within the field of the basic sciences. . . ."

The answers, if generally not surprising, are bound to please. Grouped by categories, the suggestions for distributing Hughes' largesse included these:

- Long-term funding for scientists of proven merit.
- Sustained support of departments or research units in outstanding scientific organizations.
- Support for selected younger career scientists.
- Support for students and young graduates.
- Funds for equipment and laboratory renovation.
- Support for centers in the emerging field of structural biology/molecular biophysics.

And, in a category Fredrickson labels "Off the (great) wall and other ideas," he got these suggestions:

- Creation of a new "China Medical Board."
- A one-time $5 million endowment for the Institute of Medicine—the health policy branch of the National Academy of Sciences.

In the search for ideas, Fredrickson also has written to minority institutions, small universities, and to the presidents of the 70 colleges that have the highest percentage of students going on to graduate education in science.

One new HHMI venture, already under way, is the "Cloister Project." Undertaken as a joint program with the National Institutes of Health (NIH), medical students are being given a chance to study in an NIH research lab before they get their M.D.'s. The project is housed in an old convent adjacent to NIH which belonged to the cloistered Sisters of the Visitation until it recently was purchased by NIH and renamed in honor of philanthropist Mary Woodard Lasker. The "Hughes Research Scholars" generally will take their HHMI-NIH year between the second and third years of medical school. The first 25 were chosen from a pool of 70 applicants.

In its new phase, the Howard Hughes Medical Institute will not only be far richer than it has been these past three decades, it will also be far more open to public scrutiny. For an organization that has long eschewed public inquiry, it will be a welcome change. Says Fredrickson, "HHMI must leave no room for doubt that broad public interest guides its philanthropy, even if applied to narrow themes. . . . Merely being a wealthy foundation does not provide satisfaction."—**BARBARA J. CULLITON**

Dispute Reopened on Mysterious 1979 Flash

Representative John Conyers (D–Mich.) on 21 May released a report that he said presents "compelling evidence" that a mysterious double flash picked up by a U.S. satellite in 1979 was caused by a nuclear explosion off the coast of South Africa. However, the significance of part of the evidence cited by Conyers has since been disputed by the scientist who originally produced it.

A totally convincing explanation for the flash has never been developed. In 1980, for example, a group convened by the White House concluded that it was probably a small meteorite hitting the satellite, while a study by the Naval Research Laboratory (NRL) concluded that it was probably a nuclear explosion (*Science*, 29 August 1980, p. 996).

The report released by Conyers, which was prepared by the Washington Office on Africa, an anti-apartheid group, relies heavily on the NRL's analysis. It cites, for example, evidence of ionospheric disturbances and hydroacoustic data that the NRL found indicative of a nuclear explosion. Most of this information has already been widely discussed in public.

But the report also puts a great deal of significance on a previously undisclosed finding of elevated levels of radioactive iodine in the thyroids of Australian sheep shortly after the event. Ronald Walters, a Howard University professor who wrote the report, called the finding "an important missing element" in previous analyses.

The thyroid data were developed by Lester van Middlesworth of the University of Tennessee, who has been monitoring radioiodine levels in sheep thyroids for three decades. In late 1979, he found levels 4 to 6 times higher than background in thyroids of Australian sheep, a level he says is "right on the borderline of whether there is really something there or not." In the past, he has found that thyroid activity rises between 1,000 and 10,000 times background levels following an atmospheric nuclear test.

Van Middlesworth communicated his findings to the NRL group studying the event, but did not publish them because their significance was uncertain. "It could either have been a very small contamination or a very unusual variation in background," he told *Science*. He says he was not contacted by the Washington Office on Africa when it was preparing its report, and "I would not want my data used as crucial evidence" for the conclusion that a nuclear explosive was detonated.

Walters argues that the thyroid data is part of a pattern of evidence that points to an explosion. "We can say with confidence that it occurred, but we can't be certain," he says.

In releasing the report, Conyers called for an end to all nuclear cooperation between the United States and South Africa, and called on the National Academy of Sciences to examine all the data gathered since the mysterious flash was first noted.

—**COLIN NORMAN**

Academy Proposes a Federal Trauma Center

A committee of the National Research Council and the Institute of Medicine has settled upon the Centers for Disease Control (CDC) as the most appropriate location for a centralized federal agency for the study, treatment, and prevention of trauma.

Produced at the behest of the Department of Transportation (DOT), the group's report, "Injury in America," declares injury to be the "principal public health problem in America today." Accidents, the fourth leading cause of death, kill more than 140,000 people a year, one-third of them on the roads. They leave 80,000 permanently disabled from brain or spinal cord injuries. Alcohol is involved in half of all highway accidents and is heavily implicated in shootings, falls, drownings, poisonings, and burns, as well as in 80 percent of suicides.

The committee, headed by former CDC director William Foege, notes that federal research funds—about $112 million a year—are paltry in relation to the annual treatment costs of $75 to $100 billion. It calls for stepped-up research, particularly on biomechanics; safer product design; new "centers of excellence," a major