

TWENTIETH ANNUAL TENNESSEE SCIENCE TALENT SEARCH

JAMES B. DELANO

ARO, Inc., at Arnold Engineering Development Center, Tullahoma, Tennessee

Thirty seniors from the high schools of Tennessee were selected in the Twentieth Annual Tennessee Science Talent Search for special science honors. Five of these students were selected as members of the national honors group in the Westinghouse Science Talent Search and one of these, John William Cross of Memphis, was a national winner.

The list of winners and the titles of their papers attest to the comprehensive subject interest represented by this group. Also, the studies are of outstanding calibre. Over the years participation in the Tennessee Junior Academy of Science (TJAS) Program has helped to develop interest in science.

This year's winners were honored at Oak Ridge National Laboratories by the Union Carbide Company and the Tennessee Academy of Science. Special tours of the nuclear and biological facilities were arranged for these students and also for the winners in the TJAS program and for their teacher-sponsors. A special treat was in store at the Honors Banquet: Dr. William L. Russell, geneticist in the Biology Division, ORNL, was the principal speaker. He discussed irradiation experiments on mice. The talk was based on the results of experiments performed by the internationally known Russell (husband and wife) team.

Below is the list of winners in the Tennessee Science Talent Search, listed by the cities in which their schools are located. In each case the student's name and the title of his science project are listed first, then the teacher's name and the school. An asterisk (*) indicates that the student was also a member of the national honors group in the Westinghouse Science Talent Search and two asterisks (**) indicate a national winner in the same Search.

Clarksville

CHOATE, WILLIAM EARL, Stone Age Toolmaking; James L. Major, Clarksville High School.
KIKENDALL, JAMES WALTER, After Labor Comes Luck; Ruth Rice, Clarksville High School.
PHILLIPS, EDWARD WADE, New Developments in Color Perception; Ruth Rice, Clarksville High School.
SAVAGE, KATHY LYNNE, Sentence Logic; James L. Major, Clarksville High School.
WALL, CHARLES BUFORD, Spectrum Effect on Solar Cells; Ruth Rice, Clarksville High School.

Copperhill

JONES, RICHARD ROY, The Synthesis of Amino Acids Upon Possible Primitive Earth Conditions; Ferris A. Maloof, Copper Basin High School.

Dayton

TOLIVER, RALPH HAEGER, Study of Indexes of Refraction of Sugar, Salt and Other Materials; Otis B. Melowan, Rhea Central High School.

Dresden

THOMAS, GEORGE C., A Study of Some Seemingly Paradoxical Situations Arising Under Einstein's Theory of Relativity; Mrs. C. S. Jeter, Dresden High School.

Dyersburg

FINCH, WILLIAM LAMAR, Ultrasonics; Helen C. Bell, Dyersburg High School.
ROBERTS, JAMES PATRICK, JR., The Effects of Lowered Pressure and of Hypoxia on the Histology of Mice; Helen C. Bell, Dyersburg High School.

Kingsport

CASE, MONA GRETEL, The Sensitivity of Horses to Human Voice and Actions and Other Items; James T. Davis, Dobyns-Bennett High School.
HOOVER, MARK HERBERT, Extraction of Aluminum from Silicate Minerals; James T. Davis, Dobyns-Bennett High School.

Knoxville

BACON, RAYMOND WITMER, The Role of Vision in the Maintenance of Balance in the Pigeon; Harry H. Kroll, Bearden High School.
CLARK, JOHN KENNEDY, Extra Sensory Powers: A New Test; Zavier Mankel, Knoxville Catholic High School.
FULLER, GEORGE CAREY,* Electrical Properties of a Gas Flame; H. H. Kroll, Bearden High School.
GUTH, GLORIA JEAN, Probability Fluctuations in the Distribution of Beta Particles; Xavier Mankel, Knoxville Catholic High School.
HAMMER, TERESA GLEE, Literary Search of the Possibilities of Lunar Minerals; Xavier Mankel, Knoxville Catholic High School.
WALSH, THOMAS EDWARD, JR., Report on Science Project; Lula Mae Shipe, Central High School.

Memphis

CROSS, JOHN WILLIAM,** Effect of Cell Culture on Cell Antigens; Frances B. Wild, White Station High School.
EARLY, LEO WINFORD, JR.,* A Study of Matrices; Thurman H. Jackson, Jr., Millington Central High School.
FAUST, LARRY MCNEILL,* Immunization of Staphylococcus Aureum to Penicillin; W. L. Burns, Oakhaven High School.
GARAVELLI, JOHN STEPHEN,* Dihydroxyacetone Reactions with Amino Acids; R. E. Jonakin, Messick High School.
HOWLES, JAMES RICHARD, Long-time Effects of Dilute Lithium Chloride on the form of the Ciliate Protozoan Stentor Coeruleus; Frances B. Wild, White Station High School.
MOSELEY, GEORGE NOELL, Transfer of Instrumental Learning through Cannibalism in Planaria; Frances B. Wild, White Station High School.
SCHULZ, MARTHA FAYE, Antigen Response of Blood to Proteins from Seed Extracts; William T. Conn, Jr., Central High School.
STILES, FREDERICK LAWRENCE, Low Voltage Power Supplies; S. E. Jonakin, Messick High School.
YOE, NORMAN SID, Congruences; William T. Conn, Jr., Central High School.

Nashville

HARDIN, LOUIS HAMILTON, Helictite Formation in Middle Tennessee Caves; Jacquelyn Ann Turner, Hillsboro High School.
MALLORY, MICHAEL JOSEPH, Analysis of Feedback Control System; Father Joseph W. Julius, Father Ryan High School.
WIENER, MARK LARKIN, Cavernicoles of Davidson County (Tennessee); Jacquelyn Ann Turner, Hillsboro High School.

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