

INTERNATIONAL WOMEN'S DAY

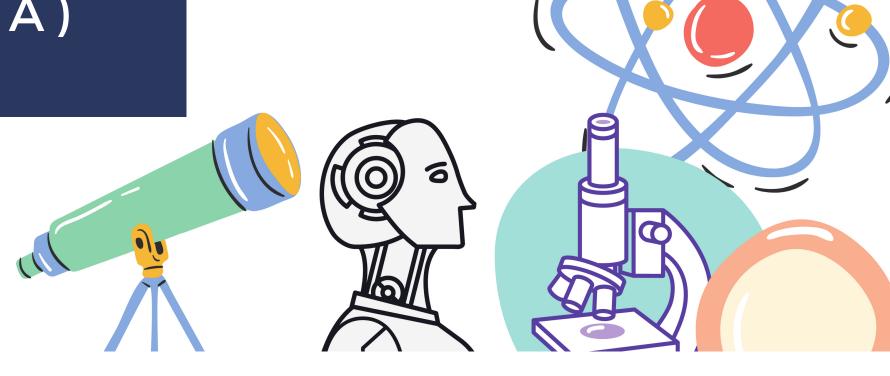
# A COURAGEOUS CONVERSATION WITH WOMEN IN STEM



WEDNESDAY, MARCH 9, 2022 AT 1PM EST FEATURING: JENNIFER OTANI, ANITA YENGUE, JENNIFER RICE, AND CHARU KAUSHIC



## ASK ME ANYTHING (AMA) RESOURCE GUIDE



#### **NOTE FROM OUR TEAM**

Thank you for participating in the <u>March Ask Me Anything (AMA): Women in STEM.</u> We are excited that you joined us for this event! An extensive list of resources has been collected and curated, that we believe will be helpful for our colleagues; however, it is not an exhaustive list. We recognize that not every resource will be valuable to every reader, however, we hope that helpful and interesting resources can be found within our guide.

In collaboration, The AMA Team <u>DiversityandInclusion-Diversiteetinclusion@forces.gc.ca</u>

#### **EVENT DESCRIPTION**

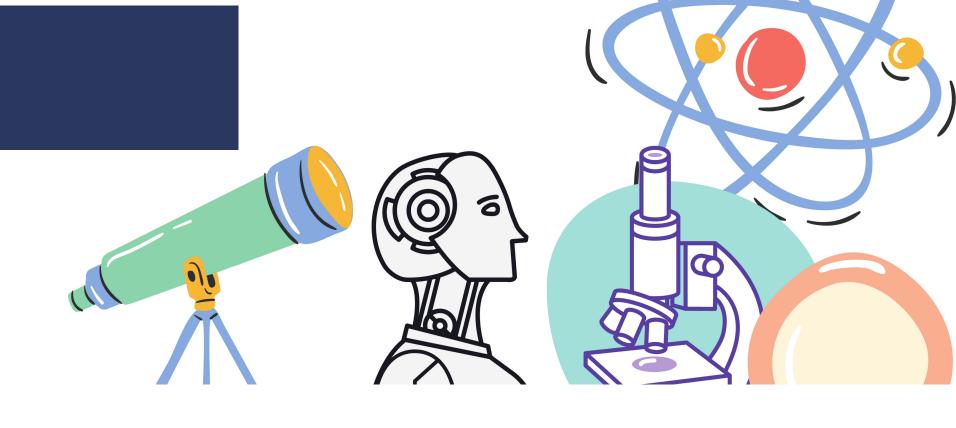
Did you know that women are far more likely to enroll in a bachelor's degree program than men?\* Despite this, women have a 30% lower probability than men of enrolling in science, technology, engineering, and mathematics (STEM) programs after high school. Of these women, only 8 will graduate with a degree, for every 10 men who do.\*\*

What influences a woman's decision to choose this field? What challenges does she continue to face in 2022? Why does this underrepresentation persist? This year, on International Women's Day, we celebrate Women Inspiring Women. This is exactly what this Ask Me Anything session is all about. Our guest speakers will share what led to their choice to join the STEM field. The panel will examine how their gender has influenced their career and how gender should be integrated to benefit the STEM disciplines.

\*For the purpose of this AMA, the binary construct of gender has been selected based on our guest speakers' gender and their experiences.

\*\* Gender differences in STEM enrolment and graduation: What are the roles of academic performance and preparation? (statcan.gc.ca)

## PANELISTS



#### **OPENING REMARKS**



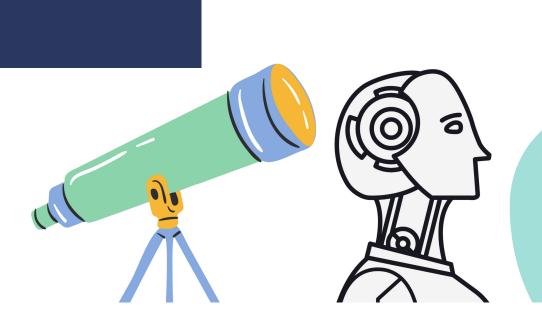
## by Charu Kaushic, PhD, the Scientific Director of the Canadian Institutes of Health Research (CIHR) - Institute of Infection and Immunity

Charu Kaushic has served in this role since July 1, 2018. Dr. Kaushic is also a tenured Full Professor in the Department of Medicine in McMaster University, Hamilton, Canada. In her role as the Scientific Director for CIHR-III, Dr. Kaushic is responsible for making decisions for CIHR strategic investments in the area of infection and immunity, nationally and internationally. She also represents CIHR and Government of Canada at various national and international forums related to infectious diseases. In this capacity, she serves as a Chair of GloPID-R, a global consortium of

funders in pandemic preparedness and emergency response research. She also represents Canada on the JPIAMR Steering Committee. During the COVID-19 pandemic, she has been closely involved in shaping CIHR's research response to the pandemic and is serving on Canada's COVID-19 National Immunity Task Force.

Dr. Kaushic has a PhD in Immunology and did her post-doctoral training in mucosal immunology. Since her faculty appointment in McMaster in 2002, she has done extensive teaching and training in immunology and built an interdisciplinary research program in women's reproductive health, specifically basic, clinical and translational research examining susceptibility and immune responses to sexually transmitted viruses, HIV-1 and HSV-2. Prior to joining CIHR, Dr. Kaushic's research program was funded by CIHR, CFI, CANFAR and OHTN. She has received numerous national and international awards including a Rockefeller post-doctoral fellowship, CIHR New Investigator Award, OHTN Research Scholar award, OHTN Research Chair award and the 2017 American Journal of Reproductive Immunology Research Excellence Award.

## PANELISTS





### Jennifer Otani, Research Scientist, Beaverlodge Research Farm, Agriculture and Agri-Food Canada

Jennifer Otani is a Research Scientist at the Beaverlodge Research Farm in Alberta. She started her career with AAFC as a summer student at the Lethbridge Research Centre in 1989. She has had a field season every summer since, working in labs at AAFC-Lethbridge and CABI-Bioscience Switzerland. Jennifer completed her B.Sc. in Biology at the University of Lethbridge then completed her M.Sc. in the Department of Entomology at

the University of Manitoba. In 1999, Jennifer was hired as a Biologist on a three-year term then the position shifted to indeterminate status. In 2019, Jennifer became a research scientist. The Integrated Pest Management Program at Beaverlodge performs field plot research as well as producer-cooperator monitoring and regional surveys examining insect pest species occurring in canola, wheat, legumes and grasses grown for forage seed within the Peace River region. Jennifer and her staff work to characterize the insect diversity in field crops grown in Canada's most northerly agricultural region.

#### Jennifer Rice, Canadian Coast Guard College, Officer Cadet Training Program

Jennifer Rice completed a BSc in Mathematics, a BEd in teaching mathematics at Dalhousie University and a Diploma in Engineering from Cape Breton University. She has been an Instructor at the Canadian Coast Guard College in Sydney, Nova Scotia, since 2001.

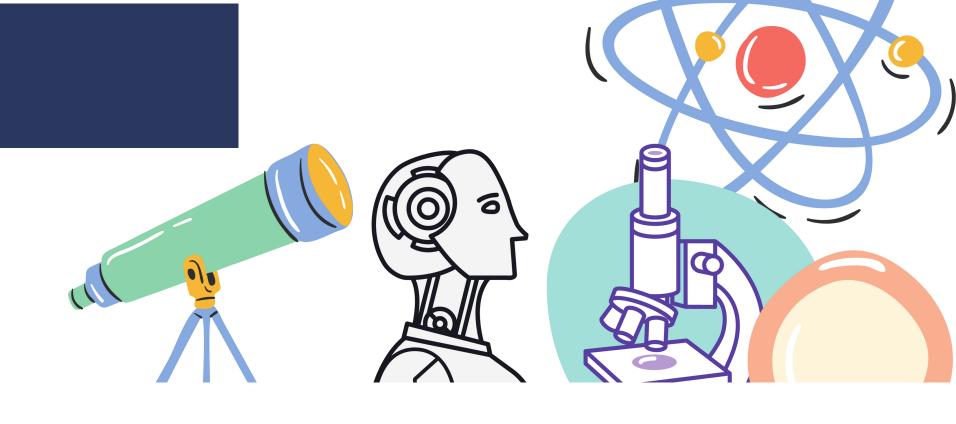
Jennifer began her teaching career in the village of Inukjuak in Nunavik, Northern Quebec. Shortly after, she moved to the community of Kujjuarrappik to join the adult education team at a school shared y both the Inuit and Cree members of the community. Following the birth of her child, she returned to life in Sydney.



A chance meeting with an Instructor from the Canadian Coast Guard College led Jennifer to apply for a term position teaching Physics to a fantastic group of students from Kuwait and the United Arab Emirates. The following year, she was offered a contract with the College and has been enjoying working with Officer Cadets in the Officer Cadet Training program ever since. She was the first female Instructor in the Sciences and has enjoyed teaching Mathematics, Physics, Chemistry and Stability during her career.

Jennifer's passions outside of work include hiking, snowshoeing, biking, paddle boarding and fishing.

## PANELISTS





### Captain Anita Yengue, Aerospace Engineer Officer (AERE), PMO FWSAR (Hull), System Engineering Management, National Defence

Captain Anita Yengue is an Aerospace Engineer (AERE) Officer currently employed in the PMO FWSAR, as a member of the System Engineering Management (SEM) team, Hull, Québec, since July 2021.

Capt Yengue was born in Cameroon and immigrated to Canada at a young age. During her teenage years, she became a Canadian citizen and completed an undergraduate degree in

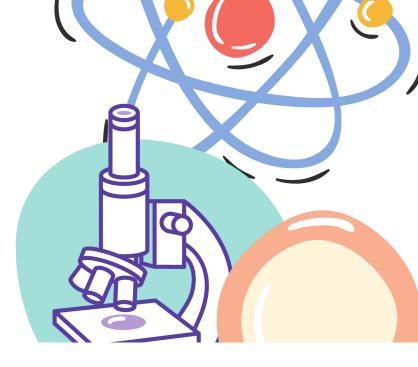
Electromechanical Engineering in 2006. From 2006-2007, she became a spokesperson for "The Hats Off to You! contest and its Excellence in Science segment" organized by the Québec government, showcasing the determination and work of women enrolled in a vocational training or technical training program, or a bachelor's program in science or technology that leads to a career in a traditionally male-dominated occupation. Upon receiving her education, Capt Yengue worked in the manufacturing industry as an Electronic Project Lead Engineer in St-Georges de Beauce, Québec and a Project Manager for a start-up in Ottawa. While working full time, she became a professor, teaching in various technical colleges within the National Capital Region (NCR).

In October 2012, Capt Yengue joined the Canadian Armed Forces. After she completed the AERE trade course in Borden in 2015, she was posted to 1 Canadian Air Division (CAD) Winnipeg, where she worked in the A4 Maintenance Transport Search and Rescue cell. In 2018, she was then transferred to 435 Sqn (Transport & Rescue) Winnipeg as the Aircraft Maintenance Support Officer (AMSO) and Aircraft Maintenance Officer (AMO) in support of Operations. In 2020, while employed at 435 Sqn, Capt Yengue completed a graduate degree in business administration (MBA).

As a tutor, Capt Yengue has worked closely for underprivileged youth & refugees. She strongly believes that through education, all is possible for Canada's youth. As a woman who identifies herself as part of a racialized group, she believes that embracing diversity and providing fair opportunities is key to ensuring a bright future for all Canadians. Proud to serve, she considers Canada's diversity a strength and a way to showcase our Canadian values, objectives and goals on the world stage.

## MEET OUR MODERATOR





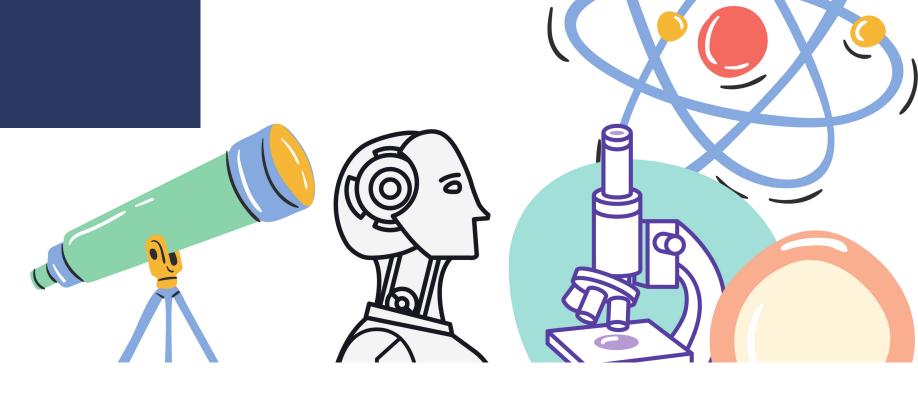


## Anu Shukla-Jones, Senior Advisor, Research Excellence, Canadian Institutes of Health Research

Anu Shukla-Jones has always had at least one foot in science throughout her academic and professional career. Throughout her interdisciplinary studies at the University of Toronto and Masters in Neuroscience at the University of Ottawa, Anu has sought to balance her curiosity of the natural world with other interests, especially those that contribute to a systems approach to understanding problems. Her career as a public servant has provided many opportunities to contribute scientific perspectives, improve science and health literacy, and critically challenge traditional ways of thinking and doing, including strategic foresight and systems approaches. Her public

service career has ranged from laboratory work on pathogens to strategic policy through various positions at Health Canada, Indigenous Services Canada, Canadian Intellectual Property Office, and the Privy Council Office. She is currently the Senior Advisor on Research Excellence at the Canadian Institutes of Health Research where she works collaboratively across the research ecosystem to develop a holistic, inclusive and renewed concept of research excellence that meaningfully values equity, diversity and inclusion. She is also an active member of the Anti-Racism Ambassadors Network, Health Canada and Public Health Agency of Canada's Facilitation Network, and Canada School of Public Service Faculty. She is passionate about contributing to efforts to dismantle systemic racism and destigmatize mental health.

## MEET OUR HOST





## Samantha Moonsammy, Section Head Lead Advisor for Diversity and Inclusion, Materiel Group, National Defence.

Samantha Moonsammy is the Section Head Lead Advisor for Diversity and Inclusion for the Materiel Group founded at National Defence Headquarters in Ottawa, Canada. She has spent over 15 years in the public service working in numerous communications, outreach and engagement initiatives that focuses on the people side of business.

But Samantha is much more than that. Her layers include being a woman, mother, partner, daughter, sister, community builder and immigrant. As an Indo-Caribbean Canadian she was born

in Guyana, South America and immigrated to Canada as a toddler. From a young age, dating back to elementary school to the present, Samantha has been a leader in diversity, inclusion and equity, always helping to amplify the voice of others and create sustainable change in organizations to build deeper respect and understanding for all humans. Samantha lives in the Ottawa area and spent some time in Toronto and Barbados during her Master's degree in Communications and Culture. She is a passionate world traveller who has worked and studied in India, China, France and the Caribbean. Her daily mantra: Be the change you wish to see in the world.

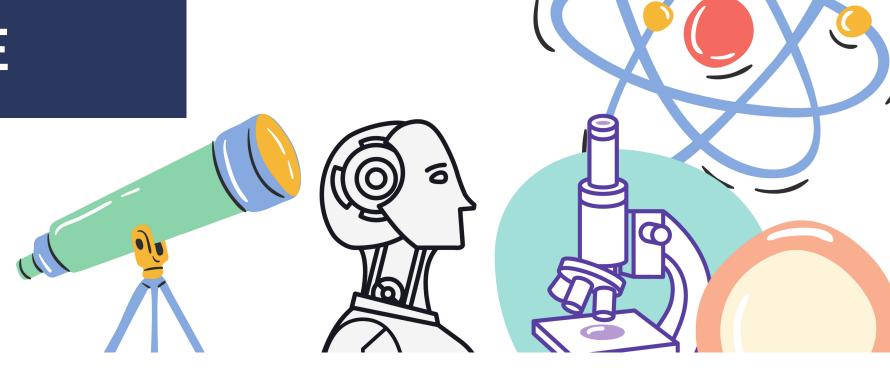
#### Mission - Ask Me Anything Series

We recognize that individuals are composed of a multitude of layers that make us who we are. We do not fit easily in one box or another and we can't be neatly counted. We represent the mosaic of Canada.

It is important that we find value in each other's experiences, differences and unique characteristics. When we build our cultural competencies, we are able to work better together in our teams and respond to each other with relevance, empathy and compassion. By celebrating and sharing our authentic selves, we gain greater appreciation of each other and the diversity that surrounds us.

We know through diversity, workplaces and communities are stronger, more successful and resilient. And most important, it creates spaces of inclusion and fosters a workplace of belonging where people feel valued.

### #AMA CHALLENGE



#### **#AMACHALLENGE**

We encourage others to have courageous conversations with their peers. Use the monthly "Ask Me Anything" sessions as an opportunity to have brave conversations in your workplaces with your teams.

#### **HERE'S WHAT TO DO:**

- •Invite your leaders and colleagues in your organization to an "Ask Me Anything" watch party, tune in live and watch the session together. Make sure it's in their calendars.
- •Before the watch party, book an "After the AMA Team Session" with your current team for the <u>day after an event</u> for 30-60mins. Share the resource guide and have these questions for discussion.

#### **AFTER THE AMA - TEAM SESSION DISCUSSION QUESTIONS**

- 1. What was my main takeaway expand and share an amazing quote, story or moment
- 2. What made me uncomfortable/ what was one of my blindspots?
- 3. What is an example of a systemic discrimination that I am aware of in my life?
- 4. What am I not going to do anymore?
- 5. How can I use my voice/ influence both overtly/covertly
- 6. Where am I going to dig in and learn more?
- 7. How will I continue this conversation?

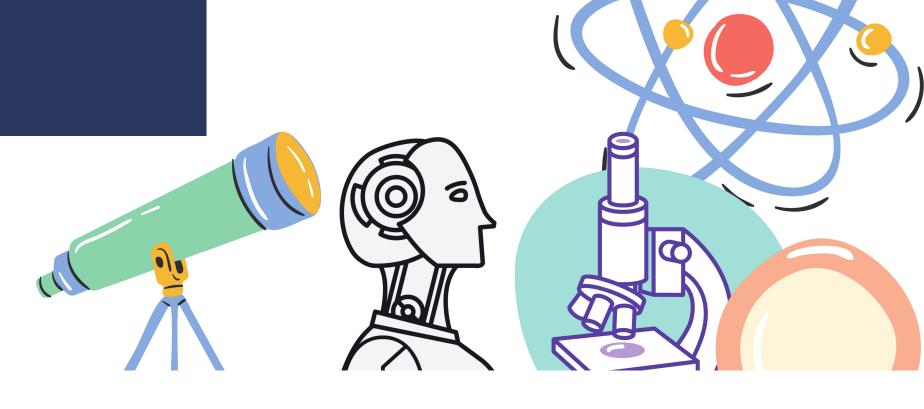
It is important that we find value in the experiences, the unique characteristics of each other. When we develop our cultural competence, we are able to work better together within our teams and respond to each other with relevant empathy and compassion. By celebrating and sharing our authentic selves, we gain a greater appreciation for each other and the diversity that surrounds us.

#### **SUPPORT**

Remember, support is available for you and your family when you need it. Some of the discussions, at the AMA, or the content shared may bring forward past trauma or uncomfortable feelings; please seek professional help if this is the case.

**Employee Assistance Program** (for Federal Government employees) - Canada.ca Toll-free: 1-800-268-7708 TTY (for people with hearing impairments): 1-800-567-5803

**The Canada Suicide Prevention Service** - Connect with a responder now by calling our toll-free number 1-833-456-4566.



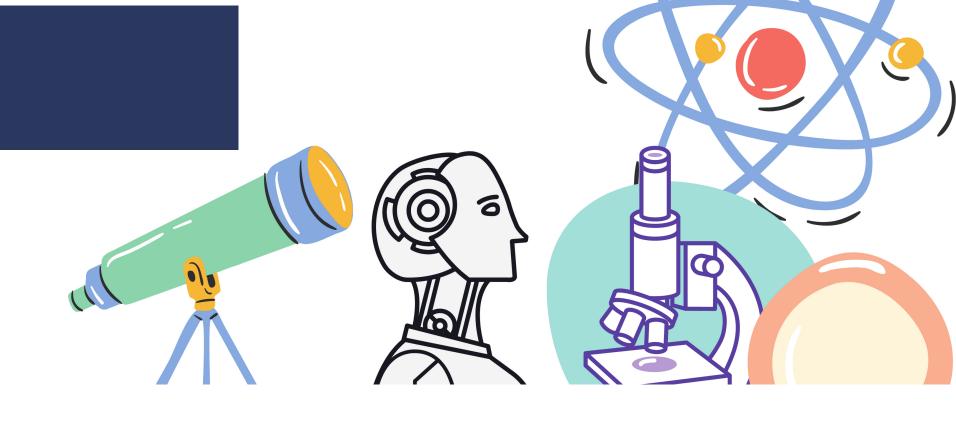
#### If in crisis visit your local emergency department, general hospitals or call 911

- https://www.dcottawa.on.ca/24-7-crisis-line/
- Ottawa and region distress center: Distress: 613-238-3311 | Crisis: 613-722-6914 or 1-866-996-0991 | TEXT 343-306-5550 | Chat & Text 10am-11pm

Wellness Together Canada
Mental Health and Substance Abuse Support.
<a href="https://wellnesstogether.ca">https://wellnesstogether.ca</a> and toll free 1-866-585-0445.

#### **GOVERNMENT OF CANADA RESOURCES**

- Advancing Women in STEM in the Government of Canada.
  - https://www.canada.ca/en/shared-services/corporate/publications/advancingwomen-stem.html
- Celebrating Women and Girls in STEM (Science, Technology, Engineering and Math)
  - https://www.canada.ca/en/public-health/news/2021/02/cpho-sunday-edition-february-7-2021-celebrating-women-and-girls-in-stem-science-technology-engineering-and-math.html
- Defence scientists empower girls to pursue dreams in STEM through outreach
  - <a href="https://www.canada.ca/en/department-national-defence/maple-leaf/defence/2021/02/defence-scientists-empower-girls-pursue-dreams-stem.html">https://www.canada.ca/en/department-national-defence/maple-leaf/defence/2021/02/defence-scientists-empower-girls-pursue-dreams-stem.html</a>
- DT News interview: Defence Scientists for International Day of Women and Girls in Science.
  - <a href="https://www.canada.ca/en/department-national-defence/corporate/video/dt-news/2021/02-10-dtnews.html">https://www.canada.ca/en/department-national-defence/corporate/video/dt-news/2021/02-10-dtnews.html</a>
- IM Group Women in STEM How we can all be better allies!
  - <u>https://www.canada.ca/en/department-national-defence/maple-leaf/defence/2021/03/im-group-women-in-stem.html</u>
- Navy News | Naval Technical Officer sees bright future for women in STEM roles
  - http://www.navy-marine.forces.gc.ca/en/news-operations/news-view.page? doc=naval-technical-officer-sees-bright-future-for-women-in-stemroles%2Fkctmlbu6
- News Article | Aviation, STEM, and women!
  - https://www.rcaf.forces.gc.ca/en/article-template-our-people.page?doc=aviationstem-and-women%2Fkllegrzt
- STEM skills key to knowledge jobs of the future. Canada.ca
  - https://www.canada.ca/en/innovation-science-economicdevelopment/news/2016/01/stem-skills-key-to-knowledge-jobs-of-the-future.html
- The Government of Canada and STEM Choose Science
  - <a href="https://ised-isde.canada.ca/site/choose-science/en/government-canada-and-stem">https://ised-isde.canada.ca/site/choose-science/en/government-canada-and-stem</a>
- The Innovative Work-Integrated Learning Initiative Canada.ca
  - https://www.canada.ca/en/employment-social-development/programs/workintegrated-learning.html

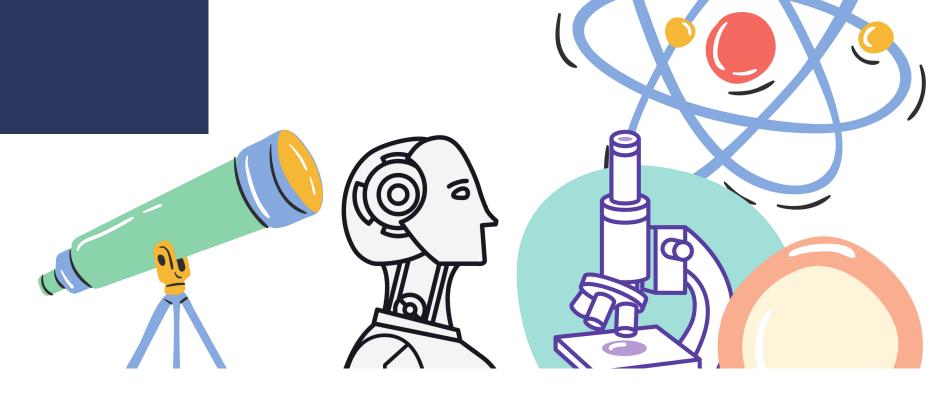


#### **BOOKS**

- Broadening Participation in STEM, Effective Methods, Practices and Programs. Edited By Z. Wilson-Kennedy, G.S. Byrd, E. Kennedy, and H. Frierson
- Diversity and Inclusion in Higher Education and Societal Contexts.

  International and Interdisciplinary Approaches. Edited By C. Birkle, S.H.K.

  Gertz, B. Huang, and L.Cyr
- Expanding Underrepresented Minority Participation: America's Science and Technology Talent at the Crossroads. National Academy of Sciences, National Academy of Engineering and Institute of Medicine
- Gender Equity in Science and Engineering: Advancing Change in Higher Education. By Diana Bilimoria and Xiangfen Liang
- Hidden Figures: The American Dream and the Untold Story of the Black Women Who Helped Win the Space Race. By Margot Lee Shetterly
- Solving the Equation: The Variables for Women's Success in Engineering and Computing. By Christianne Corbett,
- Strategies for Increasing Diversity in Engineering Majors and Career. By Monica Gray and Ken D. Thomas
- Success Strategies From Women in STEM. Editors: Peggy A. Pritchard, Christine Grant
- The Shuri Effect: Bridging the Gap for Young Black Women in STEM, By Lauryn Mwale
- Women's Influence on Inclusion, Equity, and Diversity in STEM Fields. Edited By Ursula Thomas and Jill Drake
- You're More Than Just a Diversity Hire: Women in STEM: The 5 Keys to Unlocking Your Full Potential. By Angelique Adams



#### **BOOKS FOR YOUNG ADULTS AND CHILDREN**

#### Ages 4 - 8

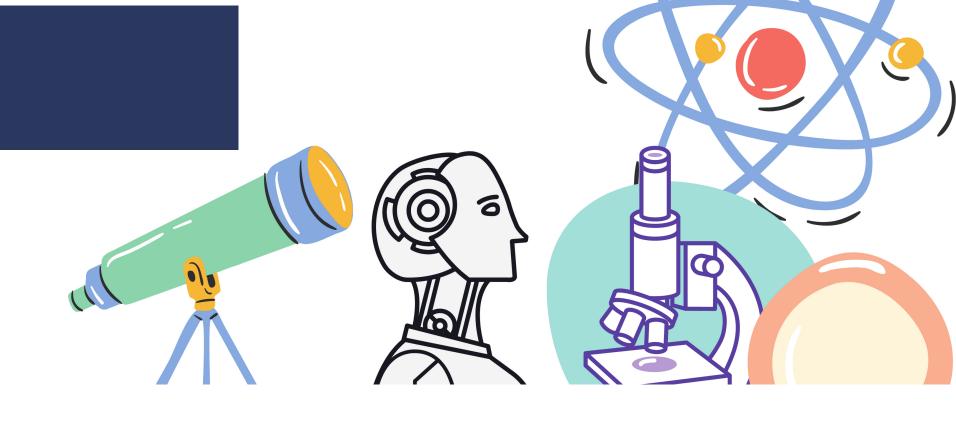
- STEM Book Series for Children By Andrea Beaty
- STEM Starter for Kids: Books and Activity Series By Jenny Jacoby
- STEM Stories International Literacy Association introducing STEM topics, initiating discussions and activities, and encouraging independent reading in the disciplines of science, technology, engineering, and mathematics.
- Mighty Mommies and their Amazing Jobs. A STEM Career Book for Kids. By Donald Jacobsen
- Bird Builds a Nest (First Science Storybooks). By Martin Jenkins. III. Richard Jones.
- Flying Deep: Climb Inside Deep-Sea Submersible Alvin. By Michelle Cusolito. III. Nicole Wong
- Hey-Ho, to Mars We'll Go: A Space-Age Version of "The Farmer in the Dell." By Susan Lendroth. III. Bob Kolar.
- Kate, Who Tamed the Wind. By Liz Garton Scanlon. III. Lee White.
- This Is the Nest That Robin Built. By Denise Fleming.
- Women in Science: 50 Fearless Pioneers Who Changed the World. By Rachel Ignotofsky

#### Ages 9 - 11

- Curiosity: The Story of a Mars Rover. Makus Motum.
- Ellie Engineer. Jackson Pearce. III.
- Who Says Women Can't Be Computer Programmers? The Story of Ada Lovelace. Tanya Lee Stone.

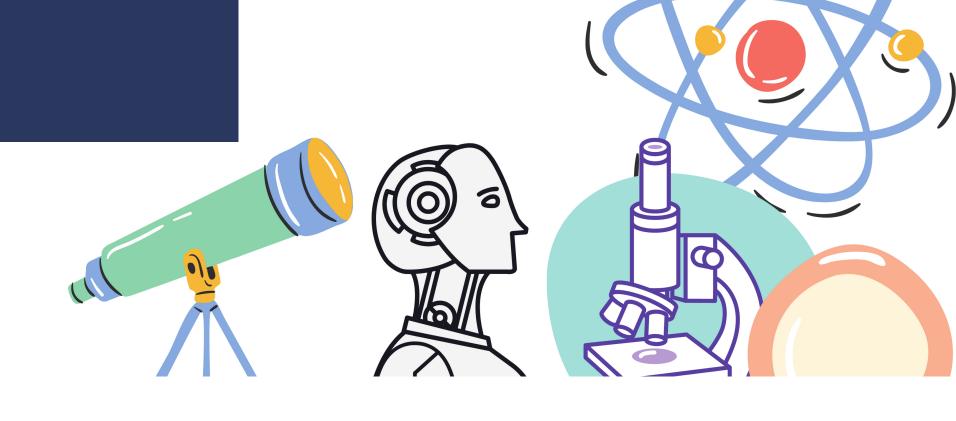
#### **Ages 12+**

- Drawn from Nature. By Helen Ahpornsiri.
- Wildflowers (Ultimate Explorer Field Guides). Libby Romero. 2018. National Geographic Society.
- Very, Very, Very Dreadful: The Influenza Pandemic of 1918. By Albert Marrin.



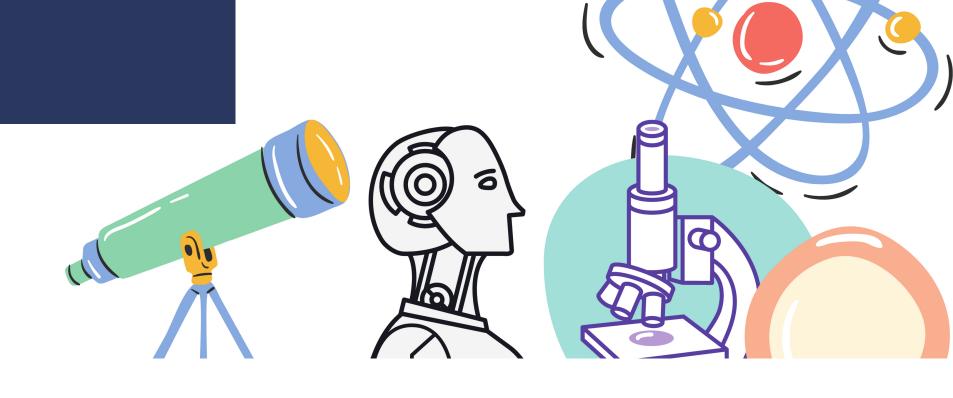
#### **ARTICLES**

- 2021 Guide to Diversity and Inclusion in STEM
  - <u>https://www.computerscience.org/resources/diversity-inclusion-in-stem/</u>
- Best Practices for Diversity and Inclusion in STEM Education and Research: A Guide by and for Federal Agencies.
  - https://www.whitehouse.gov/wp-content/uploads/2021/09/091621-Best-Practices-for-Diversity-Inclusion-in-STEM.pdf
- Best Universities in Canada for STEM Courses | Articles
  - <u>https://www.collegedekho.com/study-abroad/articles/best-universities-in-canada-for-stem-courses/</u>
- Diversity in STEM: What is it, why does it matter, and how do we increase it?
  - <u>https://caseagrant.ucsd.edu/blogs/diversity-in-stem-what-is-it-why-does-it-matter-and-how-do-we-increase-it</u>
- Status and Trends in the Education of Racial and Ethnic Groups
  - <u>https://nces.ed.gov/programs/raceindicators/indicator\_reg.asp</u>
- STEM Diversity and Inclusion Efforts for Women of Color: A Critique of the New Labor System
  - <u>http://genderandset.open.ac.uk/index.php/genderandset/article/viewFile/646/1091</u>
- The STEM Gap: Women and Girls in Science, Technology, Engineering and Mathematics.
  - <u>https://www.aauw.org/resources/research/the-stem-gap/</u>
- Women, Minorities, and Persons with Disabilities in Science and Engineering Statistics. (2019)
  - https://ncses.nsf.gov/pubs/nsf19304/digest



#### **EDUCATIONAL VIDEOS**

- Beyond the Numbers: A Data Analyst Journey | Anna Leach | TEDxPSU
  - https://youtu.be/t2oOFs4WgI0
- Diversity, Equity, and Inclusion in STEM
  - https://youtu.be/vX6M7lgl-ag\_
- Diversity, Equity and Inclusion in the STEM Classroom: A Panel Discussion.
  - https://youtu.be/4p9Ceo5yAAg
- Engendering Success in STEM.
  - <a href="https://successinstem.ca/resource-category/video/">https://successinstem.ca/resource-category/video/</a>
- Minister Duncan Choose Science With Role models.
  - https://vimeo.com/254325287/c505eec45e
- Ms.Jessica Reads Mighty Mommies and their Amazing Jobs. (Children's Video)
  - https://www.youtube.com/watch?v=YK9gNCgTorg
- Six Must-Watch TED Talks by Women STEM Leaders.
  - https://sisterstem.org/2020/03/08/six-ted-talks-by-women-stem-leaders/
- The Breakdown of Women in STEM | Jess Ellis | TEDxCSM
  - https://www.youtube.com/watch?v=GNQcKRhKE0Y
- The Power of Women in STEM. | Jin Yan | TEDxFSU YouTube
  - https://www.youtube.com/watch?v=tvZOAaqeBFQ
- Understanding Diversity in STEM: How can we build a more diverse and dynamic STEM workforce?
  - https://youtu.be/yFTKNgIIIsM
- Why Aren't there More Women in STEM Fields? YouTube
  - https://www.youtube.com/watch?v=cKxXji9IJdQ
- Why do so many women leave their careers in STEM?
  - https://www.youtube.com/watch?v=kA08vfoZAJY





A Courageous Conversation with Women in STEM

Time: 1:00 pm EST | Date: March 9, 2022

## Hosts



Anu Shukla-Jones
Canadian Institutes of
Health Research



Samantha Moonsammy National Defence

## **Panelists**



Charu Kaushic
Canadian Institutes of
Health Research



**Jennifer Rice**Canadian Coast Guard



**Jennifer Otani**Agriculture and Agri-Food
Canada



**Anita Yengue** National Defence

Canadä

Thank you for attending Ask Me Anything - International Women's Day: A Courageous Conversation with Women in STEM.

To access all the resources visit this folder.

# Objective: to facilitate a discussion with my work team about institutional influence and anti-racism Time: 60 minutes What was my main takeaway – expand and share an amazing quote, story or moment: What made me uncomfortable/ what was one of my blind spots? What is an example of systemic discrimination that I am aware of in my life? What am I not going to do anymore?

**Prerequisite:** Watch AMA



## Prerequisite: Watch AMA Objective: to facilitate and

**Objective:** to facilitate a discussion with my work team about institutional influence and anti-racism

Time: 60 minutes

How can I use my voice/ influence – both overtly/covertly
Where am I going to dig in and learn more?
How will I continue this conversation?
What are some of the challenges unique to your identity that you face in the workplace?

