

Hello everyone, my name is Sophia Seumahu and I am a year 11 student going into year 12 next year at King's christian College. Before I talk more about what I want to do with the knowledge I will gain from the national youth science forum and why I am so thankful for you guys sponsoring me. I want to give you a bit of background on why I love STEM. And just to clear up if you don't know, STEM stands for Science, Technology, Engineering, and Mathematics which are the areas that will be learning about and exploring at NYSF. This forum will have a week of lectures from professionals in a range of STEM areas and also a week of lab visits and hands-on workshops where we can see and do some of the science that is being used in the real world.

I think science has always been a huge passion of mine even from an early age because I have always loved thinking about the way the world works together and nothing falls out of place. From weather patterns to planet orbits, everything works together to create life as we know it. The gravitational pull of the sun and moon for instance creates the tides and allows us to admire the white washed crests of the waves that we see on the beach today. I also love science because of my faith and being a christian. To me, learning about science is learning about how God created the world to function in perfect harmony even to the last atom. The way he designed DNA to define our hair, eye , skin color and even our personality is just amazing. However I don't think I was just born with a love for science, I think it also comes from having a family that supported my passion and encouraged me to explore it.

For example, I am inspired by my dad's father who started as young boy in a village in Indonesia and he grew up to be an electrical engineer. When I was little he and I would work together on a table outside his house. I would work on my coloring books while he would use his electrical knowledge and equipment reate circuits for radios and battery powered lights and things like that. And when I got old enough we would work together on little engineering projects like building a drone and a robotic arm. His speciality was telecommunications and his proudest achievement was getting to represent Australia at a united nations convention for his work. From my mother's side, many of her relatives are entrepreneurs and engineers. One of them even invented an eco friendly drilling fluid to minimize the environmental impacts of oil drilling.

At the moment I am hoping to study engineering when I get into university, because I love to create and design things and use technology to make people's lives easier. In engineering there are so many niches and areas to go into and while I have ruled some out, I still don't know exactly which one I want to do. I also enjoy Physics, specifically quantum optics, and I found this out in year nine when I got to visit the Griffith quantum optics lab as part of a science camp. This is part of the reason I want to go to NYSF because in programs like these you can explore other science areas you might be interested in. I think its so important that kids my age and even younger get to go to camps like these so they can explore the different careers available in STEM.

At my school I have tried to encourage this by starting a STEM club with a friend who also feels that we need a place where students like us can discover their passion for science.

We started our club last term for high school students during our lunch break on a Monday. We were super excited to get started and we spent lots of time planning, creating information slideshows, and planning experiments. The work was all worth it in the end, and we were

thrilled to have 17 students show up to our first meeting. It was also really cool to see the impact that our STEM club had on the science culture within our school. Within the first two weeks of starting the club we had a younger high school student from another campus of our school asking how she could start a STEM club there. The friend I am co leading with is also going to NYSF and we are hoping we can learn valuable information about future jobs, careers, and STEM developments that we can share with our club when we restart next year. Its been awesome to be able to share our passion for science with the students in our school, and improve our leadership skills. I'm hoping that by going to NYSF we will be able to increase our STEM knowledge so we can also grow our club and improve it for the better.

For myself specifically, I am hoping that through NYSF I can learn more about the jobs available in engineering and just continue to explore and grow my passion for STEM. I have heard from many friends and other people that NYSF is truly an amazing and fun experience and as the days tick by, I get more and more excited as the forum gets closer and closer. One thing I have heard from people who have gone to NYSF, is that one of their favourite parts of the program was being able to connect with other people who have the same passion for science. Some of them have even said they stayed connected with those people and they are still friends 10 years into the future. I am hoping that through this forum I can make new relationships and connections with people who have the same interest in science. I have been to other STEM camps in the past and it's definitely a lot easier to make friends when you all share a passion. So I want to thank you all so much for the sponsorship and opportunity to get to go to such an amazing program, and I am so so excited to connect with and learn from the many STEM professionals and fellow students that I will get to meet.