

is sponsoring some 30 projects involving LSD. But the notoriety of LSD, gained from reports of its use on college campuses, dates back only a few years, probably specifically to 1963 when Timothy Leary, a psychologist at Harvard and apostle of LSD, was dropped from the faculty after abuse of LSD by students was reported.

In April, Food and Drug Administration Commissioner James L. Goddard broadcast a letter to educational administrators warning of a "marked increase in the illegal use of hallucinogenic and stimulant drugs throughout the nation, particularly around educational institutions" and asking them to report any "instances of the illegal use or possession of [hallucinogenics] or sleep-delaying drugs such as the amphetamines."

FDA is the agency responsible for administering the new drug-abuse amendments. Two classes of the undercover agents newly authorized to deal with the illegal traffic in barbiturates, amphetamines, and hallucinogenics have just been graduated.

The new controls on dangerous drugs apply to manufacture and distribution. Possession of such drugs is not an offense, as it is in the case of hard narcotics. Abuse of barbiturates and amphetamines requires comparatively large (and bulky) supplies of pills, and some congressional and agency officials feel that the new laws will be more effective in respect to these drugs than to the hallucinogenics. A little LSD goes a long way. The FDA estimates that as little as 100 micrograms can produce hallucinations in the individual lasting for hours or days. One gram could provide 10,000 doses. Therefore the Dodd subcommittee has been considering, among other things, making possession of hallucinogenics an offense.

Officials are disturbed because, in addition to LSD's being smuggled into the country or diverted from supplies for legal purposes, there have been reports that a significant amount is being produced by small synthesizing operations in college chemistry laboratories.

Use of psychedelic drugs was incorporated in the mystique of self-exploration and experimental morality in part taken over from the "beats" of the 1950's by the "alienated" youth of the 1960's. Since the alienated are university-oriented, the prospect of FDA agents raiding chemistry labs for homebrew LSD has obviously disturbing implications.

Congressional recognition of the multiplying social ramifications of the abuse of LSD and other drugs is indicated by the appearance before the Dodd subcommittee of Leary and, last week, of poet Allen Ginsberg, who has been called the Thomas De Quincey of psychedelic drugs. The poet and the senators continued to operate on different wavelengths, but the not unfriendly confrontation reflected a congressional attempt to understand the new problems about which it is legislating.

Before and after World War II the major legislative battles over domestic legislation involved economic questions. In recent years, welfare and education, civil rights and civil liberties have figured more prominently. Wiretapping, the use of the polygraph, and personality testing, for example, have engaged the attention of Congress. Such issues touching the "freedom of the human personality" as laws dealing with abortion and homosexuality have not burst into the legislative arena as they have in other Western countries, but it may not be long before they do.

A decade ago most legislators would have shunned any discussion of legislation on birth control. President Eisenhower late in his administration clearly labeled it a subject inappropriate for federal policy action. Yet, now, assistance to local birth control programs is being given through the Poverty program, and the Food for Peace bill, which recently passed the House, for the first time explicitly permits foreign currency paid for American food aid to be used to finance birth control programs in the recipient country.

In many of these areas there has been an interaction between the advance of technology and the alteration of public opinion. And, as in the case of treatment of narcotic addicts, reformers almost automatically invoke the support of scientific opinion. In testifying before the Senate subcommittee in behalf of the addict rehabilitation bill, for example, Attorney General Nicholas de B. Katzenbach asked, "How much longer will we allow our crime rate to be fueled by laws that lag years behind medical research?"

Congress no doubt was impressed more by the statistics showing that, in handling addicts, present methods are perhaps 95 percent ineffective, but the legislators also appreciate being able to cite scientific authority in support of change.

Congressmen and senators are accustomed to talking to agency heads

and other top governmental administrators, representatives of interest groups, and other men of organizational distinction at their hearings. When science and morality are involved, the legislators are finding it helpful to tap a wider sample of opinion. And while poets may continue to be rarities at hearings on Capitol Hill, scientists are likely to be called more often as expert witnesses.—JOHN WALSH

## Announcements

Five Philadelphia medical schools have chartered a corporation, Federated Medical Resources, to establish a **laboratory animal center**. The corporation plans to buy a 156-acre farm in Honey Brook Township and to build a "model community" to demonstrate "proper housing and care of many animal species." In addition, special strains will be bred, and many animals sent elsewhere for research will be returned to the center for short- or long-term observation. The participating institutions are Hahnemann and Jefferson medical colleges, Temple University health sciences center, the University of Pennsylvania medical affairs division, and the Woman's Medical College of Pennsylvania.

## Grants, Fellowships, and Awards

Competition is open for **U.S. government scholarships** offered under terms of the Fulbright-Hays Act for the 1967-1968 academic year. Graduate awards are available for academic work or research (as well as for professional training in the creative and performing arts) in more than 50 foreign nations. Candidates should have the bachelor's degree or its equivalent by the beginning date of the grant, and in most cases should be proficient in the language of the host country. Candidates in medical fields should have the M.D. by the time they apply. Applicants should be U.S. citizens; preference will be given to those who are under 35 years old and who have had no prior opportunity for extended study or residence abroad. The types of award are: full grants of tuition, maintenance, transportation, health and accident insurance, and allowance for incidentals; and travel grants to supplement scholarship aid from other sources.

The competition is conducted for the government by the Institute of Inter-

national Education. Persons not enrolled in a college or university may obtain information and application forms from the institute's counseling division, 809 United Nations Plaza, New York, or from one of the institute's regional offices in Chicago, Denver, Houston, San Francisco, or Washington. Application deadline: *1 November*. Students should consult the Fulbright program adviser on their campus. Deadline: *15 October*.

### New Journals

*HortScience* Journal of the American Society for Horticultural Science. Vol. 1, No. 1, Winter 1966. Cecil Blackwell, executive director and editor. (615 Elm Street, St. Joseph, Michigan 49085. Quarterly; free of extra charge to Society members; nonmembers: \$3 a year, U.S. and Canada; \$3.50 elsewhere)

*Nuclear Data*, Sections A and B. Compilations and evaluations of experimental and theoretical results in nuclear physics. Katharine Way, Editor. Section A: Vol. 1, No. 1, December 1965; new issues of "Charged Par-

ticle Cross Sections," and contributed papers. Section B: Vol. 1, No. 1, February 1966; continuation of "Nuclear Data Sheets," formerly published by NAS-NRC. (Academic Press, 111 Fifth Avenue, New York 10003. Bimonthly; \$15 a year plus \$1.80 postage outside U.S., each section)

### Scientists in the News

**O. M. Solandt**, chancellor of the University of Toronto, has been appointed chairman of the recently created Science Council of Canada. The vice chairman is **Roger Gaudry**, rector of the University of Montreal. The council, composed of 25 members and 4 associate members from Canadian industry, universities, and government, will serve solely in an advisory capacity. Although it will have no laboratories and no authority over expenditures or budgets of any government department or agency, it will "call for intensive studies of science and technology in Canada and serve as a focus for information and advice . . . in formulating policies and plans for the future."

The American Chemical Society has named **Ralph Connor** recipient of the 1967 Priestley medal, the society's highest award. The gold medal will be presented next April during the ACS national meeting. Connor is board chairman of Rohm and Haas Company, Philadelphia, and a former chemistry professor at the University of Pennsylvania; during World War II he was chief of the division of explosives in the Office of Scientific Research and Development.

**John H. Pazur**, chairman of the department of biochemistry and nutrition at the University of Nebraska, will become chairman of the department of biochemistry at Pennsylvania State University 1 July. He succeeds **Thomas Wartik**, who has been acting chairman since last June when **Howard O. Tribold** retired. Wartick is head of Penn State's chemistry department.

The Viking Fund medal for "outstanding achievement in the sciences of man" was presented recently to **Claud Lévi-Strauss**, professor of social anthropology at the College de France, Paris. The award is sponsored by the Wenner-Gren Foundation for Anthropological Research in New York; it carries a \$10,000 honorarium.

**Chalmers W. Sherwin**, deputy director of defense research and engineering for research and technology, in the Defense Department, has been named deputy assistant secretary of commerce for science and technology, effective 1 July. He succeeds **Charles Law McCabe**, who has resigned to become president of the Koebel Diamond Tool Company, Detroit.

### Recent Deaths

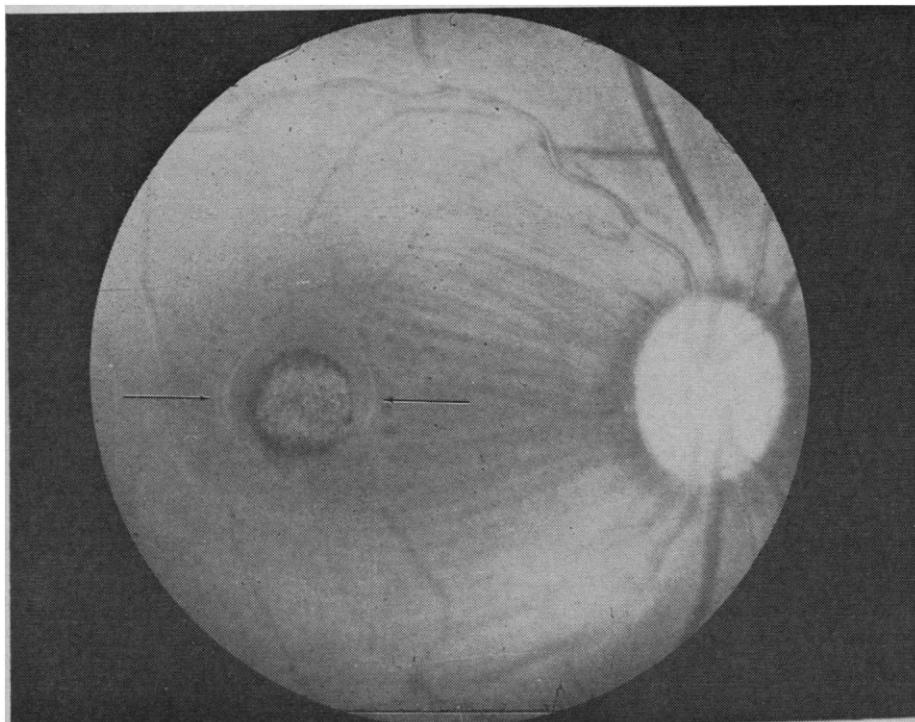
**Arnold Kent Balls**, 75; professor emeritus of biochemistry at Purdue; 25 May.

**Philip Rarick Edwards**, 64; chief of the bacteriology section of the PHS Communicable Disease Center, Atlanta, Georgia; 16 May.

**Richard A. Laubengayer**, 63; Rose professor of botany at Wabash College; 5 May.

**Alfred E. Livingston**, 83; professor emeritus of pharmacology at Temple University medical school; 8 May.

**William Howard Steiner**, 71; retired chairman of the economics department at Brooklyn College; 2 June.



Erratum: In the fifth paragraph of the report, "Visual acuity in a stump-tail macaque" by M. Yarczower, M. L. Wolbarsht, W. D. Galloway, K. E. Fligsten, and R. Malcolm [152, 1392 (3 June 1966)], reference is made to the cover. The reference should have been to Fig. 1, which was omitted. The legend for Fig. 1 is as follows: Fundus photograph of the right eye of a stump-tail macaque monkey having a laser lesion in the macula; the left eye had an equivalent lesion. Prior to this lesion, visual acuity was 1.4 minutes of arc; after, acuity was 9 minutes of arc. The white circle indicated by the arrows is concentric with the lesion and shows the extent of the macula. Histological diameter of the lesion, approximately 1 mm.