research support are capable of providing greater support for their own scientific communities.

In any case, the guiding principle for these reductions is to honor existing commitments and to reduce the total by limiting new commitments. American administrators and foreign science attachés in Washington generally agree that the cutbacks, which actually have been quite small, have been achieved with little or no hard feeling, and that the dominant sentiment abroad is one of gratitude for past assistance and for whatever may come in the future.

NIH, which has the largest overseas research program involving hard currency, spent $15 million abroad in fiscal 1963 and has cut this back to $14.1 million in the current fiscal year. It plans to reduce the amount next year to $12.7 million. Plans have not yet been worked out beyond that.

The Defense Department spent $5.4 million for basic research abroad in fiscal 1963. It has undertaken a 3-year program aimed at cutting this sum by 20 percent this year, 35 percent in fiscal 1965, and 50 percent the following year. In many cases, it is reported, granting agencies in the affected countries have agreed to make up the sums for both NIH and the Defense Department. This poses something of an administrative problem in Britain, where a good portion of the support for medical research is financed on a 5-year basis, but since the so-called brain-drain is now generating irresistible political pressure for greater support of science, it seems likely that the problem will be worked out one way or another.

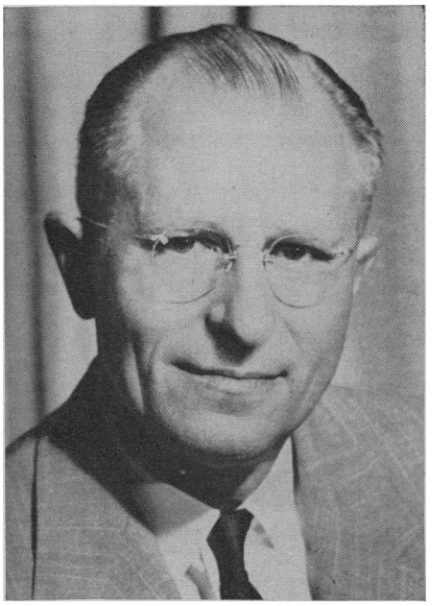
The reductions, which were ordered by the Bureau of the Budget as part of a government-wide effort to cut spending abroad, were originally strongly opposed by the federal research agencies, but at the conference table these agencies found it difficult to defend the existing programs. Since Western Europe, which receives the bulk of the research funds, is now economically booming, it could not be argued that it needs the money. And, since the programs were originally justified on their scientific merit—and not as good-will adjuncts of foreign policy—it could not be argued that the programs are needed for their nonscientific dividends. As a result, the agencies involved accepted the cutback decision and then took steps to make the reductions as painless as possible.—D.S.G.

FDA: Trouble-Ridden Medical Unit Gets New Director After 2-Year Search To Fill Difficult Position

The nearly 2-years' search for a director of the Food and Drug Administration's Bureau of Medicine ended last week with the appointment of Joseph F. Sadusk, Jr., M.D., to the post. Sadusk is currently chairman of the department of preventive medicine and community health at George Washington University (Washington, D.C.) and is also director of the university's hospital clinics.

The reasons for the long vacancy at the FDA post are not hard to discover. The Bureau of Medicine is responsible for enforcing standards of efficacy and safety for most drugs on the market, an activity which has always left it with more enemies than friends. Sadusk, however, is taking over after an extended period of more than usual tumult and criticism. The drug industry and some researchers are especially restive about certain provisions of the new drug laws, passed in the fall of 1962, that strengthen the government's regulation of the industry. The Bureau of Medicine is the subject of a long-continuing investigation by a subcommittee of the Senate Government Operations Committee headed by Hubert Humphrey (D-Minn.), and an additional inquiry is now planned by the corresponding House subcommittee, headed by Rep. L. H. Fountain (D-N.C.).

The pace of unfavorable publicity has been on the rise since thalidomide. A federal grand jury recently indicted a drug company, Richardson-Merrell, on a charge of making false statements to the FDA about certain experiments conducted on its anticholesterol drug Mer/29; for unearthing the information that led to the indictment, FDA, as well as the Justice Department, deserves some credit. But the fact that the allegedly fraudulent material slipped through FDA, that the drug was cleared, and that it was on the market for 2 years does tend to make the agency look less than vigilant. Another example: twice in the past 3 weeks alone, the FDA has intervened to encourage the withdrawal from the market of drugs whose safety had come into question. On one of them, Parnate, an antidepressant, the FDA apparently took action on its own initiative. However, in the case of Orabilex, a contrast medium for x-ray analysis of gall-bladder disturbances, the intervention of the White House (responding to the urgent queries of Senator Humphrey) was required to get the FDA to take action. In both cases, both the original decisions of the medical officers and the ability of the agency as a whole to act quickly and decisively are called into question.



Joseph F. Sadusk, Jr.

Underlying the specific drug crises which Sadusk will have to help resolve, however, is a general malaise that has long afflicted the Medical Bureau (*Science*, 6 Dec. 1963, p. 1280). Doctors responsible for drug decisions have frequently been the objects of perplexing carrot-and-stick pressures from industry (the delay in selecting a bureau chief itself was partly the result of industry politicking). Salaries have been low, compared with the potentials either of work for the pharmaceutical companies (which have done a lot of recruiting from the Medical Bureau) or of private medical practice. Facilities have been crowded, the opportunities for professional advancement limited. Work at the Bureau of Medicine, in short, has offered few satisfactions, either material or intellectual, and the bureau has habitually failed to attract and hold the first-rate people needed to perform its difficult job.

Sadusk cannot fairly be expected to revolutionize this situation at once. But at the end of a long dark road, he has already lit a small flare that should offer some encouragement to those who feel the drug situation at FDA is increasingly desperate. Although he can-

not discuss his plans in great detail until after he takes over on 1 April, Sadusk has already disclosed that from now on physicians in the Bureau of Medicine will be encouraged to spend 1 day out of the regular work week in teaching or research at local medical schools. (Sadusk himself plans to retain his affiliation with George Washington University Hospital.) The new policy, Sadusk hopes, will get FDA physicians back into the mainstream of scientific inquiry, hitherto forbidden by a clock-punching office routine and discouraged in a variety of more subtle ways as well. "We've got to get the men out into an intellectually stimulating atmosphere", Sadusk said last week. "All government agencies that value their scientific reputations have always promoted outside activities, and the FDA has got to do it too." This is good news, not only for the present staff of the Bureau of Medicine, but for possible future recruits. For the first time in 2 years, there is some reason to hope that more good news will follow.

—ELINOR LANGER

Announcements

The metabolism study section of NIH's division of research grants is considering publishing **bile acid and phospholipid standards for chromatography**. To estimate the demand, NIH requests interested scientists to submit lists of the standards they believe would be valuable in their research. Correspondence should be sent to John C. Dalton, Metabolism Study Section, NIH, Bethesda, Md., by 1 June.

The University of Miami has a graduate program leading to a master of science degree in **electrical** or **mechanical engineering**, with a specialization in **marine technology**. Courses will be offered in cooperation with the university's Institute of Marine Science, and will emphasize the engineering aspects of applied research in oceanography; work to be carried out on research vessels at sea will be included.

Meeting Notes

The **Canadian Federation of Biological Societies** will meet 9–12 June at Dalhousie University, Halifax, Nova Scotia. Only members and persons sponsored by members may participate. Papers on the various areas of biology are invited for presentation, and, if possible, at least two alternate topics for sessions should be submitted. Deadline for receipt of titles and abstracts: *23 March*. (A. H. Neufeld, The Federation, University of Western Ontario, London, Ont., Canada)

Papers are being solicited for the 1964 **cryogenic engineering** conference, scheduled 17–21 August at the University of Pennsylvania, Philadelphia. The meeting will stress design, reliability, field service, and equipment selection in cryogenic installations. Abstracts should not exceed 200 words; preliminary manuscripts are required and should include, if possible, final data. Deadline: *1 May*. (K. D. Timmerhaus, Engineering Research Center, Ketchum 129, University of Colorado, Boulder)

The Instrument Society of America plans its fifth symposium on **chemical and petroleum instrumentation**, 4–5 May in Wilmington, Delaware. Papers are invited on the theme of progress and trends in petroleum instrumentation. (G. H. Robinson, E. I. duPont de Nemours and Co., Engineering Department, Louviers Bldg., Wilmington 98)

The role of **simulation in space technology** will be the topic of a conference 17–21 August at Virginia Polytechnic Institute, Blacksburg, sponsored by the National Science Foundation and the National Aeronautics and Space Administration, through the Virginia Associated Research Center. Sessions will be held on space environment, structural dynamics, real-time dynamic simulation, hypersonic flight simulation, and simulator studies of physiological processes. NSF will provide travel and per diem allowances for up to 125 participants from educational institutions; deadline for applications: *15 April*. Representatives from industry, research, and government organizations are also invited. (F. J. Maher, V.P.I., Blacksburg, Va.)

The Petroleum Research Foundation and the National Science Foundation will sponsor two conferences on **electronic transitions in molecules**, for industrial chemistry and college chemistry teachers. The meeting at the University of Vermont is scheduled for 15–26 June; the one at the University of Utah, 22 June to 3 July. Application deadline: *1 April*. (C. M. Criss, Department of Chemistry, University of Vermont, Burlington; or A. L. Wahrhaftig, Department of Chemistry, University of Utah, Salt Lake City 12)

The 11th international congress of **cell biology** will be held 30 August to 5 September at Brown University, Providence, R.I. The topics to be covered will include reviews of research in coding, cell variance, nuclear functions, fibrogenesis, intracellular transport, structural requirements for biosynthesis, neurosecretion, protozoa, chromosomes, and cytotechniques.

Priority for attending the congress will be given members of the International Society for Cell Biology and one introduced guest per member. A limited number of nonmembers also may be admitted; those who wish to attend must apply by *31 March*. A $15 registration fee is required for participating members; $7.50 for wives not attending scientific sessions. (J. W. Wilson, Department of Biology, Brown University, Providence 12, R.I.)

Papers are invited for a conference on the **mechanisms of dental caries**, scheduled 1–2 December in New York. The meeting, sponsored by the New York Academy of Sciences, will include sessions on molecular structure of enamel, acid and chelation mechanisms of caries, and chemistry of tooth environment. Deadline: *1 May*. (J. F. Fredrick, New York Research Laboratories, 3425 Boston Post Road, New York, N.Y. 10469)

The 1964 AAAS **Laurentian Hormone Conference** will take place 7–12 September at Bolton Landing, Lake George, N.Y. The topics to be covered include thyroid chemistry and physiology, hormones in normal and pathological physiology, pituitary hormones, steroid sex hormones, comparative endocrinology, and neurohumors. A fee of $17 per day is required for participants; the number of reservations is limited. Deadline for applications to attend: *10 May*. (G. Pincus, 222 Maple Ave., Shrewsbury, Mass.)

Grants, Fellowships, and Awards

Columbia University will present a NASA-sponsored institute in **space physics**, 6 July to 14 August, in New York. Separate programs will be offered in