

Georgia Seagraves

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8<sup>th</sup> Grade Project

### Cord Blood

I chose to do my 8th grade project on the Donation of Cord Blood. I really wanted to do this for my 8<sup>th</sup> grade project because I felt like I could make a change. All of my life I have said “When I grow up I’m going to save the world!” Now that I am older I feel that raising the awareness of Cord Blood donation could be my first step in “Saving the World.”

Another motivation for choosing Cord Blood donation for my project is that when my mom gave birth to my sister Maya in 2002 she donated her cord blood. It was simple and easy, my mom didn’t have to do any hard work and her cord blood was probably a match for someone in need of a stem cell transplant.

But my mom donating isn’t my only motivation, I had a great family friend that was diagnosed with lymphoma, his name was Dave. Dave was in need of a bone marrow transplant and he was lucky enough to find a match but his body rejected the bone marrow. He later died in 2013. Dave was lucky enough to find a match but others are not so lucky and that’s why I’m choosing my project on Cord Blood to help people like Dave find their perfect match.

I used many methods for research but I mainly used the library and online research. The main books I have used are *The Stem Cell Debate* by Laura Black

and *The New Rules of Marketing and PR* by David Meerman Scott. Researching online I found the *bethematch.com* website to be the most helpful.

For this project Ruth Seagraves was my mentor. Ruth Seagraves has a degree in graphic design and her skills helped me in marketing by helping me figure out the best way to make flyers, a website, an iron-on transfer for the baby to wear, and a fun certificate for parents to print after they donate to put in their baby's books.

To begin my research I interviewed my mom who donated her second child's umbilical cord. Then I researched exactly what cord blood was and the research showed that cord blood is a source of stem cells but these are not embryonic stem cells. (*bethematch.com*)

The public became very aware of stem cell research when the famous actor Christopher Reeve fractured two vertebrae in his neck. After Christopher Reeve recovered he became the face of the stem cell movement, which promoted stem cell donation and awareness. (*Black*)

The process of donating Cord Blood is very simple: you take a survey to see if you can donate. (*bethematch.com*) If you can donate, you contact any blood bank between your 28<sup>th</sup> and 34<sup>th</sup> week of pregnancy and receive a collection kit. Then you inform your doctor or midwife that you are interested in donating Cord Blood and when you give birth to your baby they know to save and donate your umbilical cord blood. After you give birth to your child it no longer needs this extra blood. This "extra" blood is technically known as placenta blood or Umbilical Cord Blood but it is most commonly referred to simply as Cord Blood. (*nationalcordbloodprogram.org*)

In Cord Blood, there are blood-forming cells that are also in bone marrow. Bone marrow is used to treat many diseases. Because of the similarities in blood cells and stem cells with bone marrow, Cord Blood can be used in the treatment of many of the same diseases as bone marrow. Cord Blood contains all the normal elements of blood: red blood cells, white blood cells, platelets and plasma. The special thing about Cord Blood is that it has an abundance of hematopoietic (blood forming) stem cells and so when Cord Blood is used in a treatment it replaces and helps create more blood. The process of donating bone marrow can be very painful but the process of donating Cord Blood is safe, easy and painless.

People will always tell you that there is another option besides donating Cord Blood and it is to bank your Cord Blood. For an average of \$1,800 - \$2,000 for 20 years you can store your baby's Cord Blood in case you or a family member is diagnosed with lymphoma, leukemia, aplastic anemia or 80 possible other diseases. (*bethematch.com*) You may pay all that money to store the Cord Blood and you may not get sick. Even if you do, here is the hard part -- 7 out of 10 people are not matches for people in their family and then they must rely on public donation. So then, wouldn't it be easier if it was routine for the doctors or midwives to donate the Cord Blood? Then there would be enough for everyone. When a patient is diagnosed with lymphoma, leukemia or many other diseases and requires stem cell treatment it is called Allogeneic. (*Viacord.com*)

For expert help Ruth Seagraves is my mentor. Together we came up with a flyer on donating Cord Blood she also helped me identify my target audience, modify clip art and create a scan code for smartphones to use on the flyer. Ruth helped me plan out the design and taught me the best way to catch people's

attention. Not only is Ruth a graphic design major she took classes in marketing and gave me multiple brilliant ideas. We were discussing where a soon-to-be mother visits the most and we decided that a mom visits her doctor or midwife the most, which led to what I did next.

I met with my mentor and we discussed what exactly I wanted to do. I decided to create a website and design a flyer that could be displayed in hospitals or handed out in birthing classes. Ruth showed me how to design and create my website's logo and baby-hero mascot. All I had left to do was come up with a website name and reserve the URL. I chose bornasuperhero.org as my website's title and my mentor and I began to design it. BornaSuperHero.org is now a full-fledged website that helps people learn about and donate Cord Blood. My mentor gave me a brilliant idea to take the logo and create a downloadable iron-on transfer to put on a onesie (baby t-shirt) to help increase awareness. In addition, people could create a certificate to put in their child's baby book to show them that with their birth they also saved a life.

Before this project started I didn't know about Cord Blood donation and that by having a child you could potentially save someone's life. But throughout this whole project one question has been on my mind. Why hasn't this happened already? Why aren't doctors talking about this with their pregnant patients? Recently I began to research this a little more and I have finally come to a conclusion. Money, now no one loses money but no one *gains* money. It's like they decide that extra bit of effort isn't worth it if they don't get paid for it. So I have decided to take it upon myself to try and raise awareness about Cord Blood

donation. And maybe because I raised awareness on this subject someone's life could be saved.

I have learned so much from doing this project and it has been an amazing journey. Learning about the donation process of Cord Blood and all the amazing qualities in Cord Blood has been wonderful. Now that I know what just one umbilical cord can do it gives me hope for the future. Maybe this could lead to a medical revolution where we find the cure for cancer or maybe 1 more person decides to donate their Cord Blood, either way I feel that I have made a difference.

### Works Cited

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