



A commercial sperm freezer tank can hold 20,000 vials of product



FROZEN ASSETS

America is the largest exporter of **sperm**. But what happens when all those kids grow up and decide to go looking for Daddy?

BY JAY NEWTON-SMALL

FOR SHARI ANN, GOOD CANADIAN sperm was hard to find. As a single woman in her late 30s, she wanted to get pregnant and knew she didn't have much time. When she began to hunt for the perfect donor, however, she was frustrated by the selection. In her hometown of Quebec City, she found only a few Jewish candidates—a must for Shari Ann (who asked to go by her first name to protect her family's privacy)—and none of them were suitable. So she called a clinic in Toronto that contacted a sperm bank in Virginia, and there she found her genetic Prince Charming: tall, athletic, smart, handsome and Jewish. She bought five vials of his sperm; her twin boys are now 7 years old.

Prince Charming's real name is Ben Seisler, though Shari Ann might have never known that, since U.S. donors can choose to be anonymous. But one day in 2005, Seisler grew curious about the results of his biological generosity—and well he might have been, because he'd been generous indeed. He plugged his donor number into the Donor Sibling Registry and was put in touch with not only Shari Ann's family but also at least 20 others. Overall, he counts more than 70 offspring in the U.S. and abroad, and given the number of donations he made over the course of three years when he was in his early 20s, he calculates there could be as many as 140.

Now 34 and married, Seisler broke the news of the scope of his procreation to his then fiancée Lauren on a 2011 Style channel documentary about sperm donors. Lauren—no surprise—was livid. And Ben—no surprise—struggled to explain his motivations: “I guess I was dumb. Maybe I'm being dumb now [by giving up anonymity and meeting some of the kids]. I don't know.”

Seisler might have picked a better way to fess up to his future wife, but in any case, a lot of American men will sooner or later be making similar disclosures of their own. Sperm is what financial analysts call a growth sector in the American economy—and it's one of the few in which the U.S. is running a significant trade surplus. From just a handful of vials 10 years ago, American sperm exports have grown into a multi-million-dollar business. The largest sperm bank in the world, California Cryobank, recorded \$23 million in sales last year, and the U.S. industry overall does an estimated \$100 million in business annually. As of

late 2005, ABC News reported that the top four U.S. sperm banks controlled 65% of the global market. The U.S. currently exports sperm to at least 60 countries, including Venezuela, Kenya and Thailand. California Cryobank focuses mostly on the domestic market; only 5% of its business is overseas. But Fairfax Cryobank, the second largest U.S. facility—and the place Shari Ann found Seisler's sperm—says 10% of its sales are exports, and the third largest, Xytex Cryo International, does more than a third of its business abroad. Thus far, sperm banking is a microcosm of a fertility industry that in the U.S. alone has expanded from \$979 million in 1988 to a projected \$4.3 billion in 2013, according to a Marketdata Enterprises study. But sperm—simple, inexpensive and easily exportable—is the iPod of the product line.

America's ejaculatory exceptionalism is not a result of American men's superior virility. Rather, quality control and wide product selection are the keys. The U.S. Food and Drug Administration requires testing for most sexually transmitted diseases, and with HIV, that means 180 days and multiple tests. Sperm banks study a donor's family medical history going back three generations. California Cryobank boasts that it's easier to get into Harvard than to become one of its sperm donors. Also, America has a very diverse population. So if you're a couple in a country like Japan, where third-party insemination is generally frowned on, finding a match in the U.S. is easy.

What's more, even as Seisler and other men reveal their identities to their very extended families, the U.S. still almost always makes anonymity an option—and that's driving overseas customers into American arms. In 2004, after the U.K. passed a law forbidding anonymity, the number of sperm donors plummeted far below what was needed to meet domestic demand. Similar changes in Canada's and Australia's privacy laws literally dried up local donations. Both countries now import more than 90% of their donated sperm. And for overseas shoppers who want to know the identity of the donor, there are plenty of American men like Seisler who happily come forward.

“People use American sperm because you can often know the donor and the regulations are strict,” says Dr. Zeev Shoham, an Israeli fertility professor who runs a website, IVF-Worldwide.com, that tracks 3,300 in vitro fertilization clinics worldwide.

But the sperm boom gives rise to a lot of complicated legal and medical questions.



Could a remote biological heir seek a paternity declaration against a donor father and later make claims against Dad's estate? When a donor settles down and finally has kids he wants to raise, will those children want to meet their scattered tribe of half siblings? What recourse does a family abroad have if they're not happy with the product—say, if the child was born with a genetic illness? Every young industry has its growing pains, but in the sperm game, those problems can be for life.



CONQUERING THE WORLD, ONE BABY AT A TIME

THE FIRST U.S. SPERM BANK WAS LAUNCHED IN THE MID-1960S

There are 675 sperm banks in the U.S.

Donors with higher degrees like Ph.D.s make more money per donation

The U.S. exports sperm to at least 60 countries.

Almost all donated sperm in Australia and Canada comes from the U.S., but American exports also go to the Philippines, Vietnam and Mexico

Many religious countries restrict imports.

In most Muslim countries, a woman must get her husband's consent, barring single mothers and lesbians from access to sperm

Egg banking is a growing industry.

In 2008 the egg market was worth \$37 million

An Expanding Market

ONE THING THAT MAKES SPERM such a profitable commodity is that the customer base is huge. The World Health Organization estimated in 2006 that there were 60 million to 80 million infertile couples worldwide. Thus far, most international sperm business has been for heterosexual couples with fertility challenges, but that is changing as more cultures accept lesbians and single parents—two groups that

Shari Ann's boys have met Seisler twice; he was identified only as a friend

compose by some estimates up to 60% of the U.S. market. When Shari Ann started looking, she couldn't find a clinic that accepted single mothers; now there are dozens in Canada.

While anonymity helps the U.S. tap this market effectively, it's the quality issue that really keeps overseas buyers flocking—with top-shelf product going for top-end prices. Dads are profiled according to height, appearance and educa-

tion level. A man with a Ph.D. can make as much as \$500 per ejaculation. Lower-end donors, who still need at least a college degree and a minimum height of 5 ft. 9 in., can earn about \$60 a pop. Depending on how dense his sperm is and the mobility of his swimmers—critical to surviving the freezing process—a donor can make up to \$60,000 over two years, the maximum amount of time most clinics use a donor.

The Internet has made sperm shopping easier. A woman who logs into the Fairfax site can plug in a picture of her husband—or of Brad Pitt, for that matter—and facial-recognition software will look for the closest possible donor match. Customers can view donors' college transcripts, family medical histories and even photos of existing children and video interviews with the men themselves.

"Prospective parents know more about these donors than I do about my husband's family medical history, and we've been married more than 30 years," says Trina Leonard, a spokeswoman for Fairfax. All customers have to do is pick and pay, and a few days later, a canister of sperm frozen in liquid nitrogen arrives at their doctor's office.

Taming the Frontier

SOPHISTICATED AS ALL THIS SEEMS, WE are still in the Wild West phase of global sperm sales. Lucrative pay has raised questions about sperm profiteering. Seisler donated to two clinics—one in Boston and one in Virginia—to help pay his way through college and law school. One man in Britain who donated for over 30 years has sired more than 1,000 children. Such stories prompted Britain to restrict the number of children a donor can spawn, including his own, to 10. The FDA has no limits on the number of offspring a donor may have, but most banks say they limit men to 25 or 30 children. That said, there's evidence that those guidelines can be loose—just look at how many children Seisler has—and banks have no way of knowing if a donor has visited several facilities. And there's nothing to stop individuals from starting their own endeavors. A 36-year-old California computer programmer has been in the news of late for fathering 15 children by giving out his fresh sperm for free—often inserted with a turkey baster. He claims to be a virgin.

More worrisome, donors could be unwittingly spreading genetic diseases. One

EMMON MAC MAHON FOR TIME

Ice Queens

They save their eggs and thrive at work. Diane Sawyer's secret to resetting the biological clock. By Rebecca Dana

Some Bosses offer dating tips. Diane Sawyer counsels her colleagues on freezing their eggs.

The anchor of ABC's *World News* has long been a sounding board for her famously hard-working staff on a host of personal issues, from dating to the more complex realities of a demanding career. A recurring theme with women: finding time away from the office to meet a partner and have kids before they hit 40. It doesn't always happen, as Sawyer, who first married at age 42, well knows. When it doesn't, Sawyer sends her workers to New York University's Fertility Clinic.

There, Dr. Nicole Noyes, a favorite of East Coast media power women (and a periodic guest on their TV shows), helps her patients get closer to reproductive autonomy. Three quarters come in because they aren't ready to have children yet. Some are sent by their parents: I know you want to work, but I want grandkids someday. Many are furious their doctors didn't tell them about egg freezing sooner. "I want to send Diane a basket of flowers for what she's doing," says one childless 40-something in the media.

Noyes's clinic is one of three national leaders in the practice of vitrification, a relatively new technique for freezing unfertilized eggs. In the last few years, vitrification has yielded higher success rates, of around 40 percent, than traditional freezing methods—thanks to the fact that it does not create ice crystals, which can destroy eggs. And unlike embryo freezing, it allows women to choose the child's father when they're ready to conceive.

The process may be a blessing for the well-compensated women who work for Sawyer. In 2011 around 40 percent of college-educated working women over the age of 40 were childless, says Sylvia Ann Hewlett, an economist who studies gender and workplace issues. For most women, however,

vitrification is still prohibitively expensive. It costs around \$15,000 for a cycle that will lead to the freezing of 10 to 20 eggs. Not surprisingly, the other two premier clinics practicing vitrification have popped up in cosmopolitan areas where upper-class, professional women thrive: Santa Monica Fertility in California and Reproductive Biology Associates in Atlanta.

But as techniques improve, haute fertility will eventually get cheaper. When it does, women who plan in advance should be able to have children reliably in their 40s—that is, as long as they know the option exists. Not everyone, after all, works for Sawyer. As women increasingly take over the workforce, there are going to be a lot more in their 20s and 30s who could probably use some reliable advice about fertility.

"There's so much to know and nowhere that actually explains it," says 43-year-old Brigitte Mueller, whose own fertility struggles led her to make a self-financed documentary, *My Future Baby*, about egg freezing that will air this year on PBS. She is also launching an online "fertility clock" that she hopes will help young women make sure they don't end up, as she did, rushing to freeze eggs at the age of 40. Imagine a day when the process is accessible enough that, as a routine matter, college sophomores with big career dreams freeze their still-healthy eggs, just in case.

Just as birth control helped solve the problem of unwanted pregnancies while contributing to another—fertility issues among older women—so egg freezing carries its own side effects. Among them, in the best case, is a baby. That's where medicine ends and parenting begins. Says Noyes: "People often don't know what they're getting into." **nw**



A STAR IS CONCEIVED

Egg Freezing: Maria Menounos

The 33-year-old *Extra* co-host brought her parents on television last September and told them she was freezing her eggs.



Gestational Carrier: Nicole Kidman

In January 2011, a woman gave birth to the star's second child with husband Keith Urban—genetically theirs, but carried by someone else.

Surrogate: Neil Patrick Harris

The sitcom star and his boyfriend had twins, each with sperm from one father, in October 2010.



IVF: Celine Dion

A donor egg allowed the *Titanic* crooner to give birth to twins in 2010, at the age of 42.

Adoption: Sandra Bullock

America's Sweetheart became a single mother at the age of 45 when she adopted son Louis from New Orleans.



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