

DAVID BATTAGLIA

A sea urchin's loss is a Portland couple's gain, and a researcher's too.

It's the largest cell in the body and, until recently, the one with the most attitude. We're talking, of course, about the egg cell, that harbinger of life *in potentio* which has long been the nemesis of reproductive researchers, who've had precious little success adapting it to their ends. Freezing unfertilized eggs, for instance, has proved impossible, meaning that Oregon women undergoing radiation therapy, say, haven't been able to preserve their future ability to have children the way men have (sperm is notoriously freeze-hardy).

But all that may have changed on March 28, 2002, the day Forest Grove resident Jennifer Pearson was scheduled to have a routine egg retrieval for *in vitro* fertilization. March 27 is also a historic date, for it's then that her husband Brian suffered a ruptured appendix, a condition making one-half of the *in vitro* process—sperm retrieval—impossible. ("It was what you call medically contraindicated," laughed OHSU's Dr. Battaglia.)

Twenty of Jennifer's eggs had already been harvested, 20 temperamental, fragile cells that would live just 12 hours if left unfertilized. Battaglia quickly consulted with fellow fertility specialist Dr. Phillip Patton, knowing that freezing the mother's eggs was the Pearsons' only hope.

"In sitting down with Jennifer, I go, 'Look, I've never done this clinically. I don't know how it's going to work, but I don't think you have any other option.'"

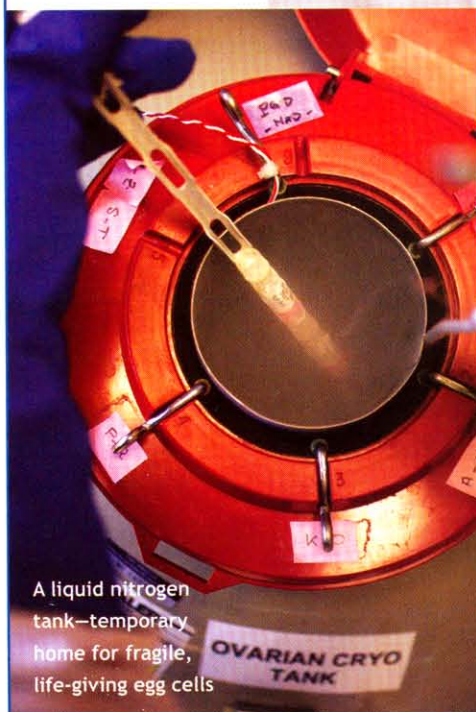
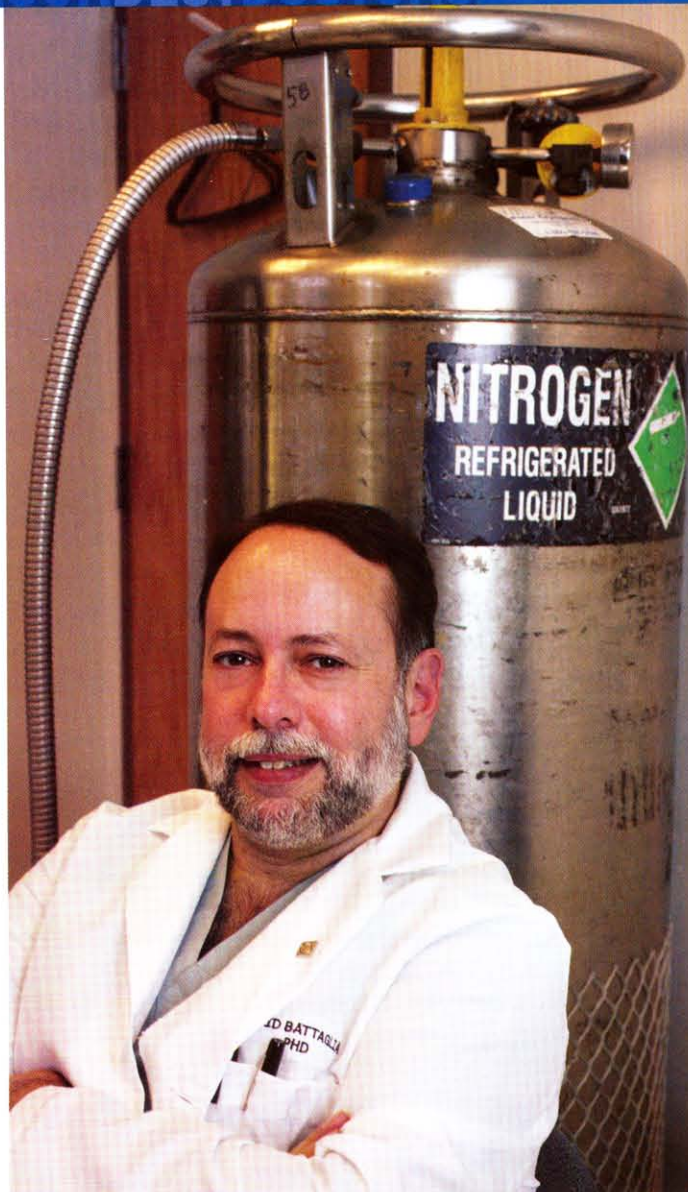
There was one hopeful sign in these angst-ridden hours: the work of Italian researchers, who had had much recent success freezing and thawing unfertilized eggs. Battaglia was familiar with their technique, which involved plunging the eggs into liquid nitrogen, and had even successfully duplicated the Italians' success in the lab.

But this was real life. "It's a very emotional thing to do IVF anyway, so this additional complication was devastating for the family." Battaglia was cautiously optimistic, but didn't want to offer the Pearsons

false hope.

Three months later the eggs were thawed. Some hadn't survived, but others showed a resilience that belied their mercurial reputation. Battaglia held his breath, injecting them with sperm and transferring a pair to the mother's uterus.

One was never heard from again. The other became Adrian Alexander Pearson, born in March of last year, almost exactly a year after his dad's appendicitis had sent Battaglia scrambling. The 9-pound, 2-ounce, red-haired phenom was the first West Coast baby in history to owe his existence to a frozen



A liquid nitrogen tank—temporary home for fragile, life-giving egg cells

egg, and it's a toss-up as to whether the Pearsons or Battaglia was more excited.

"It was one of those things," said Battaglia, his voice trailing off into the ether. "You sit down at your desk and you go, 'You know, I love coming to work every day.' It doesn't get any better than that."

Especially for fertilization biologists, an inscrutable breed whose jollies typically come courtesy the mating habits of sea urchins. Thanks to legislation pushed through by Senator Ron Wyden in 1992, however, IVF labs are now overseen by PhD scientists, which has given families like the Pearsons access to the latest reproductive advances, and David Battaglia a new career path.

"It was like, well, I could keep on working with my sea urchins, or I could try a radically new tack. So I did the new tack. It's been the best decision I ever made." ■