

side of envelopes. Nevertheless, the commission report says that he "planned to do nothing about the project unless it was mentioned to him."

In January 1971 it seemed that the FAS letter was clearly alluding to the project; examination of the FAS newsletter on privacy, which came out the next month, provided scant assurance that the CIA's secret was secure. Although the newsletter made no mention of the CIA, it did say that "during periods of political repression" law-enforcement agents might induce postal officials to let them borrow letters and open them, or use technology to read the contents of unopened letters. "The use of this technology," said the FAS, "might

well be considered permissible now, or in served to keep the project alive until early the future, by the Post Office."

The Rockefeller commission seemed unable to determine precisely what impact the scientists' inquiry had on the CIA, but Cotter told *Science* it brought "prompt action, in a matter of months." On 19 May 1971, the report notes, CIA director Helms convened a top-level meeting to discuss the mail project and the extent of outside knowledge about it. Cotter's "dilemma" was now apparent, and one official, fearful that the project might be compromised, suggested that it be fobbed off on the FBI. Reassurances provided by Mitchell and Blount that June, however, apparently

1973, when Cotter, now expressing misgivings about his conflicting loyalties and the propriety of the project, decided that in the absence of presidential approval it should be ended.

The Rockefeller commission concludes that the mail-opening operation was "unlawful" and recommends that the President instruct the CIA not to engage in further mail opening "except with express statutory authority in time of war."

Jeremy Stone, who feels that the postal inspector hoodwinked him, suggests that federal law ought to prohibit government officials from making knowingly false statements even when they're not under oath.—ROBERT GILLETTE

XYY: Harvard Researcher under Fire Stops Newborn Screening

Since 1968, all baby boys born at the Boston Hospital for Women* have been screened for chromosomal aberrations, particularly for XXY or XYY patterns. A couple of months ago, the genetics study was shut down by one of its principal investigators who says he was worn out by months of unrelenting pressure from advocacy groups that oppose XYY screening.

The pressure began last fall, when members of a science for the people group formally protested the continuation of the study, which was headed by psychiatrist Stanley Walzer and geneticist Park Gerald of Harvard Medical School (*Science*, 22 November). The group, informally led by Jonathan Beckwith of Harvard and Jonathan King of the Massachusetts Institute of Technology (MIT), charged that the study was unethical and harmful to its subjects who would be stigmatized by being labeled XYY. The medical school was asked to investigate the case, which it did. This spring the faculty, by an overwhelming vote of about 200 to 30, approved the continuation of the screening project.

However, Walzer, who has been following the behavioral development of the more than 40 XXY or XYY children picked up by the study, and who personally has borne the brunt of the criticism, decided he simply could not go on.

MIT biologist King says he thinks Walzer stopped screening because he finally saw that the risks of his research outweighed the benefits. But Walzer insistently says this is not the case. "I hope no one thinks I don't still believe in my research," he declares. "I do. But this whole thing has been a terrible strain. My family has been threatened. I've been made to feel like a dirty person. And, even after I won with the faculty, it was clear the opposition would go on. In fact, new groups were becoming involved. I was just too emotionally tired to go on." For example, lawyers for the Washington-based Children's Defense Fund went up to Boston not long ago to question Walzer about his work. Any even tentative thoughts they had about bringing some sort of legal action were, apparently, dropped when the screening stopped.

Males identified as being XYY are likely to be stigmatized because the chromosome is popularly, though incorrectly, thought of as the "criminal chromosome." Several years ago, there was quite

a to-do when a study came out saying there were a disproportionately high number of XYY males in a prison population. The study was premature. No one knew, for instance, what the proportion of XYY males was in the general population. But it was widely and dramatically reported in the press. Today, all responsible scientists insist that the XYY chromosome is quite innocent of causing any crime, but it has not yet recovered from all the bad publicity it received.

Walzer agrees that talk of a criminal chromosome is nonsense, but he does think there are indications that some XYY males have reading problems and other learning disabilities and that they may have behavioral difficulties. Furthermore, he believes that, if he follows the children and identifies problems early, he can help them.

Beckwith, King, and others could not disagree more. In a recent telephone conversation, King reiterated his opinion that there is no scientific evidence linking XYY and antisocial behavior. And he stressed the opposition's strongly held belief in the self-fulfilling prophecy argument. If you label a child and tell his parents that he may grow up to be a problem, he is very likely to meet your expectations. In addition, King challenged Walzer's statements about being able to offer help to XYY children. He does not believe in the condition, and he does not believe in its cure. Says King, "I'm glad the screening has stopped now. (As far as is known, there is no longer any XYY newborn screening going on in the United States.)"

The pros and cons of XYY screening were debated throughout the fall and winter before more than one committee of the medical school. Harvard's standing committee on medical research held hearings on the issue. It concluded that Walzer's re-

Recent advances in biomedical science are raising important problems of ethics and public policy. This is one of a series of occasional articles planned for News and Comment on the conflicts involved.

*Formerly the Boston Lying-In Hospital, it is a teaching hospital affiliated with Harvard Medical School.

search should continue; its chairman, Dana Farnsworth, so reported to the full faculty.

The medical school's human studies committee, which must certify that research supported by the Department of Health, Education, and Welfare (HEW) meets HEW guidelines for human experimentation, reviewed Walzer's work. (It is supported by the crime and delinquency division of the National Institute of Mental Health.) Herbert Benson is chairman of the human studies committee. In response to questions, Benson said that the committee had agreed that the study complied with requirements that (i) informed consent be properly obtained, (ii) the patients' rights be protected, and (iii) the benefits of participating in the study outweigh the risks.

And then there was the overwhelming vote of the full faculty.

But things did not end there. Beckwith, it is said, did not try to continue to press his opposition through formal channels. But other advocacy groups began to get in touch with Walzer. And rumors began to circulate around Harvard to the effect that the Farnsworth committee had not endorsed Walzer's study at all and that Farnsworth had misled the faculty.

Beckwith, who feels that his point of view was not properly represented in the earlier *Science* article on the controversy, declined to comment on the present situation, except to say that the Farnsworth

committee had voted by a majority of one against the proposition that the benefits of screening outweigh the risks.

Farnsworth emphatically denies the allegation that the committee came to that conclusion, although he acknowledged that the issue was debated during the deliberations. "At one point there were people who felt the question of risk hadn't been resolved, but, as we went on, the sentiment of the committee was distinctly in favor of Walzer continuing," he declares. Benson is equally firm in denying any allegations that his human studies committee came out publicly in favor of the study but was privately against it.

King, however, continues to believe there was more private opposition to the study than ever came out, and says people are keeping still for fear of risking the disapproval of faculty powers. And he correctly points out that Beckwith has not exactly made himself popular with the faculty for causing so much trouble. Being across the river at MIT, King has not been criticized as has Beckwith, who incurred his colleagues' particular wrath for taking the whole issue to the press.

King, however, has himself been the subject of one rumor—namely, that he tried to make direct contact with the parents of Walzer's patients in order to persuade them to drop out of the study. King is resolute in denying this. "It is simply not true

that we tried to get in touch with the families," he stated. King said that friends of two of Walzer's families approached him and some of his colleagues about the situation, but that they never attempted to follow up.

Walzer reports that none of his families has dropped out of the study and that only one is considering doing so. He intends to continue watching the children's development.

The XYY issue is not an easy one. No one can deny the real, or at least potential, risk of stigmatizing a child. And it seems clear that no one knows with certainty what the behavioral risks, or physical risks, for that matter, of XYY really are. Walzer and Gerald maintain scientists should continue to try to find out.

Beckwith and King are among those who believe it is too risky to try. Their opinion seems to be that the pursuit of studies of the genetic basis of behavior is ill-advised, certainly at this time. At the conclusion of a critique of the XYY study they wrote last fall they said, "... we feel that the major effort in approaching the issue of behavioral problems should be one of changing the social and psychological (inseparable) conditions which generate them. We consider the attempts to determine a genetic basis for anti-social behavior, a diversion with harmful effects."

—BARBARA J. CULLITON

Energy and the Coastal Zone: Pulling and Hauling Among the Feds

In 1972 Congress passed the Coastal Zone Management Act to encourage the states to face up to and reconcile conflicts over land and resource use along the coastal margins. But in signing the act, President Nixon said, in effect, that the federal government was not going to second-guess the states on how much or how little coastal development to allow, and that it would limit itself to evaluating the adequacy of state coastal management processes. Now, in hindsight, it is clear that this distinction between substance and process can be illusory. This is amply illustrated by the federal energy agencies' insistence that state coastal zone programs include an affirmative effort to accommodate future energy needs, even though

the extent of those needs may not yet be clearly perceived.

The Federal Energy Administration (FEA), together with the Energy Research and Development Administration and the Federal Power Commission, are currently taking exception to the first two state coastal zone programs submitted for inter-agency review, namely those from Maine and Washington. The positions asserted by the three energy agencies are not identical but they have a common thrust—that the states have an obligation to include in their coastal management plans more or less specific provisions for energy development.

For instance, in its comment on the Washington program, the FEA said that the state should identify coastal areas espe-

cially suitable for energy development. Also, the FEA said that these places should be designated under the act as "areas of particular concern" which the state might eventually acquire by condemnation as sites for energy facilities.

These FEA views are challenged by the Office of Coastal Zone Management (OCZM), which was created within the National Oceanic and Atmospheric Administration and the Department of Commerce to administer the coastal zone act. The OCZM recognizes that state coastal management programs must be prepared in consultation with state and federal energy agencies. It also acknowledges that to exclude provisions for energy facility siting from such a program arbitrarily is contrary to the letter and spirit of the 1972 act. But, in its view, the states are not obligated to designate specific areas or sites for energy facilities. If the OCZM and the energy agencies cannot reach a compromise, this question of how far the states must go to anticipate energy needs may ultimately have to be decided at the White House.

The coastal zone program, a truly pioneering venture in federal-state relations,