

Groundbreaking stem cell facility located in Chardon

By Elizabeth Yuko

Everyday, lives of people throughout the United States are being saved in Chardon. What sets these lives apart from those saved in hospitals and by law enforcement is that this lifesaving will occur in the future. Geauga County is home to the national headquarters of Stembanc, a newborn stem cell preservation center. It is the fastest growing company in the industry and the only one of its type in the area.

Under the direction of its president and chief executive officer, Archibald (Archie) Grabinski, the company's slogan, as well as its mentality, is "Dedicated to the Preservation of Life."

Although stem cell research has become a highly contested and controversial religious, political and ethical issue, Stembanc's procedures eliminate ethical concerns because they only store stem cells present in the umbilical blood of newborns. In other words, the aspect of stem cell research that makes it controversial the creation and destruction of embryos does not have any part in Stembanc's method.

"The stem cells that we save are potentially lifesaving without getting into ethical issues," Grabinski said. "Umbilical blood stem cells are unique because unlike embryo cells, they are already used for lifesaving uses. They also already demonstrated the ability to differentiate in a controlled manner into heart and brain tissue."

In addition, embryonic cells have caused cancerous types of growths in its recipients, he added.

"These are the very best stem cells available from any source," Grabinski explained. "In order for parents to benefit from this, they need to first make the decision to save the stem cells prior to the birth of the unborn child."

The process begins in the obstetrician's office, where a doctor makes Stembanc's literature available to the expecting parents. From there, the parents can call the company for more information on the process. If the parents decide to save their child's stem cells, Stembanc forwards to them a kit that their obstetrician can use to collect the blood from the umbilical cord after the child is born and has emerged completely from the mother's body.

This is the only point in a person's life when cells exactly like these will be available, Grabinski said.

Once the blood is obtained, another person present at the birth, usually the father, calls Stembanc, which then dispatches a courier to the hospital anywhere in the United States, 24 hours a day, seven days a week. The umbilical blood is expedited to the headquarters in Chardon, where it is processed and preserved in a "highly secure, state-of-the-art FDA-registered facility," Grabinski explained.

The blood is stored cryogenically at the temperature of negative 193 degrees Celsius and separated into five vials. Once the blood is stored, it is good forever, he said.

These stem cells are a 100 percent perfect match for the child and can be used at any point in the future for current medical technology in immune system reconstruction or in medical innovations that are not currently in use, Grabinski said.

The child's stem cells may also be the best match available for his or her parents or siblings, he added.

There is a one in three chance that people will have some form of cancer in their lifetime, he said, and following the cancer treatment, the person may need his or her immune system rebuilt.

That's where the stem cells come into the picture. Rejection the number one failure of stem cell transplants and the number one cause of death is eliminated because the child's cells are his or her own, Grabinski said.

"Since very few people currently save newborn stem cells, most people get bone marrow transplants," he said.

Bone marrow contains adult stem cells, which do not possess the same plasticity for developing into different tissues of the body as umbilical blood stem cells. In addition, umbilical blood stem cells are 10 times more concentrated than adult bone marrow, as well as being relatively free of aging factors, such as DNA replication errors, Grabinski explained.

At some point in the child's lifespan, stem cells may be able to be used for the development of nearly every type of tissue in the body and perhaps, someday, even organs, Grabinski said.

He said that this technology is analogous to the way skin is regenerated for burn victims and is 100 percent ethical.

According to Grabinski, only 2 percent to 3 percent of the U.S. population currently takes part in umbilical stem cell preservation. Many obstetricians still are not aware of the use of umbilical blood stem cells, he said. As such, one of Stembanc's primary objectives is to inform both doctors and parents about the potentially lifesaving benefits.

Stembanc has approximately 70 employees and is working with more than 1,000 obstetricians throughout the country, with the numbers increasing on a daily basis. Their clientele comes from throughout the U.S., including Alaska and Hawaii.

Grabinski said that he chose to locate Stembanc in Chardon because it is a “beautiful area” and he needed to attract people from around the country. “Cleveland really is one of the leaders in the country, with the new Center for Stem Cell and Regenerative Medicine,” Grabinski said. “What we both do is complementary. They add to the reasons people want our services.”

Grabinski said that it is a comfort to families knowing they can come to the Northeast Ohio area for both their child's stem cells as well as Cleveland's world-renowned medical facilities.

“The Greater Cleveland/Northeastern Ohio area is becoming a real leader. We like that because it works toward a business we see as the future,” Stembanc Executive Vice President and CFO Edward Cup said.

“Locating in Chardon gave us the proximity to Cleveland, as well as the ability to grow and be in a nice semi-rural area.”

Stembanc differs from other corporations of its type because it “has rights to the patented technologies needed for technical and legal integrity,” Cup said.

This is a unique advantage, Grabinski explained, because Stembanc's competitors do not have the rights to the patented technologies.

The full comprehensive service, including the kit, the collection, the expedited courier service, processing, testing and the first year of storage is \$1,395 and \$95 each subsequent year.

This price is significantly lower than Stembanc's competitors, which charge between \$1,700-1,800 for the same type of service.