

of the center, prepared a report for Italian authorities on dioxin contamination in four horse rings in Missouri in 1971, and another report on and an analysis of Air Force studies on the stability of dioxin in the soil and its biological effect on wild life.

The Air Force studies, by Captain A. L. Young and others, also provided the basis for advice provided by Berkeley chemist Melvin Calvin, 1962 Nobel laureate. Calvin says it was clear that activated charcoal fixed dioxin in the soil, so he suggested that it be spread at Seveso and the dioxin be allowed to degrade by bacterial action. He suggested spreading cow manure to assist the process of bacterial degradation. As far as Calvin knows, his advice was not followed.

As Calvin observed, dioxin is known

to decompose in sunlight fairly rapidly, and some scientists have advocated relying on photodecomposition as the main way to decontaminate the area. There has been some limited experimentation with this method at Seveso, but neither this means nor other experimental methods suggested, such as anaerobic decomposition, have been accepted as sufficiently sure and rapid. As Kearney and others say, developed technologies for decontamination adequate to the job at Seveso simply aren't available, in part because they have never been needed.

One of the most poignant human problems at Seveso is the question of what to do about the houses in Zone A, many of them built over the years by their owners. Some houses on the outer fringes of the evacuation area have been decon-

taminated by the company, but others nearer the factory still yield high readings of dioxin. The only course may be to raze these houses with all their contents.

While problems of decontamination heavily affect the lives of the people of Seveso, it is the implications for the health of those exposed to the chemical cloud which is the more serious concern.

A telltale sign of dioxin exposure in humans is chloracne (chlorine acne). The appearance of chloracne is similar to that of acne vulgaris, which affects adolescents, but people with heavier exposures to dioxin often develop rashes covering much of the body, and these may be serious enough to require hospitalization and can be disfiguring.

Immediately after the accident at Seveso, several cases of skin rashes were re-

Four Medical Schools Draw the Line on Capitation

In the name of the U.S. Constitution and the preservation of academic freedom, four of the country's most prestigious medical schools are threatening to reject federal aid rather than participate in a program that would force them to admit U.S. citizens who want to get into an American medical school after studying for 2 years abroad. Almost by definition, most of these students are individuals who were turned down by U.S. schools in the first place. Now, under an inflammatory provision of the Health Professions Educational Assistance Act of 1976 (*Science*, 12 November 1976), these students must be accepted by U.S. medical schools if they can meet a single (and not overly rigorous) requirement—a passing grade on the first or basic sciences part of the national medical board exam. In effect, the provision suspends all other academic criteria for admission to advanced standing and establishes the federal government as the medical schools' chief admissions officer.

Johns Hopkins, Harvard, Yale, and Stanford are among the leaders of a small group of some dozen schools that are preparing for a showdown with the government. Hopkins dean Richard Ross told *Science* that the four schools hired attorney Philip Lacovara—the man who recently resigned as chief counsel of the committee investigating the Korean lobbying scandal—to look into the issue on constitutional grounds. And Lacovara provided them with a 60-page brief challenging the law's constitutionality.

One of the ways in which medical schools receive federal aid is through capitation grants—a payment from the government for every student enrolled. Under what is known as the U.S. FMG (foreign medical graduate) provision, schools that refuse to take back U.S. students forfeit their right to all capitation money. Hopkins, for example, estimates it could lose \$400,000 to \$700,000.

According to Ross, Lacovara advised his clients that the provision violates the universities' rights under the First and Fifth Amendments, the point in the latter case being a violation of "due process" because the provision was, quite literally, written into the Act late one night by House and Senate staffers, with no public discussion whatever.

Furthermore, the Lacovara brief points out, the provision—the handiwork of Representative Paul G. Rogers (D-Fla.)—invades academic integrity, which the late Supreme Court Justice Felix Frankfurter defined in 1957 as this: "The four essential freedoms of a university are the right to determine for itself on academic grounds who may teach, what may be taught and how it shall be taught, and *who may be admitted to study*" [emphasis added].

Thus reassured of their position, the four schools have all filed notice with the Department of Health, Education, and Welfare that they will not accept returning students unless the unacceptable provision is dropped or modified.

Well aware of the furor which his provision has caused, Representative Rogers has come up with a bill that one observer described as a "have your cake and eat it too" measure. Rogers, who plans to hold hearings early in September, says he is willing to drop the language that usurps the admissions policies of individual schools, thereby eliminating the Constitutional issue. However, in its place he would put a reworded provision that would still force medical schools to accept returning students in order to get capitation money. Rogers' proposed solution is to require, as a condition of capitation, that U.S. schools expand their third year classes by at least ten students each. There being 118 medical schools eligible for capitation, simple arithmetic shows that at least 1180 students would have to be allowed to transfer and the only pool of such individuals is U.S. students in foreign medical schools.

The process of filing documents to be certified as eligible for capitation for the 1978-79 school year, when the admission of new third-year students is first required, has already begun. But it is not yet clear when the point of no return comes on a decision to take or reject the money. The majority of schools that simply cannot afford to sacrifice several hundreds of thousands of dollars a year on principle will take the students and the capitation money no matter how the Rogers provision is amended. But some, like Hopkins, Harvard, Yale, and Stanford, may, in the end, stand up for their rights.—BARBARA J. CULLITON