



Hawai'i Cord Blood Bank 1319 Punahou Street Honolulu, Hawai'i 96826

Phone: (808) 983-BANK Website: www.HCBB.org

Giving the gift of life...a second time

You Can Help:

- Sign up to donate your newborn baby's umbilical cord blood
- Tell others about the lifesaving work that HCBB is committed to doing
- Make a tax-deductible monetary contribution to the Hawaii Cord Blood Bank, a registered, 501(c)(3) non-profit entity to ensure that banking efforts can continue.

Call us at 983-BANK (983-2265)

Or visit our website at www.HCBB.org





A NEWSLETTER FOR THE FRIENDS OF THE HAWAI'I CORD BLOOD BANK

THE HAWAI'I CORD BLOOD BANK

It really is as good as it sounds

Cord Blood is:

- Collected quickly and easily from the umbilical cord after a baby is born;
- Collected from an umbilical cord that is usually discarded with the placenta after birth;
- Collected with no danger, surgical procedure, pain or risk to either mother or baby;
- Rich in stem cells like those found in bone marrow – that can be used to treat lifethreatening diseases such as as leukemia, lymphoma and genetic and immune system disorders:
- More easily matched than bone marrow and is less likely to react against a patient's body;



(L-R): Linda Chong-Tim, CNM (certified nurse midwife) with her twins, HCBB nurse-educator Lisa Wong-Yamamoto, and Cindy Burgess, RN at Kapi'olani Medical Center for Women & Children at the 2005 Baby Expo.

• Supported by the National Marrow Donor Program and the American Academy of Pediatrics.

Cord Blood is not:

• Controversial. Umbilical cord blood is *not* the same as embryonic stem cells.

The Hawai'i Cord Blood Bank:

- Collects cord blood at no cost to donors:
- Works in close partnership with the Blood Bank of Hawai'i, Hawai'i Bone Marrow Donor Registry, and local hospitals, including the Kapi'olani Medical Center for Women & Children, Kaiser Permanente, Queen's Medical Center, Tripler Army Medical Center, and Castle Medical Center;
- Works in conjunction with the Puget Sound Blood Center in Seattle, Wash., for processing and storage;
- Makes units donated in Hawai'i available to needy patients around the world. Thus far, 11 cord blood units from Hawaii have been used in transplantation at centers in both the U.S. mainland and Europe.

THE HAWAI'I CORD BLOOD BANK

is an independent, non-profit community service organization headquartered at the Kapi'olani Medical Center for Women & Children that works in close collaboration with the Blood Bank of Hawaii and the Hawaii Bone Marrow Registry.

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For more information about the Hawaii Cord Blood Bank, please contact:

Hawai'i Cord Blood Bank 1319 Punahou Street Honolulu, Hawai'i 96826 Phone: (808) 983-2265 Fax: (808) 983-8719 Website: www/HCBB.org

Our Mission:

"The mission of the Hawaii Cord Blood Bank (HCBB) is to help save the lives of patients in need of stem cell transplant by providing them with a matched umbilical cord blood donor."

DIRECTOR'S MESSAGE



Dr. Randy Wada Hawaiʻi Cord Blood Bank Medical Director

f a little bit is good and more is better, then too much is just right.

This is how we explain the rationale for hematopoietic stem cell (bone marrow) transplant to our pediatric cancer patients and their parents.

Transplant is "too much." When the cancer seems responsive to regular doses of anti-cancer drugs,

our strategy is to give really high doses of these drugs, possibly with the addition of radiation. The intent is to kill every last cancer cell... even those that were resistant to lesser doses.

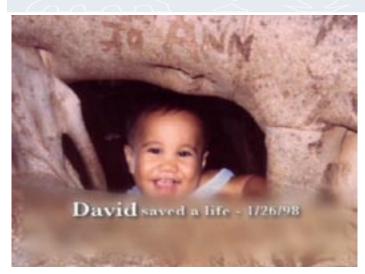
The problem is that we also end up wiping out normal cells in the bone marrow called stem cells. These special cells renew the body's supply of circulating blood cells that carry oxygen, fight infection, and stop bleeding. Without them, the patient would die, even if the cancer was eliminated. To get around this we have to rescue the patient by transplanting a fresh supply of stem cells, usually from a healthy matching donor.

Stem cell transplant is very intense therapy reserved for the most aggressive forms of leukemia, lymphoma, and other cancers. Transplant patients face significant risks of both short and long term toxicity, including the possibility of death. Even so, patients and families rarely decline this option once it is offered, since in most cases transplant is their last, best, and only hope for cure.

Unfortunately just a third of all patients needing a transplant have an appropriately matched related donor. Until recently, the sole alternative for the rest was in registries of adult volunteers who are willing to donate bone marrow or blood stem cells to perfect strangers. While there are over six million of these wonderful donors in the U.S. alone (including over 66,000 in the Hawai'i Bone Marrow Donor Registry), the racial and ethnic diversity of our local patients continues to pose a special challenge to finding matches. All too frequently we come up empty handed, with heartbreaking consequences for our patients, their families, and the medical team. It is one thing for a patient to decline a transplant because it seems too risky. It is another thing all together to tell them that they don't even have a choice.

HCBB was founded with the goal of reducing the number of these sad conversations. The blood left over in a newborn baby's umbilical cord contains the same kind of stem cells as bone marrow. After the baby is delivered and the cord is cut, this blood can be collected and the stem cells processed and frozen. Stored cord blood stem cells last for decades. If matched, they can be made available to any patient, anywhere, any time. Cord blood stem cells are more forgiving than those from

Student Production Wins Prestigious National Award





Above left: screen capture from HCBB PSA produced by Wai'anae High School's Searider Productions; Above right, Cherell Keamo holds a photo of her brother, Dennis, in her award-winning spot entitled, "We Found a Match."

Wai'anae High School's much-heralded media unit, Searider Productions, produced a series of public service announcements (PSAs) for the Hawai'i Bone Marrow Donor Registry (HBMDR) and the Hawai'i Cord Blood Bank (HCBB).

Dr. Randy Wada, who serves as medical director for both the HBMDR and HCBB, worked with the students and nominated Searider Productions for recognition by the National Marrow Donor Program (NMDP).

The Searider PSAs were awarded the *Excellence in Local Media Award*, chosen from amongst amateur and professional entries submitted from across the country.

In November 2005, Searider Productions director Candy Suiso, teacher John Allen III, and students Cherell Keamo and Kainoa Aila attended the NMDP meeting in Minneapolis, MN, to receive the award before a gathering of national and international participants. Keamo had lost her brother Dennis to leukemia in 2002. Dennis was 12 when he died, waiting to find a donor.

According to Dr. Wada, the audience responded to the PSAs "with wild enthusiasm, coupled with absolute disbelief when it was revealed that they were done by high school students."

Remembering Alana

Few people brought more public attention to the need for bone marrow donation than Alana Dung. It's been nearly 10 years since then 2-year-old Alana captured the hearts of Hawai'i's people. Although she eventually succumbed to leukemia, Alana's case led to the registration of some 30,000 people with the Hawai'i Bone Marrow Donor Registry.

The Hawai'i Cord Blood Bank was aided by a contribution of \$45,000 from the Alana Dung Foundation – the first gift by the foundation to support local research. More than anything, the contribution dramatized how closely bone marrow and cord blood are allied – bound by the mission of saving lives.

Emily Castle, continued from page 6

to cord blood's potential as a treatment for HIV....

"This is good," Castle says. "What we really need to do is get the word out to more people. We need to educate others about the benefits that can be derived from cord blood treatments – and the fact that there is no down side. It's all good."

Emily Castle and Randal Wada may have met by chance thanks to a mutual friend, but their Herculean effort to establish and grow the Hawai'i Cord Blood Bank has been a true and purposeful partnership. Now, some nine years later, Emily Castle looks back at the journey and says in her always straightforward, matter-of-fact manner: "This is the *only* thing that I'm interested in. Not so much other things, other causes, anymore. This is what motivates me and keeps me busy. This work – what Randy does – is so important. Just think in terms of the lives that can be saved..."

Emily O. Castle Benefactor Gave Hawai'i Cord Blood Bank its Start

heirs is a special relationship sparked by a deep commitment to helping others and fanned by an equally profound respect for each other.

Mrs. Emily Castle's and Dr. Randal Wada's lives first crossed some nine years ago. Wada had recently returned home from California to join the Cancer Research Center of Hawai'i and the faculty of the University of Hawai'i's John A. Burns School of Medicine.

Inspired by the pioneering work with cord blood he had been involved in at UCLA, Wada had already joined forces with Jana Hall, PhD, then the director of the Genetics Program at Kapi'olani Health, to lay the groundwork for a cord blood initiative in Hawai'i. One of the first persons Hall and Wada pitched the concept to was John Walker, Jr., the Director of the Kapi'olani Health Foundation.

As fate would have it, Emily Castle and Maili Yardley, then a board member with the Kapi'olani Medical Center for Women and Children. happened to have lunch with Walker soon after he had spoken to Hall and Wada about the benefits of cord blood. "John (Walker) was

very enthusiastic about it - and what he told us sounded so interesting that he convinced me to look into it," Castle recalls. "John told me, 'If you want to find out more, you really ought to give Randy Wada a call."

The next thing Wada remembers is that he and Hall were on their way to meet Castle at her home. "I had put together a PowerPoint presentation, but I didn't know what to expect." Wada says. "We were still so naive about the whole process of the fundraising we would need to start up this organization." Apparently, however, the meeting went a lot better than he might have expected, for a few days later Wada received a phone call from a person representing Mrs. Castle, who explained that she was prepared to make a contribution to the yet-to-be-established Hawai'i Cord Blood Bank.

"It took me a little while to digest what was happening and what the cash value of the contribution was," Wada explains. "After it sunk in, I was in shock." What he and Hall had speculated might take years to accomplish had suddenly become reality. "Basically, we realized that we could start the program," Wada says. "The impossible had become possible - thanks to Mrs. Castle."



Dr. Randy Wada and Mrs. Emily Castle (holding Precious) share a vision for HCBB's future.

"It's very exciting," says Castle, who had previously directed her philanthropic efforts towards funding children's books for libraries. In the years since she first met Hall and Wada in late 1997, she has become much more than a donor to the still-young Hawaii Cord Blood Bank, which was officially founded in 1998. By paying close attention to news and developments related to cord blood treatments and research. Castle has become one of the procedure's most knowledgeable, articulate and passionate advocates.

"In spite of never having had any prior experience in the health field, Mrs. Castle grasps things that even someone who is in medicine would have trouble appreciating," Wada exclaims. "She asks me questions that I wouldn't have asked myself, or

she'll say something that makes me look at things in a different way, or leads me to see the bigger picture... she always amazes me."

The feeling is mutual, as Castle smiles often and nods her head in vigorous affirmation as she and Wada launch into their familiar, rapid-fire conversations on topics that could range, for example, from cord blood's effectiveness as a treatment for diabetes in Argentina, to Don Ho's experimental stem cell heart procedure in Thailand, to the challenge of collecting and storing cord blood from the Neighbor Islands, to the plusses, minuses and costs of some day setting up a lab and storage facility in Hawai'i, to differentiating cord blood from more controversial embryonic stem cell research currently being debated in D.C.,

Director (continued from page 2)

bone marrow. They don't have to match the patient as closely, and yet can give equivalent or perhaps better results than bone marrow. This makes it especially attractive for hard to match patients such as ours. Partially matched cord blood from two different donors can even be combined to transplant a larger adult patient. In the past year, cord blood surpassed bone marrow as a stem cell source for unrelated donor transplants in the US, allowing many more patients to undergo transplant.

There is no charge to donate cord blood, and the process is quick, painless, and risk free. What better way to celebrate a baby's birth than to give someone else a second chance at life? The placenta and umbilical cord are most often discarded. Through HCBB these can be recycled and turned into Hope.

Since its inception, HCBB has benefited from the Aloha of

thousands of local families who chose to donate their babies' cord blood; of over a hundred local physicians and countless more nurses who donate their time and expertise to do the collections; of generous supporters such as Emily Castle, Elizabeth Sturges, the Gamar Foundation, and the Alana Dung Research Foundation; of local hospitals which donate facilities and space; and of the Blood Bank of Hawai'i which provides logistical and laboratory support.

In turn, we have shared this Aloha with the rest of the world in the form of readily available units of cord blood stem cells. These serve as a testament to our Island-born belief that we are all tied together by a common welfare. This sense of shared destiny underlies the Aloha spirit that blesses our local culture. And with Aloha, like transplant, too much is just right.

'PRIVATE' BLOOD BANKING

For-Profit Companies Offer to Store Blood for a Fee

Unlike the Hawai'i Cord Blood Bank, there are many for-profit companies that advertise their services to store umbilical cord blood. This is called private, or "family," cord blood banking. These companies usually charge an up front fee of \$1,100 to \$1,500 to collect your baby's cord blood, and a yearly storage fee of \$75 to \$100 thereafter.

Thus, more and more, expectant mothers and their families are left asking themselves, "Should I privately store my baby's cord blood just in case my child later developed leukemia, and needed a transplant?"

These private for-profit companies claim that cord blood can be used to treat any disease that is currently treated by bone marrow transplantation, and that cord blood can always be used for the child from whom the blood came from because it is a perfect match. Saving a child's own umbilical cord blood is often marketed as a way to give that child "biological insurance," so that if he or she ever needed a transplant, the blood would be there.

Umbilical cord blood does contain the same kinds of cells as those found in bone marrow. However, leukemias are cancers of these bone marrow cells, so giving patients their own cells back in the form of their umbilical cord blood would be tempting fate by allowing the whole cancer-forming process to start all over again. The best source of cells for these kinds of transplants is therefore a normal donor – someone else's cells.

Most pediatric oncologists involved with transplants feel that in families with no known risk factors for cancer or certain inher-

ited diseases, cord blood storage in a public bank such as Hawai'i Cord Blood Bank will allow these units to be used to their highest capacity. The aloha you show by participating in the HCBB program will make a significant contribution to an invaluable resource that will benefit a great number of people.

President Bush Signs Cord Blood Bill Into Law

In contrast to the emotional debate that swirls around the topic of embryonic stem cell research, cord blood's therapeutic value in battling diseases is supported by many diverse groups. The Cord Blood Stem Cell Therapeutic and Research Act passed the U.S. House *by a vote of 431-1*.

On Dec. 20, 2005, President Bush signed into law the Cord Blood Stem Cell Therapeutic and Research Act of 2005, which authorizes \$79 million in federal funding to support a network of cord blood banks facilitating the use of cord blood for transplantation purposes. The bill also requires that cord blood units that are collected, but not appropriate for clinical use, would be made available for peer-reviewed research.

Hawai'i has recently been notified that the Puget Sound/ Hawai'i cord blood program is one of six cord blood banks in the country awarded a Federal contract.

Lynette Matsumoto and Lisa Wong-Yamamoto

Small (But Mighty) HCBB Staff Helps to Drive its Success

ommitted, passionate and professional, sound like adjectives that a coach might use to describe a championship football team. It also aptly describes Lynette Matsumoto and Lisa Wong-Yamamoto, who comprise the two-member staff that helps to drive the Hawai'i Cord Blood Bank (HCBB) to achieve its impressive record of success.

As a relatively young program, HCBB has overcome incredible odds since it was founded in 1998. Forty-three units of cord blood were banked that inaugural year. In 2005, HCBB managed to screen 454 potential donors and collected 218 units. While this is no small achievement, current year-to-date figures show that HCBB has already screened nearly 3,000 potential donors and collected 1,716 samples.

In order to accomplish this impressive growth, the HCBB has had to successfully reach and educate doctors, nurses and expectant parents with their message, as well as overcome major logistical challenges of proper screening, registration, collection, transportation and storage of the donated units. In support of HCBB co-founder and medical director Dr. Randy Wada, Lynette and Lisa pitch in to seamlessly fill this multitude of administrative, clerical, accounting, secretarial, counseling, marketing, educational, warehouse and delivery functions on a daily basis.

As nurse coordinator, Lisa serves as the primary point of contact with the doctors and nurses who are responsible for the actual collection. In addition to her 15 years experience as a labor and delivery nurse at Kapi'olani, Lisa has also helped to train new nurses and worked at Kaiser as an advice nurse. "I know what the nurses go through," Lisa says. "It helps that they know me and they know that I'm a nurse as well as a mother – so I can relate to both sides."

Although HCBB program coordinator Lynette is not a nurse,

	Potential Donors Screened	Units Collected	Units Banked	Review Complete
FY2005	454	218	37	58
FY2006	545	322	92	63
Total Year- To-Date	2,970	1,716	665	476



Lynette Matsumoto (left) and Lisa Wong-Yamamoto drive HCBB collections efforts from a small office in the Kapi'olani Medical Center for Women & Children.

no one can question her qualifications for her job. First of all, she need not look far for motivation, as a picture of her son lan adorns the cover of her worn and bulging appointment book. Ian died some 12 years ago, succumbing to leukemia after a valiant, three-year battle that included a successful bone marrow transplant performed by Dr. Wada, who was then with the UCLA Medical Center.

"One of my two daughters was a match; she was the donor," Lynette explains, still struggling with the loss of her son. "That's where I met Dr. Wada. He was Ian's physician and surgeon there. He did such a wonderful job and I told him that if he ever needed any help to let me know and I would do anything to help him."

Lynette moved back to Hawai'i and eventually so did Dr. Wada. Lynette began working in the financial services department at Kapi'olani Medical Center for Women's and Children. Dr. Wada and Dr. Jana Hall started HCBB at Kapi'olani in 1998.

In 2004, Dr. Wada asked Lynette if she would like to work for HCBB. "It was a no-brainer," she said. "I don't even think of it as a 'job' in the usual sense," she says. "I told Dr. Wada that no matter what happened – if funding ran out or whatever – that it was okay. I am just grateful that I have been given this opportunity to contribute something to a cause that I believe in so deeply."

One of the most successful programs in boosting donations

was a joint effort between Lisa, Lynette and Dr. Wada. "I felt

that the doctors and nurses needed something to motivate them," Lisa explains. "So we all brainstormed some ideas and

came up with the 'Pump up the Volume' promotion."

Lynette and Lisa, continued from page 4

As a mother who had experienced the fear and pain of losing a child to cancer, Lynette is uniquely qualified to understand what others in need are going through. It drives her effort to see the program succeed. "Every unit of cord blood from Hawai'i makes me feel like it is going to help someone, some-

where... give them a second chance at life," she says.

And so Lisa and Lynette form a formidable one-

"Every unit of cord blood from Hawai'i makes us feel like it is going to help someone, somewhere – give them a second chance at life."

- HCBB Program Coordinator Lynette Matsumoto

In banking cord blood, size matters, Lisa explains, because the size of the sample determines

how large a patient

two punch. And while the two may differ in background and personality, they stand united in their quest to advance a cause they believe fervently in.

Keeping up with the paperwork required to screen and document donations is an accomplishment in itself. The process begins with a few simple prescreening questions. "Donors must be over 18 years old, be having only one baby (no twins, triplets), and have healthy parents (diabetes and hypertension is okay)," Lisa adds. "If anyone has questions as to whether or not they qualify, there is information on our website, or they can call the office."

can be served. "It's sounds silly, but our model was a fishing contest." In this case, the team decided to hold a contest and offer prizes (pizzas) for the delivery team that submitted the largest sample!

"A lot of other administrators might have shot the idea down as frivolous," Lisa continues, "but Dr. Wada thought it was great and said, 'Okay, let's go for it.' And it turned out to be a very successful program, so we continued it and word spread to the different hospitals. I guess it was just goofy enough to get their attention. Dr. Wada buys the pizzas. The main thing is that it keeps staff motivated and that the process grows."

Nothing motivates the two more than word of a match, and HCBB has contributed to 11 matches internationally. The idea that blood collected in Hawai'i has helped to save a life somewhere, anywhere, is what they live and work for. Their joy is palpable as they practically high five each other. "We in Hawai'i may be small, but we're so important to the

entire program," Lynette notes. "Our population is unique."

"Lynette is the glue," Lisa says. "She never stops. She's here early, stays late... then she takes stuff home."



A photo of her son lan serves as a constant inspiration to Lynette.

Recipient Collection **Donor Race** Age (at Site time of transplant) 17 European or Western Russian Kapiolani Japanese, Asian (not otherwise Kapiolani 49 specified), White Filipino, SE Asian/Southern Chinese, 29 Kapiolani Northern Chinese, Japanese, American Indian, White (not otherwise specified) Native American, European or Western Kapiolani 15 Russian 24 Japanese Kapiolani 2 Filipino Queens 18 Japanese, North American Indian Kapiolani SE Asian/Southern Chinese. 13 Kapiolani Vietnamese, White 49 Hispanic Tripler European or Western Russian and Tripler 2 Japanese

HCBB cord blood units have already accounted for 11 matches!

"I don't need thanks," Lynette insists. "Everyday, when the day gets long, I can hear lan's voice saying, 'Thanks, Mom.' That's more than enough motivation to keep me going."