

the future in your hands



imagine



hopes & dreams

the future in your hands

The promise of hope

Carrie and Wilf's story...

Quinn weighed in at a healthy 4397g at birth. His parents, Carrie and Wilf, had decided to store the umbilical cord blood with the Canadian Cord Blood bioRepository (CCBR) prior to his birth. The doctors collected a very good sample and it was successfully processed and saved in liquid nitrogen at the CCBR.

As Quinn grew, Carrie and Wilf became concerned about his motor skill development. He was diagnosed with spastic diplegia, a form of cerebral palsy, and doctors began to monitor his motor skill progress.

Carrie and Wilf kept hoping that Quinn would catch up in his development as he matured. Searching for a solution to improve his chances of growing up with normal motor skills, they came across a study underway at Duke University in Durham, North Carolina, USA.

In the study, children with cerebral palsy were being given their own cord blood stem cells to help repair the brain injury that had caused their cerebral palsy. Only children with stored cord blood were able to participate.

A light of hope shone brightly for Carrie and Wilf as they realized the tremendous potential of their son's cord blood stem cells in storage at the CCBR. At the age of two, Quinn was enrolled in the study and received an infusion at the pediatric transplant program at Duke University. There were no complications and no need for follow up treatment with powerful drugs; Quinn could go straight home.

With their baby back at home, Carrie and Wilf were grateful for the opportunity to have tried a leading edge treatment. Through their contribution to the study, children with cerebral palsy would have hope for a future cure using their own cord blood stem cells. Carrie and Wilf prepared for life's unknowns by taking early, positive steps and making choices that paid dividends worth more than any material gain in life.



possibilities

How can I ensure the future health of my child?

Imagine a world where each person had their own source of stem cells ready and waiting to be used in advanced medical treatments. Just imagine the future with this resource in your hands.

Families can choose to bank their newborn's umbilical cord blood as an investment for the future healthcare needs of the baby or other family members. A cord blood bank is a special type of tissue bank that collects, processes and freezes blood found in the umbilical cord after the birth of a baby.

Stem cell therapies have become a reality. Their use is expected to expand dramatically within the next five to ten years. These biopharmaceuticals will be used for cellular therapy and in organ repair, regeneration and/or replacement medicine. This means that the banking of umbilical cord blood stem cells and other non-embryonic stem cells will increase doctors' options for treating many different diseases. The use of the body's own stem cells or those of a family member is preferable over that of someone else's cells for these treatments.

What are stem cells?

Cord blood is richer in stem cells than bone marrow. These are the building blocks for all the body's organs and tissues. Stem cells can self-renew indefinitely and can differentiate into mature cells with specific functions. The blood and immune systems, nervous system, skin, bones, heart, endocrine system and other body tissues are each derived from their own types of stem cells.

The future of stem cells holds promise for a fundamental change in how health care is delivered. The potential applications for stem cells in the treatment of disease are vast. These include:

- Stroke – generation of blood vessels and brain cells for repair
- Diabetes – generation of functioning endocrine cells
- Neurological disorders – generation of nerve cells for repair (e.g. cerebral palsy)
- Heart disease – generation of heart muscle cells for repair following heart attacks
- Lung disease – repair of air sacs



innovations

Canadian Cord Blood bioRepository
– a partnership for the future.

What about the diseases we cannot treat now?

Research is showing that stem cells will someday change the way we treat diseases that cannot be treated now. With new knowledge of stem cell biology and how to direct their differentiation and movement, we may be able to expand the uses of these cells even further than previously thought.

How can I bank my baby's cord blood?

In order to bank your baby's cord blood, you will need to submit a registration form and fee early enough to receive your collection kit before giving birth. Registering before the end of the 36th week of pregnancy facilitates this, although later registrations can also be accepted.

Once you have registered for private cord blood storage, you will be sent a collection kit to take to the hospital at the time of your delivery. Once the cord blood has been collected, you will also need to provide two tubes of maternal blood for testing. When all of the necessary blood has been collected and packaged, the kit can be returned to us via the courier of your choice. Instructions for where to send the kit are inside the collection box.

Why should I use the Canadian Cord Blood bioRepository?

The Canadian Cord Blood bioRepository, in conjunction with the Alberta Cord Blood Bank, is an industry leader in research on the potential applications of cord blood stem cells.

We are a private registry dedicated to the collection and preservation of umbilical cord blood stem cells strictly for your child's or family's future use.

Our laboratory is run by Dr. John. J. Akabutu, a pediatric hematologist with over 10 years of experience in the field of stem cell research and 34 years of experience in the treatment of children with cancer. Under his leadership we are continuing to make the promise of stem cells come true.

How long can cord blood stem cells be stored?

Current technology allows cord blood stem cells to be stored for over 20 years. Given the research underway, storage time is expected to increase indefinitely.

Who will own my baby's cord blood after it has been stored at the Canadian Cord Blood bioRepository?

Umbilical cord blood collected by the Canadian Cord Blood bioRepository remains the legal property of your family.

Is information about my baby's stored cord blood available to me?

Once the cord blood has been collected, you will be sent a certificate containing relevant information. Additional information about the cord blood unit is also available upon request. This information is private and will not be shared with anyone else.

How much will it cost?

The Canadian Cord Blood bioRepository charges a fee for cord blood storage and associated services. Please contact us for further details and our fee schedule. We accept prepayment for long-term storage for up to 20 years, thereby reducing up-front costs and allowing for future innovations in the science of cord blood storage.

"You see things; and you say 'Why?' But I dream things that never were; and I say 'Why not?'"

– George Bernard Shaw

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