

Regulation or Free Markets?

By **Jeff Stryker** | November 7th, 2007

Assisted reproduction was born in shame and secrecy. In 1884, Philadelphia physician William Pancoast performed an experiment on a female patient whose husband was infertile. Without asking her or her husband's permission, he inseminated his patient while she was under anesthesia. The semen came from the "most handsome" of his medical students (although it was later speculated to be Dr. Pancoast's own). Eventually, he disclosed his experiment to the husband, but the woman never discovered the real origins of the child she bore.

Only now, more than 100 years later, is third-party reproduction beginning to shake off this aura as policy changes roil the field in Europe and new attitudes begin to lap up on American shores. In the United States, the U.S. Food and Drug Administration requires that donors be tested for diseases such as HIV and hepatitis while their sperm are frozen and quarantined, only to be released six months later when certified disease free. But today's "sperm banks" are under no obligation to report numbers of births, place any limits on births to individual donors, track the health of donors, or make information available to children born of donor insemination.

This poses some serious scientific, medical, and ethical questions. Should individual men be able to procreate perhaps hundreds of children anonymously? Over the long haul, what does this mean for human genetic diversity? What about genetic diseases? And should children "fathered" via sperm banks be allowed to know who their father is? These are questions that are only now being asked—despite the long history of "artificial insemination," as it was once quaintly called—not just in the United States but also abroad. The answers, as we shall see, are as controversial as the questions.

How We Got Where We Are Today

Dr. Pancoast's tactic—artificial insemination using another man's sperm—was for decades the only way to redress male infertility. Doctors most often donated sperm surreptitiously in this manner, but the practice really took off after World War II when soldiers returning with war wounds and sexually transmitted diseases faced infertility.

In the 1950s came the advent of technologies to freeze and store sperm. Still, the sperm was most often secured from impecunious medical students who were paid modest sums to masturbate for posterity. Banked sperm was chosen to match the physical characteristics of the infertile husband, and the sperm of the husband and the donor was sometimes mixed to

give the husband plausible deniability. Doctors told patients to lie to their offspring about how they came into the world.

Beginning in the 1960s, individual states began updating laws to recognize that, at least where a doctor or clinic was involved, the third-party sperm donor was not a father in any legal sense. Under such schemes, donors would not have any visitation rights or say in the rearing of their children, nor would they be responsible for any financial contributions. In the early decades of sperm banking, these arrangements were seldom called into question, not surprisingly, given how few donor offspring were told the truth about their conception.

Today, approximately two dozen commercial sperm banks operate in the United States. An untold number are also associated with university fertility clinics, banking sperm for pre-vasectomy and pre-chemotherapy and radiation treatment patients—no one keeps track of how many. Nor can it be said with any certainty how many children are born each year as a result of donor insemination, although the most frequently cited guesstimates range between 30,000 to 50,000.

Lesbian couples and women who are single by choice now comprise, by some rough estimates, two-thirds of sperm banking's clients. The cost: between \$255 to \$315 for a vial of regular, unwashed sperm that is implanted through intracervical insemination at home; or slightly more costly for sperm that is washed, which means it was prepared for intrauterine insemination by a health care professional and comes with more information about the donor or the promise of donor identity release.

But shipping and storage fees also add up. "A typical bill for conception, which takes roughly six once-a-month inseminations, using IUI, identity-release sperm with a photo match, is between \$2,345 and \$2,945," writes Lisa-Jean Moore, medical sociologist and gender studies scholar in her *Sperm Counts: Overcome by Man's Most Precious Fluid* (2007).

And who are the sperm donors? Some are young men depositing sperm in anticipation of their own future infertility, including those about to go off to war. But the vast majority of donors—or perhaps more accurately, sperm vendors—are men who sell their semen for \$40 to \$60 per "donation." No longer are donors almost exclusively medical men, though doctor semen remains in great demand. Education is still a highly sought-after attribute, with sperm banks seeking donors through advertisements in college newspapers.

If sperm donor is a misleading tag, sperm banking is not, at least insofar as it suggests a profit-seeking commercial enterprise. Market forces shape how the supply of sperm meets the demand. In the early days of sperm banking, race, hair color, and eye color were typically the only traits revealed. Nowadays, buyers still seek sperm of certain ethnicity and physical characteristics; taller men are the rule, no shorties need apply.

But it doesn't stop there. Some banks offer "premium" sperm, which they maintain comes from donors with doctorates or other graduate degrees. This service is reminiscent of Robert Graham's notorious "Repository for Germinal Choice," the California sperm bank that claimed to offer sperm from "geniuses," including that of a handful of Nobel Prize winners. Graham's bank operated from 1980 to 1999, creating more than 200 children amid considerable controversy about its explicit eugenic goals and the expectations heaped upon

the superbabies, as *Slate* deputy editor David Plotz recounts in his book, *The Genius Factory: The Curious History of the Nobel Prize Sperm Bank* (2005).

Today women shop from catalogues of donors in a process that has been called “yuppie genetics.” The banks provide potential buyers with “short form” questionnaires about the desired mix of genetic attributes in the sperm they are purchasing, often supplemented by a “long form” set of answers about the health history of parents and grandparents, interests and education of the sperm donor. Banks claim that questions about health histories are exhaustive, but college-age donors don’t always know all the relevant information about family history and the temptation is great to lie or omit information that might screen them out, in a version of resume fraud.

Increasingly, banks offer pictures of the men as children (and possibly adults) along with audio and even videotaped interviews and poignant and/or cloying “mission statements” about why they’ve chosen to become donors. Here’s one such site, which boasts the tagline [Creating Families Through Innovation](#).

Although sperm banking is now a vital part of this new frontier of baby making, the industry remains largely unregulated in the United States. In other countries, fundamental changes are being wrought in sperm banking practices. Canada and Britain now ban payment to sperm donors. Britain, Sweden, Austria, the Netherlands, and parts of Australia no longer permit anonymous donation, insisting that donors be available to be contacted by their children when the offspring reach adulthood. Some of these countries are establishing registries to help make this possible. These restrictions were put in place despite concerns they could dry up the pool of willing donors.

Do U.S. Sperm Banks Need More Regulation?

Occasional sperm bank scandals have brought episodic attention to the state-wide industry, if not much reform. When Cecil Jacobson, the renowned physician and infertility specialist, was discovered in the early 1980s to have inseminated as many as 75 women coming to his Virginia clinic with his own sperm (unbeknownst to them), prosecutors weren’t sure he had committed any crime. He was eventually convicted of 52 counts of mail fraud, wire fraud, and perjury and served time in federal prison, losing his medical license.

Such occasional scandals are outliers, say the bankers, not cause for further regulation. “More regulation of sperm banking is a solution in search of a problem,” says Sean Tipton, a Washington, D.C.-based spokesperson for the [American Society of Reproductive Medicine](#), which is headquartered in Birmingham, Alabama. “The danger with more regulation, like more genetic testing or changing the rules about anonymity, is that you give up important autonomy and privacy at great economic expense. It is not clear what you gain.”

Wendy Kramer, a Colorado single mother and founder of the Internet-based [Donor Sibling Registry](#), doesn’t agree. She is perhaps sperm banking’s most vocal and visible critic. “Sure, there is some regulation at the front door, screening the men who come in,” she concedes. “But what about afterwards, when the births occur? No one in the industry cares by then.”

Kramer was inspired by her son to found the Donor Sibling Registry as a Yahoo users’ group

chat room seven years ago. Her son Ryan, now a handsome 17-year-old in his fourth year of college studying aeronautical engineering at the University of Colorado at Boulder, was eager to find any half-siblings. In fact, Ryan's curiosity was even more precocious. At age two she recalls him asking, "Is my Dad dead, or what?"

Wendy Kramer conceived her son Ryan with sperm from a local bank in Colorado. "The lady at the bank just suggested a sample from someone who looked like my husband." (She's now divorced.) "I suppose I got the 'high octane,'" she joked, proudly sharing stories about her bright young son's college career.

DSR has grown from a chat room into a thriving website. At last count, the registry had more than 9,000 registered members, including parents of donor-inseminated children, some children themselves and donors who post their donor numbers and profiles to facilitate matches with families of their offspring. More than 3,800 matches have been made with half siblings or donor fathers.

After six and a half years of searching, Ryan Kramer found a half sister and was match number 2,910. "This little 13-year-old girl was just beside herself to have an older brother," says Ms. Kramer. "I don't try to define their relationship. They're teenagers. They 'IM' [instant message] each other," says Ms. Kramer.

The sperm-banking industry tends to dismiss the yearning to find genetic heritage and the worrying stories from DSR match ups as "anecdotal." Says ASRM spokesperson Sean Tipton: "I don't draw any conclusions from the Donor Sibling Registry. I don't know if there is any counterpart organization for happy children of sperm donors."

But even if data is not the plural of anecdotes, some of the anecdotes are enough to give one pause. Medical concerns in particular are a frequent topic of discussion when families get together on the Donor Sibling Registry. As will be detailed further below, one set of families discovered that five different children born of the same donor were all autistic. Other parents of donor children suffering from genetic diseases have found half siblings sharing the same illness.

Yet sperm banks have frequently refused to contact other potentially affected children, track down the donor, or even pull the sperm from the shelf. Most of these discoveries have come from Internet-abetted detective work, but some are even more serendipitous.

Case in point is Laurence A. Boxer, a University of Michigan pediatric hematologist and an expert on severe congenital neutropenia, a disease of white blood cells affecting only one in 5 million children. Yet Dr. Boxer had four families show up in his office with children suffering from the disease. As Dr. Boxer and his colleagues reported in the *Journal of Pediatrics* last year, the culprit is almost certainly a sperm donor the children shared, donor #827 from [International Cryogenics](#) in Birmingham, Mich. The donor has moved and the sperm bank cannot locate him. The bank had supplied the donor's sample to a university laboratory for testing, but the lab would not complete the tests because it could not secure the consent of the donor.

Such cautionary tales have inspired some Internet-age consumer activists. Kirk M. Maxey is

a physician who was a paid sperm donor while working in Kalamazoo, Mich. and attending medical school in nearby Ann Arbor. He stopped donating after a worker at the sperm bank where he made his deposits claimed she had purloined his sperm to impregnate herself.

While still in medical school, Maxey had founded a company to produce biochemicals and assays for use in biomedical research. Three years ago, Dr. Maxey added a non-profit arm known as the [Cayman Biomedical Research Institute](#). It operates the Donor Semen Archive. Says Maxey of his efforts:

“I come from a background of extreme mistrust of the banks. I don’t think they tell the truth. I don’t think they are careful because they have no real accountability. They hide all their records and no one can catch them unless they blunder over their own mistakes.”

Maxey’s Donor Semen Archive stores donor-related DNA samples retrieved from the vials and syringes used in insemination and from the children themselves, logging genetic sequences to make it easier when questions come up about genetic health and identity. “The Donor Semen Archive is just a molecular version of the Donor Sibling Registry,” explains Dr. Maxey. “If a bunch of Moms think their donor was ‘Donor No. 65,’ for example, we can tell whether it was really the same guy.” The Donor Semen Archive is poised to join forces and offer its services through the Donor Sibling Registry.

Concern about unwitting transmission of genetic disorders from sperm donors to many more children than would be possible in conventional families is one factor driving calls for more disclosure, traceability, and limits on the numbers of children born to a particular donor. Consider Ben, a 29-year-old practicing lawyer who masturbated his way through a Washington, D.C.,-area law school, earning about \$30,000 to help pay for tuition.

Ben asked that we not publish his last name because he’s not ready for the whole world, including his professional colleagues, to know about his donor career. He explains that he saw the anguish two cousins endured trying to get pregnant, struggling through many expensive cycles of in vitro fertilization. He figured his sperm donations could help people experience the joy of parenthood, while helping to finance law school.

“It wasn’t exactly hard work,” Ben quipped in a recent phone interview. Yet as a frequent depositor at his local sperm bank, he may have spread more joy than he reckoned.

Ben, explains Wendy Kramer, is one of her “brave donors,” who posted his story with his donor number on the Donor Sibling Registry and permits contact from families who have purchased his sperm. Ben now uses an Excel spreadsheet to manage relationships with the families of his 28—count ‘em, 28—donor offspring.

“It is just easier not to mix them up that way,” he says. Ben is only a few years out of law school. His dozens of kids are still of pre-school age. Most of the contact from parents involves email questions about his health status and genetic history.

But Ben is not the bravest donor on Wendy and Ryan Kramer’s site. “I think our record is 64,” says Ms. Kramer of the number of offspring discovered by a donor registered with the

Donor Sibling Registry. “We have other donors with children numbering in the 20s, 30s or 40s, says Kramer. “Some pull back after hearing about a few children, they just can’t take it emotionally.”

Other donors, however, are “lurkers,” she says, who visit the site to read the discussion threads but do not officially register, not sure whether they want to commit to being contacted. Official members pay DSR a \$40 fee to be able to post information such as donor numbers or sperm bank and donor characteristics data to facilitate matching up with relatives. See how to use the site at www.donorsiblingregistry.com/howDoI.php

What To Do?

When told about Britain’s recent limit on donors to creating 10 families, Ben wasn’t sure about importing such restrictions to the United States. “Why not nine or 11,” he asked. “Any limit would have to be incredibly arbitrary.” Moreover, Ben is not sure that mandating donor identity release is warranted—even after opening up to contact from families who relied on his sperm for one or more of their children.

The question of whether to require identity release—that is, to allow children to contact their donor father when they come of age—is perhaps the hottest topic in sperm banking.

Ellen Singer, a social worker and adoption program specialist with [The Center for Adoption Support and Education](#), Inc., a non-profit organization with three offices in Maryland, says that sperm banking lags far behind the adoption field in terms of regulation and oversight. “There are still professionals who advise parents not to tell their children that they were a result of donor insemination or donor eggs,” she says.

But views are evolving. Singer sees disclosure as a human rights issue. “Kids need to know the truth about their conception,” she argues. “That doesn’t mean the whole world has to know, but the kids should.”

But Singer empathizes with parents who worry about stigma. “The secrecy can be well-meaning and intended to protect the children,” she says. “But children don’t need protection, they need the truth and ways to cope with the challenges that come with it.” The American Society for Reproductive Medicine now advises parents to [disclose to their children](#) the details of their conception, even though it opposes more regulation of the industry.

Some sperm banks have been factoring in those privacy vs. disclosure issues for some time now. The Sperm Bank of California, a non-profit outfit established in Berkeley to cater to a largely lesbian clientèle, has offered identity-release semen for more than 20 years. That means the first children born with the option to contact their donor when they turn 18 are now coming of age—and some are beginning to do so.

U.S. sperm banks are increasingly offering donor identity-release sperm as an option. “It goes faster and costs more,” says Lisa Jean Moore, who teaches at Purchase College, State University of New York. Moore is a former board president of The Sperm Bank of California. She is also the parent of two daughters, one born with sperm supplied by a friend, the other

with sperm purchased from a bank.

But not everyone thinks imposing more regulations is a good idea. Gays and lesbians, as well as single mothers by choice, may have some misgivings about how sperm banking operates, but many are nevertheless wary of opening the door to regulators who may have much more cramped notions of what should constitute a family. A lesbian couple from Colorado who found out on DSR that their daughter has more than two dozen half siblings emailed the author to say:

We would not support government regulation at any level. The government has a history of discrimination against LGBT [lesbian, gay, bisexual and transgendered] families and individuals, and we would not want to open the door to the government prohibiting sales or contributions from LGBT people.

As journalist Liza Mundy writes in her wide-ranging *Everything Conceivable: How Assisted Reproduction is Changing Men, Women and the World* (2007), crafting progressive policies is a challenge in this field. “[I]n this area of reproductive science, ‘progressive’ is a hard concept to pin down.” Indeed, almost everyone connected in any way to the field of assisted reproduction gives lip service to the “best interests of the children,” even though sperm banks are set up to meet the needs of doctors, patients and parents.

But, in practice, children’s best interests can be notoriously difficult to pin down. Who knows what is in the best interest of children born to sperm donors? Clinicians? Regulators? Parents? What about the children themselves?

Deborah Spar, a professor at the Harvard Business School, has examined sperm banking as part of a larger look at the reproductive marketplace, including the practices of buying and selling sperm and eggs, renting wombs, and brokering adoptions. Spar, the author of *The Baby Business: How Money, Science, and Politics Drive the Commerce of Conception* (2006), says she attributes the lack of political interest in regulating sperm banks to the relatively small size of the industry, politicians’ reluctance to enter the fray of reproductive decision making, and a general squeamishness about semen.

“No one likes saying the word sperm,” she explains. “Plus, the egg extraction process is surgical, but the sperm extraction process is sexual.”

Still, Spar believes such squeamishness will give way to calls for more regulation, and does not buy the argument that “as soon as you let the government in they’ll be saying that only heterosexuals can have children.” She says “there are lots and lots of places to stop along the spectrum between no government regulation and the government telling me when I should have my child and what I should name him.”

Besides, a new vocal constituency for reform is about to come of age. “It is going to be the sperm babies who are going to push for donor identification and recordkeeping,” Spar predicts. “That is what is going to spur a political debate and wake people up to the medical issues involved.”

She may be on to something. As Wendy Kramer explained, “My son Ryan is 17 and he is the

tip of the iceberg. Ryan can't even be on the Board of Directors of the Donor Sibling Registry, even though he helped found it and he's in his fourth year of college. At least until he turns 18, that is."

Ryan Kramer turns 18 next spring. Watch out.

Jeff Stryker is a Connecticut writer specializing in health policy and bioethics.

Here is a list of the books mentioned in the article, with links to their pages on Amazon.com:

Lisa Jean Moore, [*Sperm Counts: Overcome by Man's Most Precious Fluid*](#) (New York: New York University Press, 2007).

Liza Mundy, [*Everything Conceivable: How Assisted Reproduction is Changing Men, Women, and the World*](#) (New York: Alfred A. Knopf, 2007).

David Plotz, [*The Genius Factory: The Curious History of the Nobel Prize Sperm Bank*](#) (New York: Random House, 2005).

Debra L. Spar, [*The Baby Business: How Money, Science, and Politics Drive the Commerce of Conception*](#) (Boston: Harvard Business School Press, 2006).

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