The Virtues of Muddling Through

A re we ever going to do anything about assisted reproduction? Fertilizing eggs in a dish to have children chafes because such a momentous event lacks a clear regulatory framework. Occasional scandals and now the prospect of embryonic screening bring on the shivers. The temptation is to do something now before greater problems develop.

Fukuyama and Furger would create a whole new federal agency to occupy the field. Call me a noninterventionist libertarian, but I suggest that we do nothing special—certainly not creating a national agency or commission. Why not just let our mixed public-private regulatory system, with its strong common law tradition, handle it nonsystematically, as it has for years?

“Muddling through” is a respectable policy option, especially for a pragmatic people faced with irreconcilable moral quandaries. This nonsystem “system” has served well to date—even if not all the time and never perfectly—both in other contexts and for assisted reproduction. There is no convincing reason it will not work for the issues now on deck in reprogenetics: genetic screening of embryos, germline gene therapy, harvesting stem cells from embryos created by in vitro fertilization or somatic cell nuclear transfer, and the other edge technologies looming ahead.

By John A. Robertson

Fukuyama and Furger are policy wonks to the core. They think that only a new governmental body can handle adequately the complications of a reprogenetic future. With great aplomb (and maybe glee), they draft out the bones and sinews of a new independent commission to handle such matters, connecting it with proper respect both for executive appointment authority and for democratic responsiveness. They want an official body, informed by a “permanent advisory board” and a system of deliberative consultative panels, to guide us through the ethical ravines that they see arising in the future. They impress with their wide and deep knowledge of regulatory agencies and the various ways to combine responsiveness and representation with expertise and independence.

It sounds great on paper, but I remain unconvinced that there is big enough game to be bagged to justify all the effort needed to make the scheme work. They define the domain of concern as “medical practices related to human reproduction and research activities involving reproductive tissues” and list under “general ethical principles” six familiar areas of concern: children’s well-being and health, access to assisted reproductive technologies (ARTs), women’s well-being and health, informed consent, limits to commercialization, and priority of therapeutic over enhancement uses of ARTs. They then translate “these general principles . . . into specific rules to guide regulators.” One set of rules would deal with activities to be banned outright (reproductive cloning, creation of chimeras and hybrids, germline modification, mixtures other than gametes from a man and a woman, and patenting of human embryos). A second set would address targets of regulation, such as research cloning, preimplantation genetic diagnosis, embryo research, and commercialization of certain elements of human reproduction.

This setup allows them to flex their policy muscles. The bulk of their effort is directed to describing the current legislative and regulatory framework at the federal, state, and professional level; the experience in the United Kingdom and Canada; the pros and cons of doing nothing (Monsanto and genetically modified foods provide a case study here); incremental adjustments in the existing regulatory framework; and creating a new regulatory institution.

Their main contribution is the design of a regulatory institution that will offset political deadlock, retain scientific and medical expertise, and be responsive to the public. Their idea of an independent commission with a permanent advisory board and novel methods of public consultation through Internet surveys and interactions is a policy maven’s delight. It builds on their knowledge of bureaucratic cultures, the experience with the Human Fertilisation and Embryology Authority in the United Kingdom (now slated to become the Regulatory Authority for Tissues and Embryos), and James Fishkin’s innovative methods of iterative public consultation. Fukuyama and Furger are synthetic masters—in the good sense of “synthetic”—cutting a broad swath through many levels of history, law, and policy, but in the end, their scheme
is too synthetic in the bad sense—a wonkster’s fabrication with little connection to the reality of human reproduction and the real problems there.

To begin with, their “general ethical principles” are not principles but outcomes that more general but unarticulated principles would produce. One suspects that those underlying principles are simply the harm principle—equal respect for liberty until its use harms another. Some of the policy outcomes they want are obvious, but others need much more support than they give. All can agree that informed consent is essential, that reproductive techniques should be safe for women and offspring, and that the therapeutic should take priority over nonmedical enhancements. Most can even agree that we not sell embryos as such. Other things will be more controversial, such as whether we pay those who donate eggs for research or infertility for their time, effort, and burdens. Nor will there be unanimity that mandatory coverage of ARTs for infertile couples is a high priority, given their costs and competing health care concerns.

In fact, the burr under their saddle is not ART per se, but futuristic issues that are still in the womb of time. Other than mandatory access for all to ARTs, they have very little to say about how ART should be conducted. Indeed, the President’s Council on Bioethics, of which Fukuyama was a member, examined the ART field for over a year and found that the main problems were on the margins, not at the core. It, too, backed muddling through, rejecting an earlier version of Fukuyama’s plan and opting instead to tinker with ways to get more data and have professional self-regulation be more effective.

The futuristic techniques that really concern them are not pressing reproductive problems and may never be. The targets are things like creating children from more than two sets of gametes, or creating offspring from clones, from human-animal hybrids, or from aborted fetuses. They also inveigh fervently against germline gene alteration (ignoring the growing literature that argues that some therapeutic germline interventions might be best for women and offspring). And, of course, they decry the “commercialization of elements of human reproduction,” although they never get specific enough about it to be informative (they would allow “some” commercialization with regulation). Such issues lead them far from mainstream infertility practice and the nodes of problems that arise there, such as whether children born from gamete donation should be so informed and given a chance later to meet their genetic parents.

Thus, the regulatory structure Fukuyama and Furger propose is clever but disembodied. Much more discussion is needed of the many here-and-now issues raised by assisted reproduction and genetics. But no one should fear that discussion will not be as robust as it has been to date, nor, if the need be shown, that more focused public or professional policies could not be adopted at a later time.

**Any Better Option?**

_Here is a simple test. Think of how we will go about resolving current issues of concern, and ask whether a new federal agency or national commission will do a better job at acceptable cost. Take embryonic stem cell research. The debate has been full and free, and a consensus of sorts for how to go about using embryonic stem cells (roughly mirroring the National Academy of Sciences guidelines) is in place, though tweaking and adjustment are needed. Once we get past the embryo status and federal funding issues, the biggest issue is payment of donors to get eggs—a problem that is stymieing researchers at several programs. I think the arguments are overwhelmingly in favor of paying donors, just as we do those who donate to infertility patients, but many are convinced otherwise. The result is that the moral problem has no clear solution, though there are pragmatic responses to narrower issues, such as how to structure compensation beyond out-of-pocket expenses. A national advisory commission could revisit those arguments, but it would be no more likely to hit on a solution that will satisfy everyone than the current kind of debate._

_Nor would such a body add particular value to the debate over creating embryos solely for research. The ethical arguments against it are purely symbolic—after all, embryos are at the same stage of development, whether they are left over from IVF or created solely for research. The idea of creating embryos for a purpose rubs some sensibilities raw, and we are back in the endless loop between rational production of needed tissue for research and treatment and more value-oriented concerns about the “meaning” of creating life only to destroy it. Again, I side with the rationalists, although I also recognize the utility of drawing symbolic lines. I doubt a new federal_
Tied Up in Nots over Genetic Parentage

BY JOSEPHINE JOHNSTON

Although Fukuyama and Furger are not the first to suggest that the interests of children should be among the most pressing concerns attending assisted reproduction, their decision to stress children’s well-being and health is still noteworthy and commendable. In a business motivated strongly by the interests of would-be parents, they do well to remind us that the intended results of assisted reproduction are future persons who must live intimately with the decisions of their parents, fertility services providers, and any egg, sperm, embryo, or other donors involved in their creation.

What I find strange about their proposal for regulating reprogenetics, however, is one of the prohibitions that they suggest is key to safeguarding children’s interests.

Fukuyama and Furger do not set out very many substantive recommendations as to what should be prohibited, permitted, or regulated. They focus instead on detailing the regulatory mechanism itself. Nevertheless, they identify general ethical principles that the regulatory system should promote and a few targets for prohibition and regulation that follow from these ethical principles. In addition to banning reproductive cloning, the creation of human-animal chimeras for reproductive purposes, germline modification, and the patenting of human embryos, they seek to outlaw the creation of children who are not the genetic offspring of one man and one woman. Anything else—the creation of a child with genetic material from two men, or two women, or one man and two women, and so on—would violate both a “fundamental biological principle” and the moral commitment to protecting the health and well-being of children.

“I Heather Has Two Mommies”

In the early days of assisted reproduction, the use of donor sperm prompted questions about parentage: who is the “father”—the sperm donor or the man who will help raise the child? Indeed, until the law clarified that the man who intends to raise the child is the legal father, some fertility clinics would mix the sperm of a few donors together so that no one could know which donor had fathered the child.

Similar questions were raised by egg and embryo donation and surrogate gestation: who is the “real mother”—the egg donor, the woman who gestates the child, or the woman who intends to raise the child? While not always as easy to solve as parentage questions in the sperm donation context, we have generally come to recognize the intended parents as the legal and social parents of any child born from donated gametes or embryos, and the donors are understood simply as donors, or as “genetic parents” or “biological parents” or—in the case of a gestational surrogate—as the “gestating mother.” These terms are still somewhat problematic and contested—in part because we usually give so much responsibility to anybody identified as a parent—but it is fair to say that the legal system, the fertility industry, and much of society now recognize the social parents as the legitimate parents and release the donors and surrogates from any parental rights and responsibilities.

Now, Fukuyama and Furger warn, “There are a number of technologies emerging that will make possible the creation of children who are not the offspring of one man and one woman, as every human child has been up to now in the history of our species.” The problem for Fukuyama and Furger is apparently not that these technologies introduce the need for a distinction between biological or genetic parents on the one hand and legal or social parents on the other. The problem is that the child will have been created by combining genetic material from persons other than one man and one woman.

An example of such a technology that is already in use is ooplasm transfer, a technique employed to circumvent problems in some women’s eggs that involves replacing the nucleus of a donor’s egg with the nucleus of another woman’s egg (usually the intended mother’s). The egg is then fertilized with sperm (usually from the intended father) and the embryo is transferred for gestation. Any child born will have received genetic material from three people: the man whose sperm fertil-