



The World Needs More Laadliyan in Science

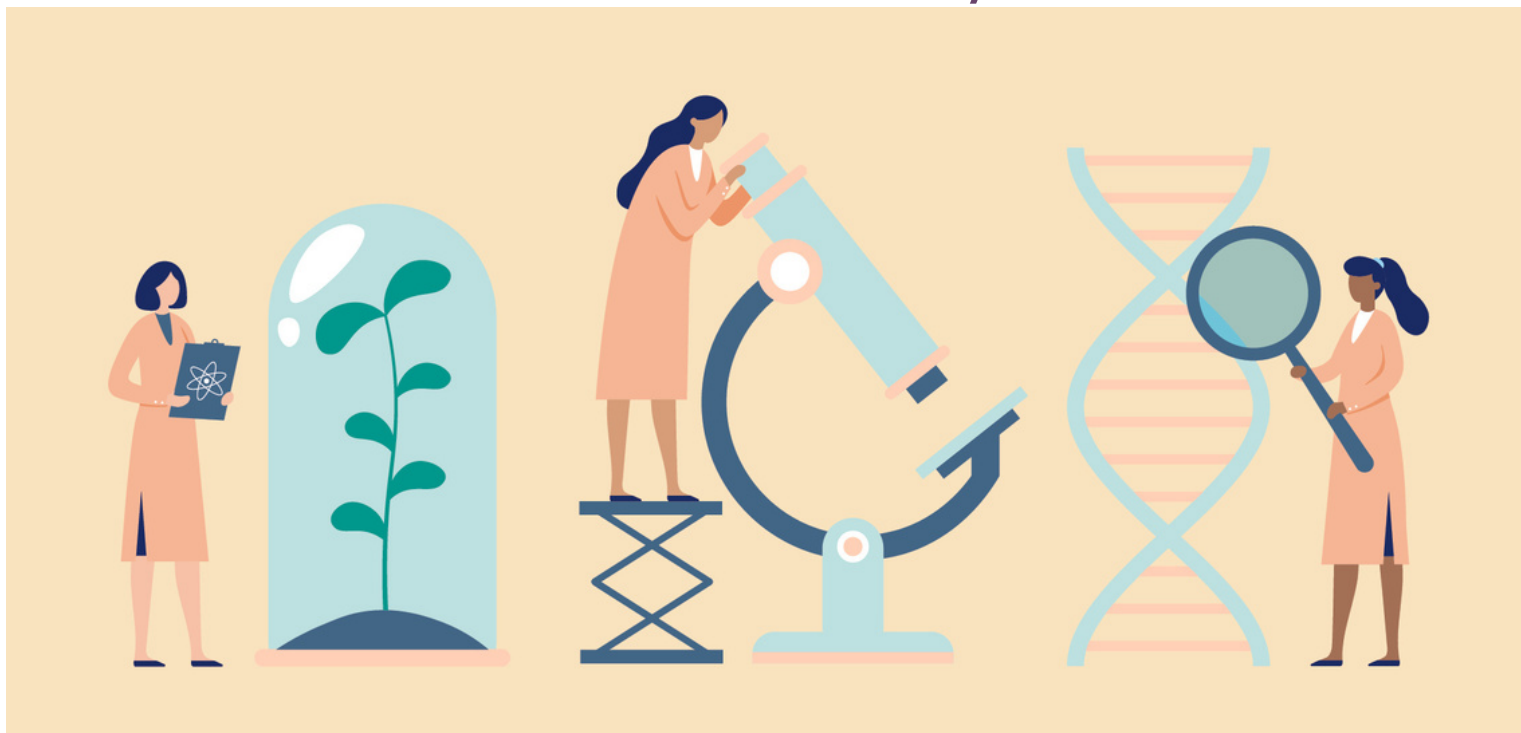


Image from Peppermint Magazine

By: Gurnoor Brar
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What does a scientist look like?

If you had asked me this question when I was 8, I probably would have told you that a scientist is a MAN with crazy hair wearing a lab coat and holding a glass beaker. There would be mathematical equations written all over the black board emphasizing the challenging and dangerous world of scientific discovery.

At the age of 8, I could not even fathom imagining a woman (let alone a South Asian woman) working in a laboratory conducting amazing experiments to expand the boundaries of human knowledge. To be honest, I didn't realize that a woman could be a scientist until I learned about Dr. Rosalind Franklin's crucial contribution to the discovery of the structure of DNA in high school. Even then, Dr. Franklin's story enraged me. She was a brilliant scientist dedicated to her craft; however, at every point in her scientific career, she endured sexist remarks and insults from her male colleagues. Even after her death, she was not recognized for her contributions to science. Instead, the 1962 Nobel Prize in Medicine was awarded to three male researchers – for uncovering the structure of DNA, having used Dr. Franklin's work to help them reach their findings.



Despite global efforts to inspire and engage women and girls to pursue careers in science, technology, engineering, and mathematics, many remain excluded. It's not that women and girls lack interest in STEM, their keen interest is often held back by many obstacles like gender bias, social norms, the portrayal of women in media and the prioritization of the boys' education.

When it comes to the world of scientific discovery and research, women are in the minority. Less than 30% of the world's STEM researchers are women and the number drops to 18.5% in South and West Asia, with women accounting for less than 15% of researchers in India. With numbers like that, it is quite evident that we are missing out on the extraordinary talent, innovation, and contributions that women can make in advancing science.

We need to emphasize and learn about the contributions of women throughout history to the field of scientific discovery. As a society, we are so focused on male contributions to scientific discovery, that we consistently glaze over the extraordinary contributions that women have made in advancing science. South Asian scientists like Kamala Sohoni, Sapna Sharma, Kalpana Chawla, Darshan Ranganathan, Asima Chatterjee, and many others deserve recognition for their contributions. Understanding and learning about their obstacles in pursuing STEM careers can allow us to dissect the power that gender biases and social norms hold over us.

As a woman of color in STEM, I want to redefine what it means to 'be' a scientist or 'do' scientific work. I want young girls to know that they can also be scientists, it's not a field reserved for white men in lab coats with crazy hair. Together we can ask questions, solve problems, cure diseases, create technology and explore the unexplored. The world needs more ladliyan in science.



My name is Gurnoor Brar. Currently, I am finishing up my MSc. in molecular cell biology at York University. I am interested in understanding how a specific complex of transcription factors impact the downstream activity of a protein in neonatal cardiomyocytes. As an advocate for inclusive education, I aim to break down barriers and dispel stereotypes associated with pursuing a career in STEM. I look forward to exploring my interests in translational research that combines science and policy.