

## 2025 Ben Strauss Higher Education Grant Essay Contest

## **Anne Pallozzi**

Hope, Heartache and Healing: My Story of Cancer

## 2<sup>nd</sup> Place

I was only three years old when my brother was diagnosed with cancer for the first time.

He had hepatoblastoma, a word I wouldn't be able to pronounce until years later. Still, I know the story of his diagnosis well, as I hear it often. She was holding my brother at his 9 month well visit and the first thing the pediatrician said when he walked in the room was, "How long has he had such a distended stomach?" What my mother had mistakenly assumed was a normal baby potbelly was actually a massive tumor growing on my brother's liver. Thanks to the pediatrician's sharp eye and quick diagnosis, my brother was treated successfully at the Children's Hospital of Philadelphia. Being that I was only three years old, I am lucky to remember almost none of this.

Shortly after my brother finished treatment, my mother found a strange lump in her abdomen. After much testing was done, it was determined that she had a noncancerous desmoid tumor. She then received a major surgery that removed both the tumor and half of her abdominal wall muscle. My mother soon grew suspicious. The chances of hepatoblastoma and abdominal desmoids occurring in the same family hinted something was wrong. After hesitation from our family doctors, genetic testing was finally ordered. The results devastated my mother: her, my brother, and I all had a genetic mutation called Familial Adenomatous Polyposis.

FAP has caused all three of us to have a shortened APC gene that cannot ward off cancers as intended. As a result, all three of us are at an elevated risk of many different types of cancers and carry a 100% chance of developing colon cancer. The



only available "cure" for colon cancer is to remove the colon before cancer can develop. Although living without a colon is possible, it is not easy. Many of the people who have their colon removed struggle with malabsorption issues, and scar tissue from the surgery can cause bowel obstructions that are life-threatening and extremely painful, something my mom has unfortunately grown familiar with. There is no way to prevent any of the other cancers that are common with FAP; the only true treatment plan is to carefully monitor patients in the hope of detecting these cancers early enough to treat.

Four years after my mother's surgery to remove her colon, my brother got sick with a bad case of the stomach bug. Only, his illness would not go away. After multiple doctor's visits, a doctor in the CHOP Emergency Room ordered a CAT scan of my brother's head. It turns out my brother had never had a stomach bug. What he was experiencing was actually the result of medulloblastoma, a brain cancer. He spent the next two years receiving surgery, radiation, and chemotherapy to kill the cancer.

Thankfully, my brother survived his cancer treatment and life continued on, although it was always going to be a little different from what it should have been. This second battle took a bigger toll on all of us, especially my brother whose brain had been attacked. My family was hopeful we could finally say good riddance to cancer and return to a more normal life. Sadly, this didn't happen.

In September of 2019, my mother was diagnosed with Stage 4 small bowel cancer. She had been closely monitored for years, but the cancer had been hiding carefully; it was only found when it spread to her liver. When my brother fought cancer, I had the joy of being young and able to block it out. When my mother was diagnosed, I had just started middle school. This time I couldn't ignore the illness. Watching my mother wither away before me was extremely stressful and upsetting

To cope with the distress and uncertainty at home, I threw myself completely into my schoolwork. Two plus two will always equal four. My mom plus chemo? Nobody knows. School was a place where every question had an answer and every problem had a solution, something that I couldn't get at home. School helped me find a comfortable routine and face exciting mental challenges. With everything going wrong, it was nice to find joy in being praised for earning good grades.

Unfortunately, school provided an escape for me, but it was also very frustrating. Having so many occurrences of cancer in my life forced me to mature far faster than anyone else my age. Although everyone was simply doing their best to help me out, it was irritating to always have people asking me about my mother when I just didn't



want to talk about it all the time. I also had far less patience for my classmate's struggles when I knew they paled in comparison to mine.

Things weren't always easy, but I soon learned how to regulate my emotions well. For a while, I was very bitter. Cancer generates a lot of emotions, and not many of them are positive. I dealt with a lot of anger, sadness, and hurt in a time where I should have been immersing myself in a new middle school career. When my brother was diagnosed the second time, my mom quickly found Gilda's Club and enrolled us in a family support group. There, I met kids who were going through the same things as me. We were able to talk freely about our feelings. It was extremely helpful to be surrounded by people who truly understood, and I was able to form lifelong friendships. These friends are also some of the most compassionate and caring people I know, something that I've found is quite common in people that have seen the horrors of cancer firsthand.

Additionally, I was able to attend summer camp at Gilda's. This was a wonderful experience for me and, when I got older, I became a camp counselor with the camp. It has been such a rewarding experience to help create the magic I experienced at Gilda's summer camp when I was a child for other children who are now facing the same things I once was. I absolutely adore the children, and I've learned so much on how to work with and care for them. I've also learned some valuable leadership and organizational skills from my time as a summer camp counselor. Not only did I gain wonderful friendships through Gilda's club, I learned valuable life skills that I can use for the rest of my life. Through these terrible experiences with cancer, I was able to become part of the most supporting and uplifting community available.

Still, it's been extremely hard watching my mother and brother suffer from a disorder that we cannot fight back against and very difficult to know that I also am at risk. At any moment, my own life could be turned upside down. There have been so many times I've wished science would find me a cure instead of a treatment. If you can shorten a gene, could it really be that difficult to add it back in? This dream began to seem more like a reality when my class learned about the world' first three parent baby. This baby was created with healthy mitochondria from one woman, the rest of the egg from another woman, and one man's sperm. Science finally allowed a couple to have a healthy baby without passing on the mother's damaged DNA. The parallels between this story and my own started my thoughts about gene editing. If science can prevent a mother from passing on her disease, surely someday it will be able to prevent any person from passing on a mutation. This sparked my interest in the field of genetics and formed my future plans.



Next year, I will attend Penn State University and be in the Schreyer Honors College, where I will specialize my education in genetics and can join cutting edge research projects exploring gene editing and biotechnology. I plan to get my PhD and find employment at a top research institute so that I can pursue my passion of becoming a genetic researcher. I am excited by the advancements frequently occurring in genetics and the rapid growth of the field; I can't wait to be a part of it all.

Although it is unlikely that my FAP will be cured in time to spare my own suffering, there is a chance I can help make sure no child born after my lifetime will ever face the struggles of a genetic disorder. Becoming a geneticist is my way of being able to transform my bad experiences into something beautiful. I will never be able to separate myself from my genetic mutation, but I can use my hope and determination to create a better tomorrow for someone else.

Lastly, cancer has caused me to change my perspective on life. Knowing that what you have can easily be removed or destroyed at any time has really shown me that every day is a gift, and I should appreciate it more. Even mundane things, like going to school every day or being able to go for a walk with my family or even just talk with my parents is a luxury many don't have. I understand this now because I've seen how easy it is to lose things like this. I'm grateful every day that I have all that I have and that I wake up every morning in a world that still contains both of my parents and my little brother.