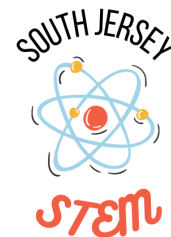
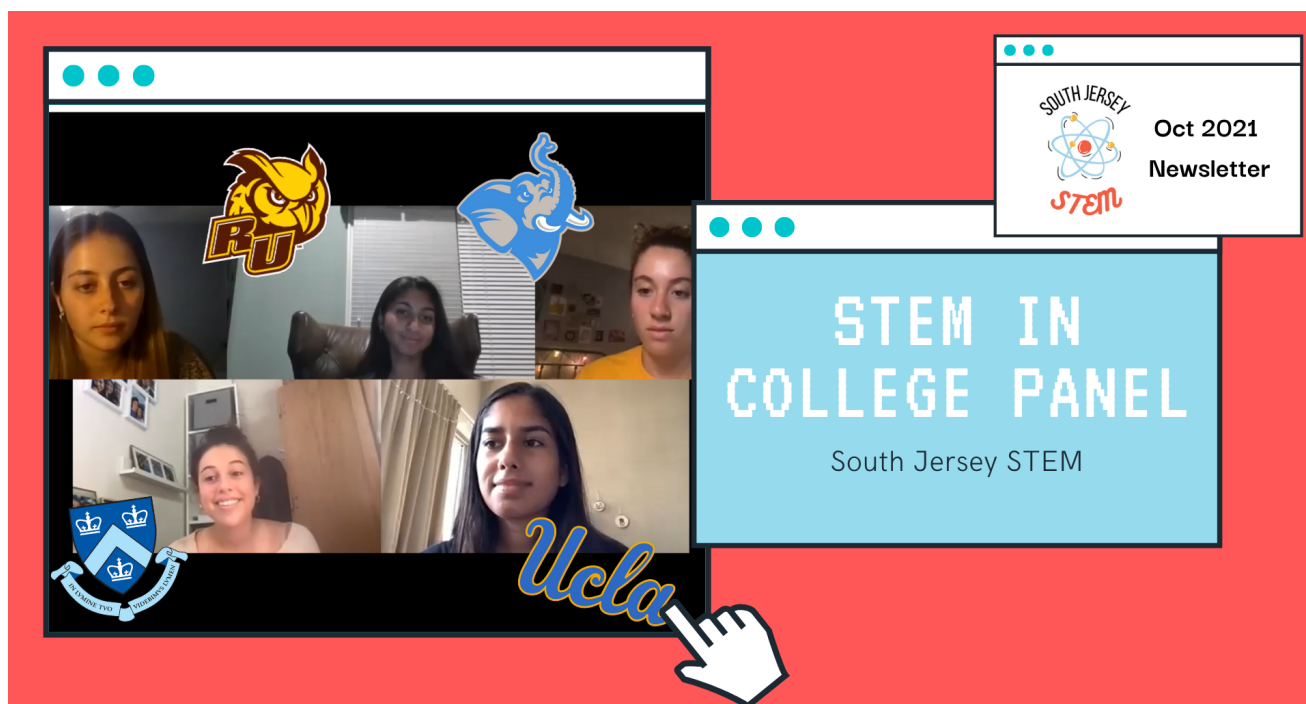


THE SOUTH JERSEY STEM NEWSLETTER



The newsletter for all things STEM!



STEM IN COLLEGE

Interview by Maya Butani

College application season is here! With so many students focused on applying, big decisions are in the making. In this interview you will hear from incredible undergraduates about the application process, how to make critical decisions, and what awaits you in college and beyond. Click [here](#) to access the panel on YouTube.

Special thanks to the speakers for providing their valuable insights for this panel.

- **Alyssa Vargas-Levine** - Computer Science Major at Tufts
- **Julia Sullivan** - Psychology Major at Columbia
- **Samar Padder** - Psychobiology Major at UCLA
- **Kayla DeCesari** - Biomedical Engineering (BME) Major at Rowan

CHECK OUT WHAT ELSE IS INSIDE!

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WHY THE SCIENCE FAIR: BEYOND VOLCANOES

Written by Maya Butani

Signs of autumn are already in the air. Leaves are blushing at the cooling temperatures, and school has begun. But for me, the tell-tale signs of fall indicate something else as well: science fair season. Since sixth grade, the science fair has become a predictable fixture in my life. Through the fair, I have pursued passions that would have otherwise remained undiscovered. My projects have taught me more about myself and science than the classroom ever could have. There's simply no way to rival the exhilaration of doing science with your hands.

Now at this point, you may be dismissing me as a science fanatic, and you may be right. It would be accurate to describe me as a nerd (and my friends would probably agree). But I promise you, the science fair is for everyone. I have seen thousands of projects, ranging from subjects like sports to art and everything in between. If you have a passion and you've felt the rush of curiosity before, there is a place for you among the rows of poster boards. If you win, monetary awards, scholarships, and college recognition await you. Though even if you don't win, there is still much to gain.

Experience in writing up reports and presenting them to the judges is a significant advantage in high school. Because of the science fair, I approached in-school presentations and essays with confidence that demonstrated itself in improving grades.

Now you may be thinking-- and forgive me for speaking for you again-- that's great and all, but I have no idea where to start! Luckily, that's where I can help. The first thing to do is find your local fair. Your school may be able to give you more information about your local fair, or you can find your fair [here](#). I live in Moorestown, so my local fair is the [Coriell Science Fair](#), which serves Burlington, Camden, and Gloucester County in New Jersey. After finding your local fair, you can visit the fair website to learn more about registration.

Once you find your fair, it's time to start brainstorming. Again, I will emphasize that passion is essential. If you have a deep investment in your project, unavoidable challenges will be easier to overcome. Many of my past project ideas have come from random epiphanies.

WHY THE SCIENCE FAIR: (CONT.)

Written by Maya Butani

My most successful idea came from an observation that spinach leaves look similar to the vascular system (though dinner that night was quite unsuccessful since I burnt it severely). Regardless of how you develop your ideas, make sure that you are interested in the topic. Then, start thinking about questions to ask or problems to solve that are related to your chosen topic. For my project, I started brainstorming ways in which the similarities between plant and human tissue could be utilized in medicine. Through many Google searches, I learned about a field called tissue engineering. At that point, I started performing background research to learn about the subject, and I began developing different questions I could test through experimentation. If you're having trouble, contact me at mbutani.stem@gmail.com. The science fair is the longest "job" I've had as a high schooler, and over the past six years, I've learned the ins and outs of the sometimes complicated process. Feel free to reach out, I would love to help you. The science fair can seem daunting, but its rewards far outweigh its challenges.

And while I have you considering the science fair, check out the resources below if you need a bit more convincing!

FURTHER READING

- [Relevance of the Science Fair](#)
- [The Benefits of the Science Fair](#)
- [The Values of the Science Fair](#)

Here are some of the winners from [Regeneron ISEF](#), the world's largest science fair that gives away nearly 4 million in prizes!

“

*I promise you,
the science fair
is for everyone!*



BLENDING ART AND STEM

Written by Anya Patel

A creative spirit and a natural love for the arts does not limit your career path as much as some may believe. In fact, there are many ways that art fields and STEM subjects overlap. When I was looking into careers, I was nervous about my future since I understood that artistic careers could be risky. However, I've always had a love for math and I wanted to express my love for both fields. Recognizing my deep passion, I was determined to find a field that I'd be happy with, a career path that would make work feel less like... work!

I originally leaned towards being an architect. But once I found the Architectural Engineering program at Penn State University I had found the field that appealed to me. Not only do Architectural Engineers get to work with design elements, they also need to understand the physical properties of what they're building to help wrinkle out logistics.

Of course, that's not the only field open that connects art to STEM. Graphic designers can hold a promising career as well. Unfortunately, it is quite a competitive industry since the number of people who go into graphic design increases every year. Nevertheless, it's an important job. Creations by graphic designers could be the face of an entire brand! Graphic designers need to understand properties such as color theory and aesthetics while also appealing to natural psychological tendencies. They also must become skilled in the use of digital programs and software.

Artists in STEM need to contemplate the 'movement' in an inanimate object, train their eye to follow the tiniest of details, and question what emotions they wish to invoke with their pieces. In her book *How Art Works: A Psychological Exploration*, Harvard graduate Dr. Ellen Winner speaks on how certain pieces can even elicit both positive and negative emotions, since art is always in the eye of the beholder.

When we integrate art with STEM, we get a fascinating and charming blend of fields that will appeal to many. It's important for everyone to find a career that genuinely excites them and relates to something that they're passionate about. If there's anything you can take away from this article, I hope you find the courage to dig deep and find a field that feels right to you!

HOW I BLEND ART AND STEM...

By drawing buildings, I've gained a great appreciation for architecture. I practice sketching by finding pictures of interesting and unique buildings online! There's a lot of beauty in the things you find in common life and I try to express that through my sketches!



RESEARCH IN HIGH SCHOOL- A GUIDE

Written by Jillian Smith

Science fairs, symposiums, and school projects often offer opportunities for high school students to conduct and present their own research. For many students, managing bureaucratic protocol and writing scientific articles - especially without an experienced mentor or teacher - can be daunting. It was for me.

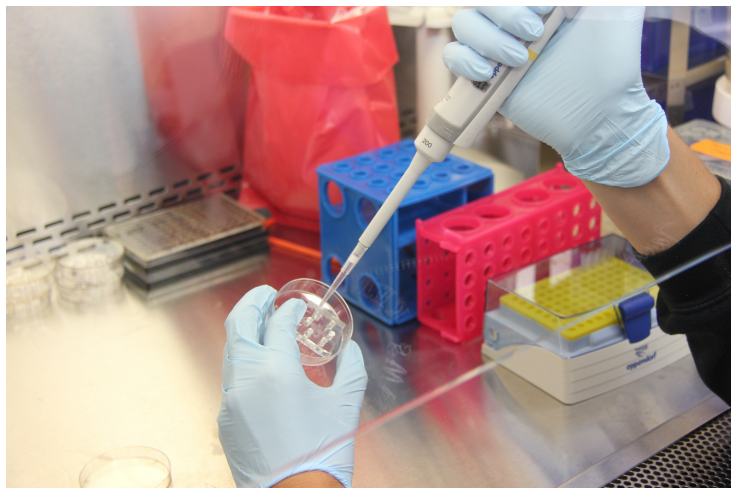
However, there are other ways to involve yourself in STEM fields without doing so alone; it is very possible to become involved in collegiate level research near you. Before delving into the methods of going about this, I'd like to tell you why you should even consider it.

First, in a lab you will have an assigned mentor (or mentors): someone who has experience in a research lab, most likely a graduate student. If your high school has underfunded science laboratories like mine, you may not have previous experience in a lab, or lack access to someone with research experience. If this is the case, attempting to conduct scientific research on your own will be extremely difficult. A mentor's job is to ensure that you can conduct experiments efficiently and on your own through training and constant discussion of your project.

Second, research in a professional setting is valuable. Through this experience, you will partake in novel experimentation, a sharp contrast to oft-repeated classroom experiments. Furthermore, you will be trained in laboratory techniques and protocols, with access to the school's high-tech equipment. By listening to older students' ideas, presenting your research, and collecting and analyzing data, you will learn soft skills like experimental design, communication, and problem-solving. Lab experience can provide a glimpse into what the future might bring, should you continue research in college and beyond.

Interested in STEM research but don't know what to do? **Start here!**

Convinced? Now it's time to find contacts by browsing the closest college website. If you are too far from a college or university to reasonably commute, this may be more difficult - though with the virtual world expanding, it's not impossible. Decide which department most interests you, and use a simple Google search to find the webpage. Every school's website will be slightly different, but their universal desire to showcase exciting research conducted on campus should make finding professors and labs fairly simple. If you are a high school student, I recommend gathering some sort of information on every lab in the department. Is there a page displaying current or past student researchers? Are any of them high school students? If not, are there many undergraduate students, or are there mostly graduate students? Do you have prior experience in the lab's research concentration - a class, a project? Where is the research conducted? Is it on the main campus? Asking these questions may seem silly, but answering them can give you an idea of the professors' research that aligns with your interests and experience and who may be willing to take on a high school student.



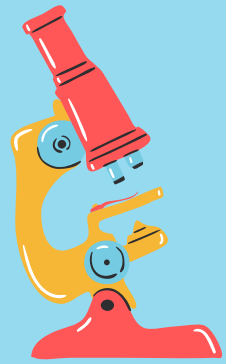
RESEARCH IN HIGH SCHOOL (CONT.)

Written by Jillian Smith

Finally, using this information, decide who to contact (and actually do it). Examine your chosen professors' publications to the best of your ability. This will help you write a more personal email, and the power of flattery can increase your chances of a response. If you don't have one, create a resume (resources linked to the right) and ask for an unofficial transcript from your school guidance counselor. Now you're ready to write.

The main point of this email is to introduce yourself and let the recipient know why you would be a good fit for their lab. Is there anything special about you - a prior experience or class, a certain interest - that sets you apart? Let them know of your academic or career interests and your knowledge of their publications. Also include your general availability, whether that's after school or on weekends. If you're lost, [here's a template](#) to guide you. Feel free to add or remove whatever feels right.

We've discussed the benefits of participating in research as a high school student and how you can get involved. If you are unsure whether you are qualified or whether you are even interested in research, I recommend giving it a try - the hands-on experience of working in a lab can help you resolve both of these issues. If you are interested and committed, you should have no problem getting involved in a meaningful way. Thanks for reading, and good luck!



RESUME RESOURCES

- [Harvard's Guide to Resumes and Cover Letters](#)
- [College Essay Guy's "How to Write a College Resume" + Example Templates](#)

EMAIL TEMPLATE

- [South Jersey STEM's College Research Email Template](#)



To the left is an image of the **VegaLab** group at Rowan University! Three South Jersey STEM leaders, Jillian, Maya, and Leila have researched at this lab!



DON'T LET YOUR FLAME BURN OUT!

Written by Kaitlyn Burkhardt

Burnout is a specific type of stress that causes mental and physical exhaustion, resulting in reduced motivation, accomplishment, and a loss of personal identity. Nearly everyone from high school students to billionaires has experienced burnout while striving to achieve their goals. When one is affected by burnout, even their most significant goals cannot motivate them to be productive.

After establishing a mental health club in my school (check out www.mentalhealthfriends.org for more information), I soon became burnt out because of the workload and the pressure that followed. As a result, the quality of my work decreased, so I decided to take a break. I cancelled several meetings and delegated the workload in order to help combat the burnout. Eventually, my burnout dissipated and I was able to return to my club with full strength.

Burnout can be caused by a number of factors. I know personally that my drive for perfection increases my chances of burning out. Serious disorders such as depression or anxiety can also play a significant role in causing burnout. Remember, people who are burnt out are not lazy. They are simply stuck in a rut. But the good news is, they **can** get out of it. If you are experiencing these emotions, remember that the storm will pass, and you can come out of it stronger!



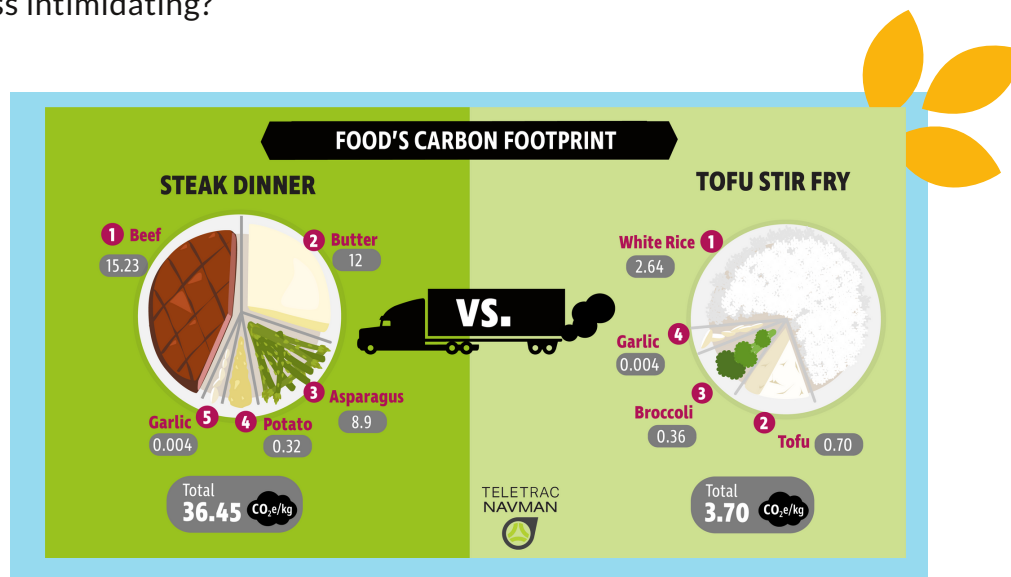
I know what you're thinking: how do I see through the storm? No, you do not need special weather goggles or superpowers. Instead, you need to recognize what you are experiencing and adjust accordingly. To relieve your burn out try seeking support from loved ones or professional help. This is the strategy that researchers suggest, since verbalizing your emotions can make them much more manageable. It also helps to recognize that perfection is not necessary for success. Just as if you were bodybuilding at the gym, you need rest days to give your mind time to recover. Recognize that you can only handle so much, and that is okay! Finally, basic self care (ex. sleep, eating, drinking water, and exercise) can help.

When you feel like your life is collapsing on itself, it's easy to think that you are alone in the fight, but everyone experiences these difficult emotions. Take a deep breath and cut yourself some slack, you are trying your best and you should be proud of yourself. Remember, your goals are worth it, but so is your well being, and that's most important in the long-run.

MINIMIZING OUR CARBON FOOTPRINT

Written by Leila Quatorze

Climate change and global warming are irreversibly affecting the world as we know it. Species are dying out, natural disasters are more prevalent, and the ozone layer is diminishing. All of these effects have very substantial and frightening consequences. For instance, as the ozone layer is depleted, increases in radiation levels will significantly impact agriculture and health. Because of climate change, our future is more uncertain, and we need to take action to minimize our harmful impact on the planet. The premature consequences of climate change are already tangible through shortages of necessities like lumber, microchips, steel, chlorine, and many others. These shortages are caused by wildfires diminishing the amount of lumber on the market and floods hitting factories in East Asia. Because of these natural disasters, our way of life is threatened. So, what can we do to make a looming future less intimidating?



Changing Our Diet

As a society, we can minimize our carbon footprint and thus climate change through our diets, consumption, and transportation. A simple way to decrease your carbon footprint is by participating in Meatless Mondays. By simply modifying your diet one day of the week, you can significantly lower your greenhouse gas emissions. According to the University of Colorado Boulder, you can “decrease your carbon footprint by 8 pounds” for each Meatless Monday you participate in [Conzachi, “Meatless Mondays”]. Further, you can also mitigate your contribution to toxic compounds in the atmosphere. Instead of eating chicken alfredo, eating broccoli alfredo would reduce 18.4 grams of phosphate and 38.6 grams of sulfur from being released into the atmosphere. This simple meal choice would reduce your impact on air pollution and acid rain as well as reducing your carbon footprint. To quantify your carbon footprint based on your current diet, you can use a meat footprint calculator like the one linked here.

MINIMIZING OUR CARBON FOOTPRINT (CONT.)

Written by Leila Quatorze

Limiting Consumption

Another way of minimizing your carbon footprint is decreasing consumption. Fast fashion is an industry that mass produces high-end fashion designs for profit. Fast fashion is especially detrimental to the environment. Producing such a significant quantity of clothing requires large amounts of energy and resources, and produces harmful byproducts like carbon emissions. Additionally, fast fashion promotes a wasteful trend cycle that coerces consumers to dispose of their items, which ultimately end up piling in landfills and the ocean. By purchasing less clothing and shopping from environmentally conscious brands, you can benefit the environment through your purchasing habits. Some eco-friendly brands you can shop at are Pangaia, pact, and Boden.

Minimizing Waste

To further reduce your carbon footprint, you can invest in a metal straw or a reusable water bottle. This way, you can minimize the waste that ends up in landfills and impacts marine life and underwater ecosystems. Plastic pollution is related to your carbon footprint because plastic waste emits greenhouse gasses during every stage of its lifecycle. Over 300 million tons of plastic are produced every year, and when litter from these plastics ends up in underwater ecosystems it can cause severe injury and death in marine organisms as well. Finally, in terms of transportation, you can carpool, bike or skate whenever possible, to reduce carbon emissions. These forms of transportation are much better for the environment because they reduce overall carbon emissions and therefore climate change.

We can all make a difference!

Even though these small changes to your lifestyle seem insignificant, they can make an impact on the future of our planet and many generations to come!

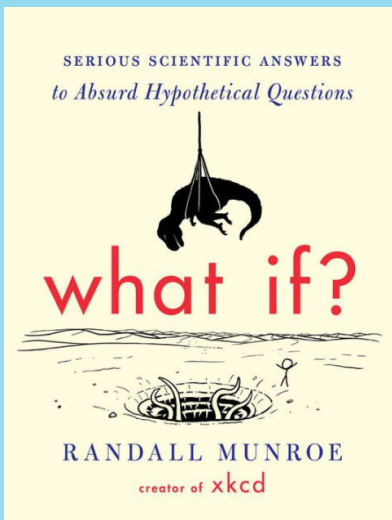


THE BOOK CORNER



Written by Maya Butani

Reading is a pleasure that's often forgotten. Amidst the chaos of unending assignments and interminable testing, students in STEM often can't find the time to read. We at South Jersey STEM recognize that the free time can be limited so we've picked out the stories that are most worth your time. We strongly encourage you to pick up these books if you get the chance!

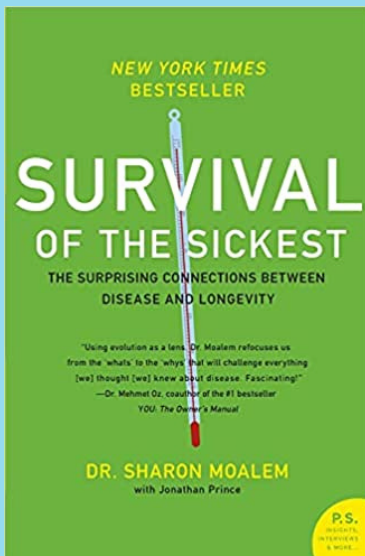


What if?

Randall Munroe

Goodreads Score: 4.12 Stars

Munroe answers absurd hypotheticals with impressive scientific professionalism accompanied with comical stick-figure illustrations. Throughout this book, Munroe demonstrates that even the most ridiculous questions can be taken seriously. A casual read, this book was incredibly entertaining every time I picked it up. I strongly recommend this book to anyone with a casual interest in science and a passionate curiosity.



Survival of the Sickest

Sharon Moalem

Goodreads Score: 4.50 Stars

Sharon Moalem presents a fascinating perspective on disease and disorders in this engaging non-fiction novel. The chapters cover conditions such as diabetes, hemochromatosis, sickle cell anemia and more, while discussing the evolutionary advantage that these ailments may have once provided. Through accessible explanations in a highly readable format, this book will likely shift your perspective on evolution and daily life.



THE EDUCATION CRISIS IN AFGHANISTAN (AND HOW TO HELP)

Written by Maya Butani

The nation has been shaken by harrowing images of the recent Taliban takeover in Afghanistan. Following the President's order to remove all American troops from Afghanistan by September 11th, 2021, the terrorist group rapidly seized control of the nation as the Afghan government collapsed. Among other issues, this change in power has "exacerbated an already dire humanitarian crisis". Specifically, women and girls are in danger, as they face increased infringements on their rights-- especially in regards to education. As one Afghan girl stated, "As the fighting increases day by day, it's a concern that we'll go back in time." In the last period of Taliban rule, from 1996 to 2001, "[the Taliban] banned almost all education for women and girls" as enforced by stoning, lashing and amputation. Furthermore, these women and girls were barred from employment and participation in daily life since they were unable to leave their homes without a male family member.

At South Jersey STEM, we believe that education is of the utmost importance, and are heartbroken as we watch these events unfold in the Middle East. Though an ocean away, we still hope to aid these women and children in any way that we can. If you are interested in donating, volunteering, or spreading awareness about this humanitarian crisis, you can find many resources to do so here.

The Afghan Girls Financial Assistance Fund (AGFAF) is one organization that stands out to us especially. Through their outreach program, they have been able to provide "emotional, academic, and project support" for bright Afghan students through a 4 year college career in the US. After their education, these students have been able to give back to other Afghan children by establishing summer programs, libraries, compost sites and other incredible projects that are improving the education of thousands more Afghani students. If you are interested, you can learn more at <https://agfaf.org/>. They accept monetary and in-kind donations and if you are interested in being directly involved, you can contact info@agfaf.org.

Humanitarian issues impact all of us. We hope you'll consider doing your part for women and girls in Afghanistan, whether that is spreading awareness, volunteering your time, or donating whatever you can.

Together, we can establish a supportive network for Afghani women. Through reading this article, you have already taken a substantial step towards increasing your awareness. From here, the possibilities to help are endless. Whether it's spreading the word, donating your time, or raising money, every contribution makes a difference!

Make a difference today!
Visit agfaf.org for more
information



THE SEARCH FOR SCHOLARSHIPS

Written by Jenna Ference-Salo

College can be extremely expensive, especially if you're going out of state, so scholarships are a great way to lower student debt. Finding which scholarships are right for you can be a difficult task, but one solution is college scholarship search engines. They typically ask you questions about yourself, such as what major you plan to pursue, your grades, and demographic information. [CollegeXpress](#), [Cappex](#), [Niche](#), [CollegeBoard](#), [Scholarships360](#), [CollegeVine](#), and [ScholarshipOwl](#) are great tools to help find scholarships. These websites make applying for scholarships simple by showing you exactly what is required to apply to each scholarship, when they are due, and how much money they award.

There are various types of scholarships available. Options include scholarships for different colleges, majors, hobbies, heritages, and states. There are various STEM scholarships, specifically girls in STEM. For example, the Rho Brooks Women in STEM Scholarship is a scholarship for undergraduates and high school girls pursuing or planning to achieve a STEM degree. All that is needed for this scholarship is a 400-600 word essay. The question is, "Please tell us a bit about yourself. Who or what is the biggest influence in your life? How has it/they shaped your career aspirations".

Applying for colleges and scholarships while managing classes and outside activities can be stressful. It is important to know that there are many online tools available to make your life a bit easier. There is also a vast amount of scholarships with so much diversity that there is something for everyone! Listed below are a few STEM scholarships that you may be interested in, and if you don't find something here, check out the scholarship search engines that I listed above!

Try these scholarship search engines!

[College Xpress](#), [Cappex](#)
[Niche](#), [Collegeboard](#),
[Scholarships360](#), [CollegeVine](#),
[Scholarship Owl](#)

Women in STEM Scholarships

Learner Education Women in Mathematics Scholarships

Deadline: August 1, 2022

Lambda School Unlock Your Potential Scholarship

Deadline: September 30, 2021

Elevate Women in Technology Scholarship

Deadline: October 1, 2021

The Science Ambassador Scholarship

Deadline: Application open in the fall

Women Techmakers Scholars Program

Deadline: To Be Determined





STEM OPPORTUNITIES

Science is a broad field that is best enjoyed with hands-on opportunities. However, we at South Jersey STEM know that summer camps, competitions, and other events can be hard to find. Therefore, we've compiled a list for you to use below. From math to programming to team competitions and more, we have it all, and everyone will be able to find something. Enjoy, and happy learning!

Coriell Science Fair - Camden County regional fair

Registration Deadline: Feb. 21
*Visit [here](#) to find other county fairs

Junior Science and Humanities Symposium - science fair opportunity

Registration Deadline: Varies from Jan. - Feb. (based on your region, find it [here](#))

First Lego League - Team Robotics Competition

A team robotics competition comprised of different leagues. Find yours [here](#).

USA Biology Olympiad, US National Chemistry Olympiad, Mathematical Association of America, US Physics Team, US Medicine Olympiad, USA Computing Olympiad

These competitions consist of different levels of qualifying tests, and often feed into prestigious international olympiads. The deadlines for each vary and can be found at their websites.

High School Hackathons - 24 hour event for programmers to complete a task together.

The given link provides all the upcoming hackathons! Many require no programming experience, but it varies between each event.

TEDx Events - An independent branch, these events are a great chance to learn new ideas!

The link given will allow you to find upcoming events near you!

Maker Faire - Opportunity to present your creations and see others!

Find your closest Maker Faire [here](#)

National Science Bowl - Science quiz bowl for teams of 4-5

Find your region [here](#)
*This competition is through the schools, information about starting a chapter is also on the website

Congressional App Challenge - App development challenge run by Congress

Submission deadline: Nov. 1
Accepts individual submissions or up to 4 team members



STEM CAMP OPPORTUNITIES

One of the best times to pursue STEM-based opportunities is in the summer, so below, we have compiled a list of some of the best camps and opportunities that we have come across. These programs vary in subject matter and length of time, so there is something for everyone! The dates in the boxes are the current deadline for application to the programs. For boxes without dates, either the application hasn't opened, or the deadline is not published. Visit the links in each box for more information!

Rowan Biomedical Scholars - June 28

Two-week program to learn lab techniques for biomedical research.

Research Science Institute (RSI) -

Application not yet open, highly competitive research opportunity at MIT.

American College of Cardiology Young Scholars Programs - Dec 1

Research with and learn from cardiologists.

Telluride Association Summer Program -

Free six week educational opportunity with unique challenges and seminars

Monell Summer Program - 7 week paid research internship for students interested in biomedical science with taste and smell.

Boston University RISE Program - Feb 14
6-week program for research projects and developmental workshops

Boston Leadership Institute- Both remote and in-person opportunities for a wide range of STEM fields.

Cornell CURIE Academy- March 1
1 week program for high school girls who are interested in exploring engineering

W.E.B Du Bois Summer Institute- 4 week program with classes in business, leadership, engineering, pre-med/neuroscience.

Girls Who Code Summer Immersion Program-
2 week opportunity to prepare female students for a career in technology.

Engineering Summer Academy at Penn- Mar 26
3 week program that combines complex lessons with hands-on experience at UPenn.

Waksman Student Scholars Program- A year long opportunity begins in the summer as a project in molecular biology

Inspirit AI Summer Program -
Year-long programs to learn about the basics of artificial intelligence programming in the world.

Inspira Health Volunteering - Hospital volunteering with customer service, emotional support and other aid.

THE IMPORTANCE OF STEM EXPERIENCES

Written by Alicia Garcia-Rivas

In our ever-changing world, technology continues to improve, outpacing old skills and proving that we have much left to learn. So, how do we stay prepared with the necessary skills and knowledge? The simple answer: STEM. Applying science, technology, engineering and mathematics to our academic lessons motivates students to thrive both academically and socially. Through these applications, students not only develop math and science skills for academic purposes, but they may also strengthen language and critical thinking skills. So how and when should you expose yourself or a child to enriching STEM experiences? The answer is anytime in their educational development!

For older children and highschoolers, joining STEM-related clubs, building experiments and competing in science fairs opens a new world of learning. Enrolling in STEM expands “their understanding of the world as they develop important life skills”. The critical thinking and hands-on learning needed for STEM teaches a number of life skills ranging from problem solving abilities to learning how to adapt. Simply teaching children to engage in the science, technology, engineering and math fields is key in encouraging a valuable mindset.

Interestingly, introducing STEM to younger students may be even more beneficial. Exposing STEM in early childhood is recommended, since younger children are in the early process of “neurological development,” making them more suitable for the curiosity and engagement needed for STEM. Younger children tend to remain much more curious, focused and active when exploring STEM learning, especially hands-on experiences. STEM also plays a huge role in social and emotional growth in younger students, the communication skills developed in STEM influence interactivity and socialization. It's crucial to teach young children to embrace their passions, and so, teaching STEM is an important key to confidence.

Before preschool, STEM can even be introduced to infants and toddlers. A simple evolution from plastic toys to real life objects (like food, cups, bottles and other materials), can foster a child's curiosity, while engaging and enhancing their senses. For preschoolers and grade students, simply engaging in STEM activities, such as learning to read patterns, playing games like “I Spy”, and learning to build things, introduces them to valuable skills. These activities can also expand their knowledge and learning habits through trial and error by experimenting.

There is a vast abundance of resources and activities available for STEM education. No matter when you decide to engage in STEM, you stand to gain incredible benefits both academically and in life skills. Keeping this in mind, if you are interested in pursuing STEM opportunities and education, below is a list of resources and websites that focus on STEM. We wish you the best as you embark on your scientific journey!

Further Resources



- [Preschool STEM Activities](#)
- [STEM Activities for Kids](#)
- [STEM Opportunities/Resources for K-12](#)
- [South Jersey STEM](#)



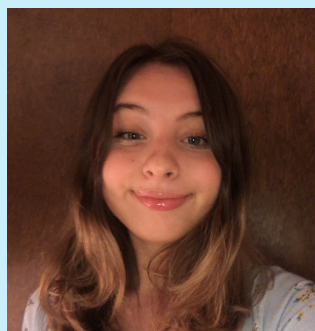
Meet the Authors!



Maya Butani - Founder/President of South Jersey STEM

Articles: Why the Science Fair, Afghani Education

Maya has competed in many science fairs for her biomedical engineering research which she pursues at Rowan University in the Vega Lab. She founded South Jersey STEM after recognizing the value of experiential learning in science education and truly believes in the power of science to better society. mbutani718@gmail.com



Jenna Ference-Salo

Articles: The Search for Scholarships

Jenna is passionate about STEM and in programming, she is working on issues regarding GI cancer and studies how AI could be used in healthcare. Outside of school Jenna loves to dance and even teaches younger students! Jenna is a wonderful leader and is excited to bring STEM to younger students.
jennaferencesalo@gmail.com



Jillian Smith -

Articles: College Level Research - A Guide

Jillian is a senior in high school and loves math and science. She is passionate about helping her community by providing mentorship and service in STEM and music. She is currently researching hydrogels for nerve grafts and spacers to protect cancer patients from radiation. She hopes to instill a love of learning and science in younger students!
smithj19@gmail.com



Alicia Garcia-Rivas -

Articles: The Importance of STEM Experiences

Alicia has competed in past science fairs with projects mainly in biochemistry. Beyond math and science, Alicia advocates for social justice topics, while giving back and helping out in her community. Her goal is to increase youth awareness and enjoyment of STEM fields!
aliciagarciarivas03@gmail.com

Meet the Authors!



Leila Quatorze -

Articles: How to Minimize Our Carbon Footprint

Leila loves all things science and engineering. She is very interested in environmental, biomedical, and industrial engineering. She is currently researching photo patterning and cell morphology at Rowan university and hopes to share her knowledge while also making environmental science more accessible to students in her community!

lquatorze100@gmail.com



Anya Patel -

Articles: Blending Art and STEM

Anya is a loves everything about creativity. Working to blur the lines between STEM and art, she hopes to create a unique environment to make the field a little more fascinating and exciting than it already is! She's happy to be working with such accomplished girls and is excited to blend ideas with people with different STEM backgrounds.

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Kaitlyn Burkhardt

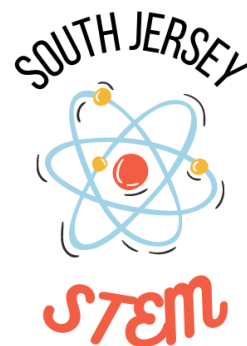
Articles: Don't Let Your Flame Burn Out!

Kaitlyn founded the club Mental Health Friends in her high school after witnessing the stigma surrounding mental health. She works towards creating an environment of acceptance and learning. She makes sure everyone knows that they are loved, worthy of living, and not alone.

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Want to see your name here?

If you have an interest in STEM and want to share your experiences or passions contact us at mbutani.stem@gmail.com! We'd love to hear from you!



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Next Edition:
Beginning of February

