

Contact: Roy L. Morrow  
Telephone: (412) 642-3005  
or  
Contact: John Armstrong  
Telephone: (412) 642-4941

FOR USE: Immediate

## FINDING TOMORROW'S SCIENTISTS

For thousands of students who dream of careers in science, the *Westinghouse Science Talent Search* has helped make those dreams come true.

Since 1942, this nationwide competition has identified and encouraged high school seniors to pursue careers in science, mathematics or engineering.

The 55th annual Westinghouse Science Talent Search, now under way, caps over half a century of remarkable achievements by more than 16,000 semifinalists and 2,200 finalists who have participated. "The Westinghouse," as students call the competition, is America's most highly regarded precollege science contest.

Seniors who participate have the opportunity, while still teenagers, to join the ranks of the nation's most eminent scientists.

The Search brings together America's brightest, most creative science students. In fact, many of our nation's top scientists and mathematicians share the common bond of having participated when they were students.

- more -

The Search has identified young scientific talent with remarkable precision. Alumni have won more than 100 of the world's most coveted science and math awards and honors. Five former finalists have gone on to win Nobel Prizes. Two have earned Fields Medals, the Nobel equivalent in mathematics. Three have been awarded the National Medal of Science. Nine Search alumni have won MacArthur Foundation Fellowships, the so-called "genius awards." Fifty-six have been named Sloan Research Fellows and 30 have been elected to the National Academy of Sciences. Three have been elected to the National Academy of Engineering.

More than half of the former Search winners are either teaching or engaged in research at colleges and universities.

### **The Process**

Westinghouse Electric Corporation, through the Westinghouse Foundation, has sponsored the Search in partnership with *Science Service*, a Washington-based nonprofit organization engaged in furthering public understanding of science, since the competition's inception in 1942.

Over the years, more than 113,000 students have completed independent research projects and submitted entries. Currently, some 1,500 seniors meet the entry requirements each year. The deadline for entries received at Science Service is midnight, December 1.

The entry consists of a written description of the student's research, plus a completed entry form which elicits evidence of student creativity and interest in science.

Search candidates are judged by a board of 12 distinguished scientists from a variety of disciplines. Chairman is Dr. J. Richard Gott, professor of astrophysical sciences at Princeton University and a former Search finalist.

The judges are aided by other scientists to complete a careful evaluation of each entry. Then, the elimination begins. The top 300 entrants are selected as semifinalists. Science Service recommends these students to colleges and universities for admission and financial assistance.

**Top Contenders Announced in January for Final Judging in March**

Next, 40 finalists are selected from the 300 semifinalists. Both groups are announced separately in January.

Westinghouse provides the 40 finalists an all-expense-paid trip to Washington D.C., where they undergo additional judging. On the basis of interviews, 10 top scholarship winners are selected. Final judging for the 55th Search will take place in Washington, March 6-11, 1996.

Scholarships total \$205,000 with the top prize at \$40,000. Second- and third-place winners receive \$30,000 and \$20,000 scholarships, respectively. Three others win \$15,000 each. Four \$10,000 scholarships are awarded. The other 30 finalists receive \$1,000 scholarships.

While in Washington, the students meet their congressional representatives and leading scientists. The young scientists display their prize-winning exhibits at the National Academy of Sciences, where they describe their research to thousands of visitors -- many of them important figures in the governmental and scientific communities.

The students are interviewed by their hometown news media, national and international newspapers, press associations, television and radio networks and science and education journals.

The finalists visit Washington's historical and scientific sights. Past winners have met with the President and First Lady, the Vice President and distinguished science advisers. On the final evening, they are honored at a black-tie awards banquet for several hundred guests.

### **Meeting Other Young Scientists**

Yet what the students say they value most is the opportunity to meet and interact with their scientific peers, often for the first time. Friendships and professional associations made during those five days continue through college and beyond.

Statistics show that 95 percent of former Search winners have pursued some branch of science for their major field of study. More than 70 percent have gone on to earn Ph.Ds or MDs. Career choices are about evenly divided among the physical sciences, the biological sciences and medicine.



To date, Westinghouse has awarded more than \$3.5 million in scholarships. Also, thousands of students have received scholarships and financial aid from other sources as a direct result of their achievement. For example, New York University offers all 40 finalists four-year scholarships including tuition, room and board, a \$5,000-a-year stipend and an opportunity to spend one year of study abroad.

High school science educators find the Westinghouse an excellent tool for stimulating latent abilities in their brightest students.

Since 1942, New York state has produced the majority of finalists, accounting for 705. California is in second place with 149, followed by Illinois with 144; Pennsylvania, 98; New Jersey, 78; Ohio, 77; Florida, 75; Massachusetts, 70; Virginia, 67; Maryland, 56; Texas, 49; Wisconsin, 47; and Indiana, 44.

Other states which have produced at least ten finalists are Michigan, 34; Connecticut, 31; Oregon, 29; Minnesota, 27; Georgia, 23; Arizona and Oklahoma 21, each; Colorado and Missouri, 20 each; Nebraska, 19; Tennessee and the District of Columbia, 18 each; New Hampshire, Washington and West Virginia, 16 each; Alabama and Iowa, 15 each; Kansas and Montana, 14 each; New Mexico, 12; and Hawaii, 11.

####

**Major Honors Achieved by  
Westinghouse Science Talent Search Finalists**

<u>Honor</u>	<u>Date Awarded</u>	<u>Name</u>	<u>STS - Year</u>
Nobel Prize (Physics)	1972	Leon N. Cooper	STS - 1947
Nobel Prize (Physics)	1975	Ben R. Mottelson	STS - 1944
Nobel Prize (Physics)	1979	Sheldon L. Glashow	STS - 1950
Nobel Prize (Chemistry)	1980	Walter Gilbert	STS - 1949
Nobel Prize (Chemistry)	1981	Roald Hoffmann	STS - 1955
Fields Medal (Mathematics)	1966	Paul J. Cohen	STS - 1950
Fields Medal (Mathematics)	1974	David B. Mumford	STS - 1953
National Medal of Science	1967	Paul J. Cohen	STS - 1950
National Medal of Science	1983	Roald Hoffmann	STS - 1955
National Medal of Science	1991	Ronald Breslow	STS - 1948
MacArthur Fellowship	1982	Frank Wilczek	STS - 1967
MacArthur Fellowship	1983	Richard S. Berry	STS - 1948
MacArthur Fellowship	1984	Arthur T. Winfree	STS - 1960
MacArthur Fellowship	1985	Jane S. Richardson	STS - 1958
MacArthur Fellowship	1987	Robert Axelrod	STS - 1961
MacArthur Fellowship	1987	Robert Coleman	STS - 1972
MacArthur Fellowship	1987	Eric Lander	STS - 1974
MacArthur Fellowship	1987	David B. Mumford	STS - 1953
MacArthur Fellowship	1993	Amory B. Lovins	STS - 1964
Albert Lasker Basic Medical Research Award	1979	Walter Gilbert	STS - 1949
Albert Lasker Basic Medical Research Award	1987	Leroy E. Hood	STS - 1956

30 STS Finalists are members of the National Academy of Sciences.

3 STS Finalists are members of the National Academy of Engineering.

56 STS Finalists are Sloan Research Fellows.

**30 Science Talent Search Finalists  
Elected to the National Academy of Sciences**

<u>Name</u>	<u>Affiliation</u>	<u>STS - Year</u>
Adler, Stephen L.	Institute for Advanced Study, Princeton NJ	1957
Axelrod, Robert	University of Michigan, Ann Arbor, MI	1961
Berry, R Stephen	University of Chicago, Chicago, IL	1948
Breslow, Ronald	Columbia University, New York NY	1948
Chilton, Mary Dell	CIBA-GEIGY, Research Triangle Park NC	1956
Clark, George W.	MET, Cambridge, MA	1945
Cohen, Paul J.	Stanford University, Stanford, CA	1950
Cooper, Leon N.	Brown University, Providence, RI	1947
Crothers, Donald M.	Yale University, New Haven, CT	1954
Davidson, Eric H.	California Institute of Technology, Pasadena, CA	1954
Felsenfeld, Gary	National Institutes of Health Bethesda, MD	1947
Gilbert, Walter	Harvard University, Cambridge, MA	1949
Glashow, Sheldon Lee	Harvard University, Cambridge, MA	1950
Halperin, Bertrand I.	Harvard University, Cambridge, MA	1958
Hochster, Melvin	University of Michigan, Ann Arbor, MI	1960
Hoffmann, Roald	Cornell University, Ithaca, NY	1955
Hood, Leroy	California Institute of Technology, Pasadena, CA	1956
Karplus, Martin	Harvard University, Cambridge, MA	1947
Martin, Paul C.	Harvard University, Cambridge, MA	1948
Mather, John N.	Princeton University, Princeton, NJ	1960
Mumford, David B.	Harvard University, Cambridge, MA	1953
Richards, Paul L.	University of California, Berkeley, CA	1952
Richardson, Jane Shelby	Duke University, Durham, NC	1958
Rosenblatt, Murray	University of California, San Diego, LaJolla, CA	1943
Sessler, Andrew M.	Lawrence Berkeley Laboratory, Berkeley, CA	1945
Solovay, Robert M.	University of California, Berkeley, CA	1956
Sternberg, Saul	University of Pennsylvania, Philadelphia, PA	1950
Streitwieser, Jr., Andrew	Harvard University, Cambridge, MA	1945
Tinkham, Michael	Harvard University, Cambridge, MA	1945
Wilczek, Frank A.	Institute for Advanced Study, Princeton, NJ	1967

**3 Science Talent Search Finalists  
Elected to the National Academy of Engineering**

<u>Name</u>	<u>Affiliation</u>	<u>STS - Year</u>
Armstrong, John A.	IBM Corporation, NY	1952
Goldman, Alan J.	Johns Hopkins University, Baltimore, MD	1949
Rechtin, Eberhardt	Aerospace Corporation, Los Angeles, CA	1943