that could still be conducted in P2 plus FK1

The next twist in the debate was a bid by Charles A. Thomas (Harvard Medical School) to create a grandfather clause for experiments already initiated under the Asilomar guidelines. When that lost, Thomas proposed that the actual clones of recombinant DNA already constructed could continue to be used. He was rebuked by a consultant to the committee, Peter Day of the Connecticut Agricultural Experiment Station, who said that "the whole question of a grandfather clause is

germane to the credibility of the committee because it is quite clear that it concerns vested interests." The committee proceeded to follow a suggestion of Brenner's that it simply require those with clones constructed under Asilomar guidelines to consult the committee about their future use.

Think Tank for Congress Advances

The long-proposed Institute for Congress—a private "think tank" that would provide policy analysis for the legislative branch to put it on a more equal footing with the executive branch—has moved a step closer to reality.

The Institute, which has been under discussion by an organizing committee for 3 years, announced on 7 December that it has been incorporated in the District of Columbia, has applied for a federal income tax exemption as a nonprofit organization, and has named a 15-person board of trustees.

The chairman of the board is Martha W. Griffiths, former Democratic congresswoman from Michigan; the vice-chairman is Republican William D. Ruckelshaus, former head of the Environmental Protection Agency and former deputy attorney general.

Other members of the board, chosen with an eye to political balance and experience in dealing with Congress, include Lucy Wilson Benson, secretary of human services for Massachusetts and former national president of the League of Women Voters; William D. Eberle of Idaho, president of the Motor Vehicle Manufacturers Association and former special trade representative for the White House; Alton Frye, senior fellow of the Council on Foreign Relations and former administrative assistant to Senator Edward W. Brooke (R-Mass.); Ben W. Heineman of Illinois, president of Northwest Industries, Inc.; Craig Hosmer, former Republican congressman from California and now president of the American Nuclear Energy Council; Leon Jaworski, Houston, Texas, attorney and former head of the Watergate special prosecution force; Gordon J. F. MacDonald, director of the Environmental Studies Program at Dartmouth and former member of the Council on Environmental Quality; Harry C. McPherson, Jr., Washington attorney and former special counsel to President Johnson; Clarence Mitchell, director of the Washington bureau of the National Association for the Advancement of Colored People; Richard B. Ogilvie, Chicago attorney and former Republican governor of Illinois; William B. Spong, Jr., Portsmouth, Virginia, attorney and former Democratic senator from Virginia; and Cyrus R. Vance, New York City attorney and former deputy secretary of defense. William T. Coleman, Jr., Secretary of Transportation, is on leave from the board during his period of government service.

James R. Killian, Jr., chairman-emeritus of the MIT Corporation and former science adviser to President Eisenhower, served on the organizing committee (along with Frye, MacDonald, McPherson, and Vance) but is not a member of the board.

The board will launch an immediate search for some \$11.5 million in foundation funds to cover the first 3 years of operation. Frye, the key instigator behind the Institute, expressed "a moderate degree of confidence" that the money can be found. Thus far the Institute has been organizing with a \$68,000 cash grant from the Donner Foundation and a comparable grant of cash and services from the Carnegie Endowment for International Peace, where Frye currently has his office.

The Institute would seek to build up to a professional staff of 80 persons recruited from the government, the academic community, and private research organizations. It envisions a 5-year experimental phase, funded with \$22.5 million in foundation grants, after which the Institute, if successful, would operate on research contracts made with Congress.

The funds in hand are expected to carry the Institute through 30 June 1976, at which time the board expects that a final judgment can be made as to whether a full-blown institute is feasible. If the decision is "yes," the Institute would hope to begin functioning in time to serve the next Congress in January 1977.

--P.M.B.

Other changes made by the committee to its earlier draft included the abolition of a loophole in the definition to P3, the upgrading of experiments with animal viruses, and more rigorous definition of the conditions under which purification of recombinant DNA may allow containment levels to be downgraded.

Implementation of the guidelines will proceed by having the NIH committee certify EK2 and EK3 systems when they become available. For physical containment, an investigator's laboratory must be certified both by his local biohazard committee and by the NIH peer review committee to which he applies for a grant. The granting agency must also receive proof of purity when a researcher wishes to downgrade the containment level of an experiment. According to the NIH's physical containment expert Emmett Barkley, the safety cabinets required for P2 conditions cost \$5000 each; to convert a P2 facility to P3 can cost up to \$50,000; and rather than trying to convert an old laboratory to P4, it would be cheaper to build one from scratch at a cost of about \$200,000.

Stricter than Asilomar Guidelines

The rules that the committee has now produced are demonstrably stricter than the Asilomar guidelines, even though nothing has happened since then to make the speculated risks seem any more likely. At least within the scientific community, the NIH committee's guidelines are likely to be favorably received. James E. Darnell, for example, a committee member who considers the levels stricter than necessary to protect either scientists or the public, also believes that they will not constitute a serious impediment to research.

It seems likely that European countries will adopt the same general levels of containment as those hammered out at La Jolla, thus preventing a potentially embarrassing split in the world's scientific community. The Europeans have not yet written detailed guidelines and have, for the most part, been waiting to see what would happen in the United States.

Berg considers that the new guidelines satisfy all the objections he voiced to the earlier draft, and that they are "a faithful translation of the spirit of Asilomar." They are tough on him personally, requiring that he abandon a whole series of ex-