

# Education Resources for STEM Educators

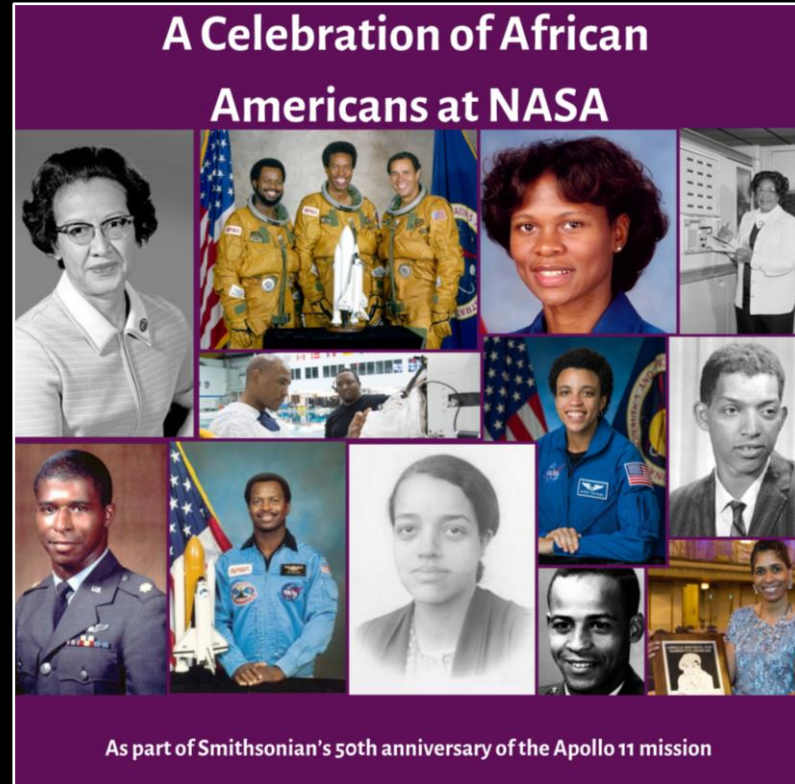
Christopher Williams PhD  
NMAAHC STEM Education Specialist  
February 10, 2021



# Learning Goals



Programs



Digital Lessons



NMAAHC's Collections



# Get to know NMAAHC's STEM Educator



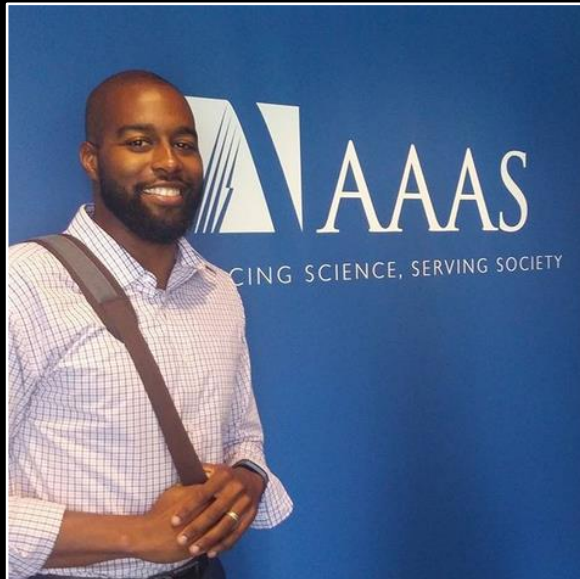
Frostburg State University



Georgetown University



National Institutes of Health



AAAS ST&P Fellow at the NSF



National Museum of African American  
History and Culture

# Changing the narrative about STEM

## Vision of STEM at NMAAHC

Global leader in K-12 STEM education



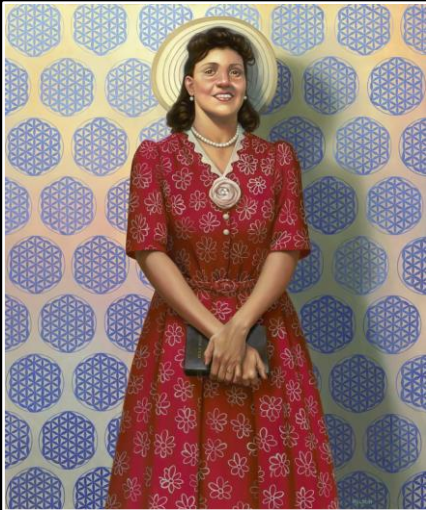
Enhance teaching and learning



Visitors recognize challenges, resilience and victories of African Americans in STEM



### STEM in historical context



Collection of the Smithsonian National Museum of African American History and Culture and National Portrait Gallery, Gift from Kadir Nelson and the JKB Group, LLC

### New stories



Collection of the Smithsonian National Museum of African American History and Culture

### Inform and inspire



Collection of the Smithsonian National Museum of African American History and Culture

- Learn and apply
- Recognize and appreciate STEM
- Value contributions





# STEM programs at NMAAHC serve multiple audiences



**STEM Teacher Fellowship**



**K-12 Educator Workshops**



**Museum-based Programs**



**STEM Days**

# STEM Educator Professional Learning Workshops

February 2021 – July 2021

# Upcoming Programs

## Wikipedia Editathon

### Date

February 21, 2021 – March 6, 2021

### Duration

2 weeks

Kickoff dates

- February 21, 2021
- February 28, 2021

### Topic

African American Computer Scientists and Engineers / African American Women in STEM

Registration is  
closed

## Creating Supportive and Inclusive Classrooms for Students

### Date

March 10, 2021

### Duration

2 hours

### Topic

Learning more about inclusive teaching frameworks for improving the teaching and learning in the classroom

## From Research Subjects to Researchers: The History of African Americans and Biomedical Research

### Date

May (TBD)

### Duration

2 days (4-6hrs total)

### Topic

Contributions and impacts of African American participation in biomedicine

## African Americans in the Earth and Environmental Sciences

### Date

July (TBD)

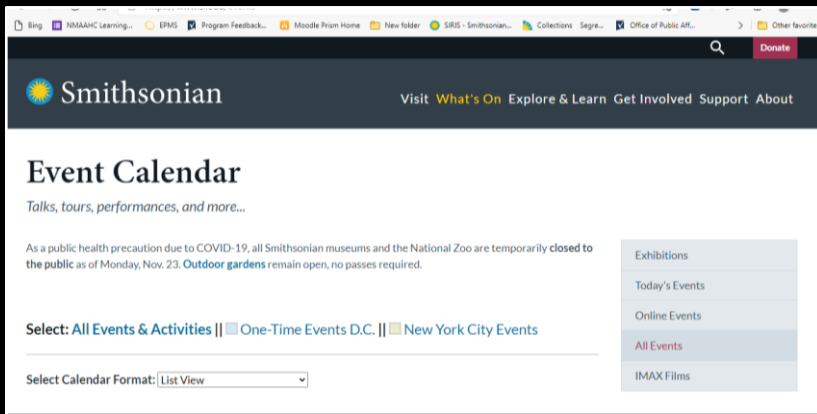
### Duration

Multiday (~10 hours total)

### Topic

Explore the relationship between African Americans and the environment throughout history

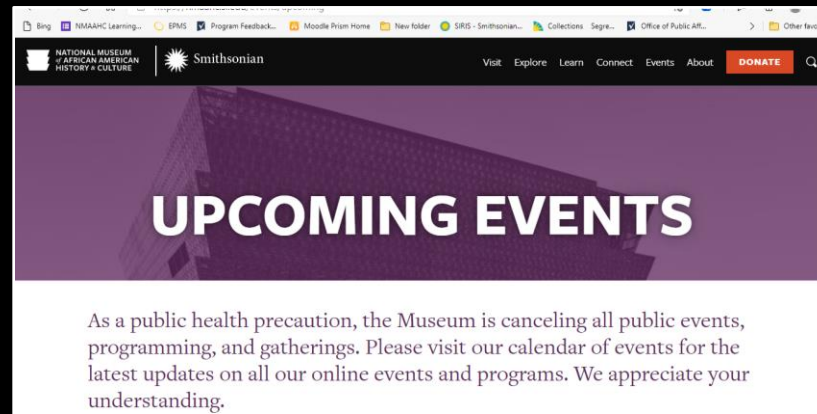
# Three easy ways to learn of upcoming programs



**Smithsonian Events Calendar**



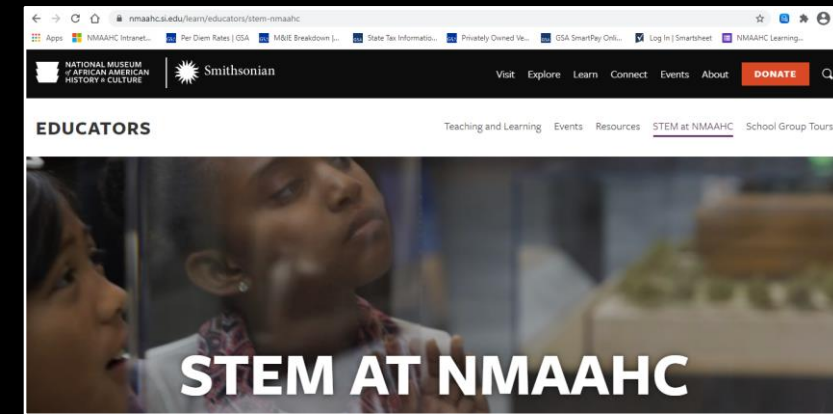
Upcoming programs from all SI museums and Zoo



**NMAAHC Events Calendar**



Upcoming programs from NMAAHC



**NMAAHC STEM Webpage**



Upcoming STEM programs from NMAAHC



# Student Resources

# Exploring Space with Victor Glover

- Follow his journey
  - Lift off to return to Earth
- Activities
  - Chat from ISS
  - Art and Teamwork
    - Student artwork submission
- Additional activities and information
  - NMAAHC collections
  - Student activities
    - Coloring pages
    - Games





# Through the Window and Into the Mirror: A Career Conversation Series

- Middle and High school students
- Explore STEM careers
- Windows and Mirrors
  - See others + See themselves
- Information
- Inspiration
- Action

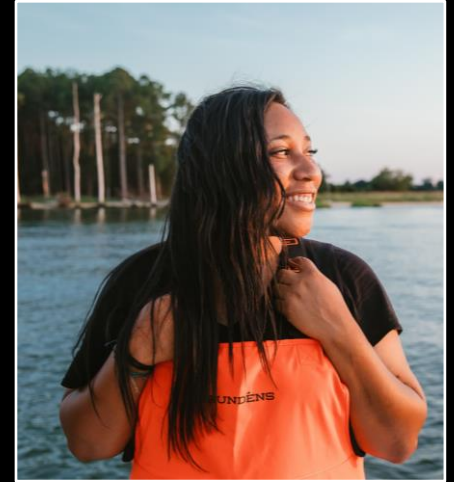


# Through the Window and Into the Mirror: A Career Conversation Series

- Earth and Environmental Sciences
- Begins February 26, 2021
- Monthly
  - February through June 2021



Austin Jordan  
Communications Director  
Redwire Space



Imani Black  
Oyster farmer and Aquaculturalist



# Exploring Digital Resources

# Smithsonian Institution Collections Search

- 6 million+ online images, audio and video
- How can you use it?
  - Object-based learning
  - Supplement existing lessons
  - Engage visual and auditory learners
  - Reveal new connections



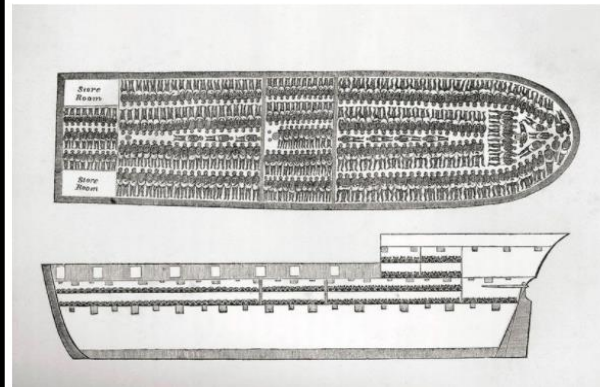
Collection of the Smithsonian National Museum of African American History and Culture, Gift of Annie Leibovitz



Collection of the Smithsonian National Museum of African American History and Culture, Gift of Maj. Gen. Charles F. Bolden Jr., USMC (Ret)

## New Research Reveals the Transatlantic Slave Trade's Genetic Legacy

Scientists investigated whether genetic data collected from 50,000 volunteers lined up with historical shipping manifests



SmithsonianMag.com

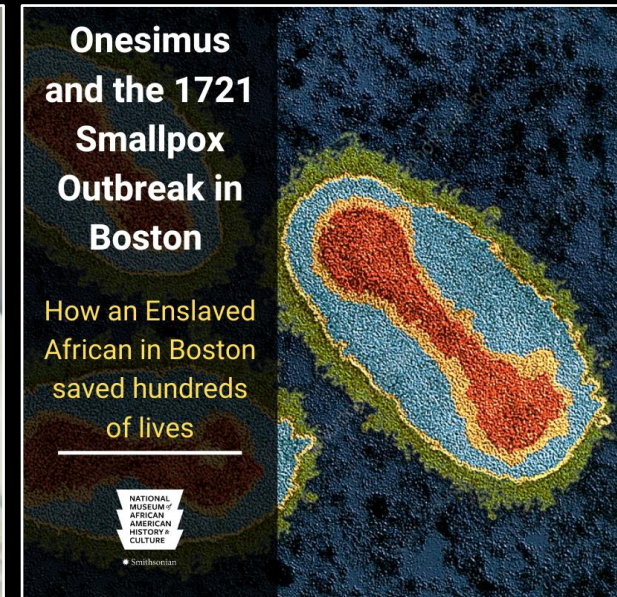
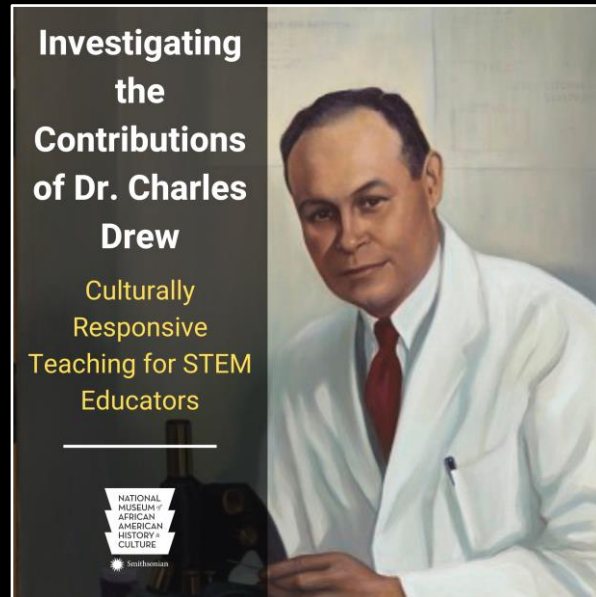
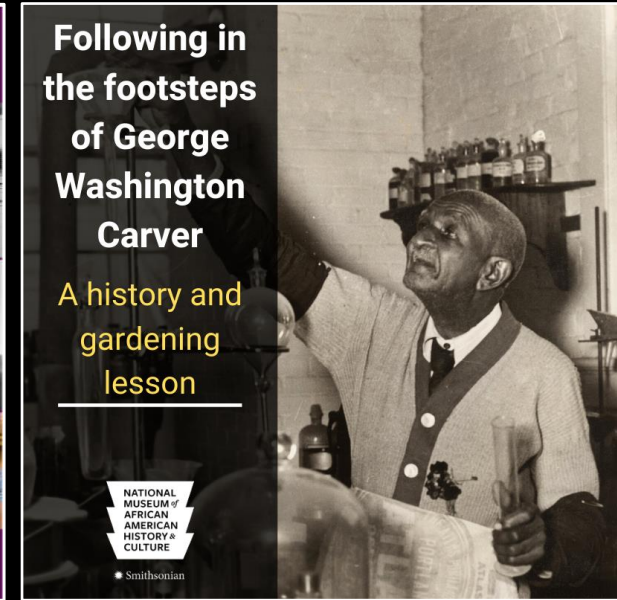


Collection of the Smithsonian National Museum of African American History and Culture



# Smithsonian Learning Lab

- Discovery, Creation and Sharing
  - 1 million+ images, recordings and texts
- Educator created lessons
  - Copy and edit
  - Download and share
  - Add quiz questions
- Weekly support
  - Tuesdays 4-5pm EST
- NMAAHC examples
  - Topical lessons
  - Student lessons
  - Lesson plans
  - Discovering little-known history



**STEM programs at NMAAHC  
are generously sponsored by  
the Dow Chemical Company**



 Smithsonian

# Questions?

