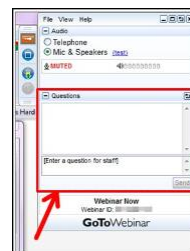




Have Questions?



Type them into questions box!

**“Why am I muted?”**

Don't worry. Everyone is muted except the presenter and host. Thank you and enjoy the show.

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

1



@AmericanChemicalSociety



@AmerChemSociety



@AmerChemSociety



<https://www.linkedin.com/company/american-chemical-society>

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

2

## Check out the ACS Webinar Library!

*An ACS member exclusive benefit*



Hundreds of presentations from the best and brightest minds that chemistry has to offer are available to you on-demand. The Library is divided into 6 different sections to help you more easily find what you are searching.

### Professional Development

▶ View the Collection

Learn how to write better abstracts, deliver more engaging presentations, and network to your next dream job. Brush up on your soft skills and set a new career path by mastering what can not be taught in the lab.

### Technology & Innovation

▶ View the Collection

From renewable fuels to creating the materials for the technology of tomorrow, chemistry plays a pivotal role in advancing our world. Meet the chemists that are building a better world and see how their science is making it happen.

### Drug Design and Delivery

▶ View the Collection

The Drug Design Delivery Series has built a collection of the top minds in the field to explain the mechanics of drug discovery. Discover the latest research, receive an overview on different fields of study, and gain insight on how to possibly overcome your own med chem roadblocks.

### Culinary Chemistry

▶ View the Collection

Why does food taste better when it is grilled or what molecular compounds make a great wine? Discover the delectable science of your favorite food and drink and don't forget to come back for a second helping.

### Popular Chemistry

▶ View the Collection

Feeling burdened by all that molecular weight? Listen to experts expound on the amazing side of current hot science topics. Discover the chemistry of rockets, how viruses have affected human history, or the molecular breakdown of a hangover.

### Business & Entrepreneurship

▶ View the Collection

How do ideas make it from the lab to the real world? Discover the ins and outs of the chemical industry whether you are looking to start a business or desire a priceless industry-wide perspective.

<https://www.acs.org/content/acs/en/acs-webinars/videos.html>

3



# ACS Webinars®

CLICK • WATCH • LEARN • DISCUSS



**Learn from the best and brightest minds in chemistry!** Hundreds of webinars on diverse topics presented by experts in the chemical sciences and enterprise.

**Edited Recordings** are an exclusive ACS member benefit and are made available once the recording has been edited and posted.

**Live Broadcasts** of ACS Webinars® continue to be available to the general public several times a week generally on Wednesdays and Thursdays from 2-3pm ET!

A **collection of the best recordings** from the ACS Webinars Library will occasionally be rebroadcast to highlight the value of the content.

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

4

## Advance YOUR CAREER

**ChemIDP™**



[ChemIDP.org](http://ChemIDP.org)

## Discover ACS PUBLICATIONS

Publishing Resources







[publish.acs.org](http://publish.acs.org)

## Connect WITH CHEMISTS AND OTHER SCIENCE PROFESSIONALS

**CAS SciFinder Future Leaders**



171 alumni, 35 countries  
and over 120 institutions

[acsoncampus.acs.org/resources](http://acsoncampus.acs.org/resources)



## From ACS Industry Member Programs

### ◆ Industry Matters Newsletter

ACS Member-only weekly newsletter with exclusive interviews with industry leaders and insights to advance your career.

**Preview & Subscribe: [acs.org/indnews](http://acs.org/indnews)**



Connect, collaborate, and stay informed about the trends leading chemical innovation

**Join: [bit.ly/ACSinnovationhub](http://bit.ly/ACSinnovationhub)**

## ACS Career Navigator: Your Home for Career Services



Whether you are just starting your journey, transitioning jobs, or looking to brush up or learn new skills, the **ACS Career Navigator** has the resources to point you in the right direction.

We have a collection of career resources to support you during this global pandemic:



Professional  
Education



Virtual Career  
Consultants



ACS Leadership  
Development System



Career Navigator LIVE!



ChemIDP



College to Career



ACS Webinars



Virtual Classrooms

Visit [www.ACS.org/COVID19-Network](http://www.ACS.org/COVID19-Network) to learn more!

7

## ACS Department of Diversity Programs

*Advancing ACS's Core Value of Diversity, Inclusion & Respect*



We believe in the strength of diversity in all its forms, because inclusion of and respect for diverse people, experiences, and ideas lead to superior solutions to world challenges and advances chemistry as a global, multidisciplinary science.

### Contact Us:

[https://app.suggestionox.com/r/DI\\_R](https://app.suggestionox.com/r/DI_R)

[Diversity@acs.org](mailto:Diversity@acs.org)



@ACSDiversity



ACS Diversity



[acsvoices.podbean.com/](http://acsvoices.podbean.com/)



[www.acs.org/diversity](http://www.acs.org/diversity)

8

# Grateful for your chemistry career?

Pay it forward with a donation to the ACS Scholars Program today!

[www.donate.acs.org/scholars](http://www.donate.acs.org/scholars)



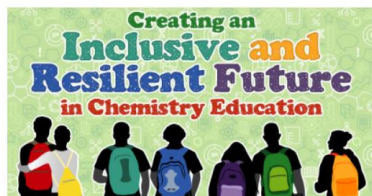
ACS Office of Philanthropy  
Chemistry for Life®



ACS Scholars Endowment Founder Joe Vacca, retired Vice President of Chemistry, Merck & Co., meets with his 2018 ACS Scholar Johanna Masterson, now a grad student at Princeton University.

“Chemistry has been good to me...so I wanted to make a significant gift to provide that opportunity to others.”

9



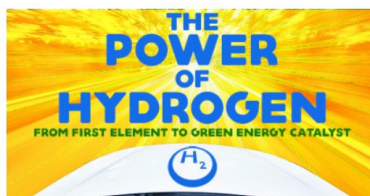
Date: Wednesday, February 10, 2021 @ 2-3pm ET  
Speakers: Anthony DePass, Long Island University and Understanding Interventions / Michelle Claville, Hampton University and NSF Undergraduate Programs / Lourdes Echevoyen, The University of Texas at El Paso  
Moderator: Zakiya Wilson-Kennedy, Louisiana State University  
Organizer: Leyte Winfield, Spelman College

[Register for Free!](#)

#### What You Will Learn:

- The breadth of research that broaden the participation of individuals from groups underrepresented in STEM
- Commentaries and evidence-based practices that might be appropriate for the JCE special issue
- The editors for the Special Issue will host weekly office hours to answer specific questions related to the JCE special issue. Please submit questions to [lwinf@spelman.edu](mailto:lwinf@spelman.edu)

Co-produced with: ACS Publications and ACS Education



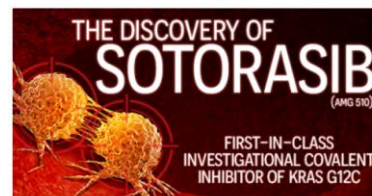
Date: Thursday, February 11, 2021 @ 1-2pm ET  
Speaker: Vijay Kapur, (retired) International Solar Electric Technology  
Moderator: Bill Tsuzynski, The Unami Group LLC

[Register for Free!](#)

#### What You Will Learn:

- Hydrogen production methods and its role as a transportation energy carrier in fuel cells
- Transportation opportunities using Hydrogen and fuel cells as an energy source
- Economic, storage, and safety issues when using hydrogen through different applications

Co-produced with: Science History Institute and *Chemical & Engineering News*



Date: Thursday, February 25, 2021 @ 2-3:30pm ET  
Speaker: Brian Lamman, Amgen, Inc.  
Moderator: Ariamala Gopalsamy, AstraZeneca

[Register for Free!](#)


#### What You Will Learn:

- Why identifying a direct inhibitor of KRAS has proven so challenging
- How covalent inhibition helped to turn KRAS G12C into a tractable target
- What hurdles were overcome in turning initial KRAS G12C binders into potential human therapeutics

Co-produced with: ACS Division of Medicinal Chemistry, American Association of Pharmaceutical Scientists, and ACS Publications

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

10



ACS  
Chemistry for Life®

# THE STATE OF SCIENCE

ON THE GLOBAL PERCEPTION OF SCIENCE  
AND THE NEED FOR STEM ADVOCACY

Co-produced with: ACS External Affairs & Communications

THIS ACS WEBINAR WILL BEGIN SHORTLY...

11



## The State of Science: On the Global Perception of Science and the Need for STEM Advocacy



**Jayshree Seth**  
Corporate Scientist and Chief Science  
Advocate, 3M



**Glenn Ruskin**  
Vice President, External Affairs &  
Communications, ACS

*Presentation slides are available now! The edited recording will be made available as soon as possible.*

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

*This ACS Webinar is co-produced with ACS External Affairs & Communications.*

12

**3M** Science.  
Applied to Life.™

# The State of Science

On the global perception  
of science and the need  
for STEM advocacy

13

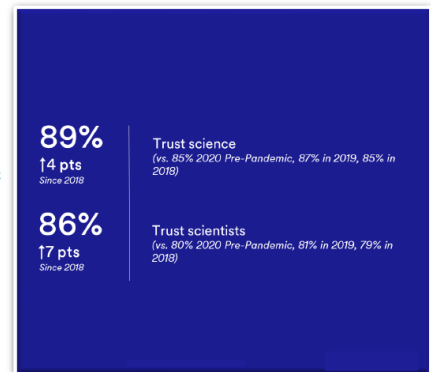
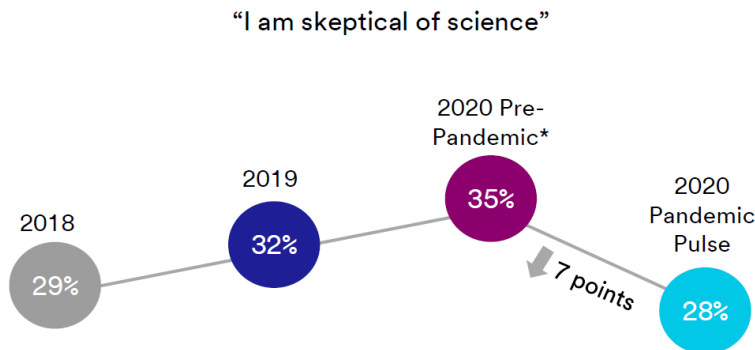
**The role of  
science is more  
important now  
than ever**



14



## Science skepticism has declined for the first time in 3 years



Q3. How much do you agree or disagree with each of the following statements? - I am skeptical of science. Base: 2020 Pandemic Pulse 9-Country Tracking Average (9,077) Fielded Jul-Aug 2020; 2020 Pre-Pandemic 9-Country Tracking Average (9,065) Fielded Aug-Oct 2019; 2019 9-Country Tracking Average (9,014) Fielded Jul-Sep 2018; 2018 9-Country Tracking Average (9,023) Fielded Jun-Aug 2017





# Leading and innovating for a more sustainable future

Applying our science to improve every life

**Focus areas:**

**Science for Circular**

**Science for Climate**

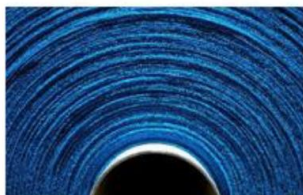
**Science for Community**

**Aspirations:**

Design solutions that do more with less material, advancing a global circular economy.

Innovate to decarbonize industry, accelerate global climate solutions and improve our environmental footprint.

Create a more positive world through science and inspire people to join us.



**Actions:**

Every new 3M product that enters our new product commercialization process must have a Sustainability Value Commitment.

We're committed to renewable energy. We power our headquarters with 100% renewable electricity and aim for 50% globally by 2025.

We are making a difference in the world through STEM education, science advocacy, skills-based volunteerism and training the workforce of the future.

© 3M 2019. All Rights Reserved.

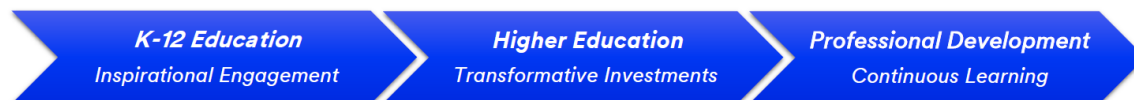


17

## STEM Equity and Skilled Trades Investments

### Expanding Access to STEM opportunities and Improving Outcomes

STEM Goal: To help underrepresented\* and/or under-resourced individuals to advance in STEM and Skilled Trades



3M Annual Education Investment: 2018 -- \$34 million, 2019 -- \$41 million

#### 3M Education K-12 Investments

**Connect Students with STEM**

- 3M Visiting Wizards
- Science is Fun!
- MATHCOUNTS<sup>SM</sup> COMPETITION SERIES
- DO SOMETHING<sup>SM</sup> 3M

**Provide experiential STEM opportunities**

- 3M STEP
- 3M East Side Summer Jobs
- SCIENCE FROM SCIENTISTS

**Improve STEM teacher diversity and teacher innovation**

- TEACHFOR AMERICA
- Donors Choose.org
- 3M Teachers Working in Science and Technology

\*The National Science Foundation has identified the following groups as underrepresented in STEM: Women, African Americans, Hispanic, Native Americans and persons with disabilities.

© 3M 2021. All Rights Reserved.



18

# 3M Science. Applied to Life.™

## Our Vision

3M Technology Advancing Every Company

3M Products Enhancing Every Home

3M Innovation Improving Every Life

© 3M 2021. All Rights Reserved.



19

## The importance of science?

At 3M we recognize the importance of science and use it every day to improve the lives of people around the world.

But what do others around the world think about science? Do they see, feel and appreciate the impact of science the same way we do?

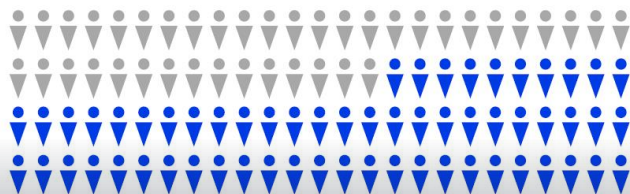
© 3M 2018. All Rights Reserved.



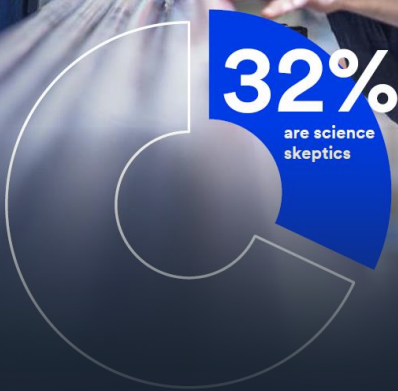
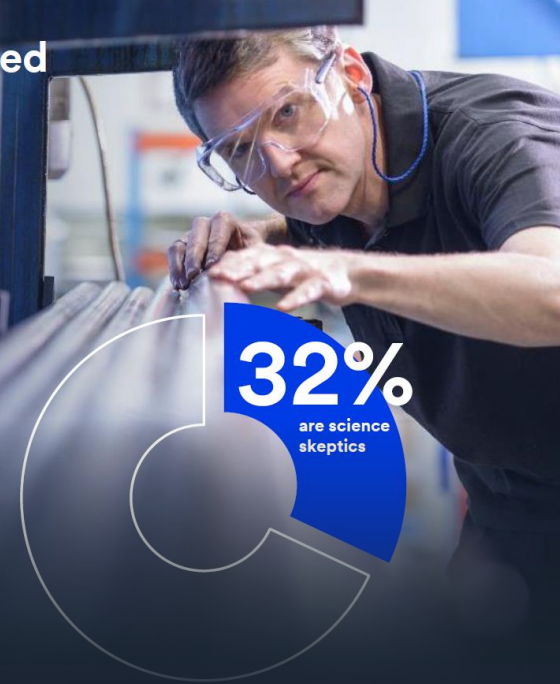
20

# The image of science is complicated

Nearly 40% of people say that if science didn't exist, their everyday lives wouldn't be that different...

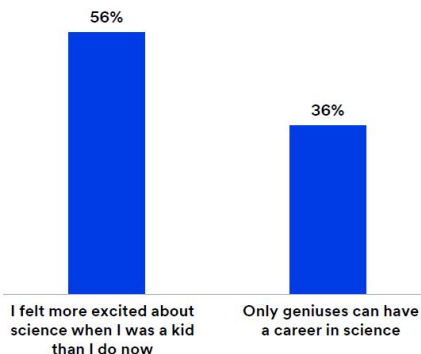


And about one-third are science skeptics...

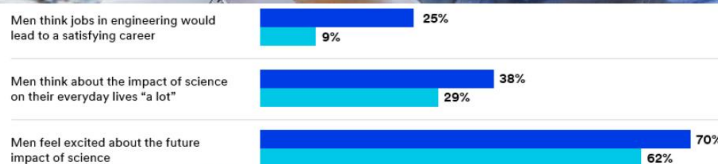


# Excitement for science is stronger in kids than adults; notable portion say only geniuses can have a science career. Also, women trail in the positive sentiment for science

How much do you agree with the following statements?  
(completely or somewhat agree)



Q9: How much do you agree with the following statements? Base=Total (14,036)



Pressure is on the next generation to push science forward

92%

of parents want their kids to know more about science

82%

of adults would encourage kids to pursue a career in science

Q9. How much do you agree or disagree with each of the following statements? Base=Total (n=4,036) and Base=Parents only (n=4,774). Very important: Q11. Thinking about the present-day, how important do you feel science is... (Very important for all four). n=4,149. Future impact positive: Q19. In the future, what kind of impact do you believe science will have on each of the following? (Positive (net) all four). n=5,870. KBI: n=345.

© 3M 2018. All Rights Reserved.



23



## Science Advocacy: Themes

A

**Awareness & Appreciation** for science and the role it plays – in our daily lives

B

**Breaking down Barriers** – not just for geniuses or a gender, also, one can have satisfying science careers

C

**Context, Communication & Championing** – what scientists do, and how science solves problems



Jayshree Seth



@jseth2



SethJayshree

Follow me. Appreciate your feedback.

3M State of Science Index: [3M.com/scienceindex](https://www.3m.com/scienceindex)



24

# Communication is critical to making science more relatable (Those who say they know more about science view it more positively)

Over **8 in 10...**



More likely to believe information that comes from a scientist than be skeptical of it. But over half (58%) believe that scientists are elitists.

**88%**

feel that scientists should be sharing results in easy to understand language

**85%**

feel that scientists should be sharing results more often

**84%**

feel that scientists should be working to make science more relatable to people's everyday life



Q28. How much do you agree or disagree with each of the following statements? Base=Total Respondents (14,025)

© 3M2019. All Rights Reserved.



25

### Make your stories stick

Stories stick. As scientists, we need to better incorporate elements of storytelling into communications to foster engagement with—and appreciation of—science. We know that the best practices and recommendations help make communicating the value of science to the world a less daunting task. Here we educate the world about the problems we solve and will be much more vibrant with these expert resources at your fingertips.

I have seen the power of science communication that I had with my own children. For instance, with my 8-year-old, the best way to explain a concept is to use a story. "For example, when I explain the concept of a cell to my 8-year-old, she is most drawn by the cartoon, or 'the why.' Keeping my audience—regardless of age and experience—helps me lead with the aspect of my story that will best capture their attention. By communicating effectively, we can not only gain more support for scientific pursuits but also appeal to a wider population. At the end of the day it's a win-win."

Happy Dvorshchik, Dr. Agnesa Esh

- 1. Put a human face on what you do**
- 2. Create dramatic tension**
- 3. Connect with your audience**
- 4. Be concise and use meaningful details**
- 5. Give an authentic delivery**

### Telling stories in 5 captivating ways

A well-told story can be extremely powerful—it captures attention, inspires others, and can even lead to action. Based on these evidenced recommendations, tell scientific stories and consider the ways in which these recommendations could be helpful for your audience.

### Science Champions

Podcasts

Season 2 Episode 4: A Kid's Eye View of Science

Season 2 Episode 3: Hands-on Science: The Mark of Maker Culture

Season 2 Episode 2: Sparking a Passion for Science

Featured guests: Shantell Fox, Richard & Wilson of the Dictionary Education 3M Young Scientist Challenge

Featured guests: Dr. Luca Rogers, Franklin, Dobbins & Makers and Museumium

Featured guest: Joanne Mawhinney, Faculty Lecturer/Online Course Developer, Franklin Lakes/Oakton College Development

### Take action to make science relatable

After you've done the work to make science relatable, the next step is making science more relevant to people's lives. The following are based on one of the biggest drivers of interest in the field: incorporating how advancements benefit future generations. In other words, people are more likely to care about science when they know what it will eventually do.

Throughout this website, you can find stories and guides that help answer them all for science—whether you're a STEM professional, educator, or someone who just appreciates science—because we all need more inspiration for our lives. Here is what we recommend and provide of value to you.

- 1. See the person behind the science**
- 2. Connect with your audience**
- 3. Advocate for STEM education**

### Beyond the beaker

It's easy to forget that people are behind the science and technology that make our lives better. Learn more about the scientists and engineers who drive our everyday innovations.

Jayfree Seth, Chief Science Advocate





- 3M scientists performing simple, at home experiments with everyday materials
- Reach 1 million school kids
- New content each week
- Aligned to Next Generation Science Standards
- Partnership with Discovery Education and the Bakken Museum in MN

© 3M 2020 All Rights Reserved.



**STEM education is critical to the future of science**  
 A lack of access to education and training are among the biggest threats to the future of innovation.  
 As of April 2020, more than 124,000 schools and 26 million students across the U.S. and more than 1 billion around the world are studying from home due to the COVID-19 pandemic. Because we believe the next generation of innovators is so important, 3M scientists are playing their part to support children everywhere with e-learning content.

3M's Science at Home program provides fun and educational science experiments for students ages 6-12. These simple, at-home experiments conducted by 3M scientists use everyday household items and are designed to reinforce core scientific principles. School systems, educators, parents, and caregivers are encouraged to use this educational content in virtual classrooms and at home. 3M will post new experiments, featuring 3M scientists and some special guests along the way. Be sure to check back weekly for new content to try at home.

**Experiments**  
 Watch more science experiments and learn how to include them in your distance learning curriculum.



**Inflation Station** Follow along with 3M's Chief Science Advocate, Jayshree Seth, as she shows how students how chemistry can help get some of today's most needed.  
**Water Dome** How many water droplets do you think you can fit on a penny? It's more than you might think. Join 3M scientist Ruyuan (Drew) to find out.  
**Fidget Spinner** Your teacher might not have when you have one in class, but the physics behind fidget spinners are truly mind-boggling. Join 3M scientist Tracy R. Avon-Dunbar as she shows you how a spinning motion changes the way things move.

27



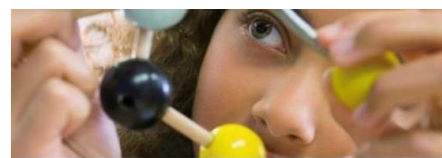
Spring into action for science advocacy: Light the way!

Published on Mar 20, 2019

**Jayshree Seth**  
 Corporate Scientist and Chief Science Advocate...

- Clearly *highlight* the connections to everyday life and make science relatable
- Put the *spotlight* on the humans behind everyday innovations
- Keep STEM initiatives in the *limelight* to encourage exposure and education

© 3M2019. All Rights Reserved.



The STEAM engine that could!  
 Overcoming the problem of female under-representation

Published on Feb 11, 2019

**Jayshree Seth**  
 Corporate Scientist and Chief Science Advocate...

- S**hattering of stereotypes
- T**elling the whole(some) story
- E**xposure and environment
- A**llies and advocates
- M**etrics and measures



28



# 3M State of Science Index (2020 Year 3)

© 3M 2018. All Rights Reserved.



29

## Evolution of the State of Science Index

### Wave 1 (2018)

Benchmarked individuals' perceptions, sentiment and trust toward science for the first time around the world.

### Wave 2 (2019)

Tracked whether and how perceptions of science have changed over one year

Explained the "why" behind certain insights we learned in the first year.

### Wave 3 (2020 *before* COVID-19)

Evaluated trends in science perception based on three years of tracking data.

Probed deeper into timely topics around the world, such as STEM inequity, sustainability, etc.

### Wave 4 (2020 *during* COVID-19 pulse)

Aims to understand how perceptions of science have shifted since the onset of COVID-19.

Identifies contrasts in attitudes prior to and during the pandemic at a time when science is highly relevant and "having its moment"

© 3M 2020. All Rights Reserved.



30

## Four key themes underpin the State of Science in 2020

### Image of science

Around the world, the image of science is on the rise.

People see science with a renewed level of significance—but **barriers remain**.

### Sustainability

Sustainable solutions remain an important focus.

The world is **united in wanting science to solve big challenges**, and finding **sustainable solutions** are still a clear priority even amidst COVID-19.

### STEM equity

STEM equity and gender/race inequality are barriers that impact our future.

**Lack of access to a good STEM education**, especially among underrepresented minority groups, is a barrier to future advancements in science and technology.

### Leadership & responsibility

Science leadership: There's an opportunity for collaboration and shared responsibility.

While **governments** on their own are most trusted to solve global challenges, the **private sector** has an opportunity to **work with governments, academia, NGOs and ordinary citizens** to address critical global challenges.

[3M.com/scienceindex](https://www.3m.com/scienceindex)

© 3M 2020 All Rights Reserved. 3M Confidential.



31

## The world is united in the belief that we should value and follow science

82%

There are negative consequences to society if people do not value science

87%

*Jumps 5 pts among emerging markets*

92%

People's actions should follow scientific evidence/advice to contain the spread of COVID-19

Q12. How much do you agree or disagree with the following statement? - There are negative consequences for society if people do not value science. Base= 2020 Pandemic Pulse 11-Country Average (11,082), Emerging Markets (3,017) Fielded Jul-Aug 2020

Q15. How much do you agree or disagree with the following statement? - In order to contain the spread of the coronavirus/COVID-19, people's actions should follow scientific evidence/advice. Base= 2020 Pandemic Pulse 11-Country Average (11,082) Fielded Jul-Aug 2020

© 3M 2020 All Rights Reserved. 3M Confidential.



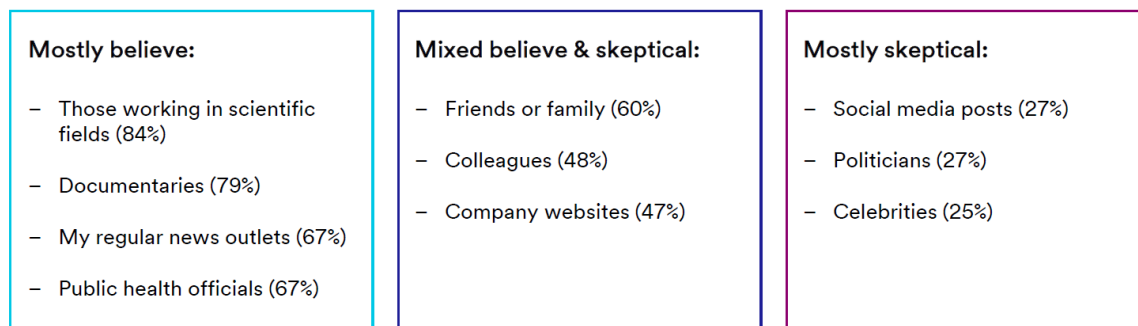
32





## When it comes to credible sources for scientific information, scientists are most trusted

% who believe scientific information coming from each source:



*People are far more likely to believe science information coming from their preferred traditional news sources (67%) than social media (27%)*

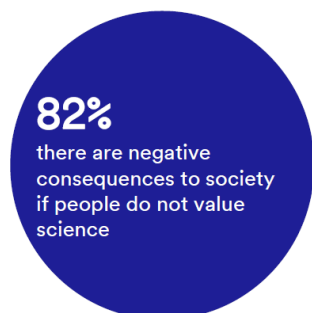
Q5. When you read or hear something about science from each of the following sources, are you more likely to be skeptical of it or believe it? - Believe It Summary Base=2020 Pandemic Pulse 11-Country Average (11,962) Fielded Jul-Aug 2020

© 3M 2020 All Rights Reserved. 3M Confidential.



33

## Even during COVID-19, environmental issues remain as a top consequence to a world without science



Top negative consequences of concern if people do not value science include:

*Among those who agree there are negative consequences to a world that does not value science*



Q13. Which of the following negative consequences are you MOST concerned about? Please select the top TWO negative consequences you are most concerned about. Select top two. Base=2020 Pandemic Pulse, those who agree there are negative consequences if people do not value science (9,089) Fielded Jul-Aug 2020

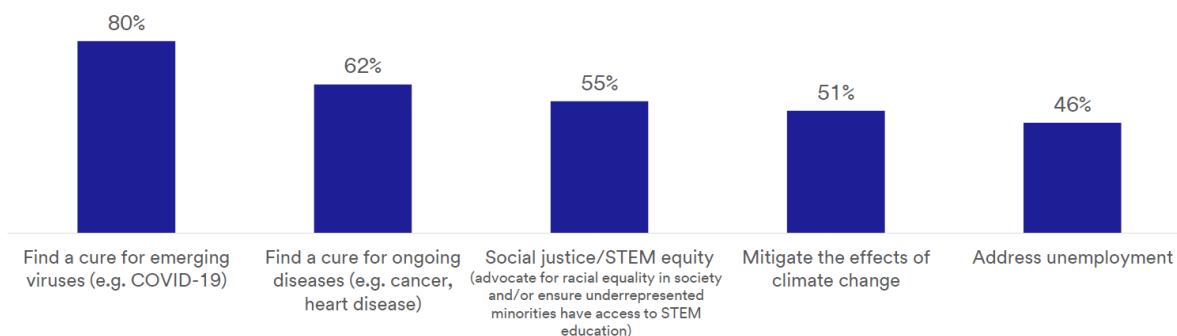
© 3M 2020 All Rights Reserved. 3M Confidential.



34

## Unsurprisingly, healthcare issues remain top priority in 2020— followed by social justice/STEM equity and the environment

Amid major public health, economic and social challenges in 2020, top issues people want the world to solve include...



Q18. Considering current events over the past six months (e.g. the coronavirus/COVID-19 outbreak, Black Lives Matter movement, progress in mitigating the effects of climate change, global economic recession, etc.), which THREE global challenges from the list below should the world prioritize solving today? Select top three. Base=2020 Pandemic Pulse 11-Country Average (11,062) Fielded Jul-Aug 2020

© 3M 2020 All Rights Reserved. 3M Confidential.



35

## The pandemic has pulled into focus the importance of a STEM education

*The pandemic has made global citizens more likely to agree...*

**74%**

The world needs more people pursuing STEM related careers to benefit society's future

**73%**

A strong STEM education for students is crucial

*And before the pandemic, people recognized a need for science-based work skills*

**85%**

The workforce needs more skilled trade workers\*

*\*2020 Pre-Pandemic Survey*

Q17. Has the coronavirus/COVID-19 outbreak made you more or less likely to agree with each of the following statements? - More likely to agree. Base= 2020 Pandemic Pulse 11-Country Average (11,062) Fielded Jul-Aug 2020  
2020 Pre-Pandemic Q49. How much do you agree or disagree with the following? - The workforce needs more skilled trade workers (e.g. welders, electricians, mechanics, etc.) Base= 2020 Pre-Pandemic 14-Country Average (14,105) Fielded Aug-Oct 2019

© 3M 2020 All Rights Reserved. 3M Confidential.

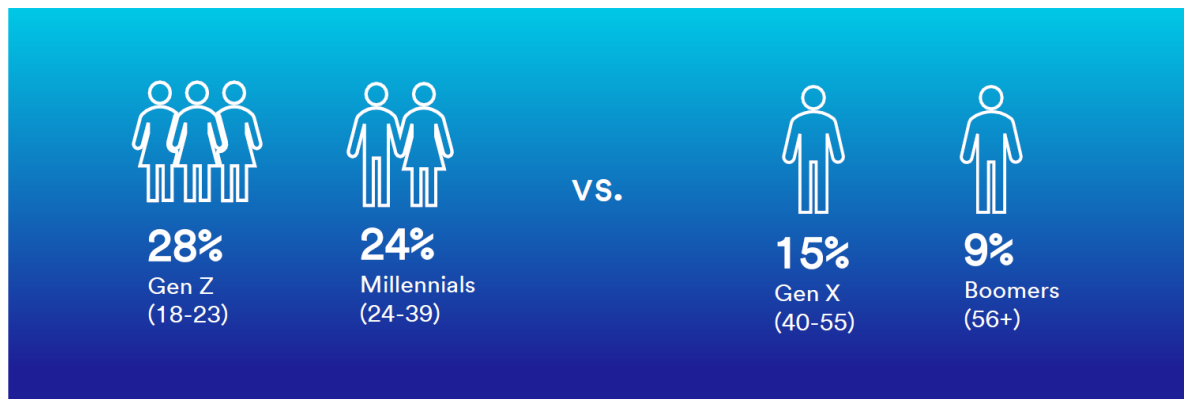


36



# Too many students have already been discouraged from STEM

## We must act now: The trend has gained momentum over time



Q10. Were you ever discouraged from pursuing science when you were a student in school (not including university)? Base= Gen Z (1,096), Millennials (3,101), Gen X (3,250), Boomers (3,595) Fielded Jul-Aug 2020

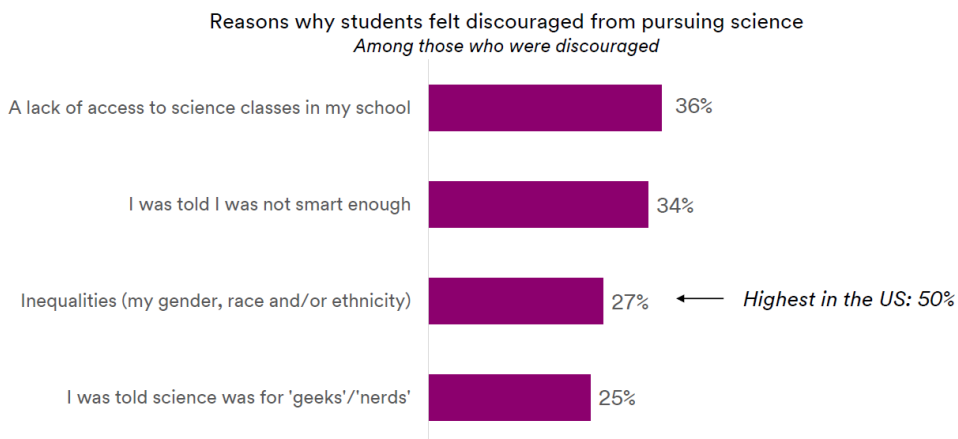
© 3M 2020 All Rights Reserved. 3M Confidential.



37

# Barriers to STEM education are holding students back

## Inequality and a lack of access are major obstacles to securing the next generation of scientists



Q11. Why do you think you were discouraged from pursuing science when you were a student in school (not including university)? I think I was discouraged from pursuing science in school because... Select all that apply. Base= 2020 Pandemic Pulse, those discouraged from pursuing science as a student (1,955) Fielded Jul-Aug 2020

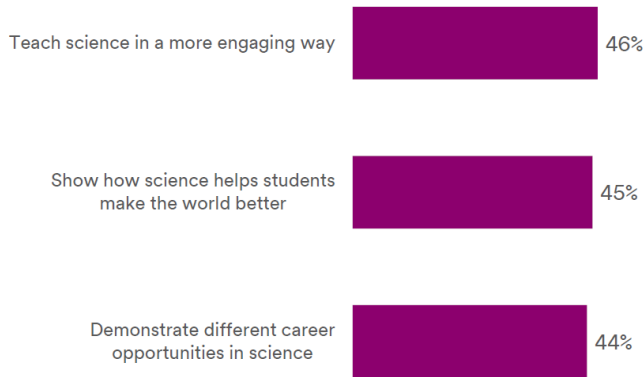
© 3M 2020 All Rights Reserved. 3M Confidential.



38

# How do we inspire more students to pursue science?

Top 3 ways to inspire students to pursue science\*



\*2020 Pre-Pandemic Survey

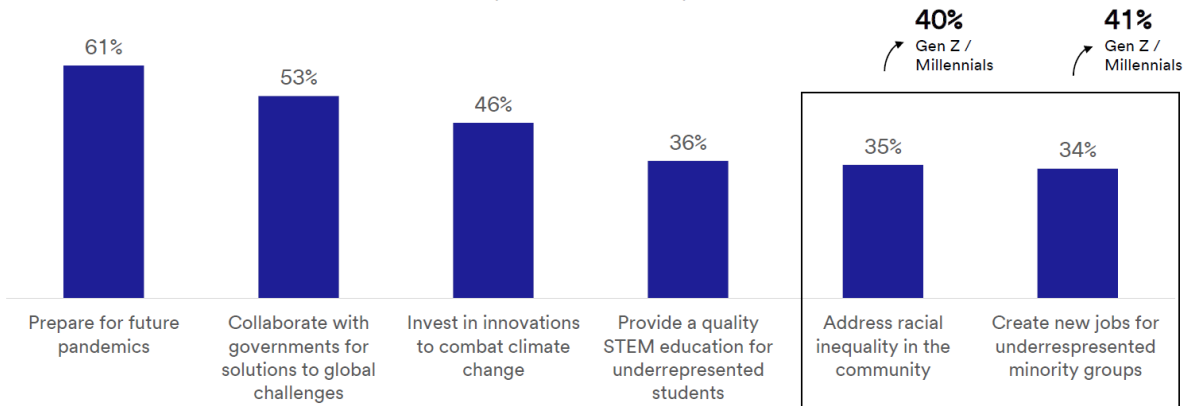
2020 Pre-Pandemic Q36. Students would be more inspired to pursue a science career if...Select top three. Base=2020 Pre-Pandemic: 14-Country Average (14,105) Fielded Aug-Oct 2019  
© 3M 2020 All Rights Reserved. 3M Confidential.



# Corporations have a license to lead on important priorities

Younger generations expect corporations to be more involved in combatting social injustices

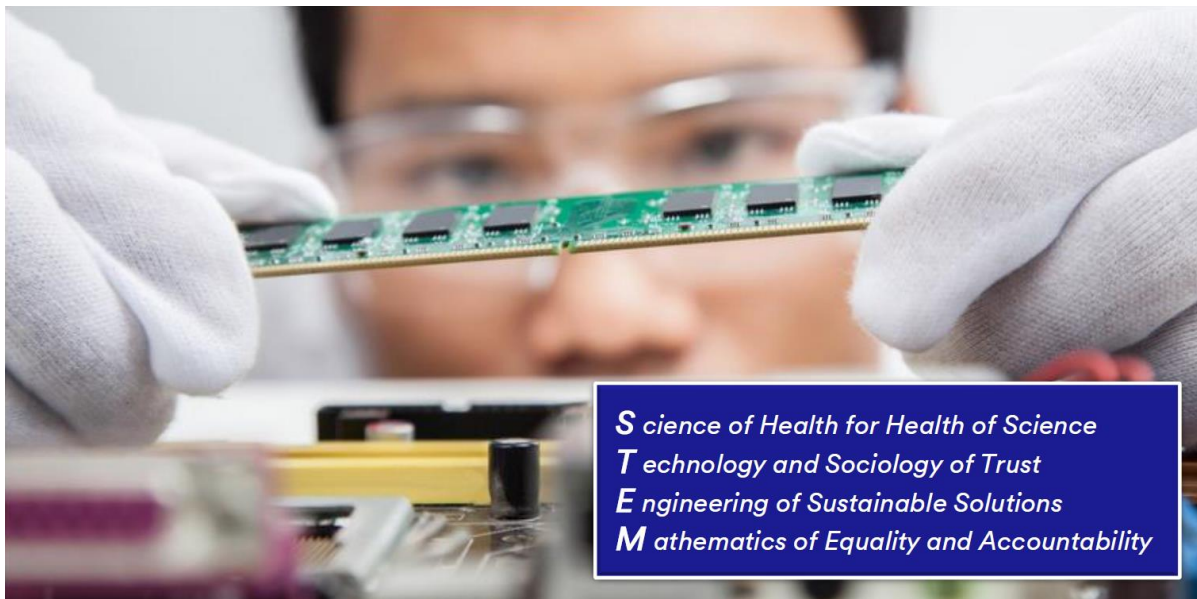
Amid 2020's public health, economic and social challenges, corporations should prioritize...



Q19. As you continue thinking about current events over the last six months (e.g. the coronavirus/COVID-19 outbreak, Black Lives Matter movement, progress in mitigating the effects of climate change, global economic recession, etc.), which, if any, of the following actions should corporations prioritize in the future (beyond their core business purpose)? Select top three. Base= 2020 Pandemic Pulse 11-Country Average (11,062) Fielded Jul-Aug 2020

© 3M 2020 All Rights Reserved. 3M Confidential.





*S*cience of Health for Health of Science  
*T*echnology and Sociology of Trust  
*E*ngineering of Sustainable Solutions  
*M*athematics of Equality and Accountability

**The State of Science: Is 2020 the year we STEM skepticism?**

Jayshree Seth on LinkedIn

41



**Belief in science is conditional.**

45% will only believe science that aligns with their personal beliefs. (SOSI 2019)

*Humanities*  
**STEM**

**What's the real shtick?  
 It's SHTEM!**

Published on Apr 23, 2019

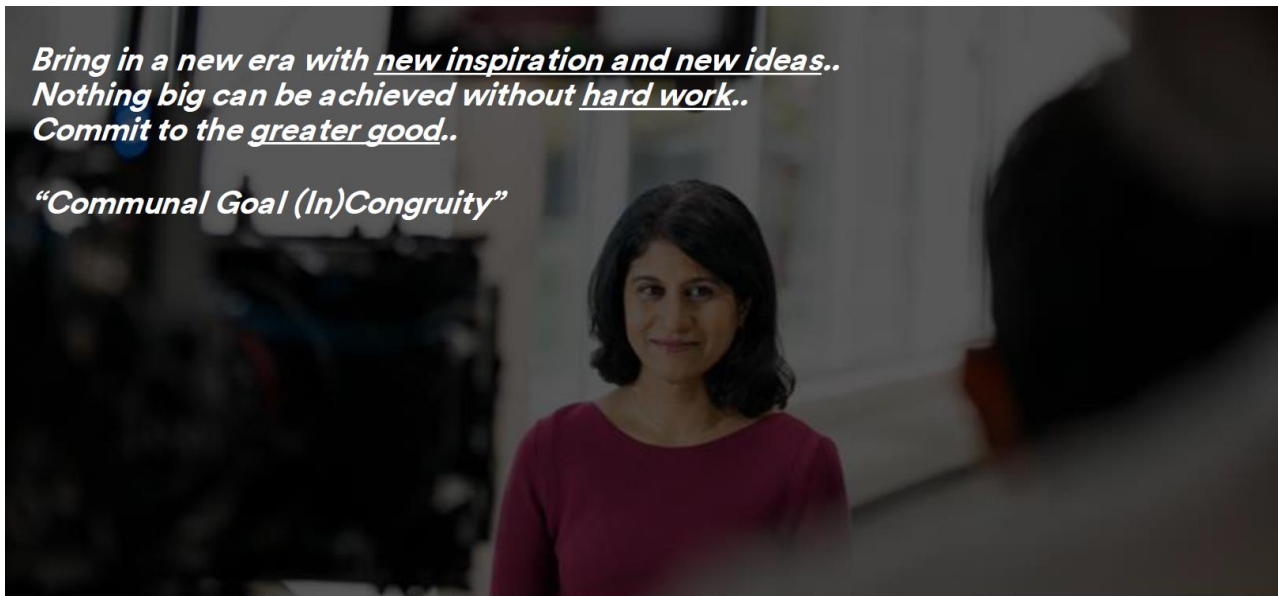


**Jayshree Seth**  
 Corporate Scientist and Chief Science Advocate...

42

*Bring in a new era with new inspiration and new ideas..  
Nothing big can be achieved without hard work..  
Commit to the greater good..*

*“Communal Goal (In)Congruity”*

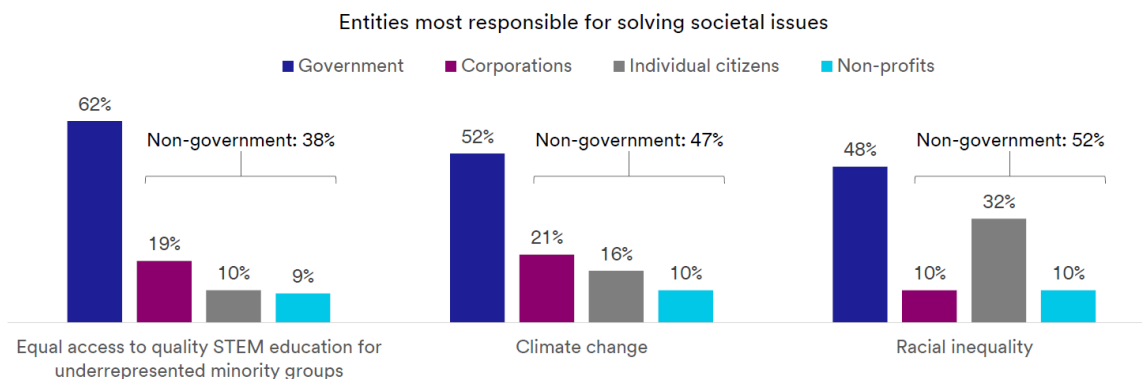


Of singing the same tune! #ImprovingLives

Jayshree Seth on LinkedIn

Jayshree Seth, 2020

## While government is ascribed most responsibility to solve societal issues, collaboration from other entities is optimal

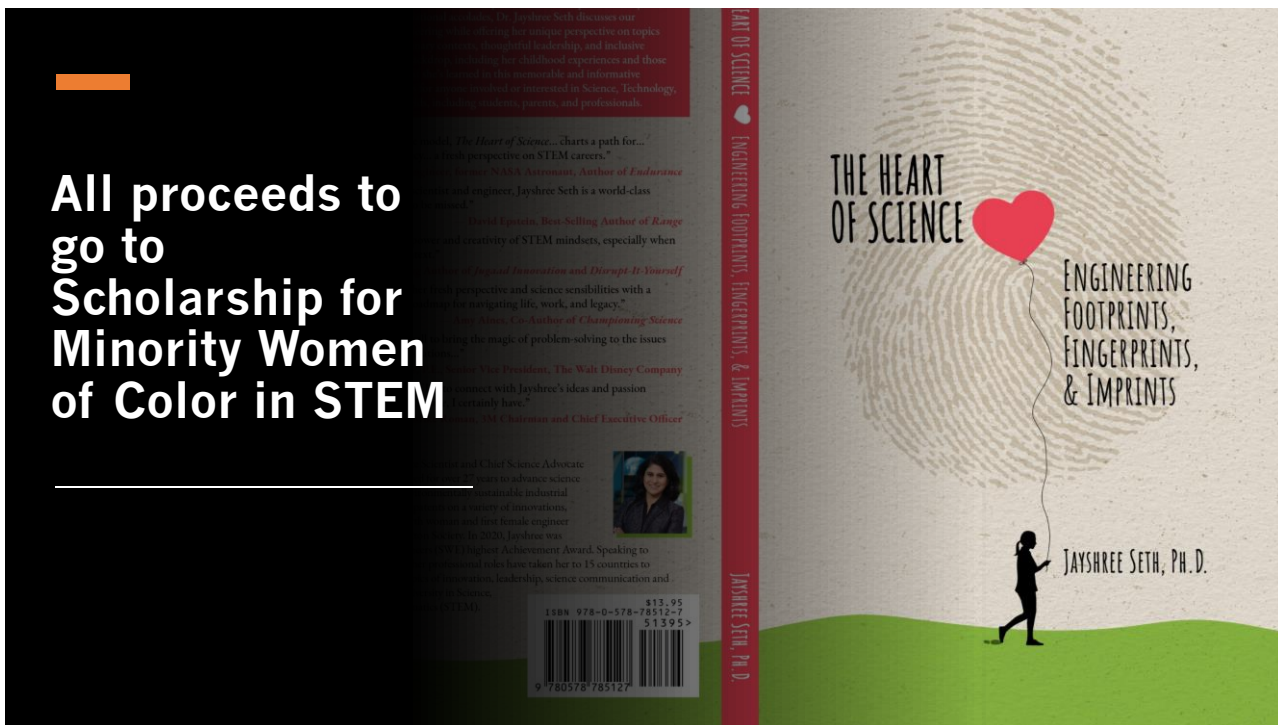


Percentages may not add up to exactly 100% due to rounding

Q21. Now, which entity would you say is MOST responsible for solving each of the following societal issues today? Base= 2020 Pandemic Pulse 11-Country Average (11,082) Fielded Jul-Aug 2020

© 3M 2020 All Rights Reserved. 3M Confidential.





# All proceeds to go to Scholarship for Minority Women of Color in STEM

Dr. Jayshree Seth discusses our... offering her unique perspective on topics... thoughtful leadership, and inclusive... her childhood experiences and those... remarkable and informative... in Science, Technology, and... parents, and professionals.

*"The Heart of Science... charts a path for... perspective on STEM careers."*

*"Jayshree Seth, Author of Endurance... and engineer, Jayshree Seth is a world-class..."*

*"David Epstein, Best-Selling Author of Range... and creativity of STEM mindsets, especially when..."*

*"...and Disrupt-It Yourself... perspective and science sensibilities with a... navigating life, work, and legacy."*

*"...Author of Championing Science... the magic of problem-solving to the issues..."*

*"...The Walt Disney Company... with Jayshree's ideas and passion... have."*

*"...and Chief Executive Officer..."*

*"...and Chief Science Advocate... to advance science... industrial... innovations, ... female engineer... Jayshree was... Award. Speaking to... bar to 15 countries to... leadership, science communication and..."*

ISBN 978-0-578-78512-7  
\$13.95  
9 780578 785127




# Thank you!

# Questions?

Jayshree Seth  
Feb 4<sup>th</sup> 2021  
ACS Webinar

[3M.com/scienceindex](https://3M.com/scienceindex)

© 3M 2021. All Rights Reserved. **3M**



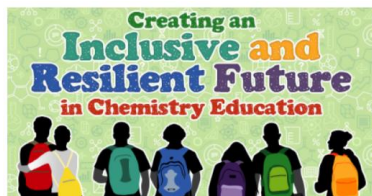
ACS  
Chemistry for Life®

# THE STATE OF SCIENCE

## ON THE GLOBAL PERCEPTION OF SCIENCE AND THE NEED FOR STEM ADVOCACY

Co-produced with: ACS External Affairs & Communications

ASK YOUR QUESTIONS AND MAKE YOUR COMMENTS IN THE QUESTIONS PANEL NOW! 47



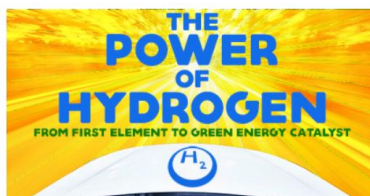
Date: Wednesday, February 10, 2021 @ 2-3pm ET  
 Speakers: Anthony DePass, Long Island University and Understanding Interventions / Michelle Claville, Hampton University and NSF Undergraduate Programs / Lourdes Echeogoyen, The University of Texas at El Paso  
 Moderator: Zakiya Wilson-Kennedy, Louisiana State University  
 Organizer: Leyte Winfield, Spelman College

[Register for Free!](#)

#### What You Will Learn:

- The breadth of research that broaden the participation of individuals from groups underrepresented in STEM
- Commentaries and evidence-based practices that might be appropriate for the JCE special issue
- The editors for the Special Issue will host weekly office hours to answer specific questions related to the JCE special issue. Please submit questions to [lwwinfield@spelman.edu](mailto:lwwinfield@spelman.edu)

Co-produced with: ACS Publications and ACS Education



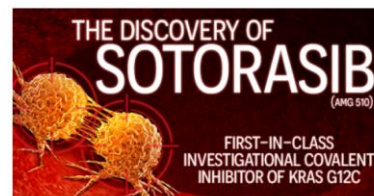
Date: Thursday, February 11, 2021 @ 1-2pm ET  
 Speaker: Vijay Kapur, (retired) International Solar Electric Technology  
 Moderator: Bill Tsuzyski, The Unami Group LLC

[Register for Free!](#)

#### What You Will Learn:

- Hydrogen production methods and its role as a transportation energy carrier in fuel cells
- Transportation opportunities using Hydrogen and fuel cells as an energy source
- Economic, storage, and safety issues when using hydrogen through different applications

Co-produced with: Science History Institute and *Chemical & Engineering News*



Date: Thursday, February 25, 2021 @ 2-3:30pm ET  
 Speaker: Brian Lamman, Amgen, Inc.  
 Moderator: Ariamala Gopalsamy, AstraZeneca

[Register for Free!](#)

#### What You Will Learn:

- Why identifying a direct inhibitor of KRAS has proven so challenging
- How covalent inhibition helped to turn KRAS G12C into a tractable target
- What hurdles were overcome in turning initial KRAS G12C binders into potential human therapeutics

Co-produced with: ACS Division of Medicinal Chemistry, American Association of Pharmaceutical Scientists, and ACS Publications

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

48





# ACS Webinars®

CLICK • WATCH • LEARN • DISCUSS



**Learn from the best and brightest minds in chemistry!** Hundreds of webinars on diverse topics presented by experts in the chemical sciences and enterprise.

**Edited Recordings** are an exclusive ACS member benefit and are made available once the recording has been edited and posted.

**Live Broadcasts** of ACS Webinars® continue to be available to the general public several times a week generally on Wednesdays and Thursdays from 2-3pm ET!

A **collection of the best recordings** from the ACS Webinars Library will occasionally be rebroadcast to highlight the value of the content.

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

49



ACS Webinars®

CLICK • WATCH • LEARN • DISCUSS



ACS

Chemistry for Life®

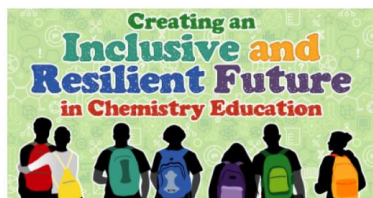
ACS Webinars® does not endorse any products or services. The views expressed in this presentation are those of the presenter and do not necessarily reflect the views or policies of the American Chemical Society.



Mike Russell Erik Katie

Contact ACS Webinars® at [acswebinars@acs.org](mailto:acswebinars@acs.org)

50



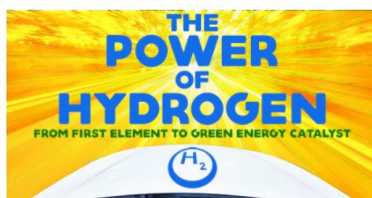
Date: Wednesday, February 10, 2021 @ 2-3pm ET  
 Speakers: Anthony DePass, Long Island University and Understanding Interventions / Michelle Claville, Hampton University and NSF Undergraduate Programs / Lourdes Echezogoyen, The University of Texas at El Paso  
 Moderator: Zakiya Wilson-Kennedy, Louisiana State University  
 Organizer: Leyte Winfield, Spelman College

[Register for Free!](#)

**What You Will Learn:**

- The breadth of research that broaden the participation of individuals from groups underrepresented in STEM
- Commentaries and evidence-based practices that might be appropriate for the JCE special issue
- The editors for the Special Issue will host weekly office hours to answer specific questions related to the JCE special issue. Please submit questions to [lwinfield@spelman.edu](mailto:lwinfield@spelman.edu)

Co-produced with: ACS Publications and ACS Education



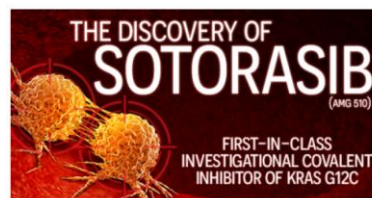
Date: Thursday, February 11, 2021 @ 1-2pm ET  
 Speaker: Vijay Kapur, (retired) International Solar Electric Technology  
 Moderator: Bill Tsuzynski, The Unami Group LLC

[Register for Free!](#)

**What You Will Learn:**

- Hydrogen production methods and its role as a transportation energy carrier in fuel cells
- Transportation opportunities using Hydrogen and fuel cells as an energy source
- Economic, storage, and safety issues when using hydrogen through different applications

Co-produced with: Science History Institute and *Chemical & Engineering News*



Date: Thursday, February 25, 2021 @ 2-3:30pm ET  
 Speaker: Brian Lanman, Amgen, Inc.  
 Moderator: Ariamala Gopalsamy, AstraZeneca

[Register for Free!](#)

**What You Will Learn:**

- Why identifying a direct inhibitor of KRAS has proven so challenging
- How covalent inhibition helped to turn KRAS G12C into a tractable target
- What hurdles were overcome in turning initial KRAS G12C binders into potential human therapeutics

Co-produced with: ACS Division of Medicinal Chemistry, American Association of Pharmaceutical Scientists, and ACS Publications

[www.acs.org/acswebinars](http://www.acs.org/acswebinars)

51