pickets are forbidden to tread and got her cause in the newspapers as a result; of full-page ads in strategic newspapers, not only in Washington but elsewhere in the country, pointing a finger at "Cancer, Krebiozen and Our National Shame." And since the uproar involved heavy political pressures, most persistently from Senator Douglas, but increasingly from other senators and congressmen responding to an outpouring of mail from their constituents, the 7 June deadline, and what FDA would do about it, became a major test of the integrity of the new laws as well as a showdown on Krebiozen. Having played cat and mouse for over a decade, Krebiozen and the Department of Health, Education, and Welfare were finally caught in the same trap.

What FDA did was what, legally, it had to do: it waited-waited until, at the very last minute, mounting pressures, a helping hand from an emissary of the White House, and an ad hoc meeting of the disputants persuaded Ivy and Durovic to file an application. But if all the participants felt relief, it was a short-lived and sadly misguided sensation. The old patterns instantly reasserted themselves. In press releases after a private meeting the two sides issued conflicting interpretations of their agreeement. Ivy and Durovic tied their decision to file to a supposed assurance that Krebiozen patients would continue to get the drug and that "all efforts would be made to speed an impartial test . . . in the near future." In HEW's view, however, no one had been assured of anything, except that the law would follow its natural course where investigational use of Krebiozen was concerned; this included distribution of the drug while the application was under review. In its press release HEW again stressed its position that the application and the test were entirely unrelated questions. Senator Douglas has already taken a different view and issued a statement which begins, "Now that Dr. Ivy and Dr. Durovic have filed a plan . . . there is no excuse for the National Cancer Institute and the Food and Drug Administration to delay further a fair test of Krebiozen."

As matters now stand, the application has been received and is under review—amid authoritative rumors that its rejection is imminent—and the patients have been receiving the drug. Under the terms of the law, Ivy and Durovic, if notified that their appli-

cation is inadequate, may call a conference with FDA to discuss the deficiencies, but it seems doubtful that such a conference would be productive.

If the application is rejected, although several delaying battles might be fought, FDA would be forced by law to attempt to ban further distribution of the drug that Ivy claims has (i) decreased the size of tumors for varying periods in from 20 to 70 percent of 4200 patients; (ii) reduced or abolished pain for varying periods, depending on the type of tumor, in from 33 to 74 percent of the patients; (iii) lengthened the ambulatory life of previously bedridden patients in 51 percent of the cases; and (iv) prolonged for from 4 to 12 years the lives of 10 percent of the patients whose doctors had expected them to die in 1 year or less. Although these figures have not been verified by any independent authorities, the fact remains that they have been publicly asserted. There will be many people aside from the Krebiozen "true believers" who feel that a drug with claims such as these behind it should under no circumstances be removed from circulation without a definitive test, however difficult it is to obtain the test, and however many unresolved mysteries still remain. If the FDA, either in applying the new laws, or in some other way, attempts to ban further distribution of Krebiozen, a renewal of the uproar is inevitable.

Re-enacting the Krebiozen drama, though it may be costly in more ways than one for all the participants, will not be difficult: many of the actors, onstage since 1951, appear to know their lines by heart.—ELINOR LANGER

## Announcements

Provisions of the 1962 Kefauver-Harris Drug Amendments became mandatory 20 June when the revised "New Drug" regulations were published in the Federal Register. The amendments refer to both the efficacy and safety of drugs. Topics covered include effectiveness of new drugs, hearings, manufacturing controls, drug names, submittal of mailing pieces and advertisements, records and reports, and notice of approval or withdrawal of approval. Copies of the new regulations are available free of charge from the Food and Drug Administration, Tempo S, Washington 25; attn: K. V. Sloan.

## Scientists in the News

Quentin H. Gibson, formerly head of the biochemistry department at the University of Sheffield, England, has become a professor of biophysics, physical biochemistry, and physiology at the University of Pennsylvania.

Leon Z. Seltzer, chairman of the aerospace engineering department, West Virginia University, has been named dean of St. Louis University's Parks College of Aeronautical Technology, effective 1 August.

Harold W. Lewis, associate director of the Nuclear Structure Laboratory at Duke University, has been named dean of arts and sciences and vice provost at the school, effective 1 September.

The new chairman of the department of physiology at Tufts University medical school is Walter L. Hughes, Jr., head of the biochemistry division at Brookhaven National Laboratory, Uptown, N.Y.

J. E. Falk has been appointed chief of the division of plant industry at the Commonwealth Scientific and Industrial Research Organization, in Australia.

## **Recent Deaths**

Emil Goetsch, 80; professor of surgery at Long Island College of Medicine and surgeon in chief of the Long Island College Hospital; 23 May.

Frank Howard, 84; professor emeritus of psychology and education at Middlebury College; 23 May.

W. Bay Irvine, 70; president of Marietta College, Ohio; 18 June.

**Donald F. Jones**, 73; retired chief geneticist at the Connecticut Agricultural Experiment Station, New Haven; 19 June.

Romeo J. Mansueti, 40; senior fisheries biologist, Chesapeake Biological Laboratory of the Natural Resources Institute and research professor at the University of Maryland; 1 June.

Walter C. Muenscher, botany professor at Cornell University; 20 March.

Frederick A. Saunders, 87; retired chairman of the physics department, Harvard University; 9 June.

**Shiro Tashiro**, 79; professor emeritus of biological chemistry, University of Cincinnati; 12 June.