If you haven't watched the Perserverence Mars rover landing yet, do it!

## BIOBEAT

Feb 24, 2021

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## Black History Month and EDI in STEM

For this special edition of Biobeat, guest writer and 4th year student, Godi Jibi, shares some of his thoughts about his experience in STEM, his hopes for the future, and words of encouragement for others. He also reached out to other Biology students to hear their thoughts about Black History Month and the connection with Equity, Diversity, and Inclusion (EDI). Thank you, Godi, for this contribution!

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Race is a delicate subject that many people avoid because of the current situation in the world. Partly stemming from George Floyd's death and the subsequent protests in America, people have been advocating for more Equity, Diversity, and Inclusion (EDI) work for the BIPOC community and other minority communities. In science, there is a belief that because it's objective, theoretically, there should be no racial biases. But that statement isn't true because science always has some degree of subjectivity; so there is no guarantee that racism can be eradicated within the world of science.

Identifying as a black man, I struggle daily to believe that there is a place for me within the scientific community. I think BIPOC people miss out on opportunities that instead are given to the people who look like the studious, white, "typical" type of person. So, for Black History Month, it is not just looking to black individuals and celebrating them, their accomplishments, and what they do; this month is also essential for advocating for minorities who struggle every day within the STEM community, and to persevere to get their message out and strive for something greater.



One thing we could do better is to give credit to the many people involved in research advances. For example, I recently found out that 3D movies were invented by a NASA physicist who was female and black. She helped to improve society because of her scientific literacy and no one knows about her. Just like a couple of my teachers said "credit the people who did the work, not the ones that got recognized." They are the true heroes within the scientific community.

So, I encourage all of the people who feel like they can to speak up, stand up, and rise to the occasion, because there is a purpose for you. You make your life decisions. You choose to stand up on issues that matter. You are you.

I had the opportunity to speak with some individuals in the Mount Royal Biology Department. Many people feel that Black History Month is about more than that. Black history is everyone's history... minorities' history is everyone's history if we are to understand our role in science.

- Godi Jibi BSc. Health Science 4th year.

## VALERIE THOMAS - INVENTOR OF 3D MOVIES

Valerie Thomas was already interested in electronics by the time she was 8 years-old. Despite not getting much support at home or school for a subject that she excelled in, she persevered and graduated from Morgan State University as one of only two women majoring in physics. She went to work for NASA in 1964. In 1976, she used concave mirrors to generate an illusion of a light bulb that fooled the viewer into thinking the light bulb was lit when it wasn't. After further experimenting with flat and concave mirrors, she found that she could make objects appear to be three dimensional. It's called an illusion transmitter and NASA still uses it today...so do 3D movies! Listen to her here.

What are your thoughts on Black History
Month and the connection to EDI issues?
- Thank you, Jessica, Daniel, Joanna, and
Amirah.



I think that it's important that they highlight black voices and everything during Black History Month, but having groups like the EDI Committee and many others are necessary for actual change to happen at MRU and to ensure it isn't just a "trend".

Jessica Lee BSc. Cellular and Molecular Biology 4th Year

The black experience [in FST] is not a homogenous one. People's identities are intersectional. They aren't just black, they are black students, or black gay students, or black, gay, low-income students, or black, gay, low-income students who are caring for a family member, etc. Hearing the experiences and struggles of people now is as important as knowing the historical contexts from which these experiences are rooted.

- Daniel Major BSc. Cellular and Molecular Biology 4th Year

I really think it is so important for everyone to educate themselves. Misconceptions and stereotypes are not going anywhere until we all actively confront them and ask ourselves why we believe the things that we believe about entire groups of people when they are completely incorrect. For Black History Month specifically, I think it's so important to look at history to understand how we got to where we are today [especially in science]. Personally, for example, learning about the history of oppression of Indigenous peoples in every aspect of Canadian society has given me a much richer context when examining where we are today. Plus, it adds so much motivation for me to want to be better and change things going forward because it is mindblowingly awful.

- Joanna Keough BSc. Health Science Alumni

The biggest thing I can say about this topic in relation to FST at MRU is that no one should have to beg for representation in a place where they already exist. We have a huge community of BIPOC in STEM and here we are fighting to just be heard and seen and respected when we have existed and lived in STEM fields for so long. Underrepresented communities should not have celebrations of our existences reserved for Black History Month or Women's History Month or Asian Heritage Month. BIPOC History is STEM history. You cannot look at FST without acknowledging the BIPOC individuals who laid out the foundation for us to continue in this field.

- Amirah Azmi BSc. Health Science 3rd Year

## EDI AND STEM ON TWITTER

**Inspiring Diversity in STEM** 

Canadian Black Scientists Network

<u>Canadian Coalition of Women in Engineering, Science, Trades & Technology</u>

Canadian Women in STEM

Canadian Association for Girls in Science

Dr. Lisa Willis

PRIDE in STEM

Dr. Imogen Coe