science Scholarships
and Awards



SCIENCE CLUBS OF AMERICA

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The Meaning of Honors in the Science Talent Search

The achieving of Honors in the Science Talent Search, earned by the top 10% of those

who complete entries in the Science Talent Search, is an evidence of science ability and interest which can be taken into consideration by colleges and universities in admissions and granting of scholarships. For this reason this Honors list is distributed to all the universities and colleges of the United States utilizing a list furnished by the American Council on Education.

All boys and girls awarded Honors in the Science Talent Search are considered so outstanding that any institution of higher learning will be justified in considering their abilities carefully.

In past years members of the Honors Group have made creditable records in the colleges and universities to which they have been admitted.

From this list of 448 honor awards, 40 are being chosen as winners of the Washington trip. Among these \$34,250 in scholarships and awards will be distributed. This list of winners is being announced subsequently to the distribution of this list and will be published in the Science News Letter of February 6, 1960, and it will be sent upon request accompanied by a self-addressed stamped envelope.

Each of those winning honors is being furnished with multiple certificates intended to accompany applications for college admissions and scholarships, but a listing in this pamphlet should be accepted as an equivalent certification.

The proportion of boys and girls in this list is determined by the ratio of boys and girls entering the contest. Listed are 100 girls and 348 boys. The girls determine their own chances in the Science Talent Search in accordance with the number that enter. Of the Honors Group, 72% of the boys and 85% of the girls rank in the upper 5% in their high school classes. Among the 448 who won Honors, 404 belong to science clubs of which 160 are affiliated with Science Clubs of America.

The Annual Science Talent Search

The Science Talent Search was the pioneering endeavor to discover at the senior high school year level those who have the potentialities to become the research scientists of the future. It has fulfilled this function far beyond the hopes entertained when this educational project was conceived. Many millions of dollars in scholarships in colleges and universities throughout the nation, supplementing the Westinghouse Science Scholarships, have been given to those who have thus been discovered to have high science talent.

This selection of those with research ability in science has become an institution and tradition due to approval from the educational world and the creditable records of winners in colleges, universities and professional positions.

In a real sense the annual Science Talent Search is more than a scholarship contest. It is a major step toward making scientific talent available for important tasks in our civilization.

The participation of a great industrial organization in the financing of the annual Science Talent Search is a notable contribution to the advancement of science in America. This activity can be considered a support of "pure research" importance equal to the fundamental researches in the Westinghouse Research Laboratories. Science and education are grateful for the financial support of the first nineteen Science Talent Searches by the Westinghouse Educational Foundation, an organization endowed by the Westinghouse Electric Corporation for the promotion of education and science.

Science Service, engaged in the interpretation and popularization of science on a broad front, is proud of administering, through Science Clubs of America, the annual Science Talent Search. From the newspapers, educators and scientists of America there has been enthusiastic cooperation in this annual activity that means so much to high school seniors interested in science. The Science Talent Search is a continuing opportunity and responsibility of the more than 25,000 science clubs and more than 600,000 members affiliated with Science Clubs of America.

In the Nineteenth Annual Science Talent Search®

Honors Group

* indicates girls

HOME ADDRESS is underlined

H. S. indicates High School

AGE of winner follows name

Title of project report submitted is on next line

ALABAMA

Birmingham Hale, Bowron Francis, Jr. 17 West End H. S. 1741 Boise Ave. S.W. 11
Exploration of Electrical Conduction in Liquids by Means of Nuclear Magnetic Resonance

ALASKA

Anchorage Griffith, Jack Denney 17 Anchorage H. S. 2006 31st St.
Particle Reactions and Radioisotopes - Their Production and Study

ARIZONA

Mesa Haase, Michel Ludwig 18 Mesa H. S. 319 E. 5th Ave.
Finding the Efficiency of a Thermocouple Refrigerator
*Wood, Judith Anne 17 Mesa H. S. 1033 W. 4th St.
Cupric Sulphate Crystals

Phoenix *Powers, Ann Marie 17 Camelback H. S. 3818 N. 20th St.
An Investigation of Psychokinesis
*Eldund, Gayle Ann 17 North Phoenix H. S. 118 E. Country Club Dr.
Hemagglutinins in Seeds of Arizona Leguminosae

KANSAS

Gant, Jerry Neil 17 North Phoenix H. S. 1915 E. Coronado Rd.

MISSOURI

Determining Effect of Absolute Humidity on Tensile Strength of Baked Sand Cores

NEBRASKA

Leonard, Yolanda Irene 17 North Phoenix H. S. 3046 E. Cypress St.
Identification of Some Anthelmintics by Paper Chromatography

NEW MEXICO

Levin, Alexander Arthur 18 North Phoenix H. S. 3102 N. 3rd St.
Use of Dithioacids in Tracing Esterification Reactions

NEW YORK

Sinder, Riley Monroe 16 North Phoenix H. S. 1737 E. Osborn Rd.
Experiments with the "Land Process" Including an

PENNSYLVANIA

Investigation of Binocular Color Vision

PENNSYLVANIA

Cosgrove, Michael Joseph 17 West H. S. 2201 W. Earl Dr.

PENNSYLVANIA

Magnetic Variation in the Earth's Field

PENNSYLVANIA

*Pate, Mary Jane 17 West H. S. 2118 W. Mulberry Dr.

PENNSYLVANIA

Determination of the Effect of Thermal Energy and Ultraviolet

PENNSYLVANIA

Rau, John August 17 West H. S. 901 Encanto Dr. S.W.

PENNSYLVANIA

Crystallographic Bonding of Natural Occurring Isomorphous Compounds

PENNSYLVANIA

Thompson, James Edgar 17 Pueblo H. S. 1902 Jason Vista

PENNSYLVANIA

Determination of the Dimensions of Fatty Acid Molecules

PENNSYLVANIA

Hearn, David Russell 18 Tucson H. S. 2215 E. 8th St.

PENNSYLVANIA

Design and Initial Testing of Low Power Plasma Jets

PENNSYLVANIA

Long, Lawrence Edward 18 Tucson H. S. 3706 E. 5th St.

PENNSYLVANIA

Designing and Building a Digital Computer

TEXAS

Little Rock Spitzerberg, Irving Joseph, Jr. 17 Hall H. S. 307 N. Cedar St.

TEXAS

Inversion of Sucrose in Alcohol-Water Solvents

CALIFORNIA

Belmont McCracken, Pete Vieu 17 Carlmont H. S. 1512 Chula Vista Dr.

CALIFORNIA

Berkeley Matthews, Robert 17 Berkeley H. S. 1912 Monterey Ave. 7

CALIFORNIA

Investigation of Aniline Perchlorate as a Rocket Fuel

CALIFORNIA

*Haseltine, Florence Pat 17 S. E. Burroughs H. S. 605 Essex

CALIFORNIA

Surface Tension

Claremont *Vincent, Joan Dotson 17 Claremont H. S. 1100 Harvard Ave.

Compton Birth of a New Synthetic Fiber

Ruoff, Carl Frederick, Jr. 17 Compton Sr. H. S. 406 Banning St. 2

El Cerrito A Telescopie

*Martin, Margaret Clare 17 El Cerrito H. S. 339 Berkeley Park Blvd. Berkeley 7

Supportive Evidence for a Theory of Sexual Reproduction in Chlorella pyrenoidosa

Gruhn, Thomas Albin 17 St. Bernard's H. S. 2035 B St.

Eureka Ion Chamber, Construction and Experiments

Abel, Richard Carl 17 Morningside H. S. 2311 W. 78th Pl. 4

Lakewood Rickard, Thomas Allen 17 Lakewood Sr. H. S. 4742 Bellflower Blvd.

Bunde, Dennis Carl 18 Helix H. S. 4640 Maple Ave.

Mardi, James Vernon 17 Helix H. S. 4729 Maple Ave.

Los Angeles Phenomena of Atmospherics

Monell, Howard Lesslie 17 Susan M. Dorsey H. S. 3433 W. 59th Pl. 43

Study and Development of a Magnetic Microbalance

Wessel, John Emmet 17 Susan M. Dorsey H. S. 4430 Presidio Dr. 8

Hypothesis of Compound Classical Special Relativity Embodiment Vectors

*Ranstad, Linda Maria 16 Fairfax H. S. 550 1/2 N. Kingsley Dr. 4

A Discussion of the Four Color Problem

Thacker, Charles Patrick 16 Franklin H. S. 210 1/2 N. Ave. 55 42

Application of the Land Color Vision Theory to Color Television

*Stein, Carol Louise 17 Hollywood H. S. 5549 Green Oak Dr. 28

Effect of Stress on Level of Pepsinogen in Blood

Mill Valley *De Smet, Diane Arlene 17 Tamalpais H. S. 75 Rancio Dr.

Ojai Magnetism and Crystal Growth

Palo Alto Frank, Roy L. 16 Fremont H. S. 4783 Fair Ave. 19

Nuclear Resonance Spectrometer

Kuuli, John Charles 17 The Thacher School 556 Prospect Blvd., Pasadena

Construction of a Klein Bottle

Calma, Jacques Michael 17 Cubberley Sr. H. S. 3715 Lindero Dr.

Effects of Specific Hormones and Psychochemicals upon the Pigmentation of Cupples

Shapiro, Donald Campbell 17 Cubberley Sr. H. S. 225 Creekside Dr.

Proton Free Precession Magnetometry

Lee, Edward Prentiss, Jr. 17 Palo Alto Sr. H. S. 1499 Edgewood Dr.

Determining the Magnetic Moment of the Electron

McGehee, Richard Paul 16 Will C. Crawford H. S. 5033 LaDorna Dr. 15

Transistor Controlled Model Railroad

Milne, David Crosby 16 Will C. Crawford H. S. 3547 Altadena St. 5

Braille Electronic Translator Automatic

Cohler, Norman Radcliffe 16 Abraham Lincoln H. S. 975 Darien Way 27

*Varrentoff, Chela 16 George Washington H. S. 1248 Elbert St. 9

Production of a Hydrocarbon and a Fluorocarbon, and a Comparison Between the Two Substances

Klein, Frederick Karl 17 Willow Glen Sr. H. S. 1480 Darlene Ave. 25

Qualitative Analytical Tests for Aliphatic Monoxylic Alcohols

Lange, Robert Edward 18 Santa Barbara H. S. 412 Stanley Dr.

Gaseous Ionization Phenomenon as Produced by High Frequency Current

*Wilton, Carolyn Joy 17 Santa Barbara H. S. 1650 Overlook Lane

Clathrate Compounds of Hydroquinone

Simi *Wood, Sandra Helen 16 Simi Valley H. S. 2844 Royal Ave.

An Ion Motor Propulsion System

COLORADO

Boulder Evans, John Martin, Jr. 17 Boulder H. S. 500 13th St.

Phillipson, Donald Ernest 17 East H. S. 665 Cherry St. 20

Genetic Clines of Colorado Butterflies

Shafer, Lawrence Harrah 17 East H. S. 4535 E. 17th Ave. 20

Development of a Term Difference Method for Summation of Finite Series

CONNECTICUT

Fairfield Denning, Peter James 18 Fairfield College Prep. 31 Brushy Hill Rd. Darien Design and Construction of an Analog Computer

Hartford Wisner, George Robert 18 Bulkeley H. S. 63 Stone St. 10

North Haven The Braille-Scriber

*Neibach, Mary-Elizabeth Hume 17 North Haven H. S. 570 Skiff St.

Development of Immunity to Specific Tumor Transplants by Lyophilized Tumor Extracts in Mice

Stamford Winfree, Arthur Taylor 17 Stamford H. S. 46 Laurel Ridge Rd.

Behavior of Soap Bubbles and Films

DISTRICT OF COLUMBIA

Washington *Maddox, Mary Eleanor 17 Anacostia H. S. 1930 21st Pl. S.E.

*Norordon, Patricia Virginia 17 Anacostia H. S. 166 Chesapeake St. S.W.

Bubble Rafts

*Page, Patricia Jane 16 Anacostia H. S. 3115 Westover Dr. S.E.

Measurement of the Speed of Sound in Transparent Liquids

Taylor, Kenneth Douglas 17 Anacostia H. S. 2808 Erie St. S.E. 20

Research on the Logical Approach Toward Space

*Eager, Anne Elizabeth 17 Immaculata H. S. 4322 42nd St. N.W.

Nutritional Requirements of Torticella microsoma

Friedman, Samuel Robert 17 Woodrow Wilson H. S. 3722 Appleton St. N.W.

Analysis of Observations of Dark Markings in the

North Equatorial Belt of Saturn

FLORIDA

Bradenton Tracy, David Howard 16 Manatee H. S. 3908 26th St. W.

Coral Gables Fries, Automatic Computation of Celestial Orbits and Trajectories

Hialeah Lee, Robert Reaney, Jr. 17 Coral Gables Sr. H. S. 6175 S.W. 50th St.

Investigation of the Phenomenon of Transformation

of Normal Cells to Neoplastic Cells

*Goldman, Maxine Marie 16 Coral Gables Sr. H. S. 11500 S.W. 62nd Ave.

A Nonselective Medium for the Enumeration of Marine Microorganisms

*West, Evelyn June 17 Coral Gables Sr. H. S. 6016 Leonardo St.

Spectrophotometric Determination of Aluminum

Metabolism in Rheumatic Fever Patients

Platt, William Joshua III 17 Gainesville H. S. Rt. 3, Box 627-A

Gainesville Ecological Observations on North Central Florida Myriapoda

Hollywood Steans, Robert Charles 17 Hialeah H. S. 250 W. 61st St.

Study of the Absorption, Translocation and Killing Time of 2,4-Dichloro-

phenoxyacetic Acid on Common Ragweed (*Ambrosia elatior*)

Eisen, Howard Jay 17 South Broward H. S. 21010 N.E. 26th Ave.

Jacksonville Patterson, John Wallace 17 Robert E. Lee H. S. 4636 Cardinal Blvd. 10

Effects of Color on the Activity of Rats

Sites, Vincent Raymond, Jr. 16 Archbishop Curley H. S. 447 N.E. 75th St.

Phage-Leukocyte Relationship

Rosenthal, Michael 17 Southwest Miami Sr. H. S. 7060 S.W. 8th St. 44

AUTO-motion

Edmunds, Henry Grier 17 North Miami Sr. H. S. 570 N.E. 135th St. 61

Theory of Three Dimensional Chess

Meins, Frederick, Jr. 17 North Miami Sr. H. S. 1005 N.E. 131st St. 61

A New Concept of Enzyme Inhibition and Its Application

in Antimetabolite Chemotherapy

Norell, Russell Gordon 17 North Miami Sr. H. S. 955 N.E. 128th St.

Electronic Light Modulator

*Glenn, Joan Marie 17 Leon H. S. 2170 W. Randolph Circle

The Harmonograph

Grow, Gerald Owen 17 Leon H. S. 1911 Gibbs Dr.

Development of a Phasing Device Which Will Permit a Radio-Telegraph

Station to Transmit and Receive Simultaneously on the Same Frequency

Jernigan, Robert Thorpe 17 Leon H. S. 630 E. College Ave.

Differential Cross Sections Due to Various Nuclear Potentials

*Samler, Virginia Dale 17 Palm Beach H. S. 349 W. 15th St. Riviera Beach

GEORGIA			
Atlanta	Rumble, Douglas III	17	Henry Grady H. S.
	Geology of the Coastal Plain	587 E. Morningside Dr. N.E.	9
	Friedman, Alan Jacob	17	North Fulton H. S.
	Diurnal Variation of Potential Gradient	569 E. Wesley Rd.	5
ILLINOIS			
Arlington Heights	Flood, William Lloyd	17	Arlington H. S.
	Corrosion of Metals	103 N. Main St., Mount Prospect	
Brownstown	Wade, Thomas Benjamin	18	Arlington H. S.
	Ground Effect Vehicles	3201 Peacock Lane, Rolling Meadows	
Chicago	*Rakauskas, Lila Mae	17	Brownstown Community Unit H. S.
	Relativity	R. R. 1	
	White, John Lyle	18	University H. S.
	Improvements in a Subroutine Package for an Electronic Digital Computer	515 N. Michael St.	
	*McDonough, Rita Marie	17	Aquinas Dominican H. S.
	The Algorithm of Euclid	8858 Dorchester Ave.	
Mosoff, Serie Ian	17	Lane Technical H. S.	
	Photographic Color Representation	6234 N. Monticello Ave.	45
Walker, Lloyd Robert	17	Lindblom H. S.	
	Plane Projections of the Earth	2024 W. 52nd Pl.	9
Krauss, Alan Robert	16	Theodore Roosevelt H. S.	
	Effects of Radiation on Cells	3751 N. Albany St.	18
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	Growth and Properties of Metal Whiskers	6656 N. Sioux Ave.	46
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	Experiments with <i>Trypanosoma lewisi</i>	555 S. Oglesby Ave.	49
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	A Small Plasma Jet	22305 Frederick Rd.	
Chicago Heights	Sterba, Vernon Joseph	17	J. Sterling Morton H. S.
	Written Letter Discriminator	2729 Harvey Ave., Berwyn	
DeKalb	Weeks, Dennis Alan	16	DeKalb H. S.
	Origin of Segmentation in the Arthropod Line of Evolution	409 Tilton Park Dr.	
Des Plaines	Conklin, Kenneth Robert	17	Maine Twp. H. S.
	Points of Symmetry in Curves of Integral, Rational	7616 Oleander St., Niles	48
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Gravander, Jerry Wallace	17	Maine Twp. H. S.	
	Surfacer Tension	1130 Harrison Ave., Park Ridge	
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	The Radio Densitometer	1313 Vine Ave., Park Ridge	
Searl, James Edwin	17	Maine Twp. H. S.	
	Comparison of the Toxicities of Different Insecticides	1517 S. Crescent St., Park Ridge	
Williamson, Glenn Thomas	17	Maine Twp. H. S.	
Boyle, James Martin	17	Edwardsville H. S.	
Edwardsville	An Electron Linear Accelerator	1532 S. Grove St., Park Ridge	
Fein, Michael Edward	17	Evanson Twp. H. S.	
Evanson	Euphonium Mouthpiece Research	8711 Avers Ave., Skokie	
	Comparison of Two Kinds of Infinity		
Eulenberg, John Bryson	16	Evanson Twp. H. S.	
	Relation of Contingency Between Regions of a Map Applied	614 Forest Ave.	
	to the Proof of the Four-Color Theorem		
	Fein, Michael Edward	17	Evanson Twp. H. S.
	The Correlation Computer	616 Grey Ave.	
	*Lawrence, Valerie R.	16	Evanson Twp. H. S.
	Chloroplast Pigment Inhibition by Extracts	1124 Noyes St.	
Lyddon, John Webster	17	Evanson Twp. H. S.	
	Ion Exchange Resins	9225 Ridgeway St.	
Mills, Richard Pence	16	Evanson Twp. H. S.	
	Antagonism of Colchicine Effects with ATP in Planarian Reconstruction	2713 Lincolnwood Dr.	
Rickard, Stanley Edgar	17	Evanson Twp. H. S.	
	Indirect Titration of Boron with EDTA	802 Washington St.	
Sherr, Jonathan Harry	17	Evanson Twp. H. S.	
	Investigation of the Theories of Decimal Expansion	249 Ridge Ave.	
Van Zant, Peter John	17	Evanson Twp. H. S.	
	Electronic Representation of Symbolic Logic Propositions	510 Sheridan Rd.	
*Wells, Molly	16	Evanston Twp. H. S.	
	An Investigation of Surface Active Agents	2008 McDaniel	

INDIANA			
Bloomington	*Cuffey, Hazel Rita	17	University H. S.
	Antibiotic Properties of Some Myxomycetes	522 Eastside Dr.	
McMullen, David Koch	17	University School	
	Determination of the Role of Enzymes in the Synthesis of	617 S. Fess Ave.	
	Deoxyribonucleic Acid of Bacteriophage X-174		
Peterson, Stephen Frank	17	Delphi H. S.	
	A Spectroscope	R. R. #1, Box 24	
David, John Deword	17	Benjamin Bosse H. S.	
	Antigen Carrier in <i>Paramecium aurelia</i> and the Order of	3130 Sherwood Lane	
	Precedence of Various Antigens		
Houston, Robert Lee	17	Benjamin Bosse H. S.	
	Preparation of D-arabinose from D-glucose with Sodium Hypochlorite	1928 E. Mulberry St.	14
Peterson, Stephen Frank	17	Delphi H. S.	
	Proton, Electron Van de Graaff Accelerator - Its Design,		
	Construction, and Application		
Wiley, John Duncan	17	Benjamin Bosse H. S.	
	Design, Construction, and Application of a	1914 Ballemeade Ave.	14
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Fehder, Paul Lee	17	Central H. S.	
	Synthesis of Some Complex Organic Compounds	927 Royal Ave.	
	from Possible Primordial Atmospheric Gases		
Zurstaedt, Donald Henry	17	North H. S.	
	Construction of an Eight-Inch Reflecting Telescope	605 Van Dusen Ave.	11
	and Protective Shelter		
Shoemaker, Thomas Robert	17	North Side H. S.	
	Phosphorus-32 Tracer Studies with the Coleus Plant	1229 Somerset Lane	
Church, Thomas Michael	17	South Side H. S.	
	Effects of Light Intensity, Photoperiodism, and Wave Length on	3928 Winter St.	5
	Growth of <i>Zea Mays saccharata</i> and <i>Oedogonium</i>		
Redmond, James Daniel	17	Specia Memorial H. S.	
	Internal Ballistics of an Experimental Rocket Engine	3516 Janet Dr.	18
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	Irradiation of Mixtures of Simple Organic and Inorganic	304 Tally St.	
	Gases with Various Energy Sources		
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	Summary of the Determination of Star Types Lying in	1129 W. Main St.	
Madison	Differences of Globular Cluster M53		

- *Remly, Lynn Louise 16 North H. S. 1117 6th St. N. 11
Collection and Classification of Some Invertebrate Fossils
- St. James Spitzner, Jerome George 17 St. James H. S. R. F. D. 3
Construction and Operation of a Spherical Ion Accelerator
- St. Louis Park Brown, David Raoul 16 St. Louis Park Sr. H. S. 4011 Excelsior Blvd., Minneapolis 16
Viability of Isografts and the Induction of Tolerance in Homografts
- St. Paul Danielson, Donald Alfred 17 St. Louis Park Sr. H. S. 4085 Alabama Ave. 16
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- Carthage Downing, Robert Matthews 17 Alexander Ramsey H. S. 1396 Sextant Ave. 13
Relationship Between Specific Solar Disturbances and Their Effect on the Earth
- Ladue Underwood, William Edward 17 Carthage H. S. 920 Poplar St.
Hornet "Spook" Light Using the Double Refraction of Light Theory
- Vencil, John Jay 18 Horton Watkins H. S. 8421 Colonial Lane, Clayton 24
Electronic Tone Synthesizer
- MISSOURI
- Choteau *Barton, Beatrice Mae 17 Choteau H. S. 207 First Ave., S. W.
Nutriculture
- Jamontte, Julie Lorette 17 Choteau H. S. 18 Eighth Ave., N. W.
Research on Hair
- Missoula Evers, Earl Everett 17 Missoula County H. S. 223 Fairview Ave.
Protozoans and Space Travel
- NEBRASKA
- Omaha McKean, Robert George 17 North H. S. 4713 Florence Blvd.. 10
- NEW JERSEY
- Bergenfield Dubin, Mark William 17 Bergenfield H. S. 96 Westminster Ave.
Changes in the Protozoan Population in the Rectum of Rana
- Clark Madey, John Michael Julius 16 A. L. Johnson Regional H. S. 1037 Raritan Rd.
Dielectric Analysis
- Lawrenceville Loveman, David Bernard III 18 The Lawrenceville School 462 Palmer Ave., Teaneck
Polynomial of Best Fit by the Method of Least Squares 5 Carpenter Rd.
- New Brunswick *Babcock, Barbara Allen 17 New Brunswick H. S. 5 River Edge
Some Physical and Psychological Effects of a Vitamin B6
Deficiency on Albino Rats
- North Arlington Frank, David Lewis 16 North Arlington H. S. 38 Fourth St.
Aristotle Space - A Research into the Logico-Projective Properties of the Pascal Table
- Oradell Bernstein, Mark Robert 17 River Dell Regional H. S. 87 Erskine Ave., River Edge
Classification of Extragalactic Nebulae
- Princeton Passaic Zavada, John Michael, Jr. 17 Pope Plus XII H. S. 148 Ninth St.
Nuclear Magnetic Resonance Spectrometer
- Mather, John Norman 17 Princeton H. S. 8 College Rd.
Nine Postulates for Euclidean Geometry
- Springfield Westerberk, Roy Allen 17 Jonathan Dayton Regional H. S. 68 Delmore Ave.
Chemical Spectroscope
- Trenton Wolf, Douglas Boris 17 Trenton Central H. S. 64 North Clinton Ave. 9
Chemiluminescence
- Westwood O'Connell, Edmund Patrick, Jr. 16 Westwood H. S. 206 Sussex Rd.
The Role of the Boron Atom in the Synthesis of the Dimethyl Silcone Polymer Known as "Bouncing Putty"
- NEW MEXICO
- Albuquerque Matthews, Shaw Hall III 17 Albuquerque H. S. 617 15th St. N. W.
An Experimental Accelerator
- Demas, James Nicholas 17 Sandia H. S. 2807 Chenault N. E.
An Electronic Number Reader
- NEW YORK
- Burdick, James Frederick 18 Alfred-Almond Central School Box 711, Alfred
Investigation of Spermatozoan Selectivity in the Utero-Tubal Junction of the Rat

- Bayside Borenstein, Matthew 16 Bayside H. S. 48-57 189 St., Flushing 65
An Analysis of the Reaction of Ferric Chloride with Copper
- Feigenbaum, Joel 16 Bayside H. S. 53-46 195 St., Flushing 65
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- Kolbert, Katherine S. 16 Bayside H. S. 214-51 32nd Rd. 61
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- Miller, Richard T. 15 Bayside H. S. 33-20 169 St., Flushing 58
Effect of a High Potential on the Production of Secondary X-Rays
- Seidman, Stephen 15 Bayside H. S. 26-42 202 St.
Reaction Between Copper and Sulfuric Acid
- Potash, Howard Kenneth 17 Brooklyn Technical H. S. 73-47 190 St.,
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Simon, Jonathan 15 Bayside H. S. 36-51 Utopia Pkwy., Whitestone 57
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- Sutow, Neal Barry 16 Bayside H. S. 203-06 35th Ave. 61
The Theoretical and Experimental Determination of the Factors Influencing the Transfer of Momentum
- Cheeger, Jeff 17 Erasmus Hall H. S. 125 Hawthorne St. 25
A New Method for Summing Certain Infinite Series
- Eisner, Alan Mark 16 Erasmus Hall H. S. 135 Hawthorne St. 25
Application of Chemical Microscopy to Mioxime Test for Nickel
- Frankel, Eric Conrad 16 Erasmus Hall H. S. 75 Buckingham Rd. 26
Investigation of the Influence of pH and Buffer Composition on Rate of Electrophoretic Migration
- Freedman, Gerald Martin 16 Erasmus Hall H. S. 460 E. 18 St. 26
An Attempt to Correlate the Electrophoretic Serum Protein Pattern with Class Specificity of Various Vertebrates
- Seckler, Ferold Howard 16 Erasmus Hall H. S. 55 Lenox Rd. 26
Anaphylaxis in the Triturus viridescens
- Tolkoff, Nina Ellen 16 Erasmus Hall H. S. 592 E. 19th St. 26
Study of Electricity, Curare, and Ionic Compounds on the Gastrocnemius Muscle of Rana pipiens
- Klein, Arthur Irwin 17 Lafayette H. S. 1514 W. 11th St. 4
Timing High Speed Chemical Reactions
- Little, Alan Michael 16 James Madison H. S. 3808 Fillmore Ave. 34
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- *Ruchlis, Carol Lee 16 Midwood H. S. 872 E. 24th St.
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- Aber, Joel Leigh 16 Andrew Jackson H. S. 130-04 226 St., Laurelton 13
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- Cheektawaga Lukis, Gary Alan 17 Cleveland Hill H. S. 494 Darwin Dr. 25
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- Levittown *Balos, Karen Mae 17 Division Avenue H. S. 72 Woodcock Lane
 Effect of Thyroxin on the Behavior and Growth of Paramucium caudatum
- Liberty Koingsberg, William David 17 Liberty Central School 31 Summit Ave.
 Experimental Rocket Telemetry Systems
- Locust Valley Samuels, Michael Jay 17 Friends Academy 40 Strawberry Lane, Roslyn
 Integrated Servo-Mechanisms
- Long Beach Goldstein, Kenneth Ira 16 Long Beach H. S. 115 W. Chester St. Heights
 Effect of Certain Spices on Bacteria
- Malverne *Magarik, Sheila Zora 17 Malverne Sr. H. S. 65 Pinebrook Ave., West
 Induction of Immunity to Methylcholanthrene-
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- New Rochelle Chamlin, Richard Mark 17 New Rochelle H. S. 68 Maywood Rd.
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Penfield		Frankel, Ira William	<u>17 Pelham Memorial H. S.</u>	<u>Fairways Apts.</u>	
Queens Village		Baxter, Paul Douglas	<u>17 Penfield Central H. S.</u>	<u>73 Washington Dr.</u>	
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		Wynar, Bruce Richard	<u>16 Monroe H. S.</u>	<u>701 Harvard St.</u>	
		Embryology and Artificial Parthenogenesis of the Chicken Egg			
Scotia		McCullough, Charles Robert	<u>17 Scotia-Glenville H. S.</u>	<u>W. Glenville Rd., R. D. #3, Amsterdam</u>	
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Syracuse		Sharbaugh, Amanda Harry	<u>17 Scotia-Glenville H. S.</u>	<u>39 Pine St.</u>	
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Tonawanda		Stewart, James Robert	<u>17 Onondaga Valley Academy</u>	<u>114 E. Newell St.</u>	
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		*Ash, Barbara Anne	<u>17 Kenmore East Sr. H. S.</u>	<u>204 Briarhurst</u>	
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		Lauth, Marlene Ruth	<u>16 Kenmore East Sr. H. S.</u>	<u>20 Claremont Ave., Kenmore</u>	
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Kaye, Lawrence Allan	17	White Plains Sr. H. S.	<u>13 Wilmont Ave.</u>		
Rosen, Kent Boris	16	White Plains Sr. H. S.	<u>5 Vermont Ave.</u>		
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*Sokolowski, Barbara Ann	17	Whitesboro Central H. S.	<u>Miller Rd., R. D. 1</u>		
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		*Millender, Mary Elizabeth			
		Herbarium and Methods of Preserving Color in Specimens			
		Straley, Joseph Paul	<u>18 Chapel Hill H. S.</u>	<u>53 Davie Circle</u>	
		The Chemistry of Non-Aqueous Solutions			
		*Lurington, Laura Russell	<u>17 Myers Park H. S.</u>	<u>3631 Fieldwood Rd.</u>	
		Ramsbotham, Alan James, Jr.	<u>18 Bishop McGuinness Memorial H. S.</u>		
		Spectroscopic Analysis with Liquid Prisms			
			<u>810 W. End Blvd.</u>		
		*Tuttle, Gail Lee			
		Experimental Surgery on the <i>Rattus norvegicus</i>			
		Dressler, John Lawrence	<u>17 Chillicothe H. S.</u>	<u>665 N. High St.</u>	
		Construction of a Digital Computer			
		*Schroer, Mary Lois Ann	<u>17 Mother of Mercy H. S.</u>	<u>2414 Nova Ave.</u>	
		*Litturi, Nancy Alice	<u>17 Lourdes Academy</u>	<u>5420 Stickney Ave.</u>	
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		Sutler, Leah Louise	<u>17 Mother of Mercy H. S.</u>	<u>5775 Green Acres Ct.</u>	
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		Fuchsmaier, Lucy	<u>16 Cleveland Heights H. S.</u>	<u>3441 Washington Blvd.</u>	
		Identification of Aldohexoses			
		Cocks, Gary Thomas	<u>16 Bishop Watterson H. S.</u>	<u>332 Colonial Ave., Worthington</u>	
		Genetic Effect of Inbreeding and Mild Irradiation on Spontaneous Activity of Mice			
		Schweickart, Charles David	<u>17 Bishop Watterson H. S.</u>	<u>778 Morning St., Worthington</u>	
		Experimenting in Metallurgy			
		Skeele, Martin Thomas	<u>17 Bishop Watterson H. S.</u>	<u>346 Glenmont Ave.</u>	
		Corrosion Resistance in Alloys			
		Nielsen, Paul Herron	<u>16 University School</u>	<u>8030 Sawmill Rd., Dublin</u>	
		Electroluminescence of Aluminum Anodes			
		Berry, LaVerne Vincent	<u>18 Slivers H. S.</u>	<u>56 Allen St.</u>	
		Culture Chamber for the Growth of Unicellular Algae Under Extensively Controlled Conditions			
		*Harrison, Marilyn Annette	<u>17 Jackson H. S.</u>	<u>52 Westlawn Ave.</u>	
		Identification and Classification of Minerals			
		Chait, Edmar Martin	<u>17 Fairmont H. S.</u>	<u>1217 Rose Bower Ave.</u>	
		Microbial Transformation of Steroids			
		Dinsmore, Theodore Robert	<u>Jr.</u>	<u>17 Fairmont H. S.</u>	
		Parametric Amplifier			

Mackinnon, Colin Ross	17 Fairmont H. S.	3084 Regent St., Dayton	9	Warwick	Kearney, Donald Francis	17 Warwick Veterans' Memorial H. S.	88 Benedict Rd.
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Smith, Maxim Gerard	17 Lorain H. S.	227 Nebraska Ave.		Taylor, Timothy Wayne	17 Warwick Veterans' Memorial H. S.	8 Luftkin Ct.	
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Scott, Michael Warren	17 Mansfield Sr. H. S.	329 Ruth Ave.					
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Clay, Ambrose Winston	18 Marion Catholic H. S.	551 Uhler Rd.					
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*Harner, Isabelle Maye	17 New Vienna H. S.	R. F. D. #1					
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Bungs, John Janis	18 Thomas W. Harvey H. S.	536 S. State St.					
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Fairland, David Arthur	17 Parma Senior H. S.	1889 E. Pleasant Valley Rd.,					
Automatic Testing and Teaching - Methods and Devices							
Guynn, Robert William	17 T. A. DeVilbiss H. S.	2356 Goddard 6 Cleveland 31					
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*Yoder, Sharon Kathleen	17 Wooster H. S.	R. D. #3, Box 53					
Growing Crystals							
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Robinson, Malcolm George	17 Classen H. S.	2000 N. W. 19th St. 6					
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*Snarr, Betty Lou	17 Classen H. S.	2020 N. E. 18th St. 11					
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*Short, Linda Kay	17 Ponca City Sr. H. S.	420 N. Ninth St.					
Comparative Study of Muscle Tissue Affected by							
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*Midgett, Portia Jean	17 Stratford H. S.	Byars, Rt. 2					
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*Cooper, Eleanor Ruth	17 Sulphur H. S.	Rt. 1, Box 102					
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Proteolytic Enzymes in Hog Gastric Mucosa							
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Fliske, Larry Burdette	17 Estacada Union H. S.	Rt. 2, Box 184					
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Kovacs, Mark Anthony	17 Allentown H. S.	1233 S. Meadow St.					
Cloud Tracks of Subatomic Particles							
*Swartz, JoAnne Marie	17 Central Catholic H. S.	2519 Allen St.					
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*Harper, Martha Whitney	17 Lower Merion Sr. H. S.	927 Cedar Grove Rd., Wynnewood					
Three-Dimensional Models of the Periodic Table							
Shidle, David Thomas	17 Purchase Line H. S.	Commodore Electric Lock					
Pottstown							
Humphreys, Robert Edward	17 A. D. Eisenhower Sr. H. S.	1741 W. Main St.					
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Pool, Charles Nelson	17 West Reading H. S.	509 Sunset Rd.					
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East Providence	Johnson, Greger Darrow	17 East Providence Sr. H. S.	49 Leroy Dr., Riverside 15				
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Frechette, Maurice Ambrose	17 La Salle Academy	Acres of Pine Rd., Coventry Center					
Geometrical Figures in Probability							

Monticello	Mayne, Charles Leroy	17 Monticello H. S.	Box 555	Warwick	Kearny, Donald Francis	17 Warwick Veterans' Memorial H. S.	88 Benedict Rd.
Orion	Determining Milligram Quantities of Uranium in Samples			The Iron-Iron Carbide System			
	Ross, Dennis Kent	17 Ogden H. S.	2283 Eccles Ave.	Taylor, Timothy Wayne	17 Warwick Veterans' Memorial H. S.	8 Luftkin Ct.	
	Determination of Magnetic Fields Using an Oscilloscope			Soap Bubbles			
Bennington	Rallis, Stephen James	17 Bennington H. S.	198 Weeks St.				
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VIRGINIA

Fritz, Gilbert Geiger	17 Wakefield H.S.	305 N. Kenmore St.	1
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Pyke, Thomas Nicholas, Jr.	17 Washington-Lee H.S.	4806 N. Seventh St.	3
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Partlow, Lester Martin	17 Fairfax H.S.	202 Andover Dr.	
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Smith, William Theodore	17 Fairfax H.S.	Rt. 2, Box 246, Vienna	
Taylor, Frank Eugene	17 McLean H.S.	4241 Forest Lane	
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*Clarke, Doris Briggs	17 Maggie L. Walker H.S.	305 Overbrook Rd.	22
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*Rochat, Marilee Jean	18 Kennewick Sr. H.S.	514 W. First St.	
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McClintock, Jeff Eugene	17 S. Kitsap H.S.	Rt. 4, Box 287	
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Construction of Parabolic Telescopic Mirrors			
Huisman, Deenes Christoffel	18 Prosser H.S.	Johnson Rd., Rt. 1	
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Tomlinson, Barrett Lynn	18 Columbia H.S.	411 Barth	
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*Molohan, Kathryn Theresa	17 Ballard H.S.	6412 34th N.W.	
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Snyder, Patrick John	17 Bellarmine H.S.	1510 N. Tenth St.	6
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*Brock, Sabra Elizabeth	17 Stonewall Jackson H.S.	851 Somersett Dr.	2
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McCormick, Joseph Andrew III	17 Stonewall Jackson H.S.	1005 Stephen	
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*Thompson, Joyce Anne	16 Stonewall Jackson H.S.	800 Vogel Dr.	2
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*Saliga, Suzanne Bernadette	17 Notre Dame H.S.	147 Seneca Dr.	1
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Harper, George Robert	17 St. Albans H.S.	105 Scenic Dr.	
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Vande Linde, Vernon David	17 St. Albans H.S.	1111 S. B St.	
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Covelli, Robert Ronald	17 Mary D. Bradford H.S.	9657 29 Ave.	
Bivalent Compounds of Samarium, Europium, and Ytterbium			
Perner, Virginia Violet	17 Columbus H.S.	Rt. 4, Box 267	
Fossil Pollen Identification of Post-Glacial Vegetation			
In Five Wisconsin Peat Areas			
Maynard, James Hadden	17 Solomon Juneau H.S.	Building 17S, Wood	
Building a Small Cyclotron			
Schobknecht, William Edward	17 Rufus King H.S.	4421 N. 22 St.	9
How to Build and Fire a Workable Solid Propellant Rocket			

STATE SCIENCE TALENT SEARCHES

All State Science Talent Searches are authorized by special arrangement with Science Clubs of America. Those desiring information on or details of the results of State Science Talent Searches should send their inquiries to the Directors in the respective states. For a prompt reply, send a stamped, self-addressed envelope with your inquiry.

Kratch, Don Henry	17	Oshkosh H. S.	1412 Wisconsin St.
Controlled Atmosphere Cloud Chamber			
Rusche, Leslie Arnold	17	Sturgeon Bay H. S.	<u>R. F. D. 1</u>
Remote Controlled Robot			
Devereaux, William Robert	17	Big Foot H. S.	<u>P. O. Box 312, Fontana</u>
Investigations in Nuclear Theory			
Vahl, James Michael	17	Waukesha H. S.	<u>10507 W. Ridge Rd., Hales Corners</u>
Ion Exchange Resins			
Reeke, George Norman, Jr.	16	Abbot Penning H. S.	<u>2619 Oakwood Green Ave.,</u> <u>Green Bay</u>
A Digital Computer			
<u>WYOMING</u>			
Maraldo, John Charles	17	Saint Mary H. S.	<u>3719 Dover Rd.</u>
Isolation of an Enzyme			
Wahl, Mark Harry	17	Saint Mary H. S.	<u>2116 Bradley Ave.</u>
Construction and Operation of a Radio Telescope			

Oshkosh	Kratzsch, Don Henry	17 Oshkosh H. S.	<u>1412 Wisconsin St.</u>
Sturgeon Bay	Controlled Atmosphere Cloud Chamber		
Rusche, Leslie Arnold	17 Sturgeon Bay H. S.		<u>R. F. D. 1</u>
Walworth	Remote Controlled Robot		
Waukesha	Devereaux, William Robert	17 Big Foot H. S.	<u>P. O. Box 312, Fontana</u>
West De Pere	Vahl, James Michael	17 Waukesha H. S.	<u>10507 W. Ridge Rd., Hales Corners</u>
	Ion Exchange Resins		
	Reeke, George Norman, Jr.	16 Abbot Pennington H. S.	<u>2619 Oakwood Ave., Green Bay</u>
	A Digital Computer		

<p align="center">STATE SCIENCE TALENT SEARCHES</p> <p>All State Science Talent Searches are authorized by special arrangement with Science Clubs of America. Those desiring information on or details of the results of State Science Talent Searches should send their inquiries to the Directors in the respective states. For a prompt reply, send a stamped, self-addressed envelope with your inquiry.</p> <p>Alabama: Alabama Academy of Science Dr. Emmett B. Carmichael, Prof. and Head, Dept. of Biochemistry, Alabama Medical College-Birmingham</p> <p>Arkansas: Arkansas Academy of Science Dr. Leo Paulissen, Asst. Prof. of Bacteriology, University of Arkansas, Fayetteville</p> <p>Connecticut: Connecticut Academy of Arts and Sciences Dr. David J. Blick, Assoc. Prof. of Science Education, University of Connecticut, Storrs</p> <p>District of Columbia: Washington Academy of Sciences Dr. Leo Schubert, Chmn., Div. of Nat. Sciences and Math., American University, Washington D.C.</p> <p>Florida: Florida Foundation for Future Scientists Dr. Luther Arnold, College of Education, University of Florida, Gainesville</p> <p>Georgia: Georgia Academy of Science Miss Emily Simmons, Science Teacher, McEachern High School, Powder Springs</p> <p>Illinois: Illinois State Academy of Science Mr. L. R. Heckard, Asst. Prof. of Botany, Botany Dept., University of Illinois, Urbana</p> <p>Indiana: Indiana Academy of Science Mr. R. W. Leffler, Asst. Prof. of Physics and Education, Physics Dept., Purdue University-Bloomington</p> <p>Iowa: Iowa Academy of Science Mr. Joe D. Woods, Assoc. Prof., Chemistry, Drake University, Des Moines 11</p> <p>Kansas: Kansas Academy of Science Dr. S. Winston Cram, Chmn., Physical Science Div., Kansas State Teachers College, Emporia</p> <p>Louisiana: Southwestern Louisiana Institute Dr. James R. Oliver, Prof. of Chemistry, Southwestern Louisiana Institute, Lafayette</p> <p>Maine: University of Maine Dr. George T. Davis, Assoc. Prof. of Education, University of Maine, Orono</p> <p>Maryland: Maryland Academy of Sciences Dr. Thompson King, Enoch Pratt Free Library Bldg., Baltimore 1</p> <p>Michigan: Michigan Academy of Sciences, Arts and Letters Prof. C. L. Schloemer, 146 Natural Science Bldg., Michigan State University, E. Lansing</p> <p>Minnesota: Minnesota Academy of Science Dr. Arthur F. Nelson, Prof. of Chemistry, St. Cloud State College</p> <p>Montana: Montana State College Dr. Adrien L. Hess, Assoc. Prof. of Mathematics, Montana State College, Bozeman</p> <p>Nebraska: Nebraska Academy of Science Dr. James A. Rutledge, Assoc. Prof. of Secondary Education, Univ. of Nebraska, Lincoln 8</p> <p>New Hampshire: New Hampshire Academy of Science Dr. R. L. Bickle, Prof. of Entomology, University of New Hampshire, Durham</p>	<p style="margin-top: -100px;">*</p> <p style="margin-top: -100px;">*</p> <p style="margin-top: -100px;">*</p>	<p align="right">Maraido, John Charles 17 Saint Mary H. S. 3719 Dover Rd.</p> <p align="right">Wahl, Mark Harry 17 Saint Mary H. S. 2116 Bradley Ave.</p> <p align="right">Isolation of an Enzyme</p> <p align="right">Construction and Operation of a Radio Telescope</p>
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SCIENCE SERVICE - 1719 N Street, N.W. - Washington 6, D.C.

Oklahoma City	*Snarr, Betty Lou	17	Classen H. S.	2020 N.E. 18th St.	11
OKLAHOMA					
Allentown	*Swartz, JoAnne Marie	17	Central Catholic H. S.	2519 Allen St.	
PENNSYLVANIA					
Houston	Cruce, William Lovel Raney	17	Spring Branch Sr. H. S.	9010 Memorial Dr.	24
Newport News	Hoyle, Samuel Pettus, Jr.	17	Newport News H. S.	68 Maple Ave.	
WEST VIRGINIA					
Charleston	*Thompson, Joyce Anne	16	Stonewall Jackson H. S.	800 Vogel Dr.	2
WISCONSIN					
Marshfield	*Perner, Virginia Violet	17	Columbus H. S.	Rt. 4, Box 267	
WYOMING					
Cheyenne	Maraldo, John Charles	17	Saint Mary H. S.	3719 Dover Rd.	
* indicates girls H.S. indicates High School					
HOME ADDRESS follows name of school AGE of winner follows name					

*Nineteenth Annual Science Talent Search®
for the Westinghouse Science Scholarships and Awards*

The forty Washington trip winners of the 19th Annual Science Talent Search, among whom 1% of those who completed entries in this scientific and educational competition,

Designed to discover and develop scientific ability among high school seniors, the Science Talent Search is conducted annually for the Westinghouse Science Scholarships and Awards by Science Clubs of America, administered by Science Service, 1719 N Street, N.W., Washington 6, D.C.

Nine girls and 31 boys (proportion determined by ratio of boys and girls completing entries) are being invited to Washington, D.C., for an all-expense trip March 3 through March 7, 1960, to attend the Science Talent Institute. Here five winners will be selected by the board of judges to receive one of the following Westinghouse Science Scholarships: \$7,500 (\$1,875 a year), \$6,000 (\$1,500 a year), \$5,000 (\$1,250 a year), \$4,000 (\$1,000 a year), \$3,000 (\$750 a year). The remaining 35 contestants will be given Westinghouse Science Awards of \$250 each.

The trip winners are 16 to 18 years of age and come from 37 cities in 20 states and the District of Columbia. They were picked by the judges from among 29,402 contestants of whom 4,477 completed their entries by taking a science aptitude examination, obtaining recommendations and writing a report on "My Scientific Project." Examinations were received from every state. Of the 40 Nineteenth Annual Science Talent Search winners, 35 ranked in the top 5% of their graduating class and 18 of these were first, second, or third. Most of the winners are members of science clubs and many of them are club presidents, or other officers. Most of their clubs are affiliated with Science Clubs of America. Girls accounted for 22% of the entries this year.

FILE COPY

Washington Trip Winners

			EVANSVILLE	David, John Dewood	17	Benjamin Bosse H. S.	813 S. Weinbach Ave.	14
ARIZONA								
Phoenix	*Edlund, Gayle Ann	17	No. Phoenix H. S.	118 E. Country Club Dr.				
Tucson	Hearn, David Russell	18	Tucson H. S.	2215 E. 8th St.				
La Mesa	Mardis, James Vernon	17	Helix H. S.	4729 Maple Ave.				
Los Angeles	*Ramstad, Linda Maria	16	Fairfax H. S.	5501/2 N. Kingsley Dr.	4			
CALIFORNIA								
Little Rock	Spitzberg, Irving Joseph, Jr.	17	Hall H. S.	307 N. Cedar St.				
Stamford	Winfree, Arthur Taylor	17	Stamford H. S.	46 Laurel Ledge Rd.				
CONNECTICUT								
DISTRICT OF COLUMBIA								
Washington	Friedman, Samuel Robert	17	Woodrow Wilson H. S.	3722 Appleton St., N.W.	16			
FLORIDA								
Coral Gables	Friis, Robert Beaney, Jr.	17	Coral Gables H. S.	6175 S.W. 50th St., Miami	55			
Gainesville	Platt, William Joshua III	17	Gainesville H. S.	Rt. 3, Box 627-A				
ILLINOIS								
Evanson	Mills, Richard Pence	16	Evanston Twp. H. S.	2713 Lincolnwood Dr.				
La Grange	*Kirkman, Nancy Ann	17	Maywood School	200 Montgomery Lane, Glenview				
Rockford	Eystone, Robert Bruce	17	Lyons Twp. H. S.	309 N. Edgewood Ave., La Grange				
	Rowland, James Warren, Jr.	17	East Sr. H. S.	404 Sunrise Lane Park				
INDIANA								
Bloomington	*Cuffey, Hazel Rita	17	University H. S.	522 Eastside Dr.				
MASSACHUSETTS								
Newtonville	Shaner, John Wesley	17	Newton H. S.	9 Bellingham St., Newton Highlands	61			
Springfield	Podoski, Frank Anthony	18	Technical H. S.	28 Pleasant St., Ludlow				
Winchester	Baker, Dennis Graham	17	Winchester H. S.	7 Grove St.				
MINNESOTA								
St. James	Spitzner, Jerome George	17	St. James H. S.	R. F. D. 3				
St. Louis Park	Brown, David Raoul	16	St. Louis Park Sr. H. S.	4011 Excelsior Blvd., Minneapolis	16			
Carthage	Underwood, William Edward	17	Carthage H. S.	920 Poplar St.				
MISSOURI								
Clark	Madey, John Michael Julius	16	A. L. Johnson Regional H. S.	1037 Kantan Rd.				
Lawrenceville	Loveman, David Bernard III	18	The Lawrenceville School	462 Palmer Ave., Teaneck				
Princeton	Mather, John Norman	17	Princeton H. S.	8 College Rd.				
NEW JERSEY								
Brooklyn	Applebaum, Richard Aaron	16	Erasmus Hall H. S.	2110 Westbury Ct.	25			
Croton-on-Hudson	Saal, Harry Jerome	16	Midwood H. S.	786 E. 19th St.	30			
New York	Bennett, Charles Henry	16	Croton-Harmon H. S.	R. R. #1				
Hudson	Heyworth, Geoffrey Dane	16	Bronx H. S. of Science	600 W. 114 St.	25			
Tonawanda	Hochster, Melvin	16	Stuyvesant H. S.	711 Ocean Ave., Brooklyn	26			
Patchogue	Wasserman, Gordon Seth	16	Patchogue Sr. H. S.	413 E. Main St.				
Queens Village	Savio, Robert Richard	17	Martin Van Buren H. S.	79-22 262nd St., Floral Park				
	*Ash, Barbara Anne	17	Kenmore East Sr. H. S.	204 Briarhurst				
NORTH CAROLINA								
Chapel Hill	Straley, Joseph Paul	18	Chapel Hill H. S.	53 Davie Circle				