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

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Dr. Fred H. Sands, Assoc. Prof. of Chemistry, North Dakota State University, Fargo

Oklahoma: Oklahoma Science Talent Search
Dr. Horace H. Bliss, Dept. of Chemistry, University of Oklahoma, Norman

Oregon: Oregon Museum of Science and Industry
Dr. Raymond E. Barrett, Education Dir., Oregon Museum of Science and Industry,
4015 S.W. Canyon Rd., Portland

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

Rhode Island: Rhode Island Schools' Science Fair Committee
Mr. George W. Gallipeau, Jr., Physics Instructor, Barrington High School, Barrington

South Carolina: South Carolina Academy of Science
Dr. Donald G. Kubler, Dept. of Chemistry, Furman University, Greenville

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Tennessee: Tennessee Academy of Science
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Texas: Texas State Science Talent Search
Dr. Robert W. Higgins, Head, Chemistry Dept., Texas Woman's University, Denton

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Mr. Richard S. Peterson, State Supv. of Science Education, 223 State Capitol Bldg.,
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Dr. George Chapman Crooks, Assoc. Prof. of Chemistry, University of Vermont,
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Virginia: Virginia Academy of Science
Prof. Edgar V. Russell, Jr., Assoc. Prof. of Chemistry, Virginia Polytechnic Institute,
Blacksburg

Washington: Washington State Science Talent Search Committee
Dr. Hugh W. Johnston, Assoc. Prof. of Chemistry, Whitworth College, Spokane

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Prof. Douglas B. Williamson, Assoc. Prof. of Physics, West Virginia University,
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HONORS GROUP

IN

THE *24th* ANNUAL

Science Talent Search[®]

for the

**Westinghouse Science Scholarships
and Awards**

1965



SCIENCE CLUBS OF AMERICA

Administered By Science Service

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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 the list of 300 honor awards, 40 are being chosen as winners of the Washington trip. Among these \$34,250 in scholarships and awards will be distributed. The 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, 1965, 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 77 girls and 223 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 86% of the girls rank in the upper 5% in their high school classes. Among the 300 who won Honors, 245 belong to science clubs of which 123 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 students 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" of importance equal to the fundamental researches in the Westinghouse Research Laboratories. Science and education are grateful for the financial support of the twenty-four 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 20,000 science groups and more than 700,000 members affiliated with Science Clubs of America.

Honors Group

in the Twenty-fourth Annual Science Talent Search^(R)

* indicates girls
H. S. indicates High School
HOME ADDRESS is underlined
AGE of winner follows name
Title of project report submitted is on next line

ALABAMA

- Birmingham Frost, Charles Alan 17 Ramsay H.S. 2901 10th Ct. S. 35205
Change in Attention Span with Respect to High or Low
Motivation to an Unrelated Central Stimulus
- Fort Payne Kidd, Billy DeWayne 18 Fort Payne H.S. Kershaw Rd., Box 390, Rt. 1
An Application of Monte Carlo Mathematics 35967
- Huntsville Swift, Wesley Robert, Jr. 17 Huntsville H.S. 704 Dellwood Rd. 35802
Effects of Mineral Matter on Origin of Life

ALASKA

- Anchorage *Ader, Patricia Lynn 17 West Anchorage H.S. 30-360-G Cherry Dr., EAFB
Growth and Developmental Adaptation of Microtus oeconomus
to the Arctic Environment as Compared to Mus musculus

ARIZONA

- Phoenix Hilsinger, Richard Nelson 17 Camelback H.S. 2517 E. Indianola 85016
Electrochemical Phenomena During a Low-Pressure
Glow Discharge
- *Harris, Karen Lynne 17 North Phoenix H.S. 4728 E. Vernon 85008
Cytological Study of Homograft and Heterograft Reactions
Using Skin Windows
- Kinsman, Michael David 18 North Phoenix H.S. 3015 N. 18th Ave. 85015
The Eminent Collision?

CALIFORNIA

- Anaheim Wewer, William Paul 17 Anaheim H.S. 638 Buttonwood St. 92805
Collection and Analysis of Meteoritic Dust
- Barstow Bell, Michael Walter 17 Barstow Union H.S. 1513 Church St. 92311
Free Amino Acids in Normal and Regenerating Tissue
- Berkeley *Behounek, Anne Christine 17 Presentation H.S. 2115 Roosevelt Ave. 94703
Effects of an Electromagnetic Field on Daphnia pulex
- *Moffitt, Mary Frances 17 Presentation H.S. 951 Ventura, Albany 94707
Extraction and Identification of Carotenoids Present
in two Strains of Bacteria
- Bishop Kurtak, Daniel Charles 17 Bishop Union H.S. Rt. 2, Box 74R 93514
Effects of Certain Mammalian Hormones on the
Metamorphosis of Tenebrio molitor
- LeVitt, Richard Merton 17 Bishop Union H.S. Rt. 2, Box 154 93514
Electrical Effects in Freezing Saline Solutions
- Campbell Faust, Douglas Alan 17 Westmont H.S. 11891 Brookridge Dr., Saratoga
An Automatic Tic-Tac-Toe Computer 95070
- Fairfield Pelzmann, Robert Frank 17 Armijo Union H.S. 1106 Roosevelt 94533
Effects of Electric Current on a Growing Sodium Chloride Crystal
- Grossmont Smith, Albert Turner, Jr. 18 Grossmont H.S. 9654 Candy Lane, La Mesa
Photoelectric Photometry of BV 267 Auriga 92041
- Long Beach Clough, Gene Alan 17 Long Beach Polytechnic H.S. 2990 Fashion Ave. 90810
Design and Construction of a Simple Game Playing Machine
- Manhattan Beach Edmundson, Dermot Barclay 17 Mira Costa H.S. 1007 Dianthus St. 90266
Possible Interaction Between Organic Radicals Upon
Irradiation of Amino Acids
- Oakland *Fitzgerald, Laurel Jacqueline 17 Oakland H.S. 1715 Clemens Rd. 94602
Investigation of Saprolegnia ferax
- Oceanside Cowen, Steven James 17 Oceanside H.S. 2026 S. Freeman 92054
Carbon Monoxide Detector

- Palos Verdes Estates *Crampton, Terri Teresa 17 Marymount H.S. 630 S. Gertruda, Redondo Beach 90277
- *Saffo, Mary Elizabeth 16 Marymount H.S. 1 Crest Rd., E., Rolling Hills 90274
- Isolation, Cell Specificity and Immunological Characteristics of Isozymes in Lactate Dehydrogenase
- Bailey, Steven Walter 17 Palos Verdes H.S. 700 Cloyden Rd., 90275
- Variations in Polysomal Distribution in the Growth Stages of *Tetrahymen pyriformis*
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- Determination of a New Strain of Tobacco Rattle Virus by Attempted Transmission With *Trichodorus christiei*
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- Stability of the Messenger RNA Template of Ferritin in Rat Liver
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- An Extension of the Concept of the Derivative of a Function
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- An Investigation of Mechanisms Facilitating Bacterial Resistance to Ultraviolet Light
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- Bacterial Metabolism of Trigonelline
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- Differential Correction of Satellite Orbits
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- CONNECTICUT
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- Analysis of Two Independent Methods of Arresting Mental Illness
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- Deoxyribonucleic Acid-Induced Reduction of Virulence in *Staphylococcus aureus*
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- Comparative Evaluation of Clinical Tests for Pregnancy Among Humans
- Kramer, Michael Stuart 16 Coral Gables Sr. H.S. 6321 S.W. 63rd Ct., S. Miami 33143
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- Graphing of Complex Numbers
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- Ketone Derivatives of Heteropoly Acids
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- Myxosporidian Parasite of the Pinfish
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- Carotenoids of *Pseudoplexaura crassa*
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Austin	Frankel, Arthur Edward 17 Stephen Austin H.S. 1110 Gaston Ave. 78703
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	VIRGINIA
McLean	*Moore, Polly Fletcher 17 McLean H.S. 6002 Dempsey St. 22101
	WISCONSIN
Sheboygan	Johnson, Randy Allan 17 North H.S. 2126 N. 26th St. 53081
	*Sdano, Caroline Kimmins 18 South H.S. 1921 S. 16th St. 53081

*indicates girls
H.S. indicates High School

HOME ADDRESS follows name of school
AGE of winner follows name



SCIENCE SERVICE, INC. - 1719 N Street, N.W. - Washington, D.C. 20036

Washington Trip Winners
of the
Twenty-fourth Annual Science Talent Search®
for the Westinghouse Science Scholarships and Awards

The forty Washington trip winners of the 24th Annual Science Talent Search, among whom \$34,250 of Westinghouse Science Scholarships and Awards will be distributed, represent about 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, D.C. 20036.

Ten girls and 30 boys (proportion determined by ratio of boys and girls completing entries) are being invited to Washington, D.C., for an all-expense trip February 24 through March 1, 1965, 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 15 to 18 years of age and come from 34 cities in 21 states. They were picked by the judges from among 22,692 contestants of whom 2,939 completed their entries by taking a science aptitude examination, obtaining recommendations and writing a report on their science project. Completed entries were received from 50 states and the District of Columbia.

Of the 40 Twenty-fourth Annual Science Talent Search Winners, 36 ranked in the top 5% of their graduating class and 15 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 25% of the entries this year.

Washington Trip Winners

ALASKA

Anchorage *Ader, Patricia Lynn 17 West Anchorage H.S. 30-360-G Cherry Dr., EAFB

CALIFORNIA

Grossmont Smith, Albert Turner, Jr. 18 Grossmont H.S. 9654 Candy Lane, La Mesa 92041

San Francisco Hassid, Edwin Joseph 17 Lowell H.S. 2075 9th Ave. 94116
Woodland Hills Howard, Larry Dean 17 William H. Taft H.S. 20271 Mobile St., Canoga Park 91306

CONNECTICUT

West Hartford Nathanson, James Andrew 18 William H. Hall H.S. 4 Brookfield Rd. 06107

FLORIDA

Orlando Truitt, James Pennington, Jr. 18 Oak Ridge Jr.-Sr. H.S. 901 Iron Oak Dr. 32809

GEORGIA

Brunswick Roth, Christopher Micheal 17 Glynn Academy 97 Yorkshire 31520

ILLINOIS

Arlington Heights Bagnuolo, William George 16 St. Viator H.S. 272 Plymouth Dr., Inverness
Chicago Silverman, Stuart Lloyd 17 Mather H.S. 6421 N. Richmond St. 60645

Chicago Silverman, Stuart Lloyd 17 Mather H.S. 6421 N. Richmond St. 60645

KENTUCKY

Louisville Barker, William Thomas 17 Mayme S. Waggener H.S. 703 Waterford Rd. 40207
Gott, John Richard III 17 Mayme S. Waggener H.S. 136 Indian Hills Trail 40207

MARYLAND

Bethesda *Kramer, Mary Elizabeth 16 Walt Whitman H.S. 5604 Vernon Pl. 20034

MASSACHUSETTS

Wakefield Knight, Thomas Frederic, Jr. 16 Wakefield H.S. 23 Pierce Ave. 01880

MINNESOTA

Sleepy Eye *Fering, Nancy 17 Sleepy Eye H.S. 701 W. Maple St. 56085

NEBRASKA

Omaha *Jenny, Linda Lee 18 Benson H.S. 5419 Crown Point 68104

NEW JERSEY

Bergenfield *Horowitz, Evalyn 16 Bergenfield H.S. 373 Wildrose Ave. 07621
Princeton Pensak, David Alan 16 Princeton H.S. 119 Random Rd. 08540

NEW YORK

Alden Choate, Albert George 17 Alden Central H.S. 1553 Crittenden St. 14004
Bayside Ephraim, Robert Martin 17 Bayside H.S. 41-29 Morgan St., Little Neck 11363

Brooklyn

Levinson, Jerrold 16 Abraham Lincoln H.S. 3702 Cypress Ave. 11224

*Greer, Helen Anita 16 Erasmus Hall H.S. 45 Martense St. 11226

Strauchen, James A. 16 Forest Hills H.S. 64-34 99th St., Rego Park 11374

Loewenstein, John Isaac 15 Jamaica H.S. 75-08 168th St., New York 11366