

The Clergy Ponder the New Genetics

By JULIE ANN MILLER

O Lord, our Lord, ...
What are human beings that Thou art
mindful of them ...
Yet Thou hast given humanity dominion
over the works of Thy hands ...

Psalm 8



Scientists generally do not expect their laboratory techniques to excite widespread interest in religious circles. Yet the development of gene-splicing has evoked unprecedented concern and comment among clerics and theologians of many and disparate denominations. Their fears center around future medical treatments that may supply functional human genes to patients with deficiencies. The techniques theoretically could be used to change any genetic trait — from height to hair color.

The potential for genetic engineering raises a host of moral, ethical and religious questions never before encountered, religious spokespersons say. A letter sent to President Carter in 1980 from the major Protestant, Jewish and Catholic councils says, "[These questions] deal with the fundamental nature of human life and the dignity and worth of the individual human being."

"The potential good and evils of genetic knowledge have been a concern to clergy, that is the thoughtful and concerned ones, for many years," says John C. Fletcher, an Episcopal priest and bioethicist at the National Institutes of Health (NIH) in Bethesda, Md. "This concern arises from a history of religious thinkers studying medical ethics. There is a special feeling of responsibility in terms of ideas of parenthood, marriage and sexuality and also the potential for relieving people of suffering. This is sort of 'the clergy's territory.'"

Caution generally characterizes the religious approach to genetic engineering, but the clergy are by no means of one mind. While some clerics believe genetic engineering should be banned, others believe the new technology ought be pursued with the blessing of the religious bodies.

Playing God is a powerful image — evoked early and often in secular and theological discussion on new techniques of gene manipulation. The 1980 letter to President Carter, urging the government to launch a thorough examination of issues raised by genetic engineering, says, "History has shown us that there will always be those who believe it appropriate to 'correct' our mental and social structures by genetic means, so as to fit their vision of humanity. ... Those who would play God will be tempted as never before."

Yet it is not a religious prohibition against assuming God-like powers that usually underlies theological discussion of genetic engineering, but issues of responsibility. "Most talk of 'playing God' is silly," says J. Robert Nelson, a theologian at Boston University. "More serious is the very cautious use of our inventive intelligence to protect and enhance all the human lives which, we believe, somehow belong to God."

Nelson was one contributor to a bioethics report issued for study and comment in November 1982 by the National Council of Churches of Christ. The report, basically cautious but favorable towards genetic engineering, concludes:

"However great the discoveries, however tantalizing the options, however grandiose the scheme, still we are human. We are subject to error, failure and sin. When the subject is recombinant DNA, when the concern is the total gene pool for humankind, when the scenario is extinction of species or eugenic programs, or when the whole biosphere can be affected by any one experiment with new life forms *de nova*, extreme caution can be our legitimate response."

Robert C. Baumiller, S.J., a Catholic priest and geneticist, consults with Jody Roberts in his laboratory at Georgetown University Hospital.



Wendy McCarran

"Nevertheless, it is exciting to gain new knowledge, to break new barriers. It is exciting to observe biotechnology unraveling the key to genetic diseases. We celebrate the healing possibilities that are now before us through this new life-technology."



Followers of the Biblical religions cite human beings' role as co-creators with God. As the National Council of Churches report expresses it, followers believe that God works constantly both through the orderly natural processes and through human intelligence, activity and productivity.

"Thus ... these major faiths respect and encourage the enhancement of knowledge about nature, as well as responsible use of that knowledge," says *Splicing Life*, the 1982 report of the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. "...[H]uman beings have not merely the right but the duty to employ their God-given powers to harness nature for human benefit. To turn away from gene splicing, which may provide a means of curing hereditary diseases, would itself raise serious ethical problems."

The president's report notes that Pope John Paul II has spoken of his support for gene splicing when its aim is to "ameliorate the conditions of those who are affected by chromosomal diseases."

Many clerics worry that genetic engineering will undermine the Judeo-Christian tradition and its belief in a stable, powerful God, says Roy Morrison II of the Wesley Theological Seminary in Washington, D.C. "If a human being can redesign a human being, he or she may also rethink

his or her heritage, suspending notions of authority, authenticity and sanctity," Morrison says. "This threatens the foundation of culture, and that scares people to death."

Others are concerned that a future ability to change human genes will alter concepts of what it means to be a person. In contrast to a religious definition of humanity, they feel genetic engineering might put more emphasis on physical well-being, at the expense of such abstract values as decency, justice, compassion, peace and dignity.



Two areas within applied human genetics draw the most reservations in religious circles. One is the potential production of creatures that are only partly human. Legend is full of minotaurs, mermaids, Franksteins and golems. The World Council of Churches in a 1982 report called "Manipulating Life" says, "To create artificially and knowingly an individual which has only in part human attributes is totally undesirable and the wrong use of our creative powers."

The president's commission was not so

strongly convinced that the notion of hybridizing human and other species is intrinsically wrong. However, it noted that, according to current information, "[T]he ability to create interspecific hybrids of the sort that would present intrinsic moral and religious concerns will not be available in the foreseeable future."

The other area of special concern is the treatment of genetic disorders by deliberately altering genes in sperm and egg cells. The change would then be passed on to any subsequent generations. In contrast to alterations in other cells of the body,

Spiritual guidance and medical dilemmas

New techniques for assessing human genetics have brought many families increased opportunities for having healthy babies. But these methods, which are becoming more powerful for determining carriers of genetic defects and making prenatal diagnoses, may also present a family with difficult dilemmas. Under the stress of making decisions regarding marriage, reproduction or pregnancy, many people turn to clergy for counsel. But the cleric often knows less about the genetic problem and clinical alternatives than do those seeking advice.

"If the person coming to you thinks you don't understand what his problem is, the chance of your doing any great good is much reduced," geneticist and priest Robert C. Baumiller, S.J., told a group of clergy and medical geneticists. "[You need to be] not a clinical geneticist, but someone with sufficient knowledge so that the intricacies of the situation will not be lost."

Baumiller comfortably wears what he calls "the sacred white coat" of a geneticist over the garb of a Roman Catholic priest. He is the director of the genetics division of the obstetrics department of Georgetown University in Washington, D.C. One of the few clergy formally trained in genetics, he is sometimes referred to as the Father of pastoral genetic education.

Since 1981 Baumiller and other clergy and geneticists have held a series of conferences for religious counselors. This summer he plans to lead an intensive genetics course for local clergy in Washington, D.C. These projects are sponsored by the March of Dimes Birth Defects Foundation, which became interested in pastoral education as a consequence of a study in the late 1970s. The study showed that genetic counseling services were generally successful in providing medical information to families, but that emotional, economic and moral issues had been less fully addressed.

"Individuals and couples faced with decisions about procreation need

counseling, not just about their reproductive options but about what differences their decisions will make in their interior lives — in the way they perceive themselves, their relationship to each other and their relationship to God," Baumiller says. "Believing people, who once accepted children as a gift from God, now are faced with multiple decisions as how to send for the gift, how to package the gift, and even how and when to deliver as well as return the gift. Such complications demand not just a holy and sympathetic pastoral guide but a knowledgeable one as well."

There is no clear precedent for pastoral genetics education, Baumiller says. Most special types of counseling — for example, hospital chaplains learning to counsel the dying — is informal, on-the-job training.

Interest in genetic education programs for clergy grew out of the conference held at Georgetown University in 1981. At that meeting medical geneticists presented information on the prevalence of genetic disorders and reviewed available clinical techniques. Catholic, Protestant, Jewish and Islamic clergy described dilemmas presented by genetic decision-making among those they have counseled.

A social worker at the meeting, Joan Weiss of Johns Hopkins Hospital in Baltimore, asked that the clergy help clinical workers determine when a religious reaction to learning of genetic diagnosis or risk is authentic and appropriate. Weiss says that the misuse and distortion of emotional reaction in the name of religion may serve as a defense or denial and prevent appropriate medical supervision or treatment.

The Georgetown conference stimulated such great interest that similar meetings have been staged in five other cities around the country. "We are helping clergy try to understand how to use genetic information in counseling and how to collaborate with genetics centers," says John C. Fletcher, an Episcopal priest and bioethicist at the Na-

tional Institutes of Health who has participated in the conferences.

"The clergy are expected to be there and to be active when a family faces a crisis," Fletcher says. A crisis can involve questions of whether to marry, whether to have amniocentesis during pregnancy, whether to abort a fetus and how to treat a baby with genetic disorders.

As an extension of the conferences for clergy, Baumiller and the March of Dimes are planning a 10-week summer course for about 20 D.C.-area clergy experienced in pastoral counseling. It will discuss the science underlying medical genetics, provide the clergy with experience in clinical settings and encourage reflection on the problems that applied human genetics presents to ethics and moral theology.

"The goal is not to get another layer of genetics professionals, but to move clergy to a point of equal understanding with the couples they counsel," Baumiller says. He sees the educated pastor's role as three-fold. The local clinics can refer patients who desire religious counseling to an informed pastor of the appropriate denomination. Within a denomination, pastors can refer parishioners to the more informed counselor. And finally, the educated pastor can be a messenger to the entire denomination on genetics issues on which the denomination might decide to take a formal stand.


The course will develop a curriculum and educational materials that may be used in future courses to be held in different cities, Baumiller says. Each course would be expected to introduce concerned clergy to the physicians in the local medical genetics clinics and teach each group what services the other has to offer.

With the ever-expanding set of genetic tools and reproductive options modern biology is supplying, and with the beginnings of fetal therapy, the need for spiritual advisors with an understanding of the medical intricacies can only increase. — J.A. Miller

"graver concerns would be raised ... as then not only is the individual changed but all descendants, in perpetuity," says the World Council of Churches report.

Last spring Congress was urged to pass a definite legal prohibition against such germline alterations: "Resolved. That efforts to engineer specific genetic traits into the germline of the human species should not be attempted."

The proposed resolution was signed by about 50 religious leaders and theologians and a handful of scientists. The signers included Jerry Falwell of the Moral Majority, members of the Evangelicals for Social Action, the Mennonite Church, the Reconstructionist Rabbinical College and the Religious Action Center of Reform Judaism, as well as most major Protestant leaders and a group of Roman Catholic bishops.

 "This is the first time in the twentieth century that religious leaders ranging from fundamentalist to liberal have come together to support a specific piece of social legislation," says Jeremy Rifkin, the social activist who wrote and circulated the resolution and organized the subsequent publicity. "It is the first time any major group of religious leaders have come out in opposition to a new technology, a peacetime technology, in advance of its application."

The resolution was accompanied by a letter from Rifkin, who heads a Washington, D.C. organization called Foundation on Economic Trends. The letter gives his arguments against genetic engineering of the human germline. "Once we decide to begin the process of human genetic engineering, there is really no logical place to stop," he writes. "The question, then, is whether or not humanity should 'begin' the process of engineering future generations of human beings by technological design in the laboratory."

Rifkin believes that humanity will pay an unacceptable price for genetic engineering. He says, "Are we so enamored with the idea of physical perpetuation at all costs that we are even willing to subject the human species to rigid architectural design? Is guaranteeing our health worth trading away our humanity?"

Another potential consequence of genetic engineering of humans also looms darkly. "Eliminating so-called 'bad genes' will lead to a dangerous narrowing of diversity in the gene pool," Rifkin says. "It is very likely that in attempting to 'perfect' the human species we will succeed in engineering our own extinction."

"We believe we have a sacred obligation to say no when the pursuit of a specific technological path threatens the very existence of life itself," Rifkin concludes.

It was a July 1982 New York Times editorial on genetic engineering of human germline cells that stimulated Rifkin to action, he says. He began to talk to religious leaders and then put together his letter.

"The wheels turned very slowly. It took

almost a year to get all the signatures," Rifkin says. "The religious leaders all had to check with each other and with ethicists. The decisions received weighty consideration in-house. Only four or five of those contacted eventually decided not to sign the resolution."

The religious leaders were already concerned about genetic engineering, Rifkin says. He points to the earlier statements of the National Council of Churches and the World Council of Churches and discussion of the issue in individual church communities.

"All I did was tighten up the resolution to make it a very clear-cut 'We say no,'" Rifkin says.


But some of the signers of the resolution were less than certain that they did want so firmly to say no. For example, signatory Richard McCormick, a Jesuit moral theologian at Georgetown University, said he was not yet sure whether germline genetic engineering should be prohibited, but that he did want to encourage public debate on the matter.

"Rifkin's resolution heightened the visibility of the whole issue," says a member of the staff of Congressman Albert Gore Jr. (D-Tenn.). "It was proof-positive that there are ethical and religious concerns."

"On a political Richter scale, [the presentation of Rifkin's resolution] was an intense moment," says NIH's Fletcher, who was not among the signatories. Fletcher is disturbed by the differences between the Rifkin resolution and the more moderate statements of the various church study groups.

"It shows very poor communication between leaders," Fletcher says. He adds that many of the signers to whom he talked said they had never seen Rifkin's accompanying discussion paper. That paper, Fletcher says, was irresponsible in that it made genetic engineering of human germ-lines seem imminent, when it is only a distant possibility.

"The stridency, paranoia and doomsaying are his [Rifkin's]," Fletcher says. "The clergy were really trying to bring the matter to public discussion."

 Another group of clergy and scientists criticized the Rifkin paper as "unnecessary and misleading" because they say research today is far from being able to place new genes successfully into human germline cells. This statement was made last summer at the thirtieth annual conference of the Institute on Religion in an Age of Science (IRAS), a group that has promoted discussion between theologians and scientists.

The conference attendees said that research on germline intervention should not be banned but be approached "with extreme regard for potential risk to the future person." Their report said, "The conceivable dangers from future advances in genetic engineering, as applied to humans, do not require long-range warning or



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John C. Fletcher, an Episcopal priest and ethicist, speaks out on advances in genetics at a recent conference for clergy.

planning, because they could not create a massive or irreversible catastrophe. Instead, they would involve individual actions, which could be controlled as the possibility arose."

They also disagree with Rifkin's positions on a number of other matters. They say that arguments against tampering with the course of evolution do not provide a rational basis for interfering with medical advances, and that regulations should be developed, but the rules should not impede the development, or delay the availability of medical treatments.

The attention of clergy now is focusing on the issue of who will oversee recombinant DNA work. Fletcher says. The World Council of Churches has asked that religious groups examine how they can contribute to the human subjects review process and how they can work with national advisory committees.

The IRAS group recommends that a continuing commission be established, composed of scientists, physicians, lawyers, ethicists and lay persons, to review the moral and public policy issues raised by future advances, or likely advances, in molecular genetics, gene therapy and other areas of medical research and therapy.

A bill, which passed in the House of Representatives last November, would establish a President's Commission on the Human Applications of Genetic Engineering to review relevant developments. Representatives of the three major denominations testified at legislative hearings held by Congressman Gore. The proposed commission would include members with expertise in theology and ethics. A staff member says, "The religious point of view was definitely taken into account in the development of this legislation."

The religious groups now regard the interests of biology and religion as inextricably entwined. "Our concern is not the problem of religion versus science. Rather we seek understanding of the new gift which a large body of microbiologists has presented to our society," says the National Council of Churches report. "Words which once were the primary language of the church are now also the words of the current biological revolution. Life, Death, Creation, New life, New day, New earth are now the vocabularies of biological science, biotechnology and biobusiness." □