As a matter of fact, Davies questions whether members of an advisory committee could get into a cost impact study deeply enough to be able to vouch for the results. "I can't imagine any advisory committee spending enough time to get on top of the problem," he says, referring especially to the difficulty of knowing whether costs are being counted in a consistent manner from company to company. In Davies' opinion, about the most that such a committee could usefully do would be to advise on the design of the study and the makeup of the questionnaire to be submitted to participating companies.

Major chemical companies could foster greater public acceptance of this study and other industry studies and positions by electing to their boards of directors more outsiders of demonstrated independence and concern for social and environmental issues. Some companies have in fact taken steps in this direction. In 1977, for instance, Union Carbide added Russell Train, former administrator of the EPA, to its board of directors and to the board's audit and policy committees, which are now composed entirely of outside directors. "As far as I am aware, the company has been tremendously open with me," Train says.

Also, at a meeting held last April under the auspices of Columbia University's American Assembly, a number of officers of major corporations (such as General Electric, Peabody Coal, Western Union Telegraph, and Xerox) joined in a resolution calling for reforms in corporate governance. Albeit fairly modest, the reforms cited included strengthening the independence of the board of directors vis-à-vis management as well as appointing "quality of life" advisory committees.

It is fair to say, however, that even the milder advocates of corporate governance reform—to say nothing of the Ralph Naders—believe that the chemical industry and all other major industries still have a long way to go in making their boards more independent of management and in disclosing information bearing on the corporate response to environmental and other societal problems.

The "corporate responsibility" issue has been off Page One since the early 1970's and the now almost forgotten campaign to "tame General Motors." But in October 1977, Secretary of Commerce Juanita M. Kreps, addressing the Conference of Chief Executive Officers at Duke University, tried in a modest way to give this issue a new vitality. She announced that the Department of Commerce was planning to develop and pub-SCIENCE, VOL. 203, 19 JANUARY 1979 lish a "social performance index" which companies would be urged to use voluntarily.

Some hostile editorials in the business press and a negative reaction by a House appropriations committee were enough to lead to a hasty withdrawal of the Kreps proposal, and no more has been heard from it. A few weeks ago, Gus Speth, a member of the Council on Environmental Quality, spoke out strongly for reform of corporate governance and for more corporate responsibility as at least a partial alternative to more regulation. But his proposals carried no White House endorsement and were meant only to generate discussion.

Such is industry's political clout and its resistance to outside initiatives for changes in corporate governance that, if significant changes do occur, they are likely to come about on the initiative of the companies themselves. The need to win greater trust and confidence on the part of the public—which, according to one recent poll (*Science*, 12 January), tends to regard big business as self-serving and politically dominant—will offer an inducement for such initiatives.

For instance, if it proves necessary for industry to bend the accepted rules of confidentiality to gain credibility for its studies of the cost of regulation, then those rules may indeed be bent. And, if companies must look to prominent outsiders to serve as advisers or directors and to help them make a persuasive case before regulatory agencies or Congress, then such individuals may be sought out and made party to internal deliberations which heretofore have been closely held within the confines of management. In this sense, what is going on now at the MCA with respect to the TSCA study and its credibility may be a revealing straw in the wind.-LUTHER J. CARTER

## Heroin Study at Georgetown

The nation's second clinical study of the pain-killing properties of heroin is to begin soon at Georgetown University's Vincent T. Lombardi Cancer Center.

The study, unlike the wide-ranging pharmacological investigations now under way at Sloan-Kettering Institute for Cancer Research in New York (*Science*, 25 November 1977), will be a narrowly focused investigation comparing the benefits of intramuscular injections of morphine and heroin in about 30 patients hospitalized with advanced cancer.

Principal investigators of the study, which is funded by the National Cancer Institute, are Philip Schein of Goergetown's division of medical oncology and William T. Beaver of the departments of pharmacology and anesthesia. The drugs will be administered in a double-blind setting, with both patients and nurse-observers supplying assessments of the severity of pain suffered, the extent of relief, and the nature of the drugs' side effects.

There is currently a great deal of public confusion over the potential benefits of heroin in pain relief, as witness the letters to the editor that regularly appear in newspapers pleading that it be made available to cancer sufferers. Many people believe that heroin will work where morphine will not, that it has better mood-enhancing properties, and that side effects such as nausea, constipation, and grogginess are less pronounced.

According to evidence so far available, none of this is true. A study conducted in Britain found that heroin had no advantage over morphine when administered orally. Schein, who has observed extensive use of heroin for analgesic purposes in England, says he has no reason to believe that the Georgetown study will reveal any significant differences in the effects of the drugs. The only definite advantage so far reported for heroin is that its greater potency permits the injection of smaller amounts.

Although definitive tests are obviously long overdue, Schein emphasizes that the main benefit of such investigations should be to help educate physicians on the proper use of opiate analgesics. They should be used less for acute or benign pain and more for the chronic pain of malignancy. Doctors who are sophisticated in pain management repeatedly contend that the drugs are there—including methadone and other opiates—to handle most cases of advanced cancer pain. Still grievously lacking are physicians with the knowledge and skill to administer the treatment boldly and effectively.—C.H.