terested in the subject is Albert Kurland, psychiatrist and clinical psychopharmacologist at the Maryland Psychiatric Research Center. The center administered LSD to some 500 persons—addicts, prisoners, psychiatric patients, and terminal-cancer patients—until the late 1960's, when the state legislature told them to stop using it. Kurland says that about one-third of the subjects underwent dramatic "peak experiences" that significantly affected their lives. Many of the 100 cancer patients treated, for example, experienced an improvement in emotional state and an accompanying reduction in pain, which lasted up to several months after one treatment. Kurland was planning to see if LSD would be helpful in conjunction with psychotherapy for schizophrenic patients, but this project was scotched by the state ban.

Kurland currently holds what he believes to be the only clinical IND (investigative new drug permit) for LSD, and recently began a new project (with his own money) administering LSD to selected cancer patients in a Baltimore hospital. But he believes the drug has "tremendous therapeutic potential" as an adjunct to psychotherapy for depression, schizophrenia, and personality disorders. While other, noninvasive methods—kundalini yoga, for example, or sensory deprivation—can lead to peak experiences, Kurland says the former requires too much psychological discipline on the part of the patient and the latter can be frightening and disturbing. "Drugs are just much more effective."

The scientific establishment is generally unsympathetic to the arguments for psychedelics. Daniel X. Freedman of the University of Chicago, who has done research in the neurochemistry of LSD since 1957, says that "no salient new intellectual questions are being asked that urgently warrant human research." He says the lack of such research is not simply the result of the "bureaucratic cloud" hanging over the drugs but a reflection of a dearth of sound proposals. Furthermore, he believes much more animal work could be done on the neurobiology of psychedelics before extensive new human work is justified.

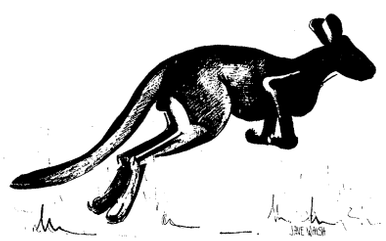
Psychiatrist Robert Dupont, a former head of the National Institute on Drug Abuse, concurs. Dupont says that, by and large, it is not the researchers who are asking for liberalization of rules pertaining to abusable drugs; rather it is "drug radicals" who are using possible medical and scientific applications as a "stalking-horse or Trojan horse" for their cause. "It is not obvious that anybody is suffering from a deficiency of LSD in this country," remarks Dupont. In recent years there have been a number of moves to promote a new look at drugs hitherto known only for their abuse potential. Some people want heroin made available for treatment of cancer pain. Psychiatrist and mind-researcher Andrew Weil has proposed the inclusion of cocaine in a number of licit products. And there has been great pressure on the government to make marihuana available for treatment of glaucoma and the adverse effects of chemotherapy. An FDA advisory panel recently voted, by a narrow margin, in favor of easing restrictions on the use of synthetic pills containing THC, the active ingredient of marihuana, to alleviate nausea from chemotherapy.

## 'Roos Abundant, Imports O.K. Says U.S.

Despite the objections of some conservation organizations here and in Australia, the government has proposed lifting a 5-year ban on the import of kangaroo products.

Kangaroos were listed as a "threatened" species under the Endangered Species Act in 1975, and Australia was told that the ban would be reconsidered after Australia had demonstrated that its kangaroos were thriving and that it had developed sound plans for the management and shooting of its national symbol. The Office of Endangered Species of the Interior Department now professes itself satisfied with the situation. Some wildlife groups are upset, however, because they say no accurate count of kangaroos has been made, that no one really knows what would constitute a sustained yield, that management plans have not curtailed illegal shooting, and that some kangaroo populations may be decimated by people eager to profit from the reopening of the U.S. market.

Australia, which is about the size of the United States, is now home to about 32 million kangaroos. Until 1973, when the country put an 18-month moratorium on exports, kangaroos were the basis of an industry estimated to be worth $5 million a year, most of it in hides. In the late 1960's, exports amounted to some 850,000 hides a year, more than half of which went to the United States. The hides,



which are tough, flexible, and durable, are used for such items as shoes, saddles, briefcases, and baseball gloves. In the past 5 years a modest trade in hides and in kangaroo meat for pet food has been going on with Europe and Japan. The demand has been decreasing, and currently Australian tanners are said to have at least a half-million hides in storage. Australia has for some time been pressuring this country to lift its import ban. According to conservationists, the pressure is coming from the kangaroo industry, but according to an official at the Australian embassy, it is farmers and graziers who have made the biggest fuss. In some areas, kangaroos compete with cattle and sheep for grazing land and trample crops in their noctural boundings.

## Stanford Picks Donald Kennedy

Donald Kennedy, the only Food and Drug Administration (FDA) head in history that almost everybody was happy with, has been appointed president of Stanford University. Kennedy, a Harvard-educated biologist, spent 20 years teaching at Stanford and returned there as provost last year after 2 years heading the FDA. Everybody seems to be happy about Kennedy at Stanford, too, which is reputedly the best private university in the West. Stanford has acquired its eminence largely through its science program. Now, says Kennedy, "we have to try in the 1980's to get the humanities where the sciences have gotten."

**Constance Holden**