



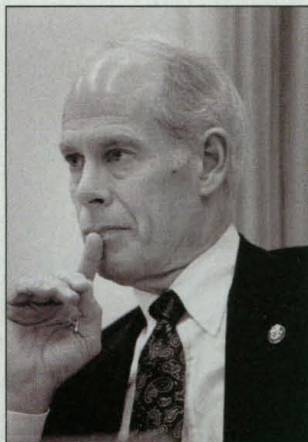
BIOMEDICINE

Ethicists Back Stem Cell Research, White House Treads Cautiously

Research on a scientifically promising type of human cell received a vote of confidence last week. In a decision that Stanford University biologist Paul Berg calls “gutsy,” the National Bioethics Advisory Commission (NBAC) recommended on 14 July that the federal government fund not only research on human embryonic stem cells but also the production of cell cultures—even if it means sacrificing embryos. In an official notice, NBAC,

on these cells “is permissible under the current congressional ban.”

With this, the Administration formally backed a policy adopted by NIH and the Department of Health and Human Services (HHS) in January. Their legal experts ruled that government funds may be spent to study, but not to derive stem cells from, embryos (*Science*, 22 January, p. 465). Under this policy, only private labs may develop human stem cells from embryos, but NIH-funded and other U.S.-backed researchers may use them. (The restriction on development doesn't apply to fetal tissue.) Even this plan is con-



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troversial, however, because some right-to-life activists have declared that *any* destructive use of an embryo is immoral.

Despite the legal clouds, many biomedical researchers think this field has a bright future. They say that stem cells derived from human embryos and fetal gonadal cells, which are capable of developing into a wide variety of specialized cells, may be a valuable source of transplant tissue. For the past 9 months, NBAC has been deliberating over ethical guidelines that might enable more rapid development of this biomedical technology by opening it to public funding. NBAC concluded that the potential benefits of stem cell research outweigh the disadvantages—provided the cells are drawn from embryos that would otherwise be discarded. NBAC recommended that only “spare” embryos from fertility clinics be used, and only when both donors give full consent. NBAC also said that the government should establish a watchdog committee to set ethical rules and enforce them.

NBAC's position could have an impact on debates on biomedical funding in Congress this summer and fall if right-to-life advocates seek to extend the congressional ban on em-

bryo research and apply it explicitly to the derivation or use of embryonic stem cells. Representative John Porter, chair of the House appropriations subcommittee for Labor and HHS, which drafts the NIH budget, has tentatively set a meeting on 21 July to begin work on next year's appropriation. Although Porter told *Science* that he personally supports NIH's perspective, he said he didn't want this discussion to “overwhelm the funding process.” Porter said: “I told [NIH director Harold] Varmus that we should fight the issue on the intellectual basis of what will happen with or without this kind of research. ... But I don't want to see NIH's funding wrapped up in an argument that to me is tangential.”

Other members of Porter's subcommittee—including Representative Jay Dickey (R-AR), a sponsor of the embryo research ban—reject both NBAC's view and the Administration's compromise position. “We believe that science should serve humans, not that humans should serve science,” says Dickey. He does not think the current law permits federal research on embryonic stem cells, and says he will help take the fight to court, if necessary. He hasn't proposed any change in the embryo research ban.

But Berg, a spokesperson for the American Society for Cell Biology, says NBAC has developed a position that he hopes will make sense to scientists and the public. He calls NBAC's recommendations for monitoring the field “bureaucratic,” but reasonable if they reassure the public that this research will be guided by ethical principles.

—ELIOT MARSHALL

RESEARCH FUNDING

Michigan Plans Massive Investment in Biotech

In what may be the largest windfall for research from a state tobacco settlement so far, Michigan Governor John Engler this week signed a bill allocating a stunning \$1 billion over the next 20 years for a competitive biotechnology research fund for his state's scientists. The fund, to focus on aging and health, may be spent on a range of programs, from research grants for diabetes to building new bioinformatics databases.



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