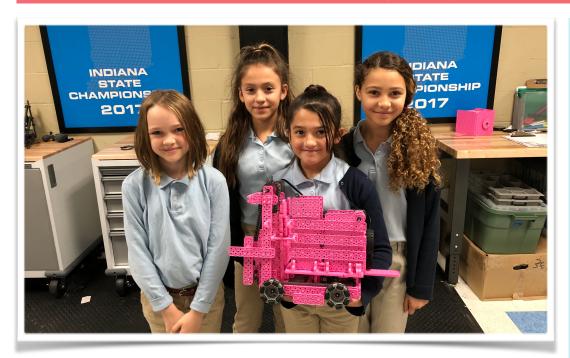
TEAM 10477A FUCHSIA FIGHTERS

# Girl Power(ed)

Looking at the past female leaders in STEM while we build a bright future for girls in our community and beyond



## **Girls with Super Powers**

#### By Parker Jackson

When most people think of the girl power, they think of girl super heroes like Wonder Woman or Gamora. I, on the other hand, think of the women's suffrage movement. Women's suffrage was when women were chanting in the streets, fighting for the right to vote in the United States. Before 1920, women in the US were not even respected enough to be allowed to vote for their representatives.

Luckily, enough, women stood up and demanded the right to vote. In the early 20th century, the government finally started seeing women as able to manage their own lives as good as men.

The way I see it, if women 100 years ago didn't have enough courage to fight, then girls today would not be able to live in a world where they can vote and work outside of their homes. Our robotics teams feels that girls, all girls, do have a super power, and that is bravery. With that bravery, we have



Parker Jackson
Parker is in 5th
grade at Paramount
Brookside and team
captain



Aaliyah
Carranza
Aaliyah is in 5th
grade and a team
design engineer



Anisa Carranza Anisa is a programming engineer and 4th grader

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the power to stand up for what is right, and to say something about injustices in our society, and to fight against that injustice.

## STEM Contributions from Women and Girls

20th century's role models for the 21st

#### By Aaliyah Carranza

Girls are some of the best people on earth. Why? Because girls help create life! Without girls, there would not be any people on earth. Someone once told me that it is very hard being a girl, because girls are always being picked on by boys. And that is true. But what is not true is that girls are not much more than we are perceived to be. And we continue to prove ourselves to the world and fight to change the way we are perceived.

Not too many years ago, women were seen as simple house keepers, and without much importance outside of their homes. Even through the middle of the 20th century, many people thought women should just stay home

#### STEPHANIE KWOLEK: KEVLAR

DuPont chemist Stephanie Kwolek invented the strong, bullet-proof material known as Kevlar while trying to perfect lighter fiber for car tires. Kevlar is light weight, high tensile and strong. Kwolek won a patent for her invention in 1966.

After retiring from DuPont, Kwolek was an activist for STEM in the classrooms, especially encouraging girls to become more interested in science.



and cook and clean and take care of their husbands and their children.

One of the first women to challenge this notion was a girl named Elizabeth Cady. She started an organization in 1848 that eventually led to women being allowed to vote, more than 70 years later.

While most people know about Dr. Martin Luther King, Jr., many people have never heard of Mahlia Jackson, who was also there, singing and marching to help open people's minds up about people of color. Since she was seen as not only a black person, but a black woman, history often glosses over her contributions to the civil rights movement.

Do you know how many women have been involved in great scientific discoveries? There are many things women have invented and contributed to. It is hard to believe that even



Stephanie Kwolek invented Kevlar in the 1960's

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#### KATHARINE BLODGETT: INVISIBLE GLASS

General Electric's first female scientist discovered a new way to transfer thin, monomolecular coatings to glass and metal in 1935. The result: glass that eliminated glare and distortion.

This revolutionized cameras, microscopes, eyeglasses, and more.

As the first woman to receive her Ph.D in physics from the University of Cambridge, she was a pioneer for women in science throughout her life.



Katharine Blodgett, seen in 1941.

though you don't hear about them, these women have dedicated their lives to science, and the betterment of our world.

For centuries, women have been an almost silent part of our workforce. To this day, women make less money than men, even in the same positions. As girls of the 21st century, we must fight against this injustice and ensure that we leave a better world for our daughters and sons, just as our mothers and ancestors did in years past.

These are the women are team looks up to for inspiration and guidance. Working in STEM isn't easy for girls today, but it was even harder for these brave leaders.



Grace Hopper was a computer scientist and Navy Admiral nicknamed 'Amazing Grace'.

#### **GRACE HOPPER: EARLY COMPUTERS**

Women in computer science have a role model in Grace Hopper. She, alongside Howard Aiken, designed Harvard University's Mark I computer. This five-ton, room sized machine was built in 1944.

Hopper invented the compiler that translated written language into computer code and coined the terms 'bug' and 'debugging' when she had to remove moths from the device. In 1959, Hopper was part of the team that developed COBOL, one of the first modern programming languages.

Enlisting in the Naval Reserves during WWII, Hopper rose through the ranks, eventually retiring with the rank of Rear Admiral in 1985.



Our all-girls VEX IQ robotics team wants to show the world that girls can be great engineers.

#### Our Team: Girl Powered

#### By Parker Jackson

This is my second year as a VEX IQ robotics student. This is also Aaliyah's second year. However, for Ivy and Anisa, this is their first year in the program. For Aaliyah and I, this gives us the opportunity to mentor these younger girls and teach them how to design, engineer, and drive the robot for this year's new Ringmaster challenge.

For the Fuchsia Fighters, inclusion is an important aspect of what we do. We don't just want to be the best team as far as scoring points, but we want to be the most inclusive teams as well. Our entire team needs to know how important each girl is to our success.

We also want to be role models in our school. Our school is very diverse, and there are many girls of color here, just like Aaliyah and I. We want to be able to show them that girls of color are just as smart and successful as any other person. When we practice during lunch and recess time, there are many other girls in the school who come to see what we are doing. It is



very
inspirational
to see them
look up to us
and what we
are doing.
We hope to
recruit more
girls like us
into next
year's VEX IQ
challenge.



### Inclusion and Diversity: The Paramount Way

#### By Anisa Carranza

When I started at Paramount school in 2013 as a kindergartner, I hardly spoke any English. My parents spoke Spanish at home, and it was not until my sister and my mother began to teach me when I was three years old that I learned the language.

When I got to school, I was very shy and didn't want to answer questions in class in English. But luckily, there are many other Hispanic students at my school, so we all worked to help each other learn English and participate in class. Without other people like me in my class, I don't know if I would have been able to do well in school.

As a student on the robotics team, I want to show other Hispanic kids, especially Hispanic girls, that even non-native language speakers can succeed in STEM and be included with all the other students.

For me, Girl Powered means girls helping other girls become successful and powerful in school and hake part in the design engineering and beyond.

All members of our team take part in the design, engineering, and driving of our robot. Here, Anisa works on improving our intake design.

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