NEBRASKA: Nebraska Academy of Sciences, C.B. Schultz, Executive Director, Nebraska Academy of Sciences, 308 Morrill Hall, University of Nebraska, Lincoln 68588-0339

NEW JERSEY: The New Jersey Academy of Science, Douglas Garatina, 13 West 30th Street, Bayonne 07002

NEW MEXICO: New Mexico Tech, Dr. David Shortess, Biology Department, New Mexico Tech, Campus Station, Socorro 87801

NORTH CAROLINA: North Carolina Student Academy of Science, Dr. Charles F. Lytle, Biological Sciences, Box 7611, North Carolina State University, Raleigh 27695

OHIO: The Ohio Academy of Science, Lynn Edward Elfiner, Executive Officer, The Ohio Academy of Science, 445 King Avenue, Columbus 43201

OKLAHOMA: Oklahoma Junior Academy of Science, Jim Pigg, Director, Oklahoma Junior Academy of Science, 300 N. Eastern, Moore 73160

OREGON: Oregon Museum of Science and Industry, David Heil, Director, Grant Program Development and Outreach, Oregon Museum of Science and Industry, 4015 SW Canyon Road, Portland 97221

 PENNSYLVANIA: Pennsylvania Academy of Science, Dr. Kurt C. Schreiber, Professor, Department of Chemistry, Duquesne University, Pittsburgh 15282

TEXAS: Texas Section of the American Association of Physics Teachers, Dr. James R. Crawford, Department of Physics, Southwest Texas State University, San Marcos 78666-4616

UTAH: Utah State Office of Education, R. LaMar Alfred, Specialist in Science Education, Utah State Office of Education, 250 East 500 South, Salt Lake City 84111

VERMONT: The University of Vermont, Dr. George C. Crooks, 74 Spear Street, South Burlington 05401

VIRGINIA: Virginia Junior Academy of Science, John Liebermann, 10106 Spring Lake Terrace, Fairfax 22030

WASHINGTON: Washington State Science Talent Search, Dr. Paul A. Lepse, Chemistry Department, Seattle Pacific University, Seattle 98119

WEST VIRGINIA: West Virginia Academy of Science, Joseph F. Glencoe, Jr., Department of Biology, Box 31, West Virginia Wesleyan College, Buckhannon 26201

WISCONSIN: Wisconsin Science Talent Search, Dr. Dean Nelson, Professor of Chemistry, University of Wisconsin-Eau Claire, P-458, Eau Claire 54701

WYOMING: (See Colorado-Wyoming)

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THE 46th ANNUAL
Science Talent Search®
for the
Westinghouse Science Scholarships
and Awards

1987 HONORS GROUP

Administered by SCIENCE SERVICE
1719 N Street N.W., Washington, D. C. 20036

FOR RELEASE: WEDNESDAY, JANUARY 14, 1987

The Science Talent Search was the pioneering endeavor to discover at the high school senior year level those who have the potential to become the research scientists and engineers 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 section of students with research ability in science and engineering has become an institution and tradition due to approval from the academic community and the creditable records of winners in colleges, universities and professional positions.

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 forty-six Science Talent Searches by the Westinghouse Electric Corporation and the Westinghouse Educational Foundation.

Science Service, engaged in the interpretation and public understanding of science on a broad front, is proud of administering the annual Science Talent Search. From the newspapers, educators, scientists and engineers of America, there has been enthusiastic cooperation in this annual activity that means so much to high school seniors interested in science and engineering.
1987 Honors Group

The achieving of Honors in the Science Talent Search is an evidence of ability and interest in science and engineering which should be taken into consideration by colleges and universities in admissions and granting of scholarships. For this reason this Honors List is distributed to all universities and colleges in the United States. Each of those winning honors is being furnished with multiple certifications intended to accompany applications for college admissions and for scholarships, but a listing in this pamphlet should be accepted as an equivalent certificate. Listed are 101 girls and 199 boys.

From this list of 300 Honors, 40 are being chosen as Winners of the Washington trip. Among these, $140,000 in scholarships and awards will be distributed. The Winners are being announced subsequent to the distribution of this list and their names will be published in SCIENCE NEWS of January 24, 1987, and it will be sent upon request accompanied by a self-addressed stamped envelope.

(age follows name; home address underlined)

ALABAMA

Huntsville
Granger, Darryl Edward 18 Randolph H.S. 2307 Gladstone Dr. 35511 Design and Construction of a Railgun

ARIZONA

Tucson
McLaughlin, Kenneth Dean 17 Amphitheater H.S. 5560 N. Maria Dr. 85732 Introduction to Cellular Automata

ARKANSAS

Ravenden Springs
Schuchman, Deidre Michelle 18 Oak Ridge Central H.S. Rt. 1, Box 191 72450 Presence or Absence of Auditory Stimuli: Their Effect on Cardiovascular and Neuronal Functions

Sheridan
Lowrey, Seth Magee 17 Sheridan H.S. P.O. Box 153 72150 Excursions Into Experimental Geometry

Weiner
Weld, Kyle Jones 17 Weiner H.S. P.O. Box 313, Fisher 72432 Isolation of Bacteria That Modify Antibiotics

CALIFORNIA

Alhambra
Hou, Lisa Fou-Fei 17 Alhambra H.S. 1341 College View Dr., #5, Monterey Park 91754 Basic Studies of Optical Coating Thermal Properties

La Habra
Nguyen, Jennifer Lynn 17 La Habra H.S. 510 Fairway Dr., La Habra Heights 90631 Analysis of Modern Human Footprints as Applied to the Study of Ancient Man

Los Alamitos
Box, Robert Aaron 17 Los Alamitos H.S. 3350 Glover Cir., Seal Beach 90740 Tew Sand Biotransformation with Surface-Producing Bacteria and Sonication

Orinda
Jacobson, Jessica Lynn 18 Miramar H.S. 53 E. Altairada Dr. 94563 Effects of Calcium Channel Blockers in Daphnia

Riverside
Williams, Mark Randall 17 Riverside Poly H.S. 2266 Century Ave. 92506 Viability of the Use of Rayleigh Scattering to Determine Planetary Atmospheric Pressure

Sierra Madre
Kowata, Keith Tadao 15 Maranatha H.S. 4848 Hampton Rd., La Canada 91011 Increasing Foam Stability for Enhanced Oil Recovery

COLORADO

Colorado Springs
Shepard, Thomas Claude 17 William J. Palmer H.S. 2104 N. Cascade Ave. 80907 Ant-agonistic Phemonones

Denver
Prasad, Kedar Che 18 Colorado Academy 351 Fairfax St 80220 Induction of Differentiated Phenotypes in Melanoma Cells by a Combination of an Adenosine 3',5'-Cyclic Monophosphate Stimulating Agent and Vitamin E Succinate

CONNECTICUT

East Lyme
DeVore, Kimberly Michelle 17 East Lyme H.S. 34 Valley Dr., Salem 06415 Enumeration of Microorganisms and Theoretical Determination of Biomass in a Hazardous Waste Land Treatment

Middletown
Barrett, Jennifer Genevieve 16 Academy of Our Lady of Mercy 20 Foran Rd. 60408 Pulmonary: The Effect of Cupric Chloride on Caeasarea virginnica

DELWARE

Seaford
Dujari, Rajeev 17 Seaford Senior H.S. R.D. 5, Box 53 19973 Investigation of the Coding Technique in Computer Storage of Textual Data

WASHINGTON

McMahon, Joseph Edward 17 Gonzaga College H.S. 8224 Inversness Hollow Terr., Potomac, MD 20854 Artificial Intelligence Applied to Robotics

DISTRICT OF COLUMBIA

Daytona Beach
Styker, Peter Philip 17 Mainland Senior H.S. 35 Marfield Cir., Ormond Beach 32207 Measuring Brownian Movement

Hillard
Roberts, Derek Marcel 17 Hilliard Junior-Senior H.S. Rt. 1, Box 159-B 32046 Stored Energy in Reactor Graphite

Medford
Hartjes, Jeffrey Randall 18 Hudson H.S. 13004 Sennmill Way, Bayonet Pt. 33557 Effects of Lysozyme on the Bacterial Colonization of the Oral Cavity

Melbourne
White, John Ann 17 Melbourne H.S. 2780 Filly Ln. 32953 Innovative Cam Engine Design and Testing

Milford
Roberts, Victoria Marie 17 Miami Edison Senior H.S. 1011 N.W. 53 St. 33172 Effects of Interferon on Natural Cell Mediated Cytotoxicity in Aquired Immunodeficiency Syndrome

Miami
Keller, Frank Joseph 17 Miami Killian Senior H.S. 7720 S.W. 96 Ave. 33173 Concentration of Platelet Analogs in Blood Flow Through Capillary Channels

New Smyrna Beach
Griffy, Charlie Cristal 17 New Smyrna Beach H.S. 1700 Orange Tree Dr. Edgewater 32132 Spectroscopic, X-Ray, and Radio Analysis of QSO Nubuloity

Pompano Beach
Gerson, Michael Bryan 17 Ely H.S. 1328 N.W. 100 Ave., Coral Springs 33071 Computer Assisted Suspect Identification 1.00 (C.A.S.T. 1.00)

Winter Park
Baker, James Edward 18 Winter Park H.S. 9204 Eastport Terrace, Orlando 32817 Color Graphics and the Mandelbrot Set

HAWAII

Honolulu
Howarth, Francis Gard 18 Farrington H.S. 1558 Monte St. 96819 Shelf Formation in Lava Tubes

Champaign
Kamoshita, Shaun Yoshie 17 University Laboratory School 125 Ohana St., Kailua 96734 Computer Expert System for Univariable Multivar Identification

ILLINOIS

Barry
Bauer, Julie Ann 17 Barry H.S. R. 2, Box 53 62312 Effect of Chitin Synthase Inhibiting Insecticides on the Germination of Apple Pollen

Chicago
Chang, Louise Asia 17 University of Chicago Laboratory Schools 617 W. 58 St., Westmont 60559 Ras Induced mRNA in NIH/ST3 Cells Identified by Differential Screening
Chicago (cont.)
Kirschner, Joshua Lawrence 17 University of Chicago Laboratory Schools H.S. 6827 S. Euclid. 60639 Effect of Ethanol on Lipid Metabolism
Downers Grove
Lundberg, Derek Lloyd 17 Downers Grove South H.S. 6112 Hillcrest Rd. 60119 Cytogenetic Effects of Chronic, Low-Dose Irradiation in Caris Farnam's Mouse
Evaston
Giese, Scott Clayton 16 Evanston Township H.S. 1044 Lake Shore Blvd. 60202 One-Dimensional Model for the Collision Between Rods and Fixed Surfaces
Grossman, Jeffrey Curtis 17 Evanston Township H.S. 1019 Asbury St. 60202 Crystal Lattice Matching: A First Step in Epitaxial Growth of New Materials and Phases
Radu, Cristian Mirea 18 Evanston Township H.S. 1206 Dewey St. 60202 Autocatalytic Properties of the Hydrolysis of Selected Esters
Schofer, Evan Abram 17 Evanston Township H.S. 2226 Central Park Ave. 60201 Dielectrically Totally Internally Reflecting Concentrators With Aspheric Front Surfaces
Seth, Kim Allan 17 Evanston Township H.S. 2231 Central Park Ave. 60201 Analysis of the Tonal Characteristics of the French Horn
Thompson, Karl Remmon 17 Evanston Township H.S. 2661 Asbury St. 60201 Effect of Temperature and Concentration Changes on the Period of Oscillation of a Bromine-Driven Chemical Oscillator
Woods, Solomon Isaac 16 Evanston Township H.S. 515 Sheridan Rd. 60202 Modeling a Frictionless Pendulum
Hoshen, Guri 17 Naperville Central H.S. 812 Shiloh Cir. 60540 Conductivity Analysis of Polyiodide Solutions
McComb, Susan Marie 17 Rolling Meadows H.S. 231 N. Kaspar. #G7, Arlington Heights 60005 Effect of Malathion on Soil Microorganisms
Naperville
Eisenberg, Laura Ellen 18 Roncalli H.S. 4464 Southway Rd. Greenwood 46124 Effects of Light Intensity on Perception of Color in Pseudoisochromatic Plates
Sarcopodes, Michael James 17 Terre Haute North Vigo H.S. 240 Hamilton Dr. 47803 Thiamarurine A: A Potential Antibiotic Produced by Certain Composite
Terre Haute
Krause, Elane Alan 18 Rockwell City H.S. 10901 W. 99 Pl. 60214 Solid-Phase Assay for Platelet Adhesion
Rockwell City
Krause, Elane Alan 18 Rockwell City H.S. 10901 W. 99 Pl. 60214 Mechanical Manipulation of Randomly Oriented Parts
Rode Christensen, Michael James 18 Rockwell City H.S. R.R. 2. Gilmore City 50541 Lie Detector: Friend or Inaccurate Fool?
INDIANA
KANSAS
Overholser, Linda Sue 17 Shawnee Mission South H.S. 10503 W. 99 Pl. 60214 Solid-Phase Assay for Platelet Adhesion
KENTUCKY
Lexington
Burger, Jeffrey Allen 17 Lafayette H.S. 852 Laurel Hill Rd. 40504 Somatotopic Variation for Oil and Morphology in Sycamore Regenerants
Louisville
Shall, Taran 17 Ballard H.S. 6303 Shadow Wood Court. Prospect 40058 Prevalence and Use of Transitional Objects: A Study of 230 Adolescents
MARYLAND
Bethesda
Fan, Jason Chia-Sun 16 Landon School for Boys 6002 Beech Ave. 20817 Cis-flavors of the Phenomenon: Involving Mixed-Chain
Chesapeake
Mills, David Wilson 17 Wait Whitman H.S. 7200 Brooklawn Dr. 20817 Investigating the Luminol Oxidation Reaction Using a Microcomputer
Washington, Todd Alan 17 Wait Whitman H.S. 7014 Maryland Ave. 20817 Induction of an Amber Mutation in Gene lon of Escherichia coli by Oligonucleotide-Directed Mutagenesis

Elliot City
Meng, Maxwell V. 16 Centennial H.S. 5542 Winburn Ct. Columbia 21045 Apolipoprotein A-1 Metabolism in Humans with Parallel Hypoprophathoproteinemia Associated with Premature Coronary Artery Disease
Greenbelt
Thomas, Hans Joachim 17 Eleanor Roosevelt Senior H.S. 3621 Tyrol Dr. Landover 20785 Classification of a Three-Dimensional Target Regardless of Orientation
Onson Hill
Poomeac
Yin, Grace Mei 17 Winston Churchill H.S. 9208 Beridge Ave. 20854 Calibration of Integrating Sphere and Hemispheres
Silver Spring
Kaufman, Rebecca Jane 17 Springfield H.S. 13421 Lockey St. 20904 Catecholization of Heated Myocardial Infarcts
Tintonum
Hirschfeld, Robert Ari 17 Dulany H.S. 1109 Timber Trail Rd. Towson 21204 Momentum in Angular Systems (A Particle Approach)

MASSACHUSETTS
Andover
Goodman, Paula Tiferet 17 Phillips Academy 5516 Pia St. Honolulu, HI 96813 Effect of Interferon-alpha and Interferon-2 on the Binding and Lysing Activity of Human Lymphocytes at the Single-Cell Level
Newton Centre
Hedgcock, Andrew Mark 17 Newton South H.S. 45 Daniel St. Newton 02159 Motor Driven Aerial Photography System (M.A.P.S.)
Somerville
Battailini, Elisabeth Marie 17 Somerville H.S. 234 Hudson St. 02143 Complementation and Phenotypic Determination of E2 and Double Nodulation of Nod" Rhizobium Transconjugates

MICHIGAN
Ann Arbor
Chou, Patrick Chien-pang 16 Pioneer H.S. 2480 Piedary Cir. 48103 Reproduction of Milikan's Oil Drop Experiment: Preliminary Step in the Search for the Fractional Charge
Decatur
Yasger, Jason Robert 17 Decatur H.S. 93556 36 St., Larton 40695 Glyphic Analysis of the Tablet of the 9 Glyphs
Detroit
Auboom, Genevieve Suzanne 17 Renaissance H.S. 18084 Huntington 48219 Heterogeneous Enzyme-Linked Competitive Binding Assay for Folate
Flinn
Guillette III, Edward J. 18 Carman-Ainworth H.S. 5121 Brier Crest Dr. 48504 MPIKO 16: Harnessing 16-Bit Multiprocessing
Kalamaazoo
Hall, Willian David 18 Kalamaazoo Central H.S. 2532 Ruskridge Ave. 49007 Development of an Optical Scanner

MINNESOTA
Minneapolis
Kepner, Jeremy Victor 17 St. Anthony H.S. 1225 7 St., S.E. 55414 Designing, Building, and Testing a New Type of Turbine: Directed Pressure Turbine
New Ulm
Malekli, Amy Ann 17 New Ulm Senior H.S. R. 3. Box 1 56073 Antibody-Dependent Enhancement of Macrophage Infection by Laetic Dodehydrogenase-Elevating Virus
St. Clair
Plyms, Tammy Carol 18 St. Clair H.S. Box 225 56080 Effect on the Spatial Positioning of Daphnia in Relation to Magnetic and Electric Fields
Slayton
Moritz, Valerie Carol 18 Slayton Public H.S. Box 235, Hadley 56133 Does Letter Configuration Affect Assimilation?

MISSISSIPPI
Starkville
Ball, John Eugene 17 Starkville H.S. R. 5, Box 1 S. Montgomery Ext. 39759 A Novel Approach to the "3 + 1" Problem

MISSOURI
Rolla
Chen, James Kenneth 17 Rolla Senior H.S. 805 Cedar Hill Ct. 65401 Determination of the Dissociation Constant of Na+ Hydrousuccinate
St. Joseph
Zweierling, Jeffrey Alan 18 Central H.S. 916 Ashland Ct. 65406 Synthesis and Characterization of Potential Conductive Polymers
Setauket
Priolo, Christine Victoria 17 Ward Melville H.S. 28 Storyland Ln. 11733
Double NOIR (dNOR) as a Risk Factor for Trinomic Ovulation

Spring Valley
Pan, Dorothy Chera 17 Spring Valley H.S. 59 Pine Brook Rd. Monsey 10952
Analysis of Limonene in Grand Fir, Abies grandis, as a Chemical Repellent Against Spruce Budworm Choristoneura

Staten Island
Pak, Peter Tongil 18 Susan E. Wagner H.S. 672 S. Gannon Ave. 10314
Conductimetric Analysis of the Sieve of Eratosthenes

Syosset
Wang, Ting Li 18 Syosset H.S. 196 Southwood Circle 11791 Effects of Massed and Spaced Practice on Serial Learning with Pictorial and Verbal Materials

Tarrytown
Chi, Timothy Thay Han 17 Hackley H.S. 10 Green Lane, Chappaqua 10514
Isozymes of Phospholipase A2 Stimulate the Release of Vasoactive Mediators From Porcine Leukocytes

Valley Stream
Gollin, Edward 17 South H.S. 36 Home St. 11580 Nanosized Electric Pulse Drivers for Rare Gas Halide Excimer Lasers

Webster
Nash, John Robert 17 Webster H.S. 1200 Severn Ridge 14580 Study of Frost Heave

Williamsville
Lee, Kelvin Hao-Hua 17 Williamsville North H.S. 288 Connearside Ln. 14221 Electron Trapping in the Crystal Structures of Polyhydroxy and Carbohydrate Compounds

NORTH CAROLINA
Goldboro
Tymensonko, Maria Funiko 17 Eastern Wayne H.S. Rt. 3, Box 103 27530 Immunolocalization of Extracellular Proteins Surrounding Rat Hepatocytes Following Treatment by the Chemical Carcinogen BPDE I

OHIO
Cincinnati
Mossey, Michael Paul 18 Greenshields H.S. 21 Jewell Ln. 45218 Backtracking Algorithm for Finding Optimal Distance Difference Sets

Louisville
Hobe, Paul Geoffrey 18 Louisville H.S. 7160 Paris Ave. 40264 Liesegang's Rings: A Study of Precipitates in Gele

Rocky River
Czerniakowski, Deborah Ann 17 Magnificat H.S. 15806 Normandy Ave. Cleveland 44111 Spectroscopic Evidence for the Non-Cyclic Nature of Low Temperature Cured Polyimides

Sylvania
Herman, Robert Laidr 17 Sylvania Northview H.S. 6098 Wakefield Dr. 43560 Verification of the Motion of Comet Halley by Visual Observation and Calculations Based on Celestial Mechanics

OREGON
Bend
Roath, Lorraine Marie 18 Mountain View H.S. 2400 N.W. Lakeside Place 97701 Rail: A Study of Language

PENNSYLVANIA
Bensalem
Jackson, Susan Elizabeth 17 Bensalem H.S. 3200 Independence Court 19020 Development of a Colorimeteric Device to Measure the Level of Iron in Blood Samples

Bryn Mawr
Chang, Pearl Choobyan 17 The Baldwin School 461 Wynnewood Rd. Wynnewood 19096 Examination of the Iron Uptake System of Keilbiella gnammariae

Coraopolis
Peters, Eric Daniel 18 Moon Area Senior H.S. 1812 Thorn Run Rd. 15108 Use of Telemetry to Determine the Effects of Fin Design on Rocket Performance

Fort Washington
Fisher, Matthew Richard 17 McDowell H.S. 5665 Mill St. 16097 Determination of the Properties of Spectra 1000 Fiber in an Elastomeric Matrix Composite

New Kennington
Racunas, Stephen Alexander 16 Valley H.S. 1075 Woodberry Rd. 15068 Computer Analysis of the Recoil Limit in an Optical Molasses Device

Pittsburgh
Oyler, Sara Jane 17 Mt. Lebanon H.S. 92 Youngwood Rd. 15228 Four Aspects of the Correlation Phenomenon

RHODE ISLAND
Wyncoat
Ijiri, Yumi 17 The Winchester-Thurston School 5 Howard Rd. Apt. 118 15213 Effects of Density Changes on the Stability of Nuclei

Wakefield
Sherman, Benjamin Harrison 17 South Kingstown H.S. 27 Beech Hill Rd. Peace Dale 02879 15117 Model for the Inhibition of Polycyclic Aromatic Hydrocarbons: The Crystal Structure of Ellagic Acid

Westerly
Saran, Dale Francis 17 Westerly H.S. 2 Stenton Ave. 02891 Solution to the O'Connell Effect for Eclipsing Binary Stars of the Beta Lyrae Class

SOUTHERN CAROLINA
Lexington
Run, William Thomas 18 Lexington H.S. 1347 Counts Ferry Rd. 29072 Dypnia: An Asset or Liability?

TENNESSEE
Brentwood
Way, Howard Johnson 17 Brentwood Academy 1116 Sparta Rd., Nashville 37205 Mathematical Modeling for the Behavior of Surfactants in Solution

Nashville
Chen, Kelvin 16 University School of Nashville 4326 Merrymont Drive. Kingston Springs 37042 Dynamics of Polyatomic Molecules

Oak Ridge
Wong, Albert Juns-Weij 16 Oak Ridge H.S. 1043 West Outer Dr. 37830 Development of Neural Network Automata to Recognize "Non-Orthogonal" Patterns

TEXAS
Bryan
Bennett, Michael Andrew 18 Bryan H.S. 3701 Oakridge Dr. 77802 Reduced or Oxiidized Nitrogen: Which Form Results in Better Growth of Pine Trees Under Drought Stress?

El Paso
Pinso, Denise Elaine 18 Loretto Academy 320 Coral Hills Road 79912 Phosphate Analysis of Flavin Agarose by pH Titration

Garland
Smith, Jennifer Elaine 18 Lakeview Centennial H.S. 927 Meadowlane Circle 75043 Evolution at the Genotypic Level: Rates and Relationships Determined from Sequence Data

Houston
Nemerger, Garrett Glenn 17 Clear Lake H.S. 14915 San Harbor Dr. 77070 Fractal Nature of a Chaotic Attractor

Killeen
Knight, James Bradolf 18 Cypress Creek H.S. 12114 Fannway Dr. 77090 Combinatory Effects of Molecular Structures on Fuel Performance

Killeen
Ho, Norman Yuli 17 C.E. Ellisson H.S. 2201 Tyler St. 75241 Effect of G3 Factors on Progression or Mitotic Factors: Induced Maturation of Oocytes

Kingwood
Lee, John 17 Kingwood H.S. 3311 Laurel Crest 77339 Analysis of a Simple Solar Cell Model

Klein
Greene, Pamela Lori 17 Klein H.S. 17810 Deep Brook Dr. Spring 77329 Electro-Optical Modulation of Laser Light

League City
Patcha, Girish Venkata 17 Clear Creek H.S. 9503 Saugene Dr. Houston 77489 Human Pulmonary Immune Responses to Cigarette Smoking

San Antonio
Hauster, Carol Jean 17 Douglas MacArthur H.S. 15319 Pebble Height 78232 Oak Wilc: An Investigation in Plant Pathology

UTAH
Smithfield
Howlett, Warren Kurt 17 Sky View H.S. 221 N. 360 E. Richmond 84333 Using the Properties of AM Radio Waves to Determine Perpendicular to the Earth's Surface

- 12 -
St. George
Scott, Daryl Armstrong 17 Pine View H.S. 3175 Swaps Dr. 84770 Matrix
Probabilities

Alexandria
Gogolewski, Raymond Mark 17 Thomas Jefferson H.S. 4907 Columbia Rd.,
Annandale 22003 Kinetics of the Hydrolysis of 4-Nitrophenoxyphosphate as
Determined by Spectrophotometric Methods for Monitoring the Two
Resulting Products
Nolan, Jr., Raymond Vincent 18 Thomas Jefferson H.S. 6045 Louxert Way,
Annandale 22003 Rate of Reaction of an Alpha-Haloketone, 2-
Bromoacetoephene, With Various Pyridine Bases
Spyrakis, Beth Ann 17 Thomas Jefferson H.S. 7653 Long Pine Dr.,
Springfield 22151 Surface Survey Archeyology
Doering, Jeffrey Allen 17 Thomas Jefferson H.S. for Science and Technology
6422 Meriwether Lane, Springfield 22150 Research of the Ranque-Hilsch
Turbine
Marinka, Michael Edwin 17 Thomas Jefferson H.S. for Science and
Technology 7715 Gralnich Pl, Springfield 22153 Kinetics of the
Neutralization of Nitric Acid in the Presence of Cationic and Anionic
Micelles and Cyclodextranopolyamylene
Owen, Peter Brandon 17 Thomas Jefferson H.S. for Science and Technology
6710 Womberly Way, McLean 22101 Simultaneous Spectrophotometric
Determination and its Application to the Isomerization of
Cobalt(III)iminodiacetate
Boodo, Julie Nuna 17 Mount Vernon H.S. 8202 Martha St. 22209 Mass
Extinction of the Paleocene Era

Arlington
Van Der Vugt, Theresa Marie 17 Yorktown H.S. 2566 N. Military Rd. 22207
Production of a Contained, Magnetohydrodynamic Gas Using a Plasma
Generator Based on the Capacitive Principle

Hampton
Sobieski, Ian Patrick 17 Kecoughtan H.S. 518 Elizabeth Lake Dr. 2369
Run Silent, Run Deep

McLean
Hung, Kenneth Eugene 17 McLean H.S. 6178 Hardy Dr. 22201 Application of
a Sheared Velocity Field-Initiated Anti-Density Current Toward Increasing
the Efficiency of a Conventional Sedimentation Tank

Reston
Neef III, Frederick Edward 17 South Lakes H.S. 11527 Links Dr. 22090
Development of a Data Compression Algorithm

Roxmore
Tota, Frank Peter 17 Patrick Henry H.S. 430 Bramble Lane 24014 Cetacean
Chrono-Calculator

Springfield
Pham, Nguyen Cao Vu 17 Robert E. Lee H.S. 6737 Boon St. 22210 Does a
Function/Dysfunction of Visual, Auditory, and Tactile Stimuli Integration
Affect the Orientational Abilities of Homing Pigeons

WISCONSIN
Brookfield
Kramer, Kevin Matthew 17 Brookfield Central H.S. 2520 Coachhouse Dr.
53005 Deviation From Beer's Law

Madison
Barclay, Elizabeth Ann 16 James Madison Memorial H.S. 401 Blue Ridge
Pike 53705 Morphometric Study of Green Alga Coloschlea
Chang, Henry Chiu-Yu 17 James Madison Memorial H.S. 110 Blue Ridge
Pike 53705 Mapping of the Replication Mutations of High Copy Number
Plasmid Mutants

Milwaukee
Horowitz, Laura Anna 17 James Madison Memorial H.S. 6417 Antionian Lane
53705 Effect of Cyclosporin on T Cell Immunity

Cheyenne
Nguyen, Tien Thi 17 Milwaukee Trade and Technical H.S. 1521 S. 26 St.
53204 Stability Studies on the Restriction Endonuclease PstI

WYOMING
Cheyenne
Heddings, Janice Anne 16 Kelly Walsh H.S. 2555 Buck Ave. 82601 The
Economics of Heat Conservation in Homes
Andersen, David Mark 17 Cheyenne East H.S. 1630 Madison Ave. 82001
Use of Degassed Water in Hydroponics

Since 1946 State Science Talent Searches have been held concurrently with the
National Competition by special arrangement with Science Service. The 34
States and the District of Columbia listed below are cooperating in this plan to
increase recognition and assistance to young scientists.

Anyone desiring information on or details of the results of State Science
Talent Searches should send their inquiries to the Directors in the respective
states.

ALABAMA: The Gorgas Scholarship Foundation, Inc., Dr. Leven S. Hadgrove, Professor,
Department of Chemistry, Samford University, Howard College of Arts and Sciences, 800 Lakeshore
Drive, Box 2236, Birmingham 35229-0001

ARKANSAS: Arkansas Academy of Science, Dr. John D. Peck, Department of Biology, Lewis Science
Center, 103, Central University of Arkansas, Conway 72032

COLORADO-WYOMING: Colorado-Wyoming Junior Academy of Science, Elemer Bernath, Executive
Secretary, C-WJAS, 803 Ensign, Fort Morgan 80701

CONNECTICUT: Connecticut Science Talent Search, John Tanaka, Director, Honors Programs,
University of Connecticut, U-147 Wood Hall, Room 113, 241 Glenbrook Road, Storrs 06268

DISTRICT OF COLUMBIA: Washington Academy of Sciences, Mrs. Edythe Durie, 1008 Moorefield
Creek Road, Vienna, Virginia 22180

FLORIDA: Florida Academy of Sciences-Junior Academy, Dr. John G. Windsor, Jr., State Director,
FIAS and Talent Search, Department of Oceanography and Ocean Engineering, Florida Institute of
Technology, Melbourne 32901

GEORGIA: Georgia Junior Academy of Science, Dr. Don A. Berkowitz, School of Chemistry, Georgia
Institute of Technology, Atlanta 30332

ILLINOIS: Illinois State Academy of Science, Dr. Donald R. Dickerson and Dr. Dorothy R. Martin,
Illinois State Academy of Science, Illinois State Museum, Spring & Edwards Sts., Springfield 62706

INDIANA: Indiana Academy of Science, Dr. Donald R. Winslow, Coordinator for School Science,
Office of School Programs, School of Education 253, Indiana University, Bloomington 47405

IOWA: Iowa Junior Academy of Science, Joe R. Moore, Keystone Area Education Agency,
Educational Services Division, JR2, Box 19, Elkader 52043

KANSAS: Kansas Academy of Science, Dr. Max Terman, Department of Biology, Tabor College,
Hillsboro 67106

KENTUCKY: Kentucky Junior Academy of Science, Dr. John Wernegreen, Associate Professor
of Physical Science, Eastern Kentucky University, 220 Memorial Science Building, Richmond 40475

LOUISIANA: Northwestern State University, Dr. Thomas W. Griffith, Professor of Chemistry,
Northwestern State University of Louisiana, Natchitoches 71497

MARYLAND: Maryland Academy of Sciences, Mary B. Hymn and Nancy J. Leyko, Maryland
Academy of Sciences, 601 Light Street, Baltimore 21202

MASSACHUSETTS: Massachusetts Science Talent Search, Dr. Mary H. Laprade, Director, Clark
Science Center, Smith College, Northampton 01063

MICHIGAN: Sigma Xi, the Scientific Research Society, Dr. Donald R. Petersen, Michigan Science
Talent Search, P.O. Box 2237, Midland 48641

MINNESOTA: Science Museum of Minnesota, Dr. Adela S. Ebwell, Field Director, Opportunities in
Science, Route 8, Box 479, Benidji 56661

MISSISSIPPI: Mississippi Junior Academy of Sciences, Donald R. Cotten, P.O. Box 8414, Southern
Station, University of Southern Mississippi, Hattiesburg 39406

MONTANA: Montana College of Mineral Science and Technology Sigma Xi Club, Dr. Lindsay Hess,
Dept. of Mathematical Sciences, Montana College of Mineral Science and Technology, Butte 59701
Washington Trip Winners of the Forty-Sixth Annual Science Talent Search for the Westinghouse Science Scholarships and Awards

The forty Westinghouse trip winners of the 46th Annual Science Talent Search, among whom $140,000 of Westinghouse Science Scholarships and Awards will be distributed, represent about 3.09% of those who completed entries in this scientific and educational competition.

Designed to discover and develop scientific and engineering ability among high school seniors, the Science Talent Search is conducted annually for the Westinghouse Science Scholarships and Awards by Science Service, 1719 N Street, N.W., Washington, DC 20036.

Fifteen girls and 25 boys are being invited to Washington, DC for an all-expenses-paid trip February 26 - March 2, 1987, to attend the Science Talent Institute. Here 10 winners will be selected by the board of judges to receive one of the following four-year Westinghouse Science Scholarships: One $20,000 ($5,000 per year), two $15,000 ($3,750 per year); three $10,000 ($2,500 per year); four $7,500 ($1,875 per year). The remaining 30 contestants will be given Westinghouse Science Awards of $1,000 each.

The trip winners are 15 to 18 years of age and come from 31 cities in 16 states. They were picked by the judges from among 15,074 contestants of whom 1,295 completed their entries by writing a report on their scientific research, submitting personal data and teacher recommendations. Completed entries were received from 48 states, the District of Columbia, Puerto Rico and Department of Defense Dependents Schools.
WASHINGTON TRIP WINNERS

HOME ADDRESS FOLLOWS NAME OF SCHOOL
AGE OF WINNER FOLLOWS NAME

CALIFORNIA

Orinda
Jacobson, Jessica Lynn 18 Miramonte H.S. 51 E. Altairinda Dr. 94563

COLORADO

Colorado Springs
Shepard, Thomas Claude 17 William J. Palmer H.S. 2164 N. Cascade Ave. 80907

CONNECTICUT

Milford
Barrett, Jennifer Genevieve 16 Academy of Our Lady of Mercy 20 Foran Rd. 06460

FLORIDA

New Smyrna Beach
Griffy, Charla Cristal 17 New Smyrna Beach H.S. 1209 Orange Tree Dr., Edgewater 32132

Ocala
Wang, Joseph Chen-Yu 17 Forest H.S. 506 S.E. 36 Ave. 32671

ILLINOIS

Barry
Bauer, Julie Ann 17 Barry H.S. R. 2 Box 53 62312

Chicago
Chang, Louise Chia 17 University of Chicago Laboratory Schools H.S. 617 W. 58 St. Westmont 60559

Evanston
Giese, Scott Clayton 16 Evanston Township H.S. 1044 Lake Shore Blvd. 60202

Naperville
Heilen, Gur 17 Naperville Central H.S. 812 Shiloh Cir. 60540

IOWA

Bettendorf
Stoffel, Christine Marie 17 Bettendorf H.S. 5324 S. 36 Ave. Ct. Moline, Ill. 61265

MARYLAND

Bethesda
Waldman, Todd Alan 17 Walt Whitman H.S. 7814 Maryknoll Ave. 20817

Ellicott City
Meng, Maxwell V. 16 Centennial H.S. 5542 Windy Hill Ct. Columbia 21045

MASSACHUSETTS

Newton Centre
Heafitz, Andrew Mark 17 Newton South H.S. 45 Daniel St., Newton 02159

MICHIGAN

Decatur
Yang, Jason Robert 17 Decatur H.S. 93356 36 St. Livonia 48154

Detroit
Ashcom, Genevieve Susanne 17 Renaissance H.S. 11884 Huntington 48219

Ouellette III, Edward J. 18 Carman-Ainsworth H.S. 4121 Briar Crest Dr. 48504

NEW MEXICO

Albuquerque
Schling, Page Elizabeth 17 St. Pius X H.S. 3818 La Hacienda Dr. N.E. 87110

Grants
Pearl, Steven Howard 17 Grants H.S. P.O. Box 728 87020

NEW YORK

Bayside
Gross, David Lawrence 16 Benjamin N. Carrozzi H.S. 61-33 215 St. 11364

Brooklyn
Bernstein, Daniel Julius 15 Belfort H.S. 9 Brewster Ln. Belfort 11713

Long Island City
Pappas, John 17 Long Island City H.S. 25-30 30 Rd. Astoria 11102

Massapequa
Abramson, Scott Lawrence 17 Massapequa H.S. 22 Burns Lane 11758

New York
Koo, David Peng-Ming 16 Bronx H.S. of Science 16-19 149 St., Whitestone 11357

Bayside
Ng, Liz 16 Bronx H.S. of Science 230 Mott St., Apt. 6 10012

Gross, David Lawrence 16 Benjamin N. Carrozzi H.S. 61-33 215 St. 11364

Port Washington
Silveira, Maria Jose 17 Bronx H.S. of Science 56-12 196 St., Flushing 11365

Brooklyn
Yuen, Mai New 17 Bronx H.S. of Science 225 E. Moshulu Pkwy., Bronx 10467

Suffern
Grannix, Alexander Wharton 17 Suffern H.S. 595 W. End Ave. 10025

Lee, Chen-Wen A. 17 Suffern H.S. 595-575 S. St., Elmhurst 11373

Park, Hyung Yoon 17 Suffern H.S. 80-56 Persu Pkwy., Jamaica Estates 11432

Tu, Juie Yui 17 Suffern H.S. 8501 Fr. Hamilton Pkwy., Apt. 2L, Brooklyn 11209