sioner, Civil Rights Commission; member, National Science Board.

Margaret Hickey, public affairs editor, The Ladies' Home Journal.

David Reisman, professor, sociology department, University of Chicago.

J. E. Wallace Sterling, president, Stanford University.

Howard E. Wilson, dean, School of Education, University of California, Los Angeles.

Dael Wolfle, executive officer, American Association for the Advancement of Science; former director of the Commission on Human Resources and Advanced Training.

Fred M. Hechinger, associate publisher, The *Bridgeport Herald*; education editor, *Parents Magazine*.

James R. Killian, Jr., president, Massachusetts Institute of Technology; Special Assistant to the President.

#### New RCA Electronic "Eye"

An extremely sensitive electronic "eye" which may disclose previously unseen details of the planets and distant nebulae, permit visual reconnaissance in almost complete darkness, and provide a powerful new tool for scientific research, has been developed by scientists of the Radio Corporation of America.

The new device is a developmental, advanced type of camera tube, based on television principles and known as the Intensifier Orthicon. In contrast to the conventional Image Orthicon, which is used in present television pick-up functions, the new tube employs either one or two "intensifier" stages between the light-sensitive pickup surface at the front of the tube and the signal output assembly at the rear. The tube was developed by George A. Morton and John E. Ruedy at RCA's David Sarnoff Research Center, Princeton, N.J., in a research program sponsored by the Aeronautical Research Laboratory at the Wright Air Development Center.

According to Morton, the new Intensifier Orthicon is probably 100 times more sensitive than the fastest known photographic film for the same exposure time at extremely low levels of light. It can "see" in surroundings which appear completely dark to the human eye, achieving a sensitivity that approaches the fundamental limit set by photon statistics, Morton claims.

Discussing the various possible applications of the new instrument, Morton emphasized its value in astronomy as a viewing system coupled with a telescope to overcome the effects of the earth's atmospheric turbulence in viewing planets and nebulae. He also mentioned its value in the amplification of

dim images such as the light traces left by the passage of high-speed subatomic particles in nuclear research.

### Radio Telescope in California

The University of California at Berkeley is planning to enter the field of radio astronomy. Plans call for the erection of an 85-foot radio telescope to be built at a site to be selected as soon as possible. Total cost of the project is estimated at about \$500,000. The Office of Naval Research will provide \$368,000 for the telescope, and the university will provide \$150,000 for land and buildings.

#### **Medical Communication**

The Institute for Advancement of Medical Communication, a nonprofit organization, was recently formed to develop ways to increase the efficiency of information exchange among medical scientists, medical educators, and practising physicians. The institute plans to devise and test new methods of disseminating medical information and to serve as an information center for medical organizations that request help with communication problems. The work of the institute will be financed by general and research grants both from private foundations and from the Government.

The charter members of the board of directors are Chauncey D. Leake, professor of pharmacology and assistant dean, College of Medicine, Ohio State University; Homer W. Smith, professor of physiology, College of Medicine, New York University; and Irving S. Wright, professor of clinical medicine, Cornell University. Richard H. Orr, assistant editor of the journal Metabolism and former medical director of Grune and Stratton, Inc., will serve as executive director. An advisory board is in the process of being selected. The temporary headquarters of the institute are at 37 E. 67 St., New York 21, N.Y.

#### Training Reactor in Puerto Rico

On 30 June the Atomic Energy Commission signed a letter contract with AMF Atomics for a pool-type nuclear training and research reactor to be built at the commission's Puerto Rico Nuclear Center in Mayaguez. AMF Atomics is a division of American Machine and Foundry Company and is located in Greenwich, Connecticut. The Puerto Rico Nuclear Center was established by the AEC on 2 October 1957 as a part of the Atoms-for-Peace program.

Under the terms of the agreement, AMF Atomics will design, fabricate, in-

stall, and test a 1000-kilowatt (heat), forced circulation, pool-type reactor at the center, which is located adjacent to Mayaguez campus of the University of Puerto Rico.

The reactor, scheduled for completion in mid-1960, will contain features permitting future operation at power levels up to 5000 kilowatts with minimum modifications. The reactor, to be designed for use both as a training and a research facility, will include a thermal column with both horizontal and vertical access, six experimental beam holes, and a dry gamma irradiation facility.

The first phase of the construction program will be completed in 1960. Facilities included in the first phase are the reactor, a laboratory and training building, and a greenhouse for agricultural training and research. All of these facilities will be at Mayaguez.

The center has as its goal the development of a comprehensive program for training and research in nuclear science and engineering, and the peaceful application of nuclear energy to medicine, agriculture, and industry. The program will be available to students in all of the American republics. Four sessions of the radioisotopes training course have already been completed, and courses in nuclear science and technology are being offered at the university's campuses at Mayaguez and Rio Piedras. Instruction generally is provided in Spanish. Charles Bonilla is director of the center.

# Scientists in the News

GEORGE R. THURMAN has been named director of the Monterey, Calif., engineering laboratory of the guided missile division of the Firestone Tire and Rubber Company. Thurman, who has been manager of the Firestone defense research division in Akron, Ohio, succeeds Captain FRANK W. MACDONALD (U.S. Navy, retired). V. E. LUCAS, who has been assistant manager of the defense research division, succeeds Thurman as manager of that division.

EMERSON W. CONLON, general manager of the Turbomotor Division of the Curtiss-Wright Corporation, has been named director of engineering and scientific research and professor of mechanical engineering at Drexel Institute of Technology.

BETTY M. WATTS, professor of foods and nutrition at the Florida State University, Tallahassee, has been selected by the American Meat Institute Foundation as the recipient of the F. C. Vibrans' Senior Scientist Award for 1958.

WILLIAM M. MERRILL, associate professor of geology at the University of Illinois, has been appointed professor and chairman of the department of geology at Syracuse University, effective 1 September. He succeeds EARL T. APFEL, who retired in June after 15 years as head of the department.

H. O. HENDERSON, for many years head of the dairy husbandry department and now professor of dairy husbandry at West Virginia University, was given the \$1000 Teaching Award in Dairy Production of the National Dairy Products Corporation at the 53rd annual meeting of the American Dairy Science Association at North Carolina State College.

FRITS W. WENT, director of the Earhart Plant Laboratory and professor of biology at the California Institute of Technology, has been appointed director of the Missouri Botanical Garden, St. Louis. HUGH CUTLER, who has been acting director of the garden since December 1956, has been appointed executive director.

JAMES N. SPUHLER has been appointed acting chairman of the department of anthropology at the University of Michigan, effective 1 July. He replaces FREDERICK P. THIEME, who becomes assistant to the president of the University of Washington on 1 August.

G. G. HARRIS, of Columbia University's physics department, and HOW-ARD GREENBERG and AUREL SEI-FERT, both of the City College physics department, have formed the Manhattan Physical Research Group, Inc., located at 556 W. 191 St., New York.

Winners of awards for the five best essays on gravity have been announced by the Gravity Research Foundation, New Boston, N.H. The first award of \$1000 was given jointly to GUISEPPE COCCONI and EDWIN SALPETER, professors of physics and nuclear studies at Cornell University, for their paper on "A Search for Anisotropy of Inertia." The second award of \$300 was given to QUENTIN A. KERNS of the University of California Radiation Laboratory, Berkeley, for his essay, "A Proposed Laboratory Measurement of the Velocity of Propagation of Gravity."

The remaining awards were made as follows: third award of \$200 to JOSEPH WEBER, University of Maryland; fourth award of \$150, to WINSTON H. BOSTICK, physics department, Stevens Institute of Technology; and fifth award of \$100, to FRITZ ZWICKY, Mount Wilson and Palomar Observatories, Carnegie Institution of Washington, California Institute of Technology, Pasadena.

LYELL F. THOMPSON has been named leader of the University of Arkansas soil testing project. He replaces R. L. BEACHER, who resigned last December to take a position as field representative with the American Plant Food Institute. As associate professor of agronomy, Thompson will be in charge of activities of the Soil Testing and Research Laboratory of the Arkansas Agricultural Experiment Station, including the Eastern Arkansas Branch Laboratory at Marianna. In addition, he will teach courses in soils at the university.

HAROLD K. WILSON, former director of the Division of Intermediate Registration at Pennsylvania State University, has been named the university's associate dean for research and development. He also is a professor of agronomy.

JAMES A. HALSTED, director of Professional Services, Syracuse Veterans Administration Hospital, and associate professor of medicine, State University of New York Medical Center in Syracuse, will be visiting professor of medical science at the University of Shiraz, Iran, for the academic year 1958–59. Halsted will return to his present position in June 1959.

For the first time since 1953 the American Heart Association has made awards in its highest category: Career Investigator. This provides lifetime support for research workers of outstanding ability. The three men chosen were: DAVID B. SPRINSON, professor of biochemistry at Columbia University; JOHN V. TAGGART, professor of medicine at Columbia University; and LEWIS W. WANNAMAKER, associate professor of pediatrics at the University of Minnesota.

GEORGE ROSEN, Columbia University Faculty of Medicine, will give the first annual Victor Robinson Lecture in History of Medicine at Temple University School of Medicine on 23 September 1958. This lectureship, named in honor of VICTOR ROBINSON, professor of history of medicine at Temple University from 1929 until his death in 1947, is appropriately initiated by Rosen, medical historian and personal friend of Robinson.

WILLIAM S. TILLETT was honored on 24 June in the Bellevue Hospital Center when new research laboratories in the department of medicine of New York University's College of Medicine were dedicated in his name. Tillett retired on 1 July as professor and chairman of the department of medicine and as director of the Third Medical (N.Y.U.) Division

of the Bellevue Hospital Center. Tillett is now full-time project director for research in the field of allergy and infectious diseases at N.Y.U.—Bellevue Medical Center. A 5-year program began on 1 September 1957 under the auspices of the National Institute of Allergy and Infectious Diseases.

## Recent Deaths

CYRUS L. COX, Newark, N.J.; 70; professor emeritus of pharmacy at the Rutgers University College of Pharmacy; former professor of pharmacy at Valparaiso University; expert on emulsions; 23 June.

BERGEN DAVIS, New York, N.Y.; 89; professor emeritus of physics at Columbia University; advanced the study of the excitation and ionization of gaseous atoms by electron impact; invented a double-crystal spectrometer; 30 June.

DONALD A. FLANDERS, Chicago, Ill.; 57; director of the Applied Mathematics Division at Argonne National Laboratory; professor of mathematics at New York University from 1929 to 1948; head of the computing section of the Theoretical Physics Division at the AEC installation at Los Alamos, N.M., from 1943 to 1946; 27 June.

HARRY N. HOLMES, Oberlin, Ohio; 78; professor emeritus of chemistry at Oberlin College; crystallized vitamin A; introduced the laboratory technique of chromatography into the United States; expert on colloids; president of the American Chemical Society in 1942; 1 July.

HOMER L. STANTZ, Rapid City, S.D.; 82; professor of botany at the University of Arizona and expert on grasses, arid lands, and plant geography; president of the University of Arizona from 1928 to 1936; 23 June.

ANDRIJ ASTAMPAR, Zagreb, Yugoslavia; 69; president of the Yugoslav Academy of Sciences and Arts; ex-president of the Assembly of the World Health Organization; former professor of medicine at the University of California and of public health and social medicine at the University of Zagreb; health expert with the League of Nations; 25 June.

CARL K. STEWART, Teaneck, N.J.; 60; metallurgist at the Curtiss-Wright Corporation: 27 June.

Wright Corporation; 27 June.

MALCOLM R. THORPE, New
Haven, Conn.; 67; geologist and paleontologist; curator of vertebrate paleontology at the Peabody Museum at Yale
University; 23 June.

FRANK T. WOODRUFF, New Haven, Conn.; 86; retired vice president of Associated Seed Growers, Inc.; specialist in breeding of vegetables, particularly peas and beans; 25 June.