



Public Policy Forum
Bioethics: The Emerging
Role of the States
Presented by
Glenn McGee

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Richard P. Nathan:

My name is Dick Nathan and I have the honor to be the director of the Rockefeller Institute, the public policy research arm of the State University of New York. We have Public Policy Forums quite regularly. Michael Cooper, the director of publications of the Institute, and Michele Charbonneau are the key people for arranging these regular programs.

Today it is my honor to introduce Glenn McGee. Glenn has become a friend of ours. He is the John A. Balint Endowed Chair for Medical Ethics, professor of medicine, and director of the Alden March Bioethics Institute at Albany Medical College and the Medical Center. He's editor-in-chief of the *American Journal of Bioethics*. He comes to us as a new man in town from the University of Pennsylvania. He's written extensively on the subject of bioethics. He's truly a leader in the country on very exciting, important questions of research, medicine, biology, and information technology.

Glenn came to us shortly after he got here in Albany to develop a relationship with the Rockefeller Institute, which I'm very proud we've now established. Jim Fossett,

who is our key person on Medicaid and health policy, has been working closely with Glenn on something that comes through in Glenn's work.

I'm here to promote this book, [*Beyond Genetics*](#). This is a book that Glenn McGee wrote to help people like me understand the immense questions of what science can do when biology, genetics, and computer technology are joined together. The questions are hugely complicated — political and institutional questions. Who should decide? What is the right way to handle some of the ethical issues that I'm sure Glenn is going to talk about? But if he misses any part of this in his remarks today, because we only have a little bit of time to be together this morning, you should read this book. I read this book when I was in the hospital. I'm fine now. Every time the doctors came around to talk to me, they would say, "What that's book about?" I hope I sold a lot of copies. I think I did. But it was very interesting to hear from surgeons and gastronomic experts on what they knew and thought and what they, as I determined, need to learn, as we all will, from Glenn McGee.

Glenn McGee:

Thanks, Dick. I'm going to give you that check in just a second. I am really excited to talk about this. To the best of my knowledge, this is the first time anybody has stood up and had the unctuousness to talk about the idea that states have a specific, general role in bioethics. Before I came over to have a conversation and began to sort of harass the folks over here, I spent some time doing literature reviews to find out whether or not anyone had studied bioethics broadly as a matter of state policy. For years, I wondered whether or not states are involved in intellectual property questions. Take Michigan for example, where the tobacco money is funding an enormous biotechnology enterprise. Have they begun to ask the question of how much of those dollars would stay in the state? There are a number of those kinds of questions that have always seemed to me to be fundamentally regional, yet I've always thought I was nuts for thinking so, because I don't seem to have any peers in that regard. Maybe you'll agree with me about that after this morning.

Cloning got me started on this, when human cloning reached its real zenith, and there are several moments that come very close. Richard Seed declaring to the group of people at a conference in Chicago that he would like to clone himself because he's very handsome or, later, because he'd like to bring back the child he lost in divorce or, my personal favorite, he'd like to clone Ted Koppel — and told him so. Another one came when Brigitte Boisselier went from network to network in New York claiming that she was imminently going to clone someone. The real zenith of cloning came when Bill Frist and others were motivated, à la Schiavo, to come back into session to talk about a clone that was purportedly to be brought into the United States from Mexico. Do you remember this? They were to come in not by land but by sea. The United States Congress held quick hearings to determine whether or not it would be possible to keep a clone out of the United States as a way of dealing with the problem of reproductive cloning. Somehow or other, I got a phone call from a group of people who were working with the governor of Florida, led by majority leader Bill Frist (who had done bioethics for years by the way when he was Vanderbilt as a transplant surgeon). The question asked of me was, "Is it against the law in Florida to bring a clone in?" To make a long story short, what we decided was that in fact it wasn't against the law to bring a clone. You couldn't argue that this was a Petri dish that hadn't been secured or something like that. But it wasn't the case that this clone would be anyone's child. The madness of this conversation, right? It was determined that under Florida law because that child was really a sibling, the child would have to be adopted by the would-be parents and that fell within the jurisdiction of the Family Courts. The stakes seem to me to be absolutely implicit in how we think about reproductive and genetic law and the argument that I want to make this morning is that bioethics is going to be a state phenomenon for some time to come.

Perhaps we should go from knowing that fact in the back of our heads to articulating it clearly. Nowhere is the evidence stronger than in stem cell research. There is no "ordinary" stem cell research. Whether we are talking about adult stem cell research or embryonic stem cell research or something half way in the middle, it is always the case that somebody in the room is coming from a language that's alien to everyone else. Stem cell research, it seems to me, is one of the more interesting examples that we've seen of

ethical debates in the past 20 years. Sometimes I call it the “kitchen sink” because it literally has everything. It has the rights of women. How do you understand whether or not you are bribing women when you procure eggs from them? How do you understand the relationship between animals and humans? It just goes on and on and on. There are at least a dozen ethical issues involved in stem cell research that you can reel off without even trying hard.

But in play in this issue are at least several different more broad questions. For instance, the question of how bioethics relates to stem cells? Second, the question of how have the fundamental problems of stem cells changed our discussions in the country? Third, there is a question about how scientists are “supposed to practice.” You may not have noticed but there have been big debates about stem cells in Washington. As if the Human Genome Project, which my colleague Art Caplan describes as “the full employment act for bioethicists,” hadn’t created enough clamor, the stem cell debate has produced a series of exciting, highly flashy discussions about whether or not particular aspects of the federal law about embryonic research can be applied to the stem cell debate.

But all of these questions are tangential. At no point, for example in the debate about stem cell research in Washington since the Clinton administration, has anyone said, “Let’s ask what it would mean to do stem cell research in terms of the impact on health care.” There has not been a hearing on the likely trajectory for stem cell research in terms of the implications for research subjects, donors, or others involved.

The questions have all been about whether or not it’s right or wrong. My personal favorite, as with most of these, was a hearing convened by Arlen Specter for the subcommittee that doles out money to the National Institutes of Health (NIH) to determine whether or not a creature that would be somewhat embryo-like or perhaps a human embryo made through the modification of an egg, would in fact be a human being. In this hearing, there was first testimony from a researcher who declared himself to be pro-life and then described how all he did all day was build and destroy things that looked to me like they were embryos. Then there was a bioethicist who was

extraordinarily populist who made the claim that there was an immense need for this research and it should be done so that we can move forward as a people. Then there was an argument against stem cell research that assumed that all creatures of any kind that bore any resemblance to human were human and thus should not be destroyed. Then I stammered through my own testimony about stem cell ethics and what they might do, captivating no one.

Bioethics is just not prepared for this particular variety of debate. This is a discipline — if it is a discipline — that is 30 years old. It has six professional journals; the most cited of these I must disclose that I run, and it has a shade under 5,000 print subscribers. At the same time, and this is a great indicator, 12 million people a year read our journal online because every 12 year-old in the United States is going to write a paper this year about cloning. Stem cell research is the most discussed moral issue I can think of. Even Tom Delay doesn't rank this high. Bioethics struggles perhaps too eagerly with problems that find themselves everywhere from *The New York Times* to the *National Enquirer*. It has been extraordinarily difficult for those of us in this field to adjust to conversations held simultaneously with scientists, religious leaders, and “the people” as a whole. That has been made much, much more difficult, as I'll discuss, with politics because of course in the 2004 election bioethics became the key football and we've seen in the last two years just how far that could go in the service of specific kinds of federal election aims.

Then, for philosophy and religion, there are fundamental questions here that are real. In the stem cell debate, as with all the debates that are reverting to the states or maybe never left despite the fact that we thought they were federal, there are basic questions that people have debated in their communities. What is it to be a steward of very young life? Is there a Faustian bargain in stem cell research, trading the very young and very vulnerable against those who are aging, those with degenerative brain disease like Parkinson's? Questions about how we do age; is it appropriate to live to 150? Is it inappropriate that we should die at a certain point from something that isn't even called a disease yet?



One of my favorite examples of stem cell therapy that has actually come some distance in public discussion is where we will go with clinical trials. A discussion of restricting the decay of telomeres so that it will be possible to take these little caps that are at the end of the chromosomes in each of our cells and

keep them in place longer. Thus, regardless of how fabulous your metabolism is, you'll age more slowly. It sounds great to me. But the questions of whether you trade embryos against it is a different one and what you do in terms of trading it against other pieces of what we currently call creation seems to me is fundamental. It's the kind of thing that interests people, whether they are in church or in synagogue or amongst friends in public debate.

Finally, there is a question for scientists about how to even deal with this stuff. The teaching of ethics to scientists is today where the teaching of ethics to doctors was in the 1950s. I mean, it's really bad. We teach ethics to scientists in the form of this pizza lunch called "responsible research" training where people are read the riot act: Do not steal the data. Do not fudge the data. Don't paint your mice black to get the results you want. By all means, give authorship to those who are entitled.

It's not that these aren't important; it's just that as some of my students used to say to me at Penn when I taught this, "If we were going to do these things, do you really think you'd change our minds in an hour because of pizza?" As ethics training, what you'd hope for with scientists is that from the very beginning the description of certain kinds of activities, controversial things, would be accompanied by training and thinking about their ethics. If you're going to teach people about how to monkey with the origins of life, you want them to see the history of dealing with life. That shouldn't be something

strangers do later. But instead that's exactly what we have – stranger, to paraphrase a prominent bioethicist, at the bedside.

I was at a National Academy of Sciences hearing on stem cells about six months ago and this is the way it went. It's exactly what I'm guessing you'd imagine. There were three prominent stem cell researchers and three ethicists. It was as though we were from different planets. That doesn't happen any more in other areas of medical ethics. With euthanasia, e.g., there are people who know both ethics and medicine. In fact, oddly, they are now the majority — clinically trained ethics people. But ethics-trained scientists? You can count them on two or three hands. The question of how this conversation goes is in some ways prefigured by this confusion.

Isn't there a way to find our way through this debate such that we will all be able to talk to each other and perhaps even talk to each other in a common language? Forget it. It's never going to happen. There is one key problem. We can't agree on a language. What is an embryo? I don't know and anybody who tells you they do know is selling something. We did a study of the 30 most cited embryologists in the world where we had to identify what an embryologist is because there is no such thing. That word is often used but scientifically there is no discipline of embryology. There's not even a subdiscipline of embryology. There are people who work on embryos. Some of them come from obstetrics. Some of them come from the sciences in basic biology. Some of them are in developmental biology. There are a million ways you can work on embryos, and a nondescript mob of people who write about it.

So we identified 30 of those who write about it who are most often cited and then we looked to them for wisdom on the question. We used a focus group to come up with a little questionnaire and we asked them open-ended questions about things like pluripotency. When is a cell capable of being pluripotent? When is a cell totipotent? Totipotent cells, we all assumed, were generally understood to be a cell that could become another embryo. A pluripotent cell was a cell that could become any from among a wide variety of all of the tissues that make up the cells of a developing human being past the A-cell stage. There are lots of ways that it has been defined, but what got me

going on the idea of doing this study is that I saw that one of the discoverers of the differentiated human embryonic stem cell used the word “embryo” in a different way than the other discoverer — one from Hopkins and one from Wisconsin. In our survey, we found that among the 30, 22 used the language of the embryo in different ways. There were 22 different ways of talking about when you do or don’t have an embryo. That’s staggering.

It’s not problematic for most people to describe things that are functionally an embryo. It walks like one. It talks like one. An embryo has the potential to progress toward birth. But what if you’ve made something that is very much like an embryo that comes from the DNA both of an animal and a human? For example, the majority of the experiments in one company, one of the leading stem cell research companies, come from eggs from cows. They create an experiment they think avoids the moral issues associated with stem cell research because it couldn’t produce a baby. Well, is that still an embryo? It produces embryonic cells at ten days, twenty days.

The reason this is a question is because the scientific lexicon is what those in the moral debate constantly point to. Both sides constantly say, “We’ve got it right. Look, this thing *is*” or “this thing *isn’t*.”

The most recent example of this is the debate about the President’s Council on Bioethics. Appointed by Bush, this Council has issued some very interesting recommendations and has been very controversial. In discussing them, people have pointed to the fact that they spent the last year trying to figure out how to stop immoral stem cell research by making disabled embryos, to the consternation of everybody. Fundamentalist Protestants around the United States have said, “This is bananas. You can’t do it. You’re going to make embryos that can’t become people. You’re deliberately making the disabled.”

On the other side, people who are gung-ho for embryonic stem cell research in places like California say, “You’re just avoiding the debate because you want to regulate

things and that's going to produce a world in which federal regulations stop us in California. Quit it."

In the middle are people who agree that it's bad to do embryonic stem cell research, but don't understand what's being advanced because these ideas are untestable and there's no group of scientists to appeal to. It's madness, perfect turf then for bioethics.

The way we try to solve these problems so far in bioethics in the past 30 years has been what I've termed "Camelot bioethics." It follows the John F. Kennedy model of bringing in experts at the federal level for presidential commissions whose stated goal is to define things like death. When are you dead? When are you born? What does it mean to be in a position where all treatment would fail? The commissions did a fabulous job of describing things like whole brain death, in fact, up until President Reagan dismantled the last grand, well-known presidential bioethics committee. There was lots of good work that came out, by all accounts, from these commissions.

After that came the Radiation Commission and then President Clinton's commission, the National Bioethics Advisory Commission, which is a more liberal group. Then came the Kass Commission, a more conservative group correctly known as the President's Council on Bioethics.

The Clinton group was so concerned about whether or not they had any impact at all on policy, to give you a sense of how far society has moved from listening to ethics commissions, they commissioned a Rand study to look at whether or not the National Bioethics Advisory Commission had even been mentioned in news stories. They found that it and its commentary and reports just disappeared, fell stillborn as it were.

That has been the case for quite some time. Why is that? You could speculate. I'm not a political scientist, but I'm happy to speculate anyway. First of all I think it's just clear that Americans don't trust intellectuals and particularly not where health, insurance, and biology are on the line. We fear them. We fear that they are going to make up stories.

That they're going to patronize us. We don't trust the notion of an intellectually run presidential body or we don't care and it is completely marginalized. I think it's also clear that the voters have said that they don't believe that these issues are amenable to advice from the executive branch. They're essentially saying, "Tell us if it's illegal or not." We don't want to hear from the President's body. The Bush Council produced a textbook on bioethics, and it's an interesting textbook that contains things that nobody else in bioethics would have used because nobody on that Council is a bioethicist. But at the end of the day, the reports that they issued were useless and treated as such. No one is paying attention.

There was much criticism of this last commission because Leon Kass himself walked to the Senate with papers in hand, the second term Bush bioethics agenda, and tried to get takers in the Senate to work toward an agenda for bioethics. He was much criticized for this. The Inspector General investigated the claim that perhaps this was an inappropriate activity for an executive branch appointee in his role. But it didn't matter because no one paid attention. Rick Weiss printed pieces of it in *The Washington Post* and no one even latched on to that. It has been very difficult for national commissions to make a difference because trust is an issue that plagues even ethics.

Case in point, while the Clinton-Rabb story is the beginning of the stem cell experiment, it is in some ways the most important and shameful moment that has led us to where we are now. President Clinton said to the chief counsel for NIH, "I've got a problem with this stem cell thing. I don't know what to do. Please help me find a way to deal with this policy so that we don't have to change the law." That's a critical phrase that you hear repeated over and over again. What Counsel Rabb said is, "I'm going to release a letter and the letter will say as follows, 'You may do stem cell research using embryos. However, you may not derive the embryos yourself. They must arrive in a plain brown wrapper from someone else addressed to Dear John and then you can use them.'" From the beginning, when you'd hope that there would have been engagement on the question of whether we should we do this stuff, there was duck and cover instead. The Clinton Administration was unwilling to engage the question of whether or not NIH

policy on embryo destruction should be reversed. From that point on, in the political debate about stem cells up until I talk about John Kerry, there has been on the left an absolute recalcitrance about defending the position that embryonic stem cell research is a good thing when it involves destruction of embryos.

So there were the clone wars. In the Gore-Bush debate of 2000, the Gore team released a 450-page report describing the potential advantages of stem cell research for medicine. It was an extraordinary document. A couple of my colleagues and I actually reviewed pieces of it and worked with the Gore team to prepare him for his medical debate, the one debate he won. But it didn't matter because the Bush team, in what's characteristic on the right (they of course knew that this report was going to be released), released on the same day their war on Alzheimer's, which was an attack on Alzheimer's with three fronts. It was a war metaphor for dealing with a degenerative disease, with no real policy mandate, no change in NIH funding, just a plan to support those who have Alzheimer's with additional maneuvering around Medicaid and Medicare. The Gore report by contrast was too complicated and disappeared.

The Bush and Thompson compromise in 2001 is what settled things so that Americans began to accept the idea of embryonic stem cell research. It's every bit as oblique as the original compromise involving Counsel Rabb. President Bush, speaking from Crawford, Texas, and I'm never going to forget this for the rest of my life, opened up the microphone and began speaking as a bioethicist. He said, and I'm paraphrasing, "I'm coming to you after spending many days with my family thinking deeply about stem cell research and I am troubled. I do not understand these moral issues." I said at the time to *The New York Times*, "It was the best speech the president had ever given." Virtually everybody who works in my field said this was a great moment for bioethics in at least one aspect: It was the first time a president ever said to the American public that they should be troubled by some bioethical debate and think long and hard about it.

President Clinton said of cloning, "It's a bad thing." But he never came as far as saying, "This bioethics stuff, I don't know what I believe."



The trouble with the Bush speech is that he appears to have spoken with a forked tongue. President Bush's proposed compromise was that a set of stem cell lines produced from previously derived embryonic cells could be used. He claimed there were 60 such lines. It turned out there were fewer or

none, but the lines that were available then became hotly debated. They were contaminated because of the cells that feed the embryonic cells, which come from mice.

The compromise resulted in a big debate in the United States and the appointment of the Kass Commission. The question asked was this: Should we or shouldn't we use more than just the available cell lines? Because researchers won't use the Bush lines. The Bush Administration allocated \$300 million for stem cell research, both embryonic and adult. Less than \$100 million of it has been used so far because nobody wants those lines and because the restrictions that are implicit in them are odious to scientists. It's also, I think, a function of the fact that the actual number of ready-to-go grant applications in embryonic stem cell research is vastly overstated. There are lots of basic biology applications, but the notion that there are lots of people geared up and ready to go to produce cures is wrong.

Backlash against the Bush policy infiltrated Bush's bioethics. This created a kind of purge. Within the Kass Commission, a woman called Elizabeth Blackburn, a scientist, and a theologian from Southern Methodist named William May both spoke out against the Bush measures, Blackburn quite vociferously. Leon Kass began in essence campaigning for the president's position, while saying he wasn't doing so in his role as the chair of the Bush commission. But it was untenable that Kass would do service to Bush's policy while William May and Elizabeth Blackburn were still on the commission. So the president removed them. There was much debate, including an actual op ed in *The*

Washington Post by Leon Kass explaining away the fact that they had been removed. But the damage was done. It was a matter of national knowledge.

One of the few things that people ever saw, in fact, about the Kass Commission were the editorial cartoons all across the country about Bush purging liberals from a science commission.

The next piece of the stem cell debate is money. There are a tiny number of stem cell companies out there. Most of them trade publicly. All of them trade under \$10 a share. Most of them trade under \$5 a share. They're all funded by venture capital. Not so unusual for small biotech, but interesting when it's the whole source of money for the research. The effect of that is that the venture capital funders for much of this research expect quick findings and stem cell research hasn't cured anybody yet. For the companies that are specializing in embryonic stem cell research, they get a \$2 million line of credit from a venture capital company in Nevada and they then have to demonstrate within two years that they have done something. What did they do? They patented things. So the embryo is subject to lots of competing patents.

My research group produced, to my knowledge, the only law review article that reviews all the patents on stem cell technologies. We looked primarily at the two core patents that are in conflict. One is from the University of Wisconsin Alumni Association and one is from Johns Hopkins and its spin-off company. The two institutes, in October and November 1997, published *Cell* and *Science* articles each claiming to have found the human embryo. Each of them created a patent. One controls looking at any aspect of the embryo and the other controls looking at any aspect of the embryo that would make stem cells.

Let's try to fathom that as an extension of the recent patents on genes. You thought gene patents were bad. You can't look at your breast cancer gene without paying someone. With stem cell patents, there is a toll to be paid for virtually every step in the research process and that's created a much more odious problem for this research than any kind of problem that would be associated with genetics. It means that how Human

Embryonic Stem Cell (hESC) research progresses is in some ways governed by the institutions who own part of nature.

Three days ago, the Bush Administration announced quietly that the University of Wisconsin, in Tommy Thompson's home state where he was governor of the state, where the cells that are approved all come from, is now the official stem cell bank. Remember the Wisconsin Alumni Research Foundation (WARF) owns the patent on the embryo, the pieces of the embryo that constitute stem cell research. And, incidentally, they also own Vitamin D milk. (You want to talk about a big patent; that has brought in \$7 billion to Wisconsin.) Under political pressure, Tommy Thompson insisted that Wisconsin allow people to use those cells without charging the full fee. Since Americans couldn't get the NIH money for stem cell research without using those cells, this is a real cornering of the market. And, at the same time the U.S. Department of Health and Human Services (HHS) and the Patent Office creates a system whereby the control over all the fundable cells can be federally articulated and may well largely reside with a single state.

The Political Debate

The best way to see how this is playing out in terms of the states is to look at the debate. From the right the arguments seem to me to be quite clear. Where stem cells are concerned, there was a very successful appeal to southern Protestants and Hispanic Catholic voters. A straight up appeal: "this stuff is wrong." That was the argument, and it stuck. The polling is incredible on stem cells in the southeast. Clinical and religious rhetoric was mixed. People pointed to the fact that you are definitely going to destroy an embryo.

There's a great moral seriousness married to the approach of the right, an almost theatrical display of how dire and grave a matter is stem cell research. I actually took some glee, I have to admit, in mocking the moral seriousness of the last presidential campaign. I don't know how many times I did NPR or some back and forth interviews with someone who represented the Kass Commission, which remember was campaigning on behalf of the president. They would interrupt something and say, "I think we have to

be very serious about this problem and McGee is glib about the matter. To be liberal in biotechnology is to be insufficiently serious.”

Moral seriousness as a language is extremely powerful. It has been utilized in presidential politics very effectively. In stem cell research, you can see why it was so effective. To say this is serious business allows you to avoid lots of contentious, ugly, complicated debates because engaging them might involve asking the kind of fundamental questions that “serious” people don’t.

By the same token, there was some conciliatory language about embryonic stem cells that had an equal effect from the left. Now adult stem cells, it was argued, can do everything, a claim that it seems to me is dangerous from the start. It is true that we will be able to re-engineer adult cells to do lots of the things that pluripotent embryonic stem cells can do. There’s no question that will happen and in fact lots of innovations have been discovered in that area recently. It’s good. Frankly, I think you’d be in a really strange position if you wanted to argue that it would still be better to use embryonic cells if, all things considered, you didn’t have to. What’s quirky about this is that there is no shared scientific vocabulary. So if you’re troubled by the destruction of embryonic stem cells, especially wholesale destruction of lots of them potentially for enhancement, you should be equally troubled it seems to me by re-engineering of adult cells to make them into embryos because most of these technologies have the effect of producing a cell that is arguably embryonic. You produce a clone, you may still have an adult cell, but the adult cell that you’re working with has in fact been given some embryonic “powers.” By extension, what’s actually happening in these experiments where you dedifferentiate a somatic cell? You take a skin cell and you enable its DNA to function in more ways. I think that’s morally interesting. I don’t buy the argument, nor do I think anybody else does, that this avoids the moral issue. I think if you’re concerned, you should be concerned.

Finally, of course, there was Mel Gibson, after all the months of Christopher Reeve nonstop, with what was going on and then his untimely death immediately before the election. It was extraordinary for conservatives to be able to find Mel Gibson, who

had just come out of *The Passion of the Christ* to speak very, very passionately on behalf of stem cells, particularly in California where Prop 71 was on the same ballot. The presence of someone on the other side became important. On the left, the argument was not that we need to do more stem cell research, not that we need to do more research involving clones. No, heaven forbid, John Kerry would never say the word “clone.” Under no circumstances would he say “embryonic stem cells.” He said “stem cell research.” He said “discarded embryonic material.” He wouldn’t say it. It was just like Counsel Rabb. So the argument was that we had a failed policy just like on Iraq and this, that, and the other thing. He tried to fit it into a set of categories of bad stuff with incredible urgency, because we have to do it for the people who need it right now. I participated in lots and lots of press conferences where someone on the panel was a young woman who had juvenile diabetes. In fact, since I’ve been here, I’ve been to lots of people’s offices to talk in academic language about stem cells and the person right after me would be someone who had a degenerative disorder. It’s not that they shouldn’t be there. I’m just pointing out that the powerful argument that this stuff could work soon, was contrary to all scientific evidence.

At the same time, John Kerry was a reluctant supporter of stem cells, whatever he said to the contrary. A small budget for embryonic stem cell research was proposed by Kerry. It was very, very important in the Kerry camp not to mention the California initiative. I think the Kerry people really believed that the California story would take the energy away from stem cells. But, whatever the reason, it was as though California was another planet.

What did the vote mean? Well, southern and western get-out-the-vote efforts from churches really did work. No question about that. It also seems to me there’s not much question about the fact that for many Republicans strategists it is now a proven fact that it is possible to engage certain voters on stem cells to a degree that they will vote against a politician who holds views that would help them economically, in order to get one who agrees on stem cells and abortion. So this is a voting issue. You weren’t just stating a position on the issue, you stated a position on this issue because it will leverage others. At

the same time, this notion that there were key commonalities among the different Bush voters was critical. Framed as stem cells, very few identified this as a voting priority, but most red states saw this research as scientific abortion. The point being that when the stem cell debate was used as a voting issue, it was always framed as the destruction of people.

The Suppressed Middle Ground

There were many commonalities to be found in the dialogue about stem cell research and they will never be seen again because, at the federal level, they were crushed by the presidential strategy post his 8/11 speech. But I want to stress that the left and the right actually share the view articulated in a number of different ways that life has begun to lose some of its inherent value through thoughtless expansion of assisted reproductive technology. The fact that we've gone from having babies to making babies is, I have argued elsewhere, important. As a people Americans seem to share two radically contradictory beliefs and you can find them no matter how you poll residents in the United States.

We believe that to procreate is among the most important things you can do, and that people who want to procreate should be helped. This showed up in Supreme Court decisions in the late 1990s and is found in lots and lots of decisions about “positive autonomy” — the right of the fertile to access resources paid for by the states to support their use of assisted reproductive technology.

At the same time, “we the people” are terrified of Frankenstein. We do not want scientists to be engaged in hijacking procreation. We don't like the idea that these scientists can't be trusted on ethics. Scientists really don't get much ethics training and it shows in the awfully arrogant claims that rogue scientists make from time to time, resulting in fear and trembling. Have you seen an action movie with a bad guy this year that didn't involve genetic engineering? There hasn't been one. There's always an evil genetic engineer. We do not trust them. We haven't ever, but now it's easier to distrust because there's more awareness of what scientists could do.



These two mix in such a way that both on the left and on the right, whether we're talking from Rifkin or Kass, there is what Kass calls a "wisdom of repugnance" that's articulated by the right wing and at the same time a "loss of nature" that's articulated by Rifkin and others on the left. Feminist concerns are politically

invisible, concerns about dehumanization, demasculization, and defeminization of assisted reproductive technology. They match the Right to Life opponents of assisted reproductive technology and yet they are as mute as those who advanced the claim that there are too many abortions.

The social role of the state as a default parent is remarkably comfortable for those on the right and the left in cases like cloning. No one wants to see parents able to deliberately create an injured baby. So participating in this Florida thing, it became very apparent to me that lots of people who were Republicans, who argue that we should have school choice and vouchers, etc., are very comfortable with the idea that if somebody doesn't vaccinate their kid or feed their kid properly or send their kid to school that they should lose the kid. On the left, in addition to those views, there are equal concerns about the importance of the state's role in divorce, etc. There are these shared moments when politics doesn't matter: all Americans are scared to death of cloning, in part I think because they believe, as I do, that the first cloned human baby will come after hundreds of experiments in which some kind of human being is gestated for a while and then destroyed, and then others are born malformed as a direct result of the effort.

So in the case of stem cell research after 2005, what have we seen? Already, and this predates the appointment of Chief Justice Roberts, a new court has extended fetal protections. There is much more "moral seriousness" about these issues. This sets up a

dilemma: How will Bush and other staunch pro-life conservatives cope with the human embryonic stem cell successes?

The answer is Terry Schiavo: a turn to the right to avoid ambiguity.

To The States

So it is left to the state. When is an embryo not an embryo? Ask your governor. From Missouri to Indiana to New Jersey to Oregon to California, there are bills pending and dollars will flow. Hearings are being held in virtually every state that has any chance of doing stem cell research. They are all asking, one state legislator to another, almost none of them with any science training, what do we call an embryo? It's the critical issue.

As an assistant professor running my school's new "bioethics major," I used to run a class at Penn on states and bioethics. You couldn't make an A in this class if you didn't get a proposed state law introduced in your home legislature. That was the rule. For two different years, 1998 and 2004, we used stem cell research as our model and in a number of these cases these students were able to get hearings started at least in their home states on their proposed legislation. In some cases they actually had bills introduced. In every single case that we were aware of in studying all these states, a critical issue was defining the moral parameters of stem cell research.

How that pans out is that we have at least four different regional approaches to political involvement in the United States.

There's the wild, wild west California model, where voters go to the polls in a flat-broke state to spend \$3 billion. Then there is New York, where no one can get anything past a crazy set of political landmines regardless of the people's will.

Then there's Middle America, where in general states and voters are somewhat interested in and concerned about stem cell research, would like to see a ban on reproductive cloning, but many voters also want some money for stem cell research.

Pretty much around the country where this is debated in states, people say, “We don’t want to get left behind.”

My own experience and the impetus for this project is New York, where the people say, “My God, we’re going to be trumped by California.” Now I’m new to this state; I’m not exactly a carpetbagger, but I’m new. In Pennsylvania, embryonic stem cell research (ESCR) is out of the question. It’s a third-degree felony to destroy an embryo in Pennsylvania. There will never be stem cell research at Pitt or University of Pennsylvania that uses human embryos. What they have to do to do this work to is to have the wet work go to Connecticut. In New York, there is a real chance that such a measure will in fact make its way to a final kind of statewide conversation. If that happens, it will engage exactly this kind of debate. Lots of voters in this state are basically opposed to the destruction of embryos, so they will have to take up the question of whether what’s being proposed would be an embryo or not, whether you could approve certain parts and disapprove other parts.

Finally, there is the Bible Belt, which has essentially said no and no means no. This is the new Bible Belt. I don’t mean the old one where there was Jesse Helms and Mississippi and Alabama. I mean the new Bible Belt, which includes North and South Dakota. A Bible Belt that pays attention to biopolitics. When Nigel Cameron starts writing in the key right-wing protestant magazine, you know that pro-life has become a new, neo-Catholic antitechnology ideology.

What is the effect on states? Well, venture capital is driving regional investment alongside the Baye-Dole act. Baye-Dole passed in 1980, which enabled the use of private money to support research that is simultaneously or previously funded by the federal government. There is a fabulous article about this in *Fortune* from October 2003. It describes the history of biotechnology investment in the U.S. since 1980. But because of this regional investment, particularly in California, where Microsoft spent \$51 million campaigning for Proposition 71, we’ve seen a real shift in how investment is occurring.

A great example of this is Michigan, as I indicated in the beginning. Michigan has spent almost all of its tobacco money on biotech. They've set up these monster incubators. They put together massive university-based efforts, e.g., at the University of Michigan. They recruit minority kids to do Ph.D.s in science in Michigan. Most germane, they work to ensure that the embryonic stem cell research Michigan could do will be done. The money is changing the shape of the state. Tobacco dollars converted into stem cell research will be a prevailing theme in this state's debate, and in others as well.

Interest groups are beginning to push for causes, the defense of vulnerable women and egg donation for stem cell research. This is a bill pushed through in California. I'm not sure where this bill is now. But a woman from northern California said, "I'm in favor of stem cell research. I worked for Proposition 71. I don't have any problems with you pushing it past the Legislature, but I don't like the idea that you're going to give women money to donate eggs for stem cell research because it's inherently coercive." These kinds of questions are coming up where there are interest groups never before seen. And more broadly there is my general claim: In the history of reproductive technology, we've never seen science rise to the level of state legislation of this kind.

I remember being called in Pennsylvania to testify at an emergency hearing because a man who lived at home with his mom had ordered up a surrogate baby from Indiana, flew out to get her, brought her back, and then beat the baby to death because it wouldn't stop crying on the return flight to PA. He had no idea how to parent. You have to go through more screening to adopt a pet than you do to go through for surrogate motherhood. So Pennsylvania went nuts. They said, "We can't allow this technology anymore. Let's make it illegal." I was one of several who testified about whether or not the state should clamp down. It didn't go anywhere. Hearings were interesting if egregious, but no bill was even introduced to the best of my knowledge. It was theater. Infertility is a \$5 billion business.

The same thing happened in New York. I was called to testify in 2001 on the postmortem sperm donation. New York was the only state that paid any attention to the phenomenon. There are 350 requests a year to make children from the sperm of dead

men. It is a very important question for a tiny number of people, but it never procured an interest group other than readers of *People* magazine and then only for a few days.

Stem cells are causing the development of local consciousness about new biotechnology. People will get together in places like Ithaca, New York, and Portland, Oregon. In places where people talk to each other, they'll say, "No clones; whatever it is you do, we won't have clones here."

Finally, states (as I mentioned in these weird opportunities to testify) have begun to say, "Hey, we can talk about bioethics too." Who would have ever guessed that state legislators would take up bioethics? It's just not obvious that would happen. Yet it has. I spoke at the U.N. last week alongside State Senator Liz Krueger on stem cell research in the state of New York. She made a very eloquent presentation on the role of New York, etc. But what really struck me was that here she was before the U.N. speaking as a state legislator about the moral importance of stem cell research. That is unfathomable in the history of bioethics. Does it make sense from a moral point of view for the states to play this kind of role in a debate like stem cells? Is it the thing we want to see happen?

States of Nature and States in Bioethics

I can't speak for state policy. I'll try, but I can't really. That is what Jim Fossett, the Rockefeller Institute, and our states and bioethics program aims to do. But I can speak for bioethics. I can tell you that having pushed this debate along, alone, for quite some time to my colleagues in the discipline, there are essentially three positions on whether or not states or the feds ought to be the ones making these decisions.

The first is a position easiest to align with the ethics codes of national and international origin. The position essentially is it's right or it's wrong. So these codes that we have (the Nuremburg code, the Belmont Report, the Helsinki Accord under the World Medical Association, now in its fifth international revision) are deontological. They are statements like the ten commandments of what simply is right or wrong. Rational decision making about values in this line of thinking is not dependent on where you are.

If it's wrong to destroy an embryo in Texas then it's wrong in Oregon, whatever the voters say. Just as there are fundamental positions about these issues that apply at the level of national and international politics, they apply in Albany County. So the role of the state legislator is to be ethical in a world where there are moral absolutes; Bubba's role is to help bring them into alignment with universal norms, whether he represents 40 people or 400,000.

The second, aligned easily with the philosophy of Mill, is simpler to explain. Mill's position is, as best I can articulate it in the space available, on the one hand, we believe these bioethicists hold that there are certain kinds of problems that rise to the level of the near universal. So, in those cases, the needs of the many outweigh the needs of the few. On the other hand, for these ethicists, the question of whether or not politics are national, local, state, or international are, as best I can argue for Mill and the many bioethicists who follow him, a function not of expediency but where the greater good can be done. This is what you hear on the street from people who are gung-ho in favor of stem cell research. As Liz Krueger said at the U.N., "I think we need national policy. But if we can't have that, it would be good for us to fund it in the state." The point is that where there is a problem that is best addressed at the global level or the national level, if we can't do so we must turn to the states because we just know that it's better to cure some people than none. Having resolved the moral issues, she says, "Let's move on to addressing the policy complexity in the best possible moment."

Mill also, of course, is perhaps the most sophisticated advocate of classical liberalism. Some of this stuff is chosen by individuals in the world of reproduction, though you wouldn't believe it if it hadn't actually happened. A group of the cloners, led by Brigitte Boisselier, proposed that they would set up just off the California coast right out in international waters a small cruise ship on which cloning would be performed for pets and people. I'm not sure what Mill would say, but I think that unless you can argue the public interest was best served in terms of the common good by prohibiting such activity, and the threshold for that is very high, the right of the nutty to pursue victimless experimentation is important to classic liberals, a piece of the common good. You may

not be able to say to the state “fund my clone.” You may not be able to say to the state, “I want embryonic stem cell research, you should pay for it.” But you should, Mill might argue, be able to say to the state, “These persons ought to be able to pursue it in their own time, in their own space, to the degree that they don’t hurt folks.” What occurs to me then, anecdotally, is another team of potential cloners who set up shop in West Virginia over a day care center. A city councilman named Mark Reynolds had a child die quite young, two years old, and he paid at least \$50,000 into the kitty of these cloners who came and set up what the Food and Drug Administration (FDA) would later describe in their raid on the site as the scientific proficiency of a high school biology lab to try to provide this guy with a clone. The question of course is: Why can’t they do that? From the point of view that I’m articulating, the perspective I’m loosely attributing to a bioethics tied to John Stuart Mill, you have to come up with a public health model for why the West Virginia farce harms others, like things dripping down onto the day care center, or a clone who might most likely be created in a horrific way.

The final approach is the one I am best known for, which is classical American pragmatism.

I think it is clear that whatever one’s position on stem cell research, one must find a way to understand that the organic growth of moral communities, out of local needs and the conflicts between those with different needs within local communities, is a uniquely American policy phenomenon. We ought, I think, to be able to tolerate the idea that, e.g., in Chicago, if you want to adopt a black child there first must be no available black parents ready to adopt and qualify. That’s acceptable in the community of Chicago. It seems to me that I have no right to question Chicagoans in doing that unless there is a strong moral impact on me.

Before you recoil at that, I want you to think about the laws that govern your life. How you are married in the state of New York is governed by laws that are regional in character and in fact are governed ultimately by judges who are within this city, whose purview in terms of changing the specific regulations that would govern marriage or in establishing precedent for how marriage take place is quite broad. People know in this

city what will happen if they try to adopt a baby and they come from a particular background. They know and you vote on the basis of the fact that in this area if somebody is divorced certain things are going to happen when Judge Judy is in charge or Judge Sam or Judge Bob. If you draw Judge Bob from the lottery, the odds are that one person, not the other, is going to get the kid.

We embrace great diversity where moral issues associated with the family are concerned. Americans foster the idea that there is an important way in which the community is prior to the nation where the most intimate matters of life are concerned.

It doesn't seem to me that pragmatism is a position that is either pro-life or pro-choice or pro-stem cell or anti-stem cell. The argument I want to make is that if we learn anything from stem cell research, it is that both sides are better served by the development of real local interest. Honestly, I expect to see a debate about cloning in city councils and mayoral elections. It may sound nuts right now, but wait. I already see the debate about cloning becoming a state debate.

To be specific, I expect to see city councils vote on laws that will make cloning illegal and that people will begin to campaign at the city level about whether or not they will embrace or move against related tax incentives and zoning and health laws and judicial elections to family court.

Just like what New York did here for nanotechnology, tax incentives that would bring in these businesses and other such regulations that would encourage or discourage initiative. Does that mean we can't have national policy? No. Does this mean we shouldn't have state debates about this funding? Could the city of San Francisco pay for stem cell research? No, it can't even pay for street repairs. But what they can do is form moral communities and select the judges who will determine whether or not these things proceed at the regional level.

I used to do educational sessions for the Library of Congress' Congressional Research Service for incoming representatives. I finally stopped because it was boring.

Nobody cared. They'd go to sleep. They'd send their aides to my session. It's just not on the agenda.

When the National Conference of State Legislatures says, "Let's talk about bioethics in the states," everybody shows up. People care in Minneapolis because they see that most of the medical devices companies in the country are located in Minnesota. They develop lots and lots of highly controversial stem cell associated devices. Under Jesse Ventura's successor, stem cells were never a big issue. But now it's become clear that lots of revenue will come from the sale of those devices. That's the kind of debate that I think we will see in state after state.

So state-based bioethics, I'm arguing from the object lesson of stem cells, is something that will not be optional. I was, to the best of my knowledge, the first to make this claim and I embrace it now more than ever. It's almost a joke, frankly, that we are now debating at the federal level whether to fund stem cell research. It really doesn't matter. The only thing on the table at the federal level about stem cell research is whether the rules that might ultimately make it to the president's desk would have the effect of squelching research or changing research funded by the states, but that might somehow be stymied by supernumerary federal action.

That's what California is terrified of. This debate, which is framed as being about money, doesn't matter. There's more money allocated to this research in California in one year than everything at stake in the bills that have wound their way through the Legislatures of the United States.

I will close with a nonsequitur. I think we're under a global misconception about American stem cells and that's true not only for the Legislature but also this idea that has been promulgated that if the government doesn't do something in the United States then stem cell researchers are all going to go to Britain, Paris, Israel, Argentina, or that other country, California. It is unlikely I think that the debate will work out that way. Ultimately, the people in New York doing stem cell are going to stay in New York doing stem cell research. I have yet to see real evidence that they're all going to be vacuumed

up by Los Angeles for UCLA. This notion that we in New York or Washington had better hurry up and do something because if we don't everything will go to pot is, like most of the stem cell debate, predicated on misunderstandings of the role of the states, the federal government, and policy. Thanks for your attention.

Richard P. Nathan:

We have a little time for questions. I'll ask the first one. One of the things that strikes me while listening to you and reading your book, which I recommend for people who are intrigued by the things you've got us into today, besides decision about stem cells and embryonic stem cell research in your book, you deal with a number of questions about how does the society now view things that are happening or are in the offing. You mentioned genetic counseling, genetic therapies, assisted reproduction, and extensive creation of artificial foods, which is out there. So my question is sort of typical for me, not very sophisticated. I want to know what your thoughts are about having agencies and expertise in the appropriate place in government so that this kind of question could be addressed by the right people. When do you think about the regulatory roles the government has — food and drug, securities, etc. — is there is some presence you could consider? I'd like you to reflect a little bit in talking about states and bioethics about where there are models or what your thoughts are about institution building, for being able to turn somewhere to have some respected entity, person, or group help people dig into it all of these terrains.

Glenn McGee:

That's a very good question. I think in part the reason why the states, at the regulatory level, will begin to embrace the idea that it's wise to try to produce some state-oriented or at least state-governed sphere is that the Food and Drug Administration (FDA) does such a lousy job. The FDA has for years now sat on this Molecular and Genetic Devices Panel, which would have governance over several of the things you mentioned — gene therapy, genetic testing, genetic devices, although not genetically engineered foods, because in yet another federal regulatory tragedy, nobody can figure out who is in charge of genetically

modified foods really. This panel, which is charged with dealing with all the devices I just mentioned, has met once in eight years. It's the position of the federal government, for example, that where genetic testing is concerned, as long as something is what's called a "home brew" (that is it's produced within a single lab and sent out from that lab to individual physicians around the country), it's not subject to mandatory federal regulation. So that means a genetic tester (more than a 1,000 of them currently exist commercially) are not subject to federal regulation other than the Clinical Laboratory Improvements Amendment (CLIA). Under CLIA, people have to wash their hands. CLIA doesn't nationally require accuracy. How good is a genetic test? How effective is an individual molecular device that is not used for direct therapeutic purposes and doesn't come out of a single place?

The danger is that leaves to the states a lot of problems if the research or therapy goes wrong. New York is the model, frankly, and it's not just because the Institute is here, which is significant, or because we have an unusual amount of biotechnology entrepreneurship more than any other place in the country including California. It's because we are the regulatory exception. We're not CLIA. We're the only state in the country that has an exception from CLIA. We have the Clinical Laboratory Evaluation Program (CLEP). Under CLEP, not only are genetic tests regulated for whether you washed your hands, they're regulated for accuracy. No one else in the country but here has such a program. I think that's amazing. I think the fact that New York is able to do that creates a model. I think New York is a model in a number of ways where this is concerned in terms of the development of thinking capacities. To be blunt, the amazing thing about New York, where I'm concerned, and what made it very appealing to me to be in Albany, apart from the great weather, was Wadsworth. I came here in part because Larry Sturman, its leader, embraced bioethics, offering me the role of "Chief of Bioethics." No other state in the country has this, with the second largest laboratory in the United States, hundreds of thousands of square feet spread out in five facilities. A scientific lab funded extramurally by the NIH. That's the state's regulatory lab too and it's public health organization for most purposes. So it's an extraordinary possibility. You've got the group that deals with newborn screening. A very important example of

this that has been at the state level for a long time even though by all rights, as in most countries, newborn screening should be national. It's in the states here and we are the national leader. California would claim that they are but they're not.

The reason why we're the national leader is because when it's time to innovate we put in a proposal to the Health Resources and Services Administration (HRSA) to say we're going to develop new DNA tests, analyze whether or not they're a good idea, analyze whether or not there are ethical issues, and then think about whether or not the outcomes are good. We're going to do research on that and do it at the same time. The states can do that. The feds can't.

The Center for Disease Control (CDC) has been trying for years to regulate reproductive technology. They have a web site on which are posted bad data findings from each reproductive technology clinic around the country. My research group did a study of the reporting that's done by In Vitro Fertilization (IVF) clinics to the CDC. To begin with, there are so many of them that there's no policing of the web sites at all. I've been on top of that. The findings that they report to the CDC, we found in our study, are radically different from what they report to CLIA and different also from what they report in their brochures that they hand out to people who want babies. But we can't regulate it because there are too many. In New York, we can regulate that. The notion here I think is both regulatory efficiency and the presence of communities who care. This is a state that, unlike Mississippi, is going to be able to innovate in that regard. I think other states will have to imitate states like New York, whether it's the debate about stem cell research or the increasing presence of a need for regulation on genetics.

Peter Levin:

I agree with you about what New York's capacity is, but I don't think there is a prayer of that happening in state after state. It's here for historic reasons and it's been maintained by some very good leadership. Larry Sturman, director of the Wadsworth Center, does deserve a lot of credit. But you just can't do that. You can't get state legislatures to buy into the concept of scientific excellence and inventiveness as something that a state

should invest in its public health systems. I don't see the FDA differently than you do, but I'm always waiting at the state level for something to be done differently when it comes to strong regulatory stuff particularly like HMOs and all and it just doesn't happen. I can't see Delaware and North Dakota developing labs.

Glenn McGee:

You may be right, but the very first legislative experience I ever had was writing the cloning bill with a staffer in Rhode Island. It's a bit like the U.N. thing where there are countries that don't have clean water taking a strong position on cloning. Where there is entrepreneurship it's unpredictable and to that extent I agree with you. I'm not in a position to judge, and you are, the question of whether or not states have the capacity to develop this sort of stuff on their own.

Within bioethics, to back up a couple steps, there's been this historical trajectory where bioethics people and for that matter others in the community who think and write about this — theological leaders, people inside the Beltway — especially drove bioethics. There hadn't been a whole lot of progress in bioethics until there were giant explosions — the Karen Ann Quinlan case, the Nancy Cruzan case, even more recently Dolly the Sheep, and now the Schiavo case. It's in the wake of those sorts of things that we get dramatic changes. I don't know that we will see that kind of drama in state legislatures. I'm not sure we will see it even in state regulatory bodies, but my argument here is what is happening with cloning is what will happen with stem cells. That is Florida will suddenly, with Schiavo, take up a question that is almost impossible. Remember Jeb Bush going to the Legislature in Florida and making incredible arguments about the Schiavo case. Whether you agree with him or not about the case, the kind of argument he had to make in order to advance that reshapes the whole Florida state Legislature and frankly will impact policy. But he had to create that kind of innovation around an emergency case. I think what's going to happen is that it is unlikely states will do amazing things. The Oregon case is a great example. We will soon see rulings on Oregon's assisted suicide stuff; they have acted as though there isn't a rest of the country now for 20 years. What happens in that case is going to be very instrumental in Oregon's

political landscape for the purpose of health care. Oregon has innovated in this regard. So maybe that just goes to your point. So Oregon will do it, New York will do it, and California will do it.

Peter Levin:

I think you're absolutely right on that stuff. I don't think they will create and invest in a scientific mechanism to deal with this. That's all I'm saying.

Glenn McGee:

That's where the tobacco money should make a difference. But lots of states don't have a lot of it and lots of them had to put it in their educational system. Lots of them were bankrupt. So again, I take your point.

Courtney Burke:

Obviously, this is an issue that goes beyond the United States. So I was just curious if you knew much about what's happening in other countries like Great Britain or South Korea where there has been research? It's obviously to a point where there is room for debate.

Glenn McGee:

Well, I'm biased. I'll acknowledge that this almost bias on my part. I worked with Tony Blair in the British government in 2000 as an Atlantic Fellow and we have a journal publication coming out on that in December in the *Journal of Law and Medicine and Ethics* that reviews the differences between the human fertilization and embryo authorities in Britain and the kind of ad hoc weirdness on the same issues in the United States. It has been argued for decades that the British system is *the* system. They have nationalized questions about ethically controversial questions — most recently sex selection in both Britain and Australia — and have fought them out the way the Brits

fought out stem cell research with the House of Lords. They finally decided at the last minute that it would be okay to do it but the Human Fertilization and Embryo Authority (HFEA) would have to approve each application. Having to deal with the fact that it was Ian Wilmut, who promised that he would never do human cloning, who filed the very first application to do human cloning.

I think it's a fact that the American system, for all its problems, has actually worked better even across the long haul and that the argument that national systems work better even where they could work is overblown. Around the world, people think about this stuff just very differently. In most countries, it is an extremely effective thing to have a national ethics committee. It works well, catalyzes national conversation, and makes policy. It could never happen here. It's just a very different system. The question ultimately is when the rubber hits the road you're better off with a system that reflects the whole country. I think frankly that if your system is as complicated as the one in Great Britain or the United States, probably not.

Richard P. Nathan:

Peter Levin, who is the dean of the Public Health School, made a statement about New York and he knows the scene here well. As I listen to you, and I'll make this comment at the end, in federalism terms I'm thinking of lead states where you might turn on all these different subjects, where there is expertise and some semblance of an effort to do knowledge building. You've got us all thinking hard. We welcome you to Albany and we look forward to talking to you further. It's very exciting to have you come here and share your thoughts with us.

Glenn McGee:

Thank you for having me here.