FACT: The synthesis of the brain hormone, somatostatin, by the bacterium, E. coli, is the first reported "successful use of recombinant DNA techniques to get a bacterium to produce a substance from a gene of a higher organism." ("Science/Technology Concentrates," Chemical and Engineering News, Nov. 14, 1977, p. 26.)

COMMENTARY: Ever since the Gordon Conference on Nucleic Acids of June, 1973, when the conference made the decision to inform the National Academy of Sciences about the potential health hazards of bacterial genetic manipulations, there has been increasing debate among scientists and lay public alike regarding the benefits and risks of such research. (For a clear and concise summary of the major events in this controversy, see Daniel J. Sullivan, "Gene-Splicing: The Eighth Day of Creation," America, Dec. 17, 1977, pp. 440-443.) After an initial "scare," the scientific community has settled down to a more balanced assessment of the reasonably expected benefits and hazards associated with such DNA research. (A more extended discussion of these was presented in the form of a debate: "Recombinant DNA Research — A debate of the benefits and risks," Chemical and Engineering News, May 30, 1977, pp. 26f.) Many of those originally concerned, such as Dr. Paul Berg, now feel that the early estimates of the dangers were overestimated. Accordingly, Dr. Berg testified before the Senate Commerce Committee's Subcommittee on Space, Science and Technology: "I now believe that the possibility that experimental organisms will be hazardous or released is exceedingly small." ("DNA research: no federal regulation now," Chemical and Engineering News, Nov. 21, 1977, p. 22.) Notwithstanding the change of attitude on the part of many scientists involved with DNA research, there are some persons such as Marcia J. Cleveland, an attorney with the National Resources Defense Council, who raised the question whether recombinant DNA technology should ever be commercialized. Industry already is involved in research and development of such technology to the extent that some industry scientists predict that within five years there will be marketable applications. (Ibid.) However, it should be noted that the NIH regulations for such research do not bind organizations not receiving grant support from the DHEW.

The debate over the potential hazards underlines the great difficulty in making an ethical decision primarily on the basis of a risk/benefit analysis. With the same evidence available to them, competent, knowledgeable and public-spirited individuals have differed sharply, particularly, in the estimate of the potential hazards. An editorial comment on The New England Journal of Medicine by Dr. Richard Goldstein makes good sense:

"The societal benefits that may well arise from gene transplantation studies will be valuable whether they come in 20 years versus 25, or 50 years versus 55. These benefits and the sheer excitement and beauty of scientific endeavor will endure for centuries thereafter. For five or 10 years now, a slow, thoughtful approach to limiting hazards makes sense in terms of progressive public-health policy." (May 26, 1977, pp. 1226-1228)

Another aspect of genetic engineering was surfaced by Dr. Solomon Garb in a letter to the editor: "In Leviticus 19:19 there are certain prohibitions against hybridization of animals or plants... Also of interest are the various commentaries on that verse. Without any exceptions I know of, they interpret Leviticus 19:19 as calling on religious people to respect and keep inviolate the universe and the order that God created." (Notre Dame Magazine, April, 1977, p. 2.) Dr. Garb applies this biblical text to recombinant DNA research to raise a cautionary flag over the whole endeavor. There is no question that the theological dimension needs to be examined. Whether the aforementioned scriptural text is to be understood and applied in the manner Dr. Garb suggests remains to be seen.

"Very important for us to determine are the limits God has placed on our delegated dominion over nature. That issue will be one of the major considerations of the Task Force on genetic manipulation which the Pope John Center is now in the process of organizing.

Twins Separated
(Continued from Page Two)

mean the death of the other? To leave them together is to condemn them to an ultimate death in a few more years and a rather uncomfortable existence in the meanwhile. On the other hand, surgery will give life to one that will approach a normal life but unfortunately, at the cost of death to the other. One way out of the dilemma is to consider the following: the critical point is that the life of one twin is not "saved" by means of the immediate death of the other; the death of one is not necessary for the life of the other. It is a scarce resource problem; there is only one heart for two. The surgeons would decide on the basis of which twin had the better chance of survival. In terms of the complex surgery involved, it may mean that one twin anatomically and physiologically was more in possession of the heart and therefore had a greater "right" to that organ.

CenterNews Board Changes

Four new members were nominated and elected to the Pope John Board of Directors in December. The CHA Board of Trustees ratified the appointments. Named to the board are Patsy R. Bremer, treasurer, Rasbok Foundation, Lake Worth, FL; Oscar B. Hunter, Jr., MD, pathologist, Washington, D.C.; Rev. Donald B. McCarthy, PhD, professor of Christian ethics, Mt. St. Mary Seminary, Norwood, OH; and, Frank J. Schneider, board chairman, Schneider, Inc., Pittsburgh, PA.

Retiring members of the Board collectively completed 18 years of continuous service to the Pope John Center. Rev. Anthony R. Kosnik, Orchard Lake, Michigan, served for five years; Eileen M. Ridgeway, R.N., PhD, Seattle, WA., five years; Vitale Henry Paganelli, M.D., Glen Falls, NY, five years; and, Rev. Msgr. Raymond J. Pollard, East Orange, N.J., three years.