The serum sampling has, however, already provided a worrisome indication of the potential course of the epidemic in Belle Glade. The high rates of infection, especially among young adults, are many times greater than the national average and approach the levels found in some central African countries where AIDS is widespread. Although it is uncertain how many of those who have been infected with the virus will eventually develop disease symptoms, there are already signs that the AIDS caseload is increasing. According to estimates by Whiteside, some 200 people in western Palm Beach County may have AIDS-related complex.

A serious potential for continued spread of infection also exists in Belle Glade. Researchers generally agree that people who have HTLV-III/LAV antibodies should be considered capable of transmitting the virus, and thus the high seroprevalence rates provide a strong reason for a major public health effort to cut down the spread of infection. The state of Florida, with a grant of some $300,000 from CDC, is about to step up its efforts in this area.

According to Spencer Lieb, an epidemiologist working on the Belle Glade study, the effort will be targeted at high-risk groups, with the message that unsafe sex and dirty needles are spreading the disease. Asked whether the effort is a little late, Lieb noted that it was important to evaluate the alternative hypotheses about how the disease was spreading to lay the groundwork for an education campaign.

Castro is more explicit. "We have an epidemic on our hands, and we have to curtail it," he says. "The unfortunate fact is that we have to change people's behavior. To continue to focus on mosquitoes misses the point." ■ COLIN NORMAN

French R&D: à la Reagan With Dash of De Gaulle

New budget figures show boost in military and basic research, cuts in civilian R&D; but some central control of research is maintained

Paris

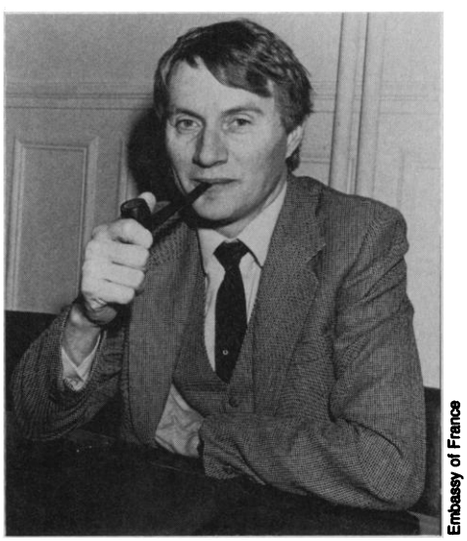
At first glance, the science policy developed by France's new conservative government bears several resemblances to the one pursued by the Reagan Administration.

A commitment to maintain research as an important government priority is reflected in the detailed budget figures for 1987 released in Paris on 9 October. They show an overall planned increase of 8.1% in government-funded R&D over 1986, with basic research growing even faster. At a time of sharp constraints elsewhere, the R&D budget will rise from 7.2 to 7.6% of total public spending.

As in the United States, this growth is largely the result of a significant increase of 19% being proposed for military R&D, to be spent on projects ranging from the modernization of France's nuclear weapons to the development of space-based military technologies. The volume of government-funded civilian R&D is planned to fall by 2.3% from the level in 1985—the last full year in power of the socialist government.

In contrast to the United States, however, the new government continues to support the idea that clear leadership from the center is necessary if France is to maintain a strong and well-balanced research effort. While increasing its indirect support for research—for example by raising tax credits to industry—it remains faithful to the postwar vision of science and technology as state responsibilities, as developed by President Charles de Gaulle in the 1960's. The need "is not for less, or more, but *better* state [control]," the minister for research and higher education, Alain Devaquet, said in a speech in Paris last week.

In line with this philosophy, Devaquet explained the government's decision not to split up the Centre Nationale de la Recherche Scientifique (CNRS), the main government-sponsored research agency which currently employs 10,000 scientists and 15,000 technicians and support staff.



Embassy of France

Alain Devaquet. *Not less, but better, state control of science is needed.*

During the election campaign last year, the CNRS was strongly criticized by various right-wing groups—including some prominent members of the academic community—on the grounds that it had become over politicized and excessively bureaucratic. They also complained that the dominant role of the CNRS in the support of French science had often been at the expense of universities.

Devaquet says that in the recent past "too much has been asked of the CNRS," and that these demands have led to an "inflation of administrative structures" that have tended to isolate the agency's policy-makers from the scientific community. He says it is now necessary to redefine a "hierarchy of tasks" for the organization, and to refocus its activities around support for basic research.

But to operate effectively, he adds, the CNRS must stay as a single unit, embracing not only the natural sciences but also the social sciences. "The unity of the CNRS is an essential condition for many disciplines to develop, particularly because it is often at the frontiers between different disciplines that real progress is made in science," he says.

However, Devaquet outlined reforms intended to meet some of the criticisms leveled at CNRS. For example, the expanded role in decision-making, which the previous government had given to junior research staff and technicians through increased labor union representation on CNRS committees, will be cut back.

In addition, Devaquet and CNRS's new director, Serge Feneuille, have proposed various measures designed to make the internal operations of the CNRS more flexible, for example by reducing the number of committees in the different scientific directorates and loosening requirements for promotion and recruitment.

CNRS will also change the way in which it interacts with outside bodies, particularly the universities. Where the previous government tried to use CNRS to spearhead a technological renaissance by promoting the exploitation of research, Feneuille says he is more keen to establish the idea of "partnership" with other organizations. "The principle is that CNRS scientists should work in cooperation with others, such as industrial research groups, but that each partner should be allowed to do what it is best at," he says.

Not surprisingly, the new government's policies have met strong opposition from sectors of the research community that had been well served by its predecessor. Labor unions representing technicians and administrative staff, for example, have already announced plans to fight proposals to cut 900 technical and administrative jobs next year.

More difficult for the government to handle is a deep split within the the ranks of its own supporters. A substantial number of conservative parliamentarians support the views of the militantly anti-Marxist National Interuniversity Union (UNI), which has been demanding much more radical action.

Immediately after Devaquet announced the CNRS reforms last week, the UNI issued a statement expressing its "disappointment" with the measures proposed, and reiterating claims made prior to the elections that "only the breaking up of [the CNRS's] centralized and arthritic structures will inject new life into French research."

The UNI and its supporters have already been making life difficult for Devaquet by claiming that his plans for the reforms of universities do not go far enough in providing higher education institutions with autonomy from the state. A new bill promised for last summer has already been held up for several months as a result.

But, as often happens in France, pragmatism rather than ideology is likely to win the day, at least as far as the organization of science is concerned. Apart from the reductions in support for some areas of applied research, Devaquet's budget plans for 1987 have already been acknowledged by the government's top science advisory committee, the Conseil Supérieur de la Recherche et de la Technologie, as making up for the cuts inflicted shortly after the conservatives came to power in March.

Officials in Paris point out that research was spared the extra cuts demanded of other government agencies in July when it was decided to increase the military budget for 1986. There have been few complaints about that move from the scientific community; and de Gaulle would probably have approved as well. ■ **DAVID DICKSON**

Woburn Case May Spark Explosion of Lawsuits

A suit claiming damages from polluted drinking water has been settled but chemical companies are bracing for similar actions elsewhere alleging a link between toxic chemicals and immune system damage

EIGHT families of Woburn, Massachusetts, filed suit in 1982 against W. R. Grace & Company, Beatrice Foods, and the Unifirst Corporation, saying they would prove beyond a reasonable doubt that the companies had polluted the town's drinking water and given its children leukemia. After a partial trial, one acquittal, and two out-of-court settlements, the charges were dropped in September.

In return, the families reportedly got $8 million from Grace. This was less than the $400 million they sought at first, according to a Grace spokesman. But it was a lot, perhaps the largest per capita settlement of any environmental injury claim.

Thus ended the Woburn case. The promised debate on new theories of chemical damage to the immune system and the associated risk of cancer never came off. But this is not the end of the Woburn story.

Some lawyers foresee a wave of new lawsuits sweeping the nation based on the "Woburn strategy," an approach that links many kinds of illness to immune system injury and ties immune injury to pollution.

"If I were a plaintiff's lawyer, I'd love this argument too," says Donald Evans, deputy general counsel of the Chemical Manufacturers Association. "Whatever disease your client has, you relate it to chemicals." Evans finds it "a tough issue to deal with legally" because "it puts you on the defensive and is difficult to disprove."

Anthony Roisman, executive director of Trial Attorneys for Public Justice in Washington, D.C., and a consultant to the Woburn families, said the $8-million settlement was important because, "The message goes out: you can succeed in these cases. Go ahead and try." Although Woburn sets no legal precedent, Roisman says, its public relations value, together with a recent federal court decision involving the Velsicol Chemical Company, creates "a very important milestone" in toxic chemical law.

Judge C. Odell Horton of the federal district court for western Tennessee decided against Velsicol in a major case on 1 August. Horton gave some residents of Hardeman County $12.7 million in compensation for the pollution of their water by Velsicol. The company admitted that it had caused the pollution, but not the liver and kidney problems or the cancer it was being sued over. Most important, Roisman says, the judge decided to earmark $875,000 specifically for people who said their immune systems were damaged by drinking chemical-laden water. In making the award, Horton cited the plaintiffs' expert witness, Allan Levin, a San Francisco doctor. Levin, a self-designated "clinical ecologist," is one of a handful of experts who have testified in court that exposure to common industrial chemicals damages the immune system.

The court in Massachusetts never got into medical issues. The litigants quit after the first part of a planned three-part trial; parts two and three would have dealt with medical testimony on cancer and birth defects. The Unifirst Corporation, a dry cleaning company, bailed out before the trial began, giving the Woburn families $1 million. This financed the continued litigation against Beatrice Foods and Grace.

These two companies owned land near public wells "G" and "H" in Woburn, both of which were contaminated with solvents. Phase one of the trial attempted to track the path of the chemicals as they traveled underground in East Woburn. Because Beatrice inherited the problem when it bought property in 1978 and claimed to know nothing about it until after the wells were closed in 1979, the jury absolved it of negligence.

Grace conceded that its employees had "sporadically" dumped an unknown quantity of trichloroethylene (TCE) and buried drums of the chemical on its property half a mile from the town wells. But the company insisted that many others in Woburn had dumped the same chemicals. The offending molecules in Woburn's water, Grace argued, did not come from its property, but from somewhere else nearby, perhaps from the polluted Aberjona River.

Company experts estimated that much of