

CELL RESPECT

From page 1

"The staff here decided that we would no longer provide the destruction option to our patients," he explains. "Embryos deserve a level of respect above that of simple cellular material. Some good needs to come of their existence."

Some good, or a lot of good.

An entire human history lies in that single blastocyst — the history of an individual. Of one who can love and struggle and carry on. Of one who can take the measure and mystery of the wide world, but now subsists in a fragile collection of cells perched microscopically on the point of a 4-million-year-old evolutionary needle.

With Dr. Sweet's gentle knitting of egg and sperm, that vast history has been woven suddenly into the fabric of existence.

The decision has nothing to do with arguments for or against legalized abortion — he supports a woman's right to choose, he says, but he's never performed an abortion. Instead, it has everything to do with his wonder and reverence for the tiny, biologically ambitious cells that appear under his microscope.

The Repro Business

If the Creator of Life (CL) is anything like Santa Claus, perhaps there's a workshop somewhere with a bunch of miracle-making reproductive endocrinologists who look just like Sweet. He's trim and fit to the point of appearing elfin. Quick in motion and thought. Inventive and articulate. A master of his craft and his science.

But as an endocrinologist, he is not merely an inspired toymaker. In reproductive medicine — especially on the level of this clinic, where the success rate is about 60 percent, compared with 39 percent nationally for practicing endocrinologists — there is a troubling inevitability: Helping a woman become pregnant by fertilizing an egg outside the womb (hers or a donor's), and then implanting it, often means making extra embryos. If one doesn't take, the next one might.

What happens to those potent little engines of life that remain unused?

"Some of those embryos are gorgeous," Sweet notes. "They come from pregnancy cycles with six embryos, say. And maybe the couple got twins. So now their reproductive life is complete." Which leaves four gorgeous embryos, waiting. But for what?

The hundreds of photos affixed to the hallway walls of the clinic attest to a multitude of happy outcomes. Roughly 1,500 children exist who were born in Lee County, or nearby, with Sweet's help. But the wall photos also recall, silently and invisibly, the other embryos, cryopreserved and frozen with potential.

"We make the best embryos I have ever seen," insists Andrew Bhatnagar, the clinical embryologist and scientific lab director who holds a doctorate degree in the field. He's worked in labs and at clinics in Boston, where he completed his post-doctoral work at Harvard Medical School, and in New York and Chicago during a career that has spanned 15 years.

Both he and Sweet echo the notion that destroying any embryos is a complete waste, in part because so many women who can't produce eggs hope for the generosity of a donor.

"Now, only about 5 percent of babies come from in vitro fertilization," Bhatnagar says. "Before long, I'm sure that's going to 20 percent or more."

The notion of donating eggs, or for that matter acting as a surrogate mother for someone else's fertilized egg, is still fraught with technical, cultural and in some cases legal inhibitions, Sweet explains.

Egg donation, itself, requires the woman giving her eggs to be on hand. Soon it won't, and soon the eggs may be preserved over the course of years, like sperm.

"We're going to be freezing human eggs on a regular basis before long," Sweet says. "Now, freezing embryos or sperm is a piece of cake, but eggs contain a lot of water. The real challenge is to freeze them without ice destroying the inner contents of the cells."

Another issue is pay.

"For embryos it's taboo," he explains. "We



FLORIDA WEEKLY PHOTO
Above, Dr. Craig Sweet and his staff at the clinic he opened in Fort Myers in 1991, Specialists in Reproductive Medicine and Surgery, have taken a rather unusual step, at least for reproductive specialists or endocrinologists; they will not destroy unused embryos from their patients. Left, a Blastocyst is thin-walled hollow structure in early embryonic development that contains a cluster of cells called the inner cell mass from which the embryo arises. This one is five days after fertilization.

can legally reimburse (for reasonable expenses and their "kindness") sperm donors, egg donors, and women who adopt out babies, although we can't pay them. But we don't yet reimburse embryo donors. I feel strongly that's the next phase: Number one, what will happen with those embryos? We knock off their destruction. And the next step, after more research, is to strongly consider reimbursing appropriately."

Egg donors, for example — normally women between 18 and 31 — will receive about \$3,000, following a lengthy and somewhat demanding process in which the donor's medical history is closely analyzed.

Surrogate mothers, by Florida law, can be paid living and reasonable medical expenses by the parenting couple during the pregnancy, but no pay above that. Thus parents in the Sunshine State may save thousands of dollars, money that parents in some other states might have to pay a surrogate, in addition to expenses. All of it is intended to help the people who enter the clinic hoping to make babies.

But when they do, or when they stop making babies, they have to decide the fate of what they've left behind: sperm, which can be cryopreserved indefinitely (frozen at minus 196 degrees Celsius, or about 384 degrees F. below zero); or embryos, which can also remain viable for extended periods.

To date, Sweet has followed guidelines set forth by the American Society for Reproductive Medicine: to let parents cryopreserve embryos for their own future use in Sweet's clinic; to let them donate unused embryos to infertile couples or women; to let them donate embryos to research; or to destroy the embryos.

If they chose to destroy them in the past, they were able to save the monthly rental fee of lab conditions and technology that preserves them (about \$100), and to prevent their use or existence anywhere else.

The decisions are difficult and heartfelt, as Sweet's patients suggest, especially those who manage only just barely to become pregnant, leaving no reserves for themselves or anyone else.

Kim Bonadies spent significant amounts of time in and out of the clinic preparing her body to produce eggs. She was elated when her team managed to retrieve seven.

"I thought, 'Great, that would give me some for reserve,'" she recalls. But it wasn't to be. "Of the seven, only three made it. We were disappointed, but more than that, scared that something would happen to those eggs, or that they wouldn't fertilize and we would be left with nothing."

In the end she gave birth to a daughter, but if she wants to have more children, she'd either have to repeat the arduous process — if she could — or hope for a donated embryo or an adoption.

The cost can run into the tens of thousands of dollars, depending on how much medical effort is required to help a woman become pregnant. And as many patients point out, most insurance companies do not yet cover this treatment (some do, and some patients change their lives significantly just to obtain such insurance, they say).

The Evolution of Dr. Sweet

On any given morning in Dr. Sweet's comfortable waiting room off College Boulevard, women and men who have likely seen their

20s and even their 30s come and go, wait calmly. So do those patients who may have reproductive issues not associated with age, such as apparent infertility, or perhaps a history of diseases that come with often sterilizing treatments, such as breast cancer or Hodgkin's disease, for example.

Sweet has devoted a career to helping them make babies with the materials and technologies at hand, which are sometimes meager. But not nearly as meager as they were when he started in 1991, only 13 years after the first in vitro fertilization, exactly three decades ago.

"The two biggest jumps from a techno-perspective have been our ability to cause overwhelming fertility through direct injection of a single sperm through a single egg — by skewering the egg with that single sperm. It works beautifully.

"The other thing is fairly dramatic. We can take a single cell from an embryo at about day three — there are seven or eight cells then — and we remove it and send it to a lab for genetic analysis. This enables us to stop some diseases in their tracks, such as down syndrome, cystic fibrosis or some cancers, and at least not pass them on from generation to generation. It's a Godsend."

And all of it — the pursuit of such Godsend, if you will — began for Sweet during his medical school training on an exchange program to the Middle East, he says. (A Northwestern undergraduate, Sweet attended medical school at Southern Illinois University, where he did an internship and residency in obstetrics and gynecology, followed by a fellowship in reproductive endocrinology at the Medical School of Georgia.)

He remembers the day well.

"I had studied it for so many years, but it was always just a picture, a concept. So it was a remarkable day (in 1985) when I actually got to see a human embryo, to hold the culture dish. It was sort of like studying the atom, and finally seeing it. It brought it all home."

And at home, in Fort Myers finally, he began the long effort to give the human embryo its due.

"We've now have this donation program working beautifully and we've accepted donations (of embryos) from across the country," explains Sweet.

But it was the constant rubbing up against greater need and desire for eggs and embryos, Sweet suggests, that led him, with his staff, finally to forgo any participation in the mere destruction of human embryos.

"I'd say our practice is now entirely an embryo advocate," he says. "And I've been an advocate of stem cell research, so if patients don't want to preserve them for their own future use or donate embryos, we recommend sending them to Harvard Medical School, for their stem cell program."

It's always the patient's choice, not Sweet's, he points out. But left to choose, he opts first for donation to women hoping to become mothers, because the need is so pervasive.

"So many people are looking for babies through adoption or donation, but some patients cannot adopt. If you're a 32-year-old breast cancer survivor, sterilized from your treatment, you may not be able to afford egg donations, and you cannot adopt because of your medical history. So you're looking at embryo donation.

"We looked at this whole situation, and thought, 'We don't have to offer this (embryo destruction).' The only way I'm going to change behavior is by changing the options. That's the first step — take it out of the options."

There are, of course, critics, "especially in this fairly conservative community," Sweet says. "But the community has really opened up, too.

"I have to be fairly aware of the religious views of the major religions regarding reproduction, and at least be sensitive to them. I'd say that Judaism is accepting, but Islam is not, and the Catholic Church in and of itself, is not."

Religious advocates aren't the only critics, either. "Any country that still has kings and queens, where inheritance is important, then egg donation is often outlawed," Sweet notes.

Which may be too bad for them, in his view.

He's smiling when he says, "In this country, we don't have kings and queens."

Only treasured embryos. ■