

get or personnel to do those tasks," says Louis Lasagna, academic dean of the School of Medicine at Tufts University and chair of a committee that last year reviewed the FDA's approval process for cancer and AIDS drugs. Congress did give the FDA a significant increase last year and the proposed 1992 budget of \$770.2 million includes an 11% increase over the 1991 budget, but \$197.5 million of that would be financed by "user fees" charged to industry.

Even that infusion, however, will fall short of what Kessler needs to really get the job done. The Booz, Allen & Hamilton study estimates that just the two centers that approve new drugs and biologics need another 100 to 180 scientist/physicians and another 50 to 100 support staff, with projected estimates of 400 to 600 new people in the next few years—particularly in the Center for Biologics, where a backlog of genetically engineered drugs already is building. That doesn't take into account new staff needed in the field to inspect plants, dock shipments, and enforce statutes, or in food regulation, animal drugs, and medical devices. Those needs will be large, because the workforce at the FDA has been dwindling over the years: Overall staff fell from more than 8000 in 1979 to fewer than 7000 in 1987; it is expected to catch up again only this year, when it will reach a peak of 8400.

Chief among the personnel problems that Kessler is going to have to grapple with is recruiting top-level scientists and physicians. Those are people who can draw much larger salaries in industry and even academia—and as a result, it's hard to attract them and hard to keep entry-level scientists once they're trained. Furthermore, the FDA lags in keeping labs and equipment up to date. Kessler doesn't have answers to these problems. In fact, he complains: "I don't have salaries. I don't have space. The only thing I have is convincing people of the importance of this agency."

In the face of all these competing, sometimes contradictory demands, how will David Kessler fare? It's not easy to predict. All those interviewed by *Science* acknowledge he's a capable man. He's got a new, tough attitude toward enforcement, he's got good ideas about management, and he's energetic. He's also coping with huge inertia, a demoralized agency, and a chronic lack of money. Perhaps the right attitude is that of many FDA staffers, who say they are taking a wait-and-see approach. The problems he faces, they say, are so big that it's unclear how big a dent any single person can make. Yet if anybody can do it, the consensus seems to be that Kessler can.

■ ANN GIBBONS

## Candidate in Sight to Head Salk

*San Diego*—For the second time in a year, a search committee at the Salk Institute for Biological Studies has homed in on a choice for the institute's president. Its latest pick is Arnold Levine, 51, chairman of molecular biology at Princeton University. The Salk board of directors is expected to vote to make Levine an offer during its next meeting on 17 April in La Jolla.

"It's a little premature to talk about it because they've made no offer and we haven't negotiated any details yet," Levine told *Science*. "But I'm both honored by the possibility and would look forward to the opportunity to lead the Salk Institute."

Renato Dulbecco, Salk's interim president, cautiously calls Levine "the most serious candidate." He and the board want to avoid an embarrassing repeat of the unsuccessful negotiation they engaged in last year with James E. Darnell of Rockefeller University. Darnell declined the Salk presidency in March 1990 after months of discussion

about salary and housing.

Dulbecco says of Levine: "He has a good reputation as a scientist and for having built up two rather strong departments of biology." Before taking the Princeton post in 1984, Levine was chairman of the department of microbiology in the medical school at the State University of New York at Stony Brook. His research involves DNA tumor viruses and tumor suppressor genes.

Dulbecco, a 77-year-old Nobel laureate, has served as interim president since 1988, when the late Frederic de Hoffmann stepped down. When the Darnell negotiations fell through, Dulbecco agreed to remain in the post until 1992. During his tenure, he launched a \$25-million fund-raising campaign and led the planning for a major expansion of the private research facility.

■ YVONNE BASKIN

*Yvonne Baskin is a free-lance science writer based in San Diego.*



Arnold Levine

## French AIDS Researcher Cleared

*Paris*—AIDS researcher Daniel Zagury has been cleared by the French government of allegations that he conducted unethical research on human subjects. The allegations stemmed from tests at the Saint-Antoine Hospital in Paris in 1988 and 1990, in which Zagury administered a candidate AIDS vaccine to seronegative volunteers and tested active immunotherapy on AIDS patients. The research was conducted in collaboration with researchers at the U.S. National Cancer Institute (NCI), including Robert C. Gallo.

French authorities investigated the tests after the U.S. National Institutes of Health (NIH) suspended collaboration between NCI researchers and the Université Pierre et Marie Curie, where Zagury works. The suspension was imposed when NIH's Office for Protection from Research Risks found that the NCI scientists had failed "to provide and document adequate protections" for human subjects involved in Zagury's research (*Science*, 15 March, p. 1306). Last week, however, Minister of Health Bruno Durieux announced that "the results of the [French government] investigation show that legislative texts, procedures, and rec-

ommendations of ethical committees have been respected by the teams that carried out the trials."

A report of the investigation, which was conducted by François Stasse, director general of the Assistance Publique, the body that administers public hospitals in Paris, points out that the French National Ethics Committee had approved trials of AIDS vaccines prepared in France. The ethics committee had also sanctioned tests of immunotherapy on patients whose chances of survival were poor and who could not be given AZT. Moreover, the report said, Saint-Antoine's own ethics committee had authorized comparative trials of immunotherapy alone and immunotherapy in conjunction with AZT.

The French government did not investigate controversial trials of a candidate AIDS vaccine Zagury conducted in Zaire as far back as 1987. These tests, some of which involved young children whose mothers were being treated for AIDS, were reportedly approved by Zairian ethics committees.

■ ALEXANDER DOROZYNSKI

*Alexander Dorozynski is a free-lance science writer based in Paris.*