Debating the Moral Status of the Embryo

HOULD STEM-CELL SCIENTISTS be able to destroy even early-stage human embryos in order to advance medicine? That question has been framed in many different ways. When does life begin? At conception? At implantation? When the heart starts to beat at 22 days? When the embryo takes on a human form? Religious traditions have emphasized ensoulment, but differ on when that occurs. Some countries have set time limits governing research with embryos. In Great Britain, the cutoff date is 14 days after conception, or around the time of implantation.

In a pluralistic society such as ours, how do we reconcile conflicting points of view? As individuals, many factors intellectual, emotional, or spiritual may sway us to adopt one view or another. The loss of a friend to an incurable disease may move us to support such research, or a regretted abortion may move us to take an opposing view. But as a society, we reconcile our differences through the political process. Stem-cell research is an issue that does not follow party lines.

In the lobby of Corwin Hall at Princeton University, where McCormick professor of jurisprudence Robert George, J.D. '81, M.T.S. '81, has his offices, two quotations are painted high on the wall: from James Madison, "A well instructed people alone can be permanently a free people," and from Thomas Aquinas, "Among all the practical sciences, politics must be the principal one that directs all others, because it investigates the ultimate and highest good in human affairs."

George holds what is known among moral philosophers as the "equal moral status" view of the human embryo: "The principle to which I subscribe is one that says that all human beings are equal, and ought not to be harmed or considered to be less than human on the basis of age or size or stage of development or condition of dependency." Fertilization "produces a new and complete, though immature, organism" that possesses "the epigenetic primordia for self-directed growth into adulthood with its determinateness and identity fully intact." Although not all fertilization events lead to an adult, we were all once embryos in the blastocyst stage of development, he points out. We possessed all of the genetic material needed to inform and organize our growth.

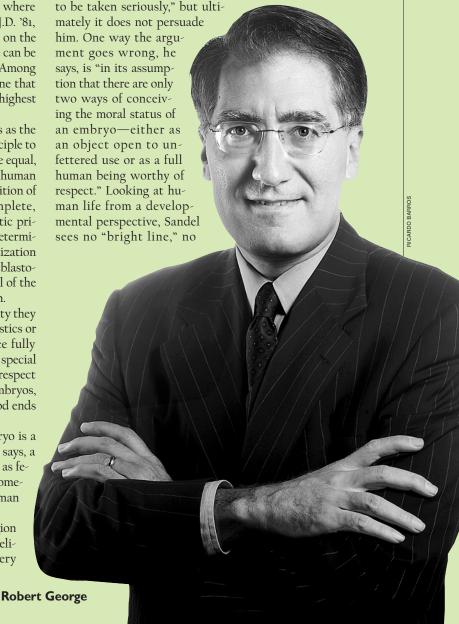
Humans deserve full respect by virtue of the kind of entity they are, George maintains, not by virtue of acquired characteristics or abilities, which we all hold in varying degrees even once fully grown. Development is a continuous process: there is no special moment when human life suddenly becomes worthy of respect and human rights. That worth is intrinsic, he argues. Embryos, therefore, should not be used as means to an end, even good ends such as cures for diseases or to save another human life.

George is not persuaded by the argument that an embryo is a *potential* life, rather than human life itself. It is instead, he says, a life with potential—the potential to become an adult, just as fetuses, infants, and small children are. "An embryo is not something distinct from a human being," he writes; "it is a human being at the earliest stage of its development."

George's reasoning does not depend on religion. But religion can inform one's views of embryo research, he allows: "Religion's role is to remind us of the intrinsic dignity of every

human being; to remind us that none of us exists solely to benefit others, or as mere instrumentalities, meant to benefit society or the state. The great teaching of the Declaration of Independence is very valuable: that all of us—every human being—is created equal, and endowed by the Creator with certain inalienable rights. We don't get those rights from the state, and therefore, the state can't take them away. It's the state's obligation, rather, to respect and to protect those rights." What religion cannot do, he says, is "substitute for science in determining whether the developing embryo is, or is not, in fact, a human being. That can't be found in the Bible; it is not something that theological resources allow you to resolve." George believes the matter should be settled strictly on the basis of the scientific evidence. "When does a new member of the species *Homo sapiens* come into existence? That is a scientific question, not a religious question."

Bass professor of government Michael Sandel finds the equal moral status argument "one that has



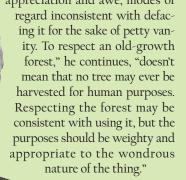
Sandel asks how a person would behave if confronted with a fire in a fertility clinic. Given the choice between saving a five-year-old girl or a tray of 10 embryos, which would one choose?

biologically determined moment when such a life acquires the moral status of a person. The process is gradual. "To regard an embryo as a mere thing open to any use we may desire or devise does, it seems to me, miss its significance as potential human life. You don't have to regard an embryo as a full human person to believe that it is due a certain respect."

Sandel suggests that a more expansive view of the moral status of nature can help us see beyond the stark dualism between persons and things. "Personhood isn't the only warrant for respect," he says. "We consider it a failure of respect when a thoughtless hiker carves his initials in an ancient sequoia, not because we think the

sequoia is a person, but because we con-

sider it a natural wonder worthy of appreciation and awe, modes of



Probing the assumptions underlying the equal moral status view of the embryo, Sandel asks how a person holding that view would behave if confronted with a fire in a fertility clinic. Given a choice between saving a five-year-old girl or a tray of 10 embryos, which would one choose?

George finds fault with such scenarios for many reasons, including the fact that the little girl "would experience terror and horrifying pain, while the embryos would not." For the same reason, he says, "one might rescue the little girl rather than several terminally ill adults in deep comas without denying that the adult patients are human beings who ought not to be killed and dismembered for their body parts."

But Sandel finds further flaws with the equal moral status view. "The fact that all persons were once blastocysts does not prove that all blastocysts are persons. This is faulty reasoning. The fact that every oak tree was once an acorn does not prove that every acorn is an oak tree"—or that we should regard the loss of an acorn eaten by a squirrel as equivalent to the loss of an oak tree felled by a windstorm. George responds that "saplings are not mature oak trees either, but this fact does not make us doubt that infants are equal in human dignity to adults."

The primary problem with the equal moral status view of the human embryo, Sandel reiterates, is "this deep assumption that the moral universe is divided in binary terms...but this dualism is overdrawn." He urges us to regard "life as a gift that commands our reverence and restricts our use." On those grounds, he opposes reproductive cloning, because it makes the cloned child an instrument of a parent's will, but believes that stem-cell research, including therapeutic cloning, "is a noble exercise of our human ingenuity to promote healing and to play our part in repairing the given world."

"We both want to get this right," says George. "We both recognize our fallibility,...and we both consider that we are doing each other a favor in making the best arguments we can for our respective positions, because the only way we are going to figure out which of us is wrong, or...wrong on one point or another, is to debate the question in a spirit of civility, and try to come to the right answer. These questions are difficult. No one should pretend—on either side of this debate—that they are easy. But given that, there is really no alternative to fair-minded, civil, serious debate." George and Sandel have carried on their debate—George opposing and Sandel defending human embryonic stem-cell research—while serving on the Bush-appointed President's Council on Bioethics.

The council came under fire this spring when its only practicing research biologist, a member of the National Academy of Sciences, was dismissed shortly after she objected that a major council report was misleading on stem-cell research. Developmental biologist Douglas Melton, for his part, does not believe the cells of

a blastocyst, which has neither nerves, heart, lungs, brain, feeling, nor any sensibility at all, are a human being. "You can't put a five-year-old in a freezer and then take it out" as you can a blastocyst, he says.

Yet Melton acknowledges, "These issues are quite complicated. And while as scientists we reach decisions and move forward," other people need more time. "I feel a sense of urgency that doesn't allow me to do that," he says, "but I

do like the lab to be cognizant of the fact that the work we're doing is controversial."

Michael Sandel