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### New AAAS Associate Society

The Council of American Bioanalysts was formed with the primary purpose of bringing together people who direct, perform, or teach analyses as they are applied to medical laboratory procedure or related fields. The term *bioanalyst* was coined from the prefix *bio* and the word *analyst* to describe an individual who by training and competence is capable of directing or teaching analytical procedure involving the biological sciences.

While the first members were drawn from state clinical laboratory associations, provision for membership was made for other scientific workers with identical interest. Accordingly, laboratory officers in the armed forces, technical laboratorians from public health laboratories, and university professors teaching curricula in these areas have become members.

The administrative organization consists of a national board of directors and five regional boards. The officers serve in dual capacities as national and regional representatives. Scientific activities of the society are concentrated in an internal council known as the scientific council. Officers to staff this are elected, and some of them serve simultaneously on the national board. All meetings, evaluation studies, publication of scientific journals, and studies of the utility of courses offered for academic instruction are governed through this council.

The most important project undertaken so far has been a general evaluation of laboratory routine and methods. The program is divided into two general categories; one consists of 25 laboratories selected on the basis of previous performance; the second consists of an indeterminate number of laboratories that accept specimens to check routine procedures within their institutions. The first group acts as a control unit for the preparation of samples issued to the second, and in addition conducts evaluation of specific methods or techniques. This entire program has been under the direction of Nell Hollinger, an associate professor in the School of Public Health at the University of California, Berkeley.

Publication of a quarterly journal, *Abstracts of Bioanalytic Technology*, has provided coverage of technical, bioanalytical literature in a manner not previ-

ously offered by other publications. Under the editorial direction of H. E. MacDaniels of the Illinois State Department of Public Health, a group of editors scattered throughout the United States scan and select articles. These are professionally abstracted by the Crerar Library staff in Chicago and published within 3 months of their original appearance.

Emphasis has been placed on regional meetings within a geographic area small enough to allow the greatest number to participate. The society has established a policy of inviting the attendance at meetings of members of all other scientific societies within the area concerned. National meetings are usually held in conjunction with one of the regional meetings.

The past two presidents have been Donald Abel of Chicago and William Reich of Walnut Creek, Calif. The present president is Marion Dooley, director of a clinical laboratory in Dallas, Tex. The president-elect is Thomas S. Hosty, director of the Alabama State Department of Public Health Laboratory at Montgomery.

In a special tribute Margaret Beattie, an outstanding educator and a professor in the School of Public Health at the University of California, Berkeley, was made an honorary member of the council. A lecture series named in her honor, the Margaret Beattie lecture, was created as an annual event. The inaugural paper was presented in January 1955 by Maxwell S. Wintrobe, professor of medicine of the University of Utah. The second will be delivered on 4 Feb. in San Francisco, by Linus Pauling, Nobel laureate in chemistry and professor of chemistry at California Institute of Technology.

The council engages in a number of other programs designed for the benefit of its members. Notable among these is an insurance program for those in applied bioanalysis that provides malpractice coverage. Another is the preparation of a series of handbooks that are being assembled for future publication under the general title "The handbook of bioanalytic technology." Still another is a program of improving educational facilities for present and future members.

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### Radioisotope Distribution

The Atomic Energy Commission announced issuance on 11 Jan. of a revised regulation, "Licensing of byproduct material," that removes certain restrictions on the sale of radioisotopes abroad and simplifies procedures governing domestic distribution. The regulation is effective

on 10 Feb.; it replaces the existing radioisotopes-distribution regulation, which was first issued in 1951.

The revised regulation makes more conveniently available to scientists in other countries radioactive materials for use in medicine, agriculture, industry, and the physical sciences. Research groups abroad may now deal directly with production and distribution centers in this country. In the United States the revision will help American research workers and the growing body of radioisotope users by raising the limit on quantities of radioactive materials available to each user under general license.

In issuing the revised regulation, the AEC said that its usual practice of publishing a proposed regulation and inviting comment was not followed because the revisions made are for the most part designed to remove certain existing restrictions and to clarify present provisions, and not to impose additional requirements on licensees or applicants. In connection with consideration of further amendments, interested persons may submit written comments and suggestions to the U.S. Atomic Energy Commission, Washington 25, D.C., attention the Director, Division of Civilian Application.

### Salk Vaccine in Massachusetts

■ A report on the effectiveness of the Salk vaccine in last summer's poliomyelitis epidemic in Massachusetts has been compiled by the Massachusetts Department of Public Health under a grant from the National Foundation for Infantile Paralysis. The report appeared in the 19 Jan. issue of the *New England Journal of Medicine*. It states that one injection was 60 percent effective against all paralytic poliomyelitis, 66 percent effective against bulbospinal poliomyelitis, and 65 percent effective against bulbar poliomyelitis.

(A U.S. Public Health Service analysis of paralytic poliomyelitis in 11 other states, made on 15 Nov., showed vaccine effectiveness levels for 1955 ranging from 55 to 91 percent, and averaging 76 percent. Last April's report by Thomas Francis, Jr., on the vaccine used in the 1954 field trials gave an effectiveness of from 60 to 90 percent for children who had received three injections in a 5-week period.)

The Massachusetts report said that "no conclusions should be drawn" from the figures on results of more than one injection of vaccine, because relatively few cases were tabulated. But the effectiveness for two or more shots was estimated at 69 percent against all paralytic poliomyelitis.

This means that 157 paralytic cases

occurred per 100,000 unvaccinated children, whereas 21 paralytic cases occurred per 100,000 children who had received only one shot. Among 4658 youngsters who received three injections of vaccine during the 1954 field trials, plus a booster shot in 1955, there was only one case of paralytic poliomyelitis.

In a comparison of the Massachusetts one-shot experience with the experience with children who had received three injections in the 1954 field trials, the report said, "It is remarkable that one dose could have approached so closely the value of three doses, particularly in an epidemic situation. It would seem to indicate that the vaccine used in Massachusetts in 1955 was a particularly effective one."

The report noted that the "unprecedented" Massachusetts epidemic was due almost entirely to type I poliomyelitis. It was against this type of virus that the 1954 field trial vaccine was least effective.

The Massachusetts survey was directed by Alton S. Pope, former deputy commissioner of the State Department of Public Health. A total of 3608 cases were studied in preparing the report. Study populations were obtained from school census reports in 351 Massachusetts cities and towns. The authors of the report describe it as preliminary; a further paper will contain additional information and figures that have not yet been analyzed.

### Grasshoppers on the Rangelands

A recent survey by the U.S. Department of Agriculture indicates that the 1956 grasshopper problem on western rangelands will be more than three times more serious than in 1955. The survey indicated that grasshopper populations will occur in 1956 on more than 20 million rangeland acres in 16 states, compared with the 6 million acres given in the preliminary estimate for 1955.

The states involved are Arizona, California, Colorado, Idaho, Kansas, Missouri, Montana, Nebraska, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming. In 1955, almost 1,650,000 acres of rangeland in 11 states were treated with insecticides to control grasshoppers.

Next spring the threatened areas will be resurveyed to find what toll predators, parasites, diseases, and weather take over the winter of the potential insect population. Final plans for 1956 control work will be based on the findings of this study.

In these grasshopper surveys, investigators count the actual number of insects per square yard at sample stops in suspected areas. Later in the fall, they re-

turn to check whether the outlook remains the same or whether a shifting of adult egg-laying insects has changed the forecast.

The surveyors shovel a measured square foot of soil into a sifting screen, or scrape away plants and dig into the soil, to expose and count grasshopper egg pods. From these counts the coming year's infestations are rated, and the data are used to make up maps and estimates of the potential infestation for the following year.

### News Briefs

■ The French Physical Society held a special meeting to celebrate the discovery of artificial radioactivity by F. Joliot-Curie and his wife in 1934. Four commemorative papers that were delivered were published in the October 1955 issue of *Le Journal de Physique*: "The historical aspect of the discovery of artificial radioactivity," by S. Rosenblum, research director, C.N.R.S.; "Artificial radioactivity and physics," by O. R. Frisch, Cambridge; "Artificial radioactivity and chemistry," by F. A. Paneth, Max-Planck Institute, Mainz; "Artificial radioactivity and biology," by M. Tubbiana, Institute Gustave Roussy, Villejuif.

■ A mutual assistance agreement between India and the United Kingdom for the development of peaceful uses of atomic energy was announced late in December by the United Kingdom Atomic Energy Authority. The statement issued by the Atomic Energy Authority states:

"Discussion between the United Kingdom Atomic Energy Authority and the Indian Department of Atomic Energy have led to the conclusion of an agreement which ensures that there shall be close co-operation and mutual assistance between the Authority and the Department in the promotion and development of the peaceful uses of atomic energy. The agreement provides for the Authority and the Department to arrange for members of their staffs to consult and work together on mutually agreed topics. In furtherance of this agreement the United Kingdom Atomic Energy Authority will provide the Indian Department of Atomic Energy with enriched uranium fuel elements for a swimming pool reactor now under construction and a high flux research reactor which may be built at a later date."

■ An experimental electric train fitted with a germanium rectifier—which converts the alternating current picked up from an overhead wire to direct current for the traction motors—has completed

successful trials on the Lancaster-Morecambe-Heysham line of British Railways. It is believed to be the first ever to use such an installation. The manufacturers of the rectifier (British Thomson-Houston Company, Ltd., Rugby, England) claim that it is more efficient and reliable than the mercury-arc rectifier.

■ A new agricultural fungus disease, previously unknown in the United States, has been discovered in Mississippi, according to the U.S. Department of Agriculture and the Mississippi Agricultural Experiment Station. The disease, downy mildew of crimson clover, is caused by a fungus, *Peronospora viciae*, which does considerable damage to crimson clover in sections of Europe. The disease has not yet become damaging in this country.

Leaves of infected crimson clover appear yellowish gray to purple from above, and are often curled. The lower surface of the leaves is coated with downy fuzz which becomes violet-colored after a period of time.

### Scientists in the News

JOHN F. FULTON, Sterling professor of the history of medicine at Yale University and for many years chairman of the department of physiology, was honored on 14 Jan. at a reception and dinner given to mark his completion of 25 years of service as Sterling professor.

Fulton's work in neurophysiology has outlined basic concepts of the workings of the brain. He is also credited with major responsibility for the development of Yale's medical history library. A special issue of the *Yale Journal of Biology and Medicine*, dedicated to Fulton, was presented to him.

PHILIP HERSHKOVITZ, associate curator of mammals at Chicago Natural History Museum, has been appointed curator. He succeeds COLIN C. SANBORN, who retired 31 Dec. because of ill health.

EDWARD C. BULLARD, director of the National Physical Laboratory, Department of Scientific and Industrial Research, London, England, resigned on 31 Dec.

RUBEN F. METTLER, director of advanced systems planning at the Ramo-Wooldridge Corporation, Los Angeles, Calif., has been named one of the "Ten Outstanding Young Men of 1955" by the U.S. Junior Chamber of Commerce. Mettler was honored for "contributions in rocket fire control developments and classified military electronics."