

GENERAL SCIENCE

Science Fair Winners

Five young scientists, including two girls who tied for first place in the biological sciences division, win top honors at the Eighth National Science Fair.

See Front Cover

► FIVE of the nation's future scientists won top scientific honors at the Eighth National Science Fair in Los Angeles.

Three girls and two boys were chosen as first place winners from among 233 teen-age scientists, all local fair finalists from throughout the United States and Alaska. The top exhibitors are Dorothy Lundquist, a 17-year-old senior from Webster High School, Webster, S. Dak.; Kristina Toffer, an 18-year-old senior from Allentown High School, Allentown, Pa.; Johanna Elizabeth Phay, a 17-year-old junior from University High School, Oxford, Miss.; Richard Henry Conrad, a 16-year-old junior from Rutgers Preparatory School, New Brunswick, N. J.; and James Barclay Compton, a 17-year-old senior from Bethesda-Chevy Chase Senior High School, Bethesda, Md.

The five learned of their achievement at the annual awards luncheon, presided over by Watson Davis, director of SCIENCE SERVICE, which conducts the National Science Fair. The awards presentation followed talks by Dr. Howard L. Bevis, chairman of the National Committee for the Development of Scientists and Engineers; A. H. Batchelder, vice-president of the California Research Corporation; and Dr. Glenn T. Seaborg, Nobelist, professor of chemistry and director of nuclear research at the University of California at Berkeley.

Dorothy and Kristina tied for top honors in the girls' biological sciences division. Dorothy, who studied the effects of inadequate sleep upon physical and mental alertness, was also honored by being named recipient of a special American Medical Association citation. Kristina, who won with a study of salt exchange in plants, follows in the footsteps of her sister, Taimi, who won top honors for the girls' physical sciences division last year in Oklahoma City.

Richard won the first prize in the boys' biological sciences division with a study of a microscopic one-celled organism called euglena, which he tried to pin down as either a plant or animal.

Johanna earned top award in the girls' physical sciences division with a display showing the commercial uses for the osage orange seed, James won his first place award in the boys' physical sciences division with an electrical comparison of a chemical cell versus a living cell.

A view of the exhibits is shown on the cover of this week's SCIENCE NEWS LETTER.

Each of the top place winners will receive scientific equipment of his or her own

choosing valued at \$125. These are known as the "wish" awards. Every young scientist at the national event held at the Los Angeles County Museum had already been named a winner and honored as such at his or her local fair, of which there were 123 this year. Each National Science Fair exhibitor was also awarded a silver medal with the gold emblem of Science Clubs of America.

The following telegram was received at the Eighth National Science Fair:

THE WHITE HOUSE, WASHINGTON, D. C.

10 928AME

WATSON DAVIS,
DIRECTOR,
SCIENCE SERVICE,

c/o HOTEL MAYFAIR
1256 WEST 7TH STREET
LOSA

TO THE YOUNG SCIENTISTS AND THEIR TEACHERS ASSEMBLED AT THE EIGHTH NATIONAL SCIENCE FAIR I SEND GREETINGS. THE SCIENCE CLUBS OF AMERICA ARE PERFORMING A SPLENDID SERVICE IN OUR HIGH SCHOOLS ACROSS THE LAND. AS THEY RECOGNIZE AND ENCOURAGE THE ABILITY OF OUR STUDENT SCIENTISTS, THEY HELP TO INSURE THE FUTURE STRENGTH OF OUR NATIONAL ECONOMY AND THE FREEDOM OF ALL. BEST WISHES TO YOU.

DWIGHT D. EISENHOWER

Second Place Winners

Winners of the second place wish awards amounting to \$75 in scientific equipment of their own choosing and the titles of their Fair projects are: Melvin Douglas Ball, 16, Clovis (Calif.) Union H. S., "Mushrooms;" Elizabeth A. Campbell, 18, Our Lady of Providence H. S., Clarksville Ind., "Nitromethane—A Fuel Additive;" Carole Anne Caroselli, 17, Classical H. S., Providence, R. I., "Algal Culture—A Research Tool;" Brian Russel De Palma, 16, Friends' Central School, Overbrook, Pa., "Application of Cybernetics to the Solution of Differential Equations;" Charles A. Frenzel, 16, College H. S., Bartlesville, Okla., "Raman Spectroscopy;" Carl Edward McLaughlin, 16, Encinal H. S., Alameda, Calif., "Tic-Tac-Toe Computer;" John Douglas Reichert, 18, Stephen F. Austin (Texas) H. S., "Is Chromatography a Practical Tool in Inorganic Analysis?;" Winston Albert Salser, 18, Wichita (Kans.) H. S. East, "Effects of Ionizing Radiations on Plants and Animals;" Eileen Jane Settle, 16, Portland-Wayne (Ind.) Township H. S., "Insects on 160 Acres."

Third Place Winners

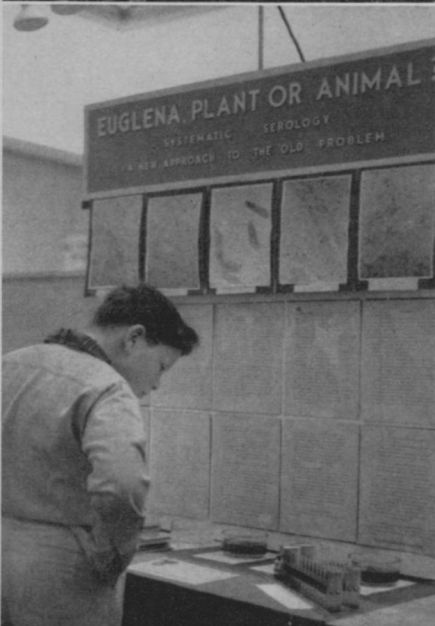
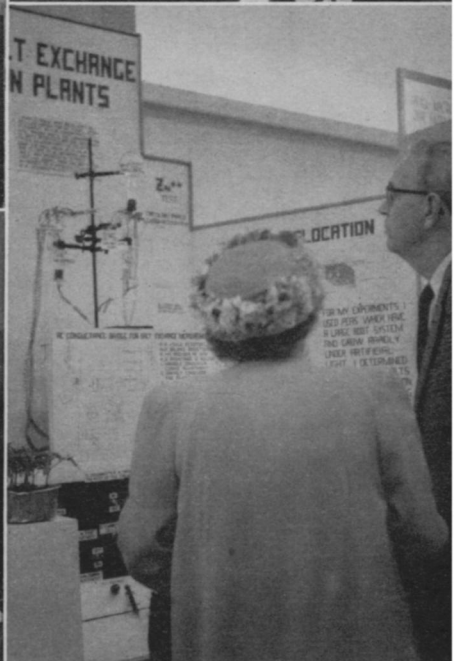
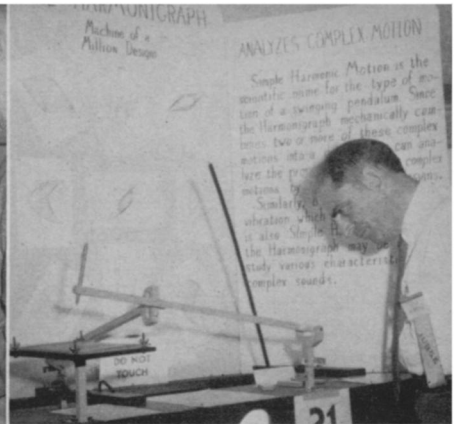
Winners of the third place wish awards, amounting to \$50 in scientific equipment of their own choosing are: Dorothy Patricia Aldred, 18, Thomson (Ga.) H. S.; Robert I. Bina, 17, St. Meinrad (Ind.) Minor Seminary; James McGill Jenkins, 16, Kenwood Senior H. S., Baltimore, Md.; William P. Love, 18, Florida H. S., Florida State University, Tallahassee, Fla.; George Patrick Markin, 18, Helena (Mont.) Senior H. S.; William Edward Montgomery, 17, Myers Park H. S.; Charlotte, N. C.; Margaret Anne Reynolds, 17, George Washington H. S., Indianapolis, Ind.; Sam Bayless Upchurch, 15, East Nashville (Tenn.) H. S.

Winners of the fourth place wish awards, amounting to \$25 in scientific equipment of their own choosing are: Jon Harold Bech-

(Continued on page 334)

On the opposite page are shown, far left, the first place winners (left to right) James Compton, Johanna Phay, Richard Conrad, Kristina Toffer, and Dorothy Lundquist, Dorothy is shown shaking Dr. Glenn T. Seaborg's hand while Dr. H. L. Bevis and Watson Davis, director of SCIENCE SERVICE, look on. The photograph below shows second place winners (back row) Melvin Ball, John Reichert, Winston Salser, and Brian De Palma, Eileen Settle, Carole Caroselli, Elizabeth Campbell, Charles Frenzel, and Carol McLaughlin. The eight third-place winners are shown below. American Medical Association award winners, together with Dr. Dwight H. Murray, president of the AMA, are Robert Nathanson, Lillian Harris, Warren Prince and Dorothy Lundquist. Other photographs show a judge (top right), local visitors to the fair and exhibitors.

Science News Letter, May 25, 1957



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Science Fair Winners

(Continued from page 326)

tel, 17, Goshen (Ind.) H. S.; Martha Cecilia Blake, 17, Calvin Coolidge H. S., Washington, D. C.; Willis Blumhardt, 18, Kulm (N. Dak.) H. S.; Allan E. Boyd, 18, Turlock (Calif.) Union H. S.; William Ernest Bridson, 17, Wichita (Kans.) H. S. East; Alan Dwight Brooks, 18, Lincoln H. S., Tacoma, Wash.; Stephen H. Caine, 16, Byrd H. S., Shreveport, La.; Patricia Wayne Caruthers, 17, Sumner H. S. Kansas City, Kans.; Patricia Ruth Chelette, 17, Chatham (La.) H. S.; David Lehman Cocanower, 17, Elkhart (Ind.) H. S.; Barbara Ann Conway, 15, Notre Dame H. S., Chattanooga, Tenn.; James Merle Cunningham, 18, North Side H. S., Fort Worth, Texas; Dallas Darrel Diederich, 17, Monsignor Luckey H. S., Manhattan, Kans.; John Donelson III, 16, The McCallie School, Chattanooga, Tenn.; Mary Marshall Doyle, 16, William Fleming H. S., Roanoke, Va.; John Logan Emler, 17, Oak Ridge (Tenn.) H. S.; John Lester Emmett, Jr., 17, Rochester (Minn.) Senior H. S.; Robert Matthew Ennis, Jr., 18, Bishop Noll H. S., Hammond, Ind.; John T. Falkenbury, 17, Arlington Heights H. S., Fort Worth, Texas; David Lee Fuller, 17, Northside H. S., Atlanta, Ga.; William E. Hauda, 16, Sault Ste. Marie (Mich.) H. S.; William D. Henn, 17, Bishop Loughlin H. S., Brooklyn, N. Y.; Tommy Hoffman, 15, Washington (Ga.) H. S.; Dorothy Anita Hollingshead, 17, Murphy H. S., Atlanta, Ga.; Roger Nelson Horn, 17, Wakefield H. S., Arlington, Va.; Thomas Dale Kennelly, 18, Pacific Senior H. S., San Bernardino, Calif.; Donald A. Klose, 15, Albany (Calif.) H. S.; Francis Stratton Knox III, 16, Mount Pleasant H. S., Wilmington, Del.; Michel Allan Lynch, 17, Northwest Classen H. S., Oklahoma City, Okla.; Marianne Maclary, 17, W. H. Adamson Senior H. S., Dallas, Texas; Noel McFarland, 19, University H. S., Los Angeles, Calif.; Camille Cecile Miller, San Dieguito H. S., Encinitas, Calif.; Robert B Nathanson, 16, William Hall H. S., West Hartford, Conn.; Joseph Raymond Pastore, 15, West Side H. S., Newark, N. J.; Patricia Jean Pence, 17 West Valley H. S., Mill-

wood, Wash.; David Pfendler, 15, West Lafayette (Ind.) H. S.; David Eugene Pitts, 17, Classen H. S., Oklahoma City, Okla.; Warren Edward Prince, 16, Northwestern Senior H. S., Hyattsville, Md.; Gordon Wilson Romney, 15, Stephen F. Austin H. S., El Paso, Texas; James William Samuel, 17, Quakertown (Pa.) Community H. S.; Violette Elizabeth-Emma Schlatter, 17, Archbold (Ohio) H. S.; Katherine Lois Schmelter, 16, Colton (Calif.) Union H. S.; Robert James Schneider, 17, Southwest H. S., St. Louis, Mo.; John Gordon Sessions, Jr., 18, North Fulton H. S., Atlanta, Ga.; Samuel Strober, 17, Stuyvesant H. S., New York, N. Y.; Lynne Welch Taylor, 18, Northwestern Senior H. S., Hyattsville, Md.; Betty Lou Wallace, 15, Mountain Park (N. C.) H. S.; Richard Arlen Wolfe, 17, Sophia (W. Va.) H. S.; Emma Leah Young, 17, Alcee Fortier H. S., New Orleans, La.; Nelson Lee Zinsmeister, 18, Chester H. S., North Manchester, Ind.

Science News Letter, May 25, 1957

AMA Award Winners

► DOROTHY Lundquist and Warren E. Prince were selected from among the young scientists at the National Science Fair to receive the American Medical Association's special citations. The awards include a plaque and an all-expense paid trip to the Association's New York Convention on June 3 through 7.

Lillian M. Harris, 17, of Salpointe High School, Tucson, Ariz., and Robert B. Nathanson, 16, of William Hall High School, West Hartford, Conn., were named as honorable mentions and will go to New York in the event the first place winners are unable to do so.

The prize-winning exhibits, Miss Lundquist's study of the effects of inadequate sleep upon physical and mental alertness, and Mr. Prince's exhibit entitled "Spray Method for Autogenous Skin Grafts," will be displayed at the AMA convention.

The two exhibits that received honorable mention were entitled "African Sleeping Sickness" shown by Miss Harris, and "Fungistatic Action of Squalene and Certain Unsaturated Fatty Acids of the Skin on *T. rubrum* in Vitro," shown by Mr. Nathanson.

Dr. Alphonse McMahon, associate professor of medicine at St. Louis University and chief of medicine at St. John's Hospital, St. Louis, Mo., speaking for the panel of six doctors who judged the exhibits, commented that "the exhibits at National Science Fair were of exceptional quality and presented a very great problem for the judges."

Dr. Dwight H. Murry, president of the American Medical Association, presented the awards.

Science News Letter, May 25, 1957

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