

Interview

with Lauren Bowling



Michigan Technological University student, Lauren Bowling has just begun her second NASA internship. We caught up with Lauren to find out from her perspective the biggest differences between her first NASA internship at Langley Research Center and her COVID-19 affected NASA virtual internship that just began.

The effects of COVID-19 seem to be just beginning as everything came to a halt fast. Students with internships were affected by either having their plans canceled or changed to a virtual platform. NASA did everything it could to make their internships virtual across the country.

Please explain the details of your last NASA Internship:

Last summer I was also an intern at LaRC, working with bulk metallic glass (BMG) gears being considered for spacecraft. The overarching goal of the project is to evaluate the performance of BMG alloys from ambient to cryogenic temperatures to determine if the alloy has suitable properties for its cryogenic-service temperatures. Specifically, I helped develop a cryogenic hardness testing procedure for the gears and then used it to test them!

Please explain the details of your Summer 2020 NASA Internship:

This summer, I will be researching and analyzing inflatable lunar habitats. Mainly, I will focus on a gap analysis between the technologies needed to create and sustain inflatable habitats on lunar surfaces and the technologies currently available or being developed at NASA Langley and other centers.

What is the biggest challenge this year versus last year's internship?

Although I'm only a couple days into my internship this year, I suspect that the biggest challenge will just be the virtual aspect. Last year, it was easy to talk with someone – I would just go to their office. Now, meetings

have to be scheduled, which can add complications via technical difficulties and poor connections. Personally, I learn best through experience rather than audio or visuals, and with all interactions being virtual this summer, audio and visuals will be the main tools used to explain concepts. Therefore, I'm going to have to spend some extra time to understand the topics compared to if I were on-center this summer.

What are you most looking forward to for this year's internship?

I'm most excited for the application of my internship this year, the fact that NASA has already begun contracting lunar habitats for 2024 is mind-boggling to me. I'm also excited to learn about material applications in space and how materials are utilized in advanced lunar structures differently than on Earth.

What kind of changes has NASA implemented for this summer?

NASA has done a great job at adapting to virtual work! All interns were still administered laptops and all online meetings have run smoothly with limited technical hiccups.

Do you think that this could affect how future internships operate?

I think that this virtual experience will provide insight on how to increase the accessibility of the internship for future years. Not will it demonstrate the types of projects that might flourish in the virtual environment, but it will increase the accessibility that guest speakers have to giving

talks/presentations. At LaRC, the internship program provides so many opportunities to attend to interesting talks/presentations, and after this, they might continue to record the lectures so that those who could not attend it physically could still listen. Additionally, they might consider keeping the webinar format for some talks, which would only make the program more accessible to scientists world-wide!

How has COVID effected your summer plans?

Obviously, the largest change was not moving to Virginia for the summer to work on-center at LaRC. I had a blast living there last summer, but now I get to spend more time with my family and friends from home, who I don't get to see much since I go to school at Michigan Tech.

How do you feel about doing a remote internship?

I'm really excited to start my internship, its pretty different than my internship last year so I'll be exposed to a whole new aspect of MSE than I was before. I think that its not only going to be a great opportunity to gain a greater understanding of MSE applications, but it will also be a great opportunity to improve my communication skills, which always needs help.

Tips for future interns?

The internship goes by way too fast, so make sure to make the most out of the experience from the beginning, whether that be exploring the center, attending the talks, or hanging out with the other interns!!