pharmacologist Gabriel Plaa of the University of Montreal, points out that carbon tetrachloride was used for many years as a deworming agent in humans. The standard adult dose was 3 ml per day. A person would have to drink sever-

al thousand gallons of water containing 100 ppb of the chemical in order to ingest that much.

Plaa also calculated that a person would have to drink thousands of gallons of the water in order to ingest the minimum dose that causes damage in the most sensitive species. However, in an affidavit filed during the litigation with FMC, EPA toxicologist Robert Tardiff claimed that the effects of carbon tetrachloride accumulate with repeated ex-

Briefing_

Califano Loses Fordham As Assistant Secretary

Christopher C. Fordham III, designated to be assistant secretary for health in the Department of Health, Education, and Welfare (HEW), quit in a huff after only a month in "office" and flew home to Chapel Hill, where he will resume his job as dean of the University of North Carolina Medical School Technically speaking, Fordham had not yet become assistant secretary at the time of his abrupt leavetaking-in fact, the White House was going to make his nomination to the post official on the day he guit—but had been in the job as a "consultant" long enough to conclude that there is not much to it. Fordham withdrew on 20 April after a dispute with HEW Secretary Joseph A. Califano, Jr., in which the two men argued over the role the assistant secretary would play.

Califano offered Fordham the job of assistant secretary in March, after at least two other prominent doctors turned it down, in part because the position, which had been growing in stature during the Republican administrations, was being deflated by Califano himself (*Science*, 8 April). In one of his first moves as Secretary, for instance, Califano split health care financing away from the assistant secretary's office, thereby removing the office's influence over one of the most important current issues facing HEW.

Nevertheless, in job interviews with Califano, Fordham succumbed to the Secretary's blandishments about the importance of being assistant secretary. Obviously they did not work. It is widely believed in the Washington health community that Califano wants to run health affairs with a firm hand out of his own office. Fordham reportedly concurred that this is the case. So, he decided to get out early and in a handwritten note to Califano said simply, "With regret and for deep personal reasons I must withdraw." He will, however, continue to have some association with HEW as a member of

the Secretary's advisory committee on national health insurance, an area in which Fordham has a particular interest and one in which he hoped to have some authority had he become assistant secretary.

It is not clear now whether Califano will begin once again a search for an assistant secretary or whether he will turn to James Dickson, the deputy assistant secretary, to fill the job.—B.J.C.

Meanwhile, at NCI the Search for Director Narrows

Pathologist Arnold Brown of the Mayo Clinic, radiobiologist Arthur C. Upton of the State University of New York at Stony Brook, and immunologist Baruj Benacerraf of Harvard are the three contenders for the job of director of the National Cancer Institute (NCI), a presidential appointment that has been vacant since Frank J. Rauscher, Jr., resigned last fall. (Brown previously was nominated for the NCI post by Benno C. Schmidt, chairman of the President's cancer panel, who had urged former President Ford to make the appointment before he left office.)

The new three-name list has been submitted, unranked, to Health, Education, and Welfare (HEW) Secretary Joseph A. Califano, Jr., by a search committee that he appointed with instructions to produce a short list of candidates who could be persuaded to take the job if offered. (Califano, having spent a lot of time talking with people who have turned him down for other jobs, did not want to go through that again.)

The search committee, which functioned out of the National Institutes of Health and only met twice, was headed by Ivan L. Bennett, provost and dean of New York University Medical Center. Califano may forward one name, or all three, to the White House. So far, no one has been interviewed, and it's anybody's guess whether the selection will be made in a week or a month or . . . —B.J.C.

Scientists in Space— At Least Eventually

Some 222 scientists—81 from the United States and the rest from 14 other countries—have been selected to compete to have their experiments carried on one of the early orbital flights of the space shuttle. One or two of the scientists could accompany the experiments into space.

NASA and the European Space Agency (ESA) chose the group from among 2000 applicants to participate in the mid-1980 mission which has been dubbed Spacelab 1 because it will feature a reusable space laboratory which ESA will supply.

The shuttle consists of an aircraft-like orbiter designed to be flown back to earth after the mission and reused several times, an expendable tank which carries fuel for the orbiter, and two solid-propellant booster rockets which will be recovered and reused. NASA is scheduled to begin orbital test flights of the shuttle in 1979, and the first spacelab mission is expected to be the sixth trip into orbit.

ESA's spacelab, which will cost an estimated \$500 million consists of a pressurized laboratory where one to four scientists will work, and a pallet area for mounting instruments which need to be exposed to space. Originally, plans called for one American and one European scientist to be chosen from the group of experimenters to make the 7-day flight as "payload specialists." Now, however, NASA says that no final decision has been made on whether the payload specialists will be drawn from among the experimenters or from the NASA contingent.

In any event the payload specialists will not be required to meet the demanding physical and training standards demanded of astronauts and which still apply to the orbiter crews. Normal good health and the ability to carry out the experiments aboard the spacelab are the main qualifications.—J.W.