

Give Birth to Hope: An Unique Approach to Public Cord Blood Donation

- **The Public Health Nursing and Professional Development Unit, North Carolina Division of Public Health, is approved as a provider of continuing nursing education by the North Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.**
- **This presentation is being jointly provided with Carolinas Cord Blood Bank and Women's Health Branch, Division of Public Health.**
- **The planners and presenters have no actual, potential or perceived conflicts of interest to disclose.**



Give Birth to Hope: An Unique Approach to Public Cord Blood Donation

In order to obtain CE for this session participants must:

- Remain for the entire presentation
- Complete the participant evaluation from the Public Health Nursing and Professional Development Unit utilizing a survey monkey link which will be provided at the end of the presentation.
- A total of one contact hour will be awarded for this presentation.
- This webinar will be archived and contact hours will be available beginning August 31, 2016 until August 31, 2018.

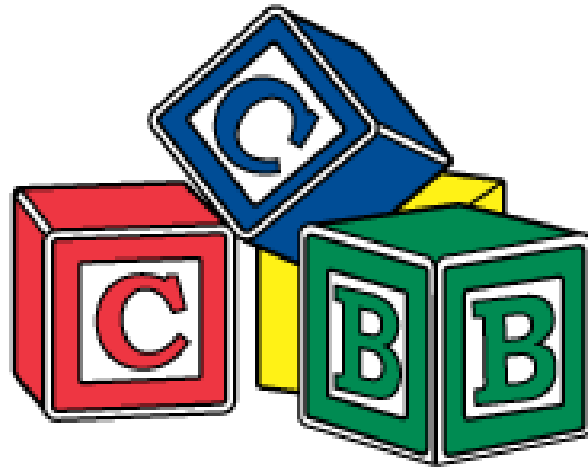


Give Birth to Hope: An Unique Approach to Public Cord Blood Donation

Objectives

- Update health care professionals regarding Carolinas Cord Blood Banking Program.
- Provide health care professionals information about the cord blood donation and collection process to be able to share information with pregnant women.
- Discuss the potential life-saving options through the *Be The Match* registry.





CAROLINAS CORD
BLOOD BANK

GIVE BIRTH TO HOPE:

An Unique Approach to
Public Cord Blood Donation



Carolinas Cord Blood Bank



- A not-for profit, public cord blood bank at Duke University
- One of the largest cord blood banks in the world
- Part of the National Marrow Donor Program and Be The Match®
- Our goal is to provide safe, effective umbilical cord blood for patients in need of a live-saving transplant



Carolinas Cord Blood Bank



- Dr. Joanne Kurtzberg
- 1993 first unrelated blood transplant
- 1998 NMDP launches cord blood program



Cord Blood Transplant Beginnings

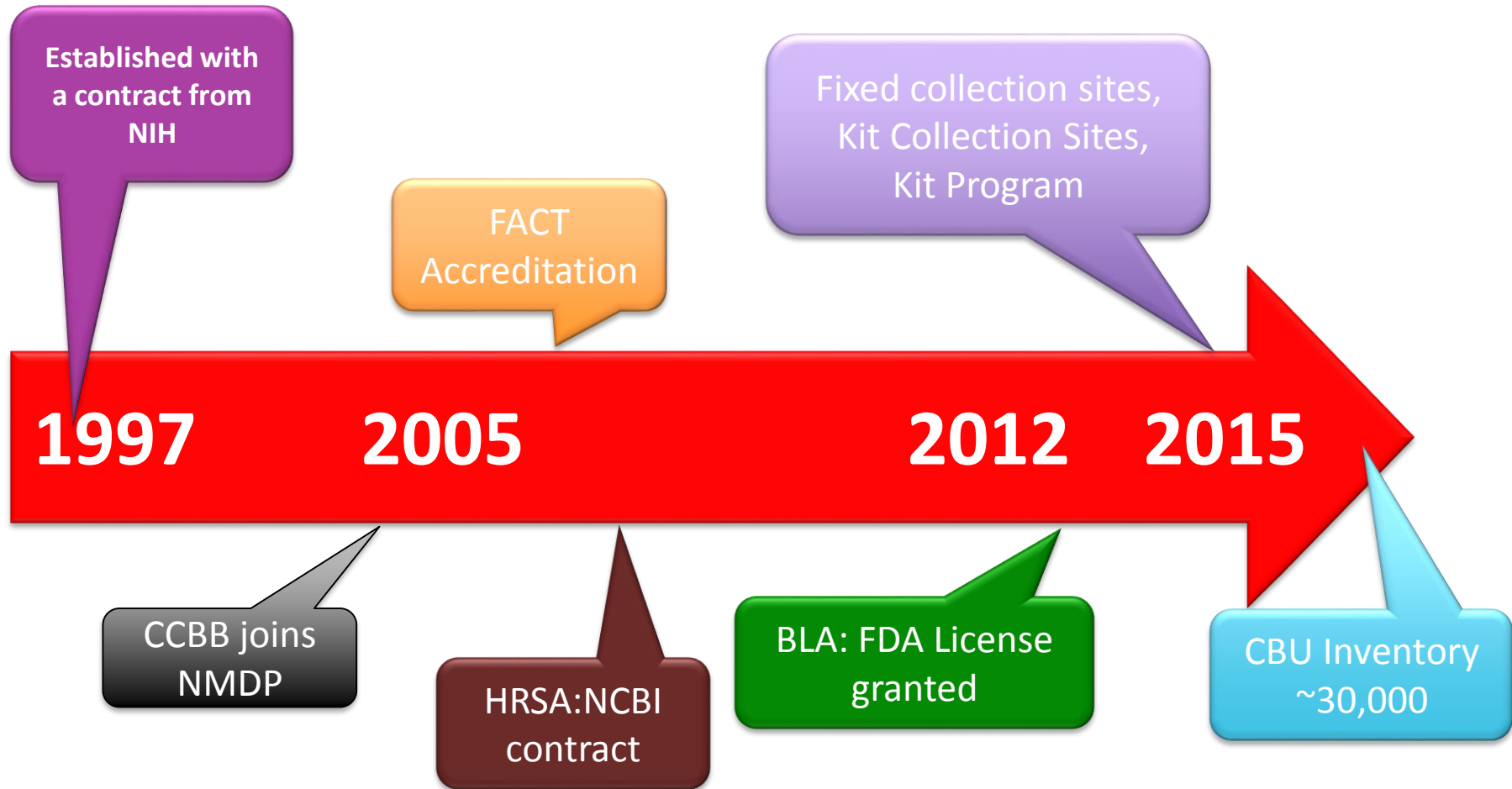
- Matthew
- 1988 First patient
- From Salisbury, NC
- 4 years old
- Fanconi's Anemia
- Paris, France
- Sibling Donor



Matthew in 2014 with Dr. Joanne Kurtzberg



CCBB Overview



Your baby's umbilical cord blood could **SAVE A LIFE.**

DID YOU
KNOW



LESS THAN
30%

of people are aware
of the option to
donate cord blood to a
public cord blood bank?

If **your cord blood unit** meets the criteria, it can be listed
on the Be The Match Registry® for any patient in need
of a transplant.

Learn more at BeTheMatch.org/cord



Carolinas Cord
Blood Bank





Dr. Hall Video

https://youtu.be/-C_GEAQ1iZs

**Carolinas Cord
Blood Bank**



Cord Blood **vs.** Bone Marrow

Cord Blood

- Painless to donate
- Greater HLA mismatch tolerated
- Can be frozen & stored
- Less risk of acute GvHD

Bone Marrow

- Donation requires treatment
- Closer HLA match required
- Not usually frozen or stored
- Greater risk of acute GvHD
- Can collect more TNCs for adults



Cord Blood is:

- The baby's blood left over in the umbilical cord and placenta after a baby is delivered and the cord is cut
- A rich source of hematopoietic stem cells which are unspecialized cells that produce all blood cells
- Typically thrown away as medical waste



Why Cord Blood?

- Can be an alternative to bone marrow transplant
- Cord blood does not need to be as close a match as bone marrow
- Is more readily available than bone marrow



Cord Blood Treats:



- Sickle cell disease
- Blood cancers & diseases
- Immune deficiencies
- Inherited metabolic diseases
- Thalassemia disorders
- Bone marrow failure syndromes



Diseases Treated

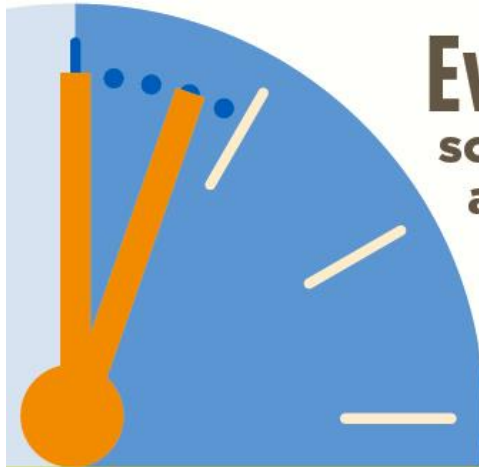
The NATIONAL MARROW
DONOR PROGRAM® operates
the Be The Match Registry®.

More than 70 diseases can be treated by cord blood transplant

Blood Disorders	Malignancies	Metabolic Disorders
<ul style="list-style-type: none">• Sickle-cell anemia• Aplastic anemia• Fanconi's anemia• Thalassemia• Thrombocytopenia• Diamond-Blackfan• Amegakaryocytosis	<ul style="list-style-type: none">• Leukemias• Lymphomas• Multiple myeloma• Hodgkin's Disease• Retinoblastoma• Histiocytosis• Solid tumors	<ul style="list-style-type: none">• Hurler's syndrome• Niemann-Pick disease• Krabbe disease• Leukodystrophy• Gaucher Disease• Hunter Syndrome
Immunodeficiencies	Autoimmune Diseases	Other Inherited Disorders
<ul style="list-style-type: none">• SCID• Ataxia Telangiectasia• Wiskott Aldrich• DiGeorge• Kostmann• Omenn	<ul style="list-style-type: none">• Multiple sclerosis• Systemic Lupus• Rheumatoid arthritis• Evan Syndrome• Crohn's Disease	<ul style="list-style-type: none">• Osteoporosis• Osteogenesis Imperfecta• Lesh-Nyhan Syndrome• Tay-Sachs



Your baby's umbilical cord blood could **SAVE A LIFE.**



Every 3 minutes
someone is diagnosed with
a blood cancer. A cord blood
transplant is a potentially life-
saving treatment for more than
70 different diseases, including
leukemia, lymphoma and other
blood disorders.

If **your cord blood unit** meets the criteria, it can be listed
on the Be The Match Registry® for any patient in need
of a transplant.

Learn more at BeTheMatch.org/cord



**Carolinas Cord
Blood Bank**

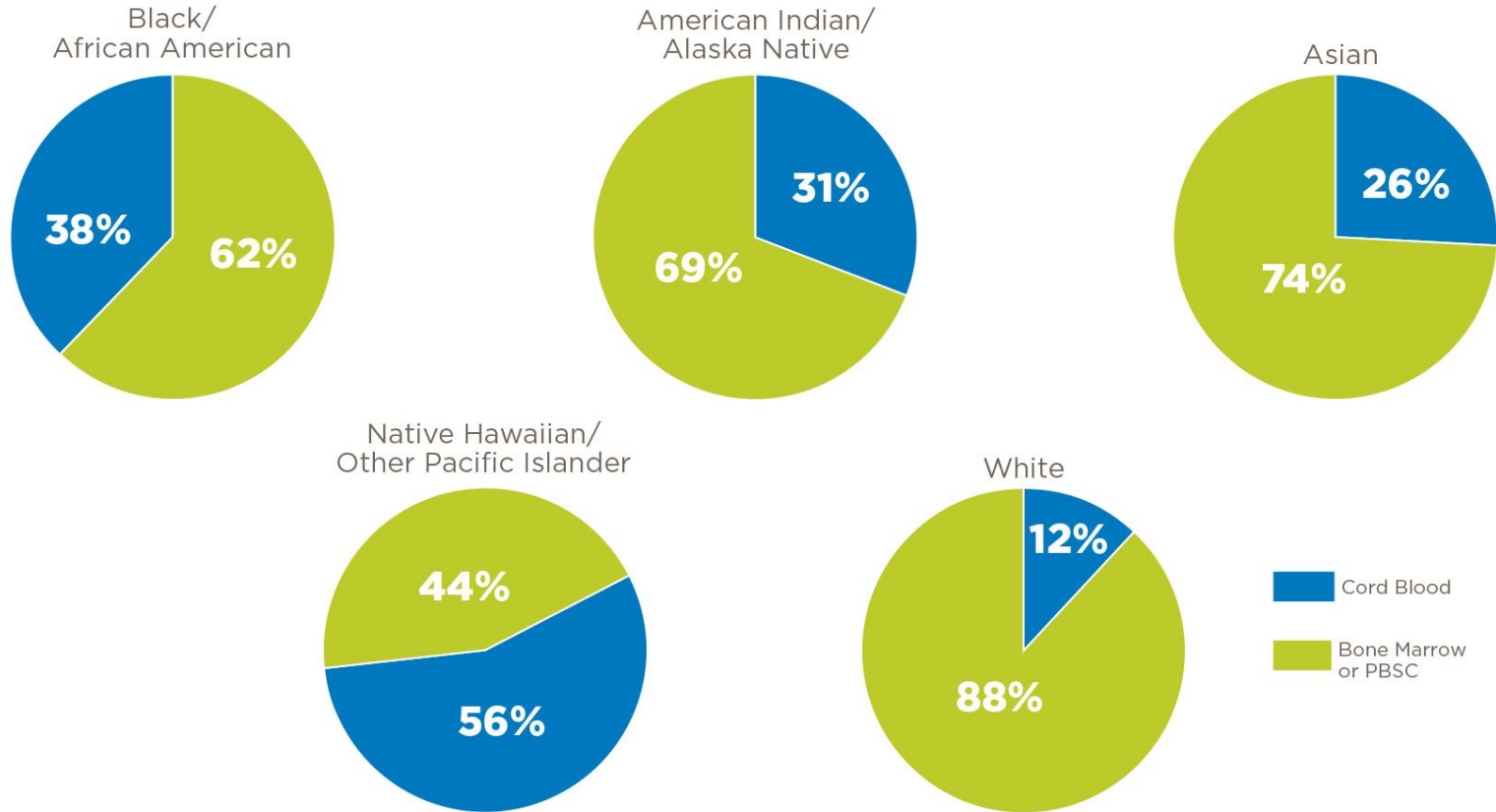


Why is it Less Likely Non-Caucasians will Find a Match?

- Stem cells are more easily collected from Caucasian cord blood
- There are proportionally fewer Black, Hispanic and Asian donors compared to Caucasian donors



Role of Cord Blood in Transplants by Patient Ethnic Background



Source: National Marrow Donor Program/Be The Match FY 2015



Role of Cord Blood in Transplants for Patients of Hispanic or Latino Ethnic Background



Source: National Marrow Donor Program/Be The Match FY 2015

**Carolinas Cord
Blood Bank**



Donor Eligibility:

Donors must be:

- ✓ 18 years of age or older
- ✓ 34 weeks or more gestation
- ✓ having a single baby
- ✓ negative for Hepatitis B & C, HIV/AIDS, TB, HTLV
- ✓ free from cancers in the baby's mom, dad or siblings



Delayed Cord Clamping

- Moms can delay clamping and donate
- Lower volumes of cord blood
- Sometimes meet minimum volume



What is the difference?

Family/Private

- Mom organizes
- For profit business
- Cost involved for mom (initial and annual)
- Advertise
- Eligibility for all bankers
- Pay initial and annual fees
- Reserved for family only
- Volumes requirements differ
- Different banking criteria

Donor/Public

- CCBB organize at staffed site/Mom organize at non-staffed site
- Not for profit organization
- No cost involved for mom
- Publicize
- Specific donor eligibility
- No donor fees involved
- For unrelated recipient
- Ship 60/80 mL
- Bank \geq billion TNC if all criteria met



CCBB Staffed Sites

- Dedicated collection room
- Consented on admission
- Donation transported by local courier
- *Ex utero* collection by staff
- *In utero* by MDs/CNMs
- No advance coordination needed by mom



CCBB Staffed Sites in NC:



Duke University Hospital - Durham, NC
Duke Regional Hospital - Durham, NC



UNC
HEALTH CARE

UNC Women's Hospital - Chapel Hill, NC
Rex Hospital - Raleigh, NC



Cone Health Women's Hospital
Greensboro, NC



Womack Army Medical Center
Fayetteville, NC



Carolinas HealthCare System

Carolinas HealthCare System University
Charlotte, NC
Carolinas HealthCare System NorthEast
Concord, NC

Carolinas Cord
Blood Bank



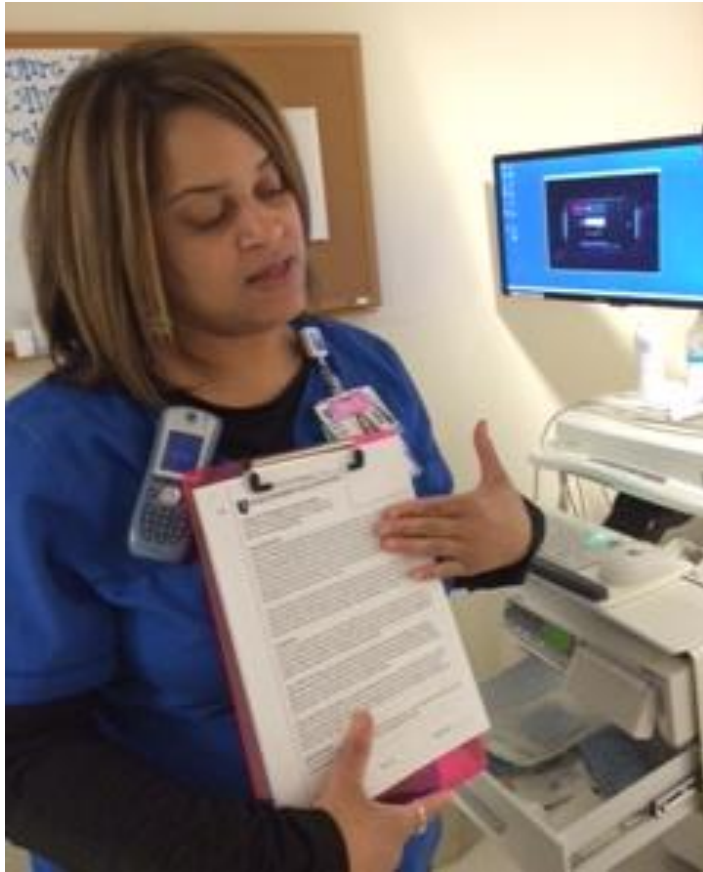
Ex Utero Collection Room



Carolinas Cord
Blood Bank



Cord Blood Collector and RN



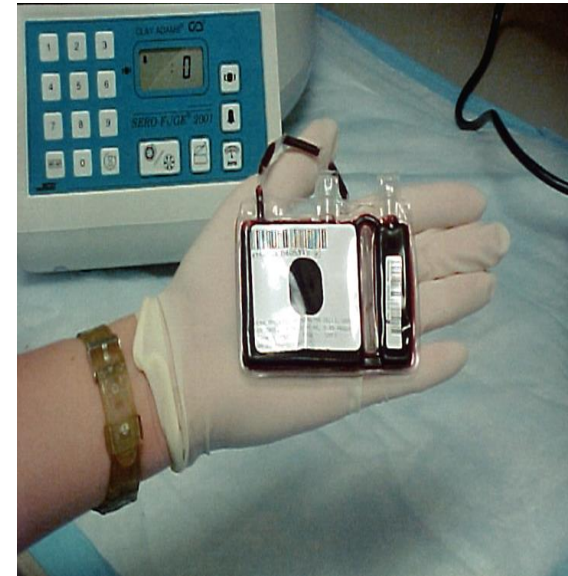
Kit Program

- Donor driven
- NC only
- Consent before 36 weeks
- Kit sent 36 weeks
- NMDP trained MDs/CNMs
- *In utero* collection
- Shipped by commercial courier to mom and back to CCBB



At CCBB the Cord Blood is:

- Checked for viability and cell count
- Tested to make sure it is free of infectious diseases
- Tissue typed and listed on the Be the Match registry
- Frozen in liquid nitrogen and stored



Babies Are Amazing

<https://www.youtube.com/watch?v=doxVFKXKcPw>



Carolinas Cord
Blood Bank



How can you help?



- Tell a friend!
- Share with your other healthcare providers, MDs, CNMs, DOs...
- Connect with us on social media
- Utilize our free educational resources for your patients
- Let us know when you're having educational events in your area where we may be a good fit to exhibit or present



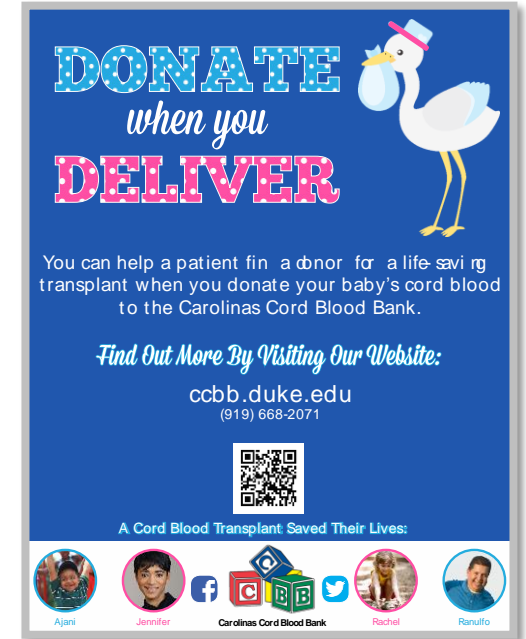
Available Resources:



Brochures



Patient Stories



Waiting Room Signs



Interested In Donating
Your Baby's Cord
Blood?

Webpage Icon



Social Media



Educational Videos

Carolinas Cord
Blood Bank



What should I remember?

- There is no cost to donate cord blood to a public bank
- Donation is not harmful to mom or baby
- Donation does not change delivery in any way
- If not donated or privately stored, cord blood is thrown out as medical waste



Thank You...

- For contributing to the National Marrow Donor Program public cord blood bank
- Your participation will help many patients in need of a cord blood transplantation



Questions?

www.ccbb.duke.edu

www.bethematch.org/cord

