NISE Network Online Workshop

America at 250 - Just in time resources you can use at science centers and children's museums

June 9, 2026

Today's Presenters:

- **Catherine McCarthy,** PhD, NISE Network Director, Arizona State University
- **Analisa Duran,** PhD, Knight Vice President, Science Education, **Frost Science**, Miami, FL
- **Addie Bouck,** Program Coordinator, **America 250 - Colorado 150 Commission** **History Colorado**, Denver, CO

Welcome! As we wait to get started with today's discussion, please…

Introduce yourself! Type your name, institution, and location into the Chat Box

Questions? Feel free to type your questions into the Chat Box at any time throughout the webinar. A selection of questions from the chat and workshop registration will be read aloud by moderators for presenters to answer during the Q&A.

See you next time!
Upcoming Online Workshops...

NISE NETWORK
ONLINE WORKSHOPS

Tuesdays; 2pm-3pm Eastern /
11am-12pm Pacific

- **July 21st:** Practical Approaches to Immersive Digital Experiences in Museums
- **August 11th:** Ready for Roman - Resources for Celebrating the Launch of NASA's Nancy Grace Roman Space Telescope

Learn more and register at nisenet.org/events

Agenda

- Catherine McCarthy, NISE Network
  Overview of America at 250 Resources

- Analisa Duran, Frost Science
  Celebrating American Innovation Poster Exhibition, Planetarium Show, and Resources

- Addie Bouck, History Colorado
  Moments That Made US Customizable Exhibition Panels

Catherine McCarthy

NISE Network Director

Arizona State University

cmccarthystem@gmail.com

America 250 Semiquincentennial

This historic milestone is an opportunity to

- Pause and reflect on our nation's past,
- Honor the contributions of all Americans, and
- Look ahead toward the future we want to create

Content

- The 250th anniversary is not just about 1776 and the Revolutionary War
- It is an opportunity to share all of America's history, beginning well before the Declaration of Independence and continuing to today

Timing

- Celebrations will continue well beyond July 4th, 2026 lasting for the next several years

Today we are sharing resources to help you create experiences and tell the stories you want to share

Photo by Brandon Mowinkel on Unsplash

Learn more at nisenet.org/america250

National Initiatives

America250

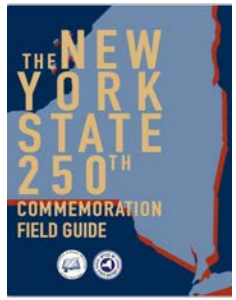
Nonpartisan federal initiative commissioned by Congress in 2015

- https://america250.org/

State and Territories Commissions

Connect with your state or territory commission
In some states, each county also has a local commission

- https://america250.org/state-and-territory-commissions/
- American Association for State and Local History (AASLH)
  https://aaslh.org/programs/250th
  (Choose State Commissions in left navigation menu)



National Initiatives

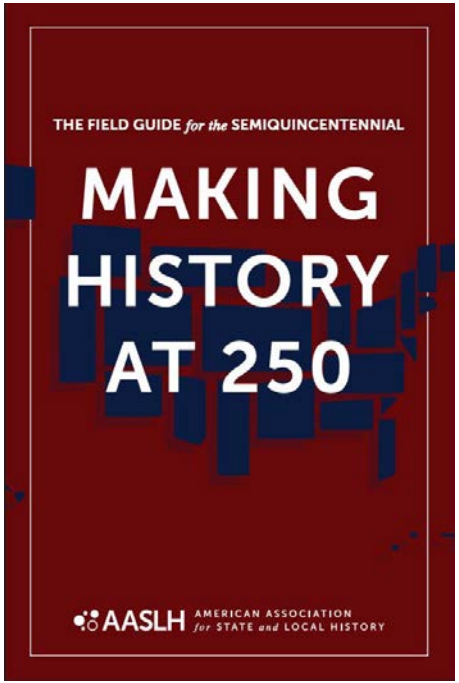
American Association for State and Local History (AASLH)

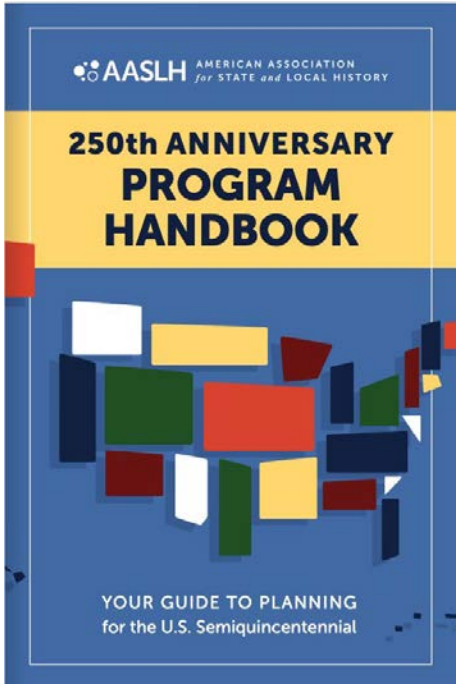
Making History at 250:
The Field Guide for the Semiquincentennial (2021)

- Broad themes:
  - Unfinished Revolutions
  - Power of Place
  - We the People
  - American Experiment
  - Doing History

250th Anniversary Program Handbook (2024)

- Features low-cost program ideas and practical suggestions specifically geared towards smaller organizations





Create a free account to download
https://www.aaslh.org/programs/250th/

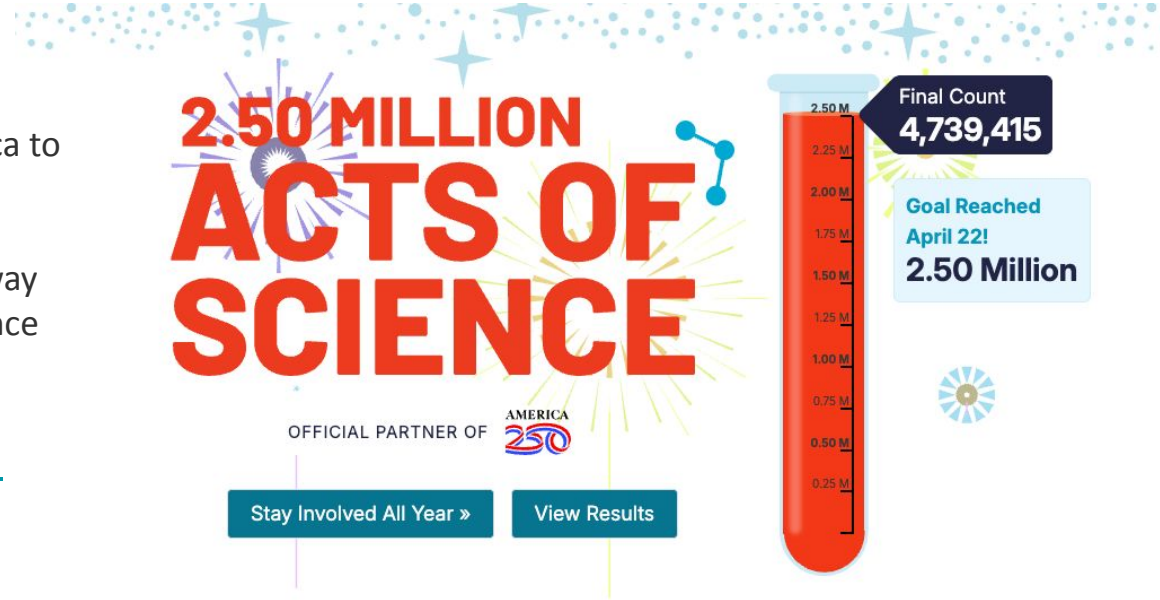
Many other resources on this website

National Initiatives

Citizen Science Month

In April SciStarter invited all people in America to embrace their inner scientist, involve every community, inspire scientific discovery, and imagine a better future. Citizen science is a way for anyone and everyone to take part in science and imagine a better future.

https://scistarter.org/citizensciencemonth



scistarter
Science we can do together.

National Initiatives

Science across America

- STAR Net library network is offering a digital map where you and your visitors can add scientific achievements from your state/territory
- Free physical map and stickers to celebrate local science
- Libraries (and museums who participated in this webinar) can register to receive free materials here: https://www.surveymonkey.com/r/LC56BF3

- Cohort 2 applications are open - will receive free resources, with only optional reporting requirements
- https://community.starnetlibraries.org/join-science-across-america-cohort-2-free-resources-and-no-requirements/

Learn more at nisenet.org/america250

National Initiatives

COSI American Innovations Kit

- https://cosi.org/connects/kits/american-innovation-kit.php

Featured in our 2025 workshop

You can see the recording with a presentation by Stephen White from COSI at nisenet.org/america250

National Initiatives

THE AMERICAN REVOLUTION
A FILM BY KEN BURNS, SARAH BOTSTEIN & DAVID SCHMIDT

PBS

PBS Film

- THE AMERICAN REVOLUTION
  Six-part film started airing in November 16, 2025
  PBS member stations have
  community engagement activities around the film
  https://www.pbs.org/kenburns/the-american-revolution/

- **Community engagement multi-year effort**
  https://docs.google.com/forms/d/e/1FAIpQLSd6_GcN7ShbSBqD6wMMuQQ0Fw3DvCAGCeVWQwzA6sZaHNI3tQ/viewform

- **Education resources**
  https://docs.google.com/forms/d/e/1FAIpQLSe11Gf-9bGsZV_h0EZx5CndAxkCF6NtDPhB3hjQrEiiRkzulg/viewform

Learn more at
nisenet.org/america250

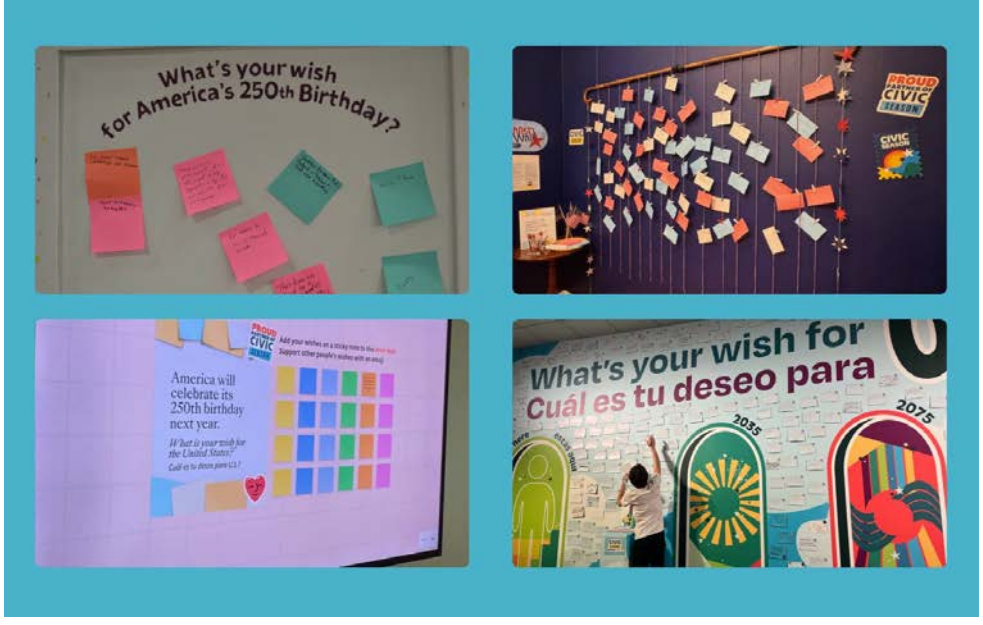
Programming Ideas

Hosting a Wish Wall

In person wish walls

Invite people to contribute to our shared story, in our local communities.
https://thecivicseason.com/wish-walls

Made By Us has created a detailed host guide with examples and graphics
https://docs.google.com/document/d/1B_JyXOlzlEKcq25cEPwtCiPUlW-Bezg-J_iPOcy6ZO4/edit?usp=sharing



Wish Wall photo collage courtesy of Made By Us

Digital versions

My Wish for U.S. created Made By Us
https://www.mywishforus.com/

OnOur250th.org created Made By Us
https://www.onour250th.org/

Programming Ideas

Time capsules - personal or community

- American Museum of Natural History ArcheOLogy ideas for personal time capsules https://www.amnh.org/explore/ology/archaeology/create-your-own-time-capsule2
- Library of Congress advice for community time capsules https://www.loc.gov/preservation/resources/educational/timecapsule/

Host a Birthday Party

- Great for even very young children

Commemorative tree plantings

- National Wildlife Federation Trees for Wildlife Event Planning Guide https://www.nwf.org/Trees-for-Wildlife/Get-Involved/Request-Trees/Plan-an-Event

Photo by Andrey K on Unsplash

Photo by Thomas Park on Unsplash

Photo by George Bakos on Unsplash

Programming Ideas

Making and Creativity

- Handwork: Celebrating American Craft
  National collaboration showcasing the importance of the handmade and celebrating the diversity of craft that defines America
  https://www.handwork2026.org
- Making resources
  https://www.nisenet.org/making

Sharing local history and personal stories

- Documenting oral histories, collaborating with a local historical society
- StoryCorps DIY advice https://diy.storycorps.org/
- Oral history best practices https://oralhistory.org/best-practices/

Creating a location-based tour with audio and images

- Clio free platform https://theclio.com/
- Clio free mobile app is free in iTunes and Google Play
- Learn more https://theclio.com/about

Programming Ideas

Imagining our Future

- NISE Network Futures thinking activities
  https://www.nisenet.org/society

Civics Programs

- iCivics resources **https://vision.icivics.org/**
- Civic Learning Week resources **https://civiclearningweek.org/**
- Educating for American Democracy
  https://www.educatingforamericandemocracy.org/
- Exploring Civics through Historic Spaces:
  A Model for Civic Learning at Museums, Historic Sites,
  and Cultural Institutions from the Intrepid Museum
  https://intrepidmuseum.org/exploring-civics-through-historic-spaces-model-civic-learning-museums-historic-sites-cultural

EDUCATING FOR AMERICAN DEMOCRACY

Learn more at nisenet.org/america250

Analisa Duran, PhD,
Knight Vice President,
Science Education,
Frost Science in Miami, FL
aduran@frostscience.org

FROST SCIENCE

Celebrating American Innovation

Project Overview

In honor of the semiquincentenial, we are highlighting 250 American scientists, innovators, and engineers in the fields of marine science, paleontology and natural history, astronomy, and flight through the following:

- ★ Poster exhibit
- ★ Passport
- ★ Resource guide
- ★ Lesson plans for grades 6-12
- ★ Planetarium show (4 minutes)

Celebrating American Innovation

Poster Specs

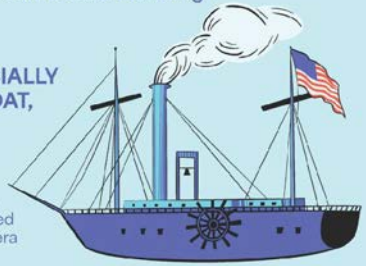
- Total number of posters: 25 (24x36)
- Total sq. ft.: Approximately 3,440 (sizes vary)

Celebrating American Innovation

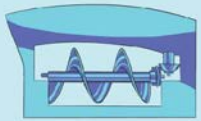
Powered Vessels

American innovation has paved the path of efficient and powerful ocean-based traveling.

1807 - FIRST COMMERCIALLY SUCCESSFUL STEAMBOAT, ROBERT FULTON



Robert Fulton designed and invented the first commercially successful steamboat. Although this steamboat would only traveled a short distance, it launched the era of powered watercraft.



1843 - FIRST PRACTICAL SCREW PROPELLER, JOHN ERICSSON

John Ericsson, a Swedish American inventor and mechanical engineer, developed one of the first practical screw propellers and oversaw the construction of the U.S. Navy's first screw-propelled ship, launched in 1843. The adoption of the screw propeller marked a major advance in naval engineering. This technology is still used as the primary form of high-speed marine propulsion today.

CONNECTING CULTURES: Ancient Polynesian Navigation

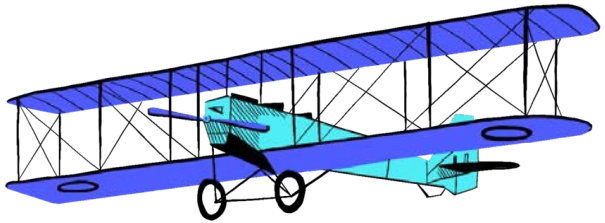
People have been sailing the ocean for thousands of years, using wind and currents to reach lands near and far.

The ancient Polynesians navigated the vast Pacific Ocean using the stars and signs from the ocean and sky in canoes made of wood. These traditional wayfinding methods have mostly disappeared with the emergence of Western technology, though they are still used by navigators in Pacific Islands nations.

Sample Poster

Celebrating American Innovation

Sample Illustrations



Celebrating American Innovation

Disciplines and Themes

FROST SCIENCE

Celebrating American Innovation

Introduction

Poster

AMERICA 250

Celebrating American Innovation

Marine Science

Breaking the Surface and Connecting Cultures

From early navigation, mapping, and seafaring technologies to modern tools like Scuba, submersibles, and remotely operated vehicles, American innovation has pushed the boundaries of ocean exploration. These technologies can be traced to foundational exploration methods developed by cultures around the world. Here, we highlight the connections between American innovation and the rich, global history of ocean exploration.

Sections/Themes

- Powered Vessels
- Mapping Oceans
- Exploring the Deep
- Ocean Stewardship and Protection

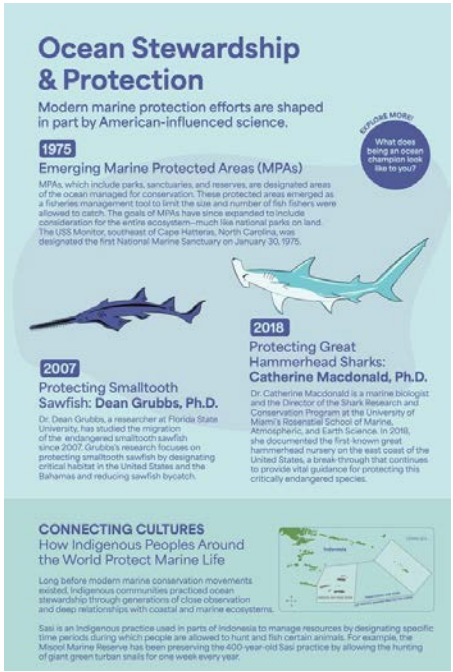
5 posters

Approx. 220 sq. ft.

Celebrating American Innovation

Marine Science

Marine Science



Astronomy

Earthbound Observations to Interstellar Exploration

American space exploration began with observing the cosmos from Earth. Tools such as radio astronomy observatories, telescopes, and planetariums have allowed us to learn about the universe safely from the ground. American ingenuity has also driven major advances in how we explore space by taking humankind to the Moon and the International Space Station, sending rovers to far away planets, and even taking photos of black holes. Here, we explore the individuals who contributed to space exploration, with emphasis on innovative tools used from Earth and beyond.

Sections/Themes

- Observing the universe from Earth
- Leaving Earth
- Public engagement with science

6 posters

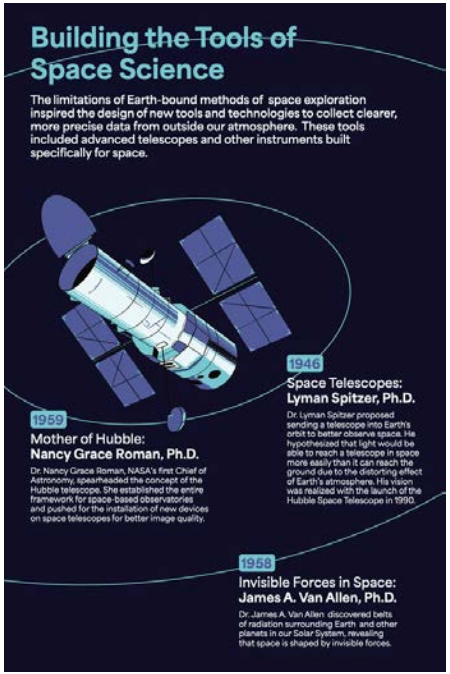
64 sq. ft.

Celebrating American Innovation

Astronomy

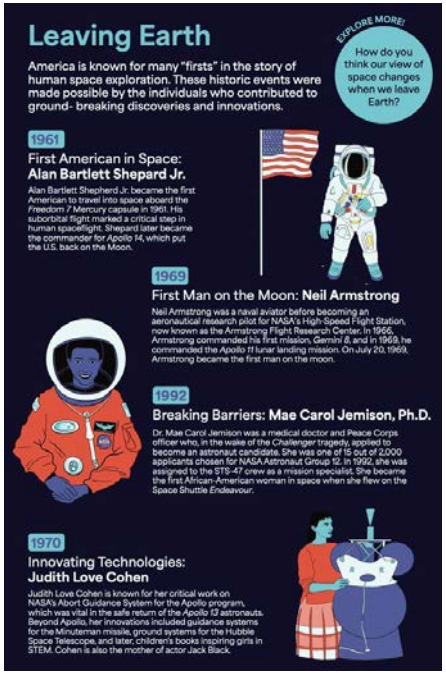
Earthbound Observations to Interstellar Exploration
American space exploration began with observing the cosmos from Earth. Tools such as radio astronomy observatories, telescopes, and planetariums have allowed us to learn about the universe safely from the ground. American ingenuity has also driven major scientific advances by taking humans into space, sending rovers to far away planets, and even imaging black holes.
Here, we explore the individuals who contributed to space exploration, with emphasis on innovative tools used from Earth and beyond.
Celebrating American Innovation
Discover the American spirit of creativity and discovery by exploring 250 American scientists, engineers, and innovations.
Scan to view the resource guide

Observing the Universe from Earth
Through careful observation and the use of mathematical tools, early astronomers made discoveries that revealed the structure and scale of space.
1847
America's First Female Astronomer: Maria Mitchell
Maria Mitchell discovered and named a comet—originally called C/1847 T1, later known as "Miss Mitchell's Comet"—by spotting a small blurry object in the sky that did not appear in her charts. She became a professor of astronomy and helped found the Association for the Advancement of Women. She inspired women to believe that they could accomplish the same things as their male counterparts.
1912
New Discoveries in Understanding Stars: Henrietta Swan Leavitt
Henrietta Swan Leavitt discovered that the luminosity (brightness) and pulsation periods of a Cepheid star—a type of star that brightens and dims on a predictable rhythm—was directly related to its distance from Earth. This realization shaped the future of astronomy by changing how scientists measure the distance of celestial objects.
1922
The Harvard System for Classifying Stars: Annie Jump Cannon, Ph.D.
Dr. Annie Jump Cannon developed and applied the Harvard system for classifying stars which is still used today. She manually classified over 350,000 stars using their spectra and focusing on temperature, helping to shape the future of astronomy and how scientists measure objects in the universe. Cannon became the first woman to be awarded the Henry Draper Medal from the National Academy of Sciences.
1924
Understanding our Universe: Edwin Hubble, Ph.D.
Dr. Edwin Hubble discovered that galaxies exist beyond the Milky Way and that the universe is constantly expanding, completely changing our understanding of space. He also coined Hubble's Law, which states that the further a galaxy is from Earth, the redder its light appears.


Building the Tools of Space Science
The limitations of Earth-bound methods of space exploration inspired the design of new tools and technologies to collect clearer, more precise data from outside our atmosphere. These tools included advanced telescopes and other instruments built specifically for space.
1959
Mother of Hubble: Nancy Grace Roman, Ph.D.
Dr. Nancy Grace Roman, NASA's first Chief of Astronomy, spearheaded the concept of the Hubble telescope. She established the entire framework for space-based observatories and pushed for the installation of new devices on space telescopes for better image quality.
1946
Space Telescopes: Lyman Spitzer, Ph.D.
Dr. Lyman Spitzer proposed sending a telescope into Earth's orbit to better observe space. He hypothesized that light would be able to reach a telescope in space more easily than it can reach the ground due to the distorting effect of Earth's atmosphere. His vision was realized with the launch of the Hubble Space Telescope in 1990.
1958
Invisible Forces in Space: James A. Van Allen, Ph.D.
Dr. James A. Van Allen discovered belts of radiation surrounding Earth and other planets in our Solar System, revealing that space is shaped by invisible forces.

Building the Tools of Space Science (Continued)
1984
Understanding Extreme Cosmic Events: Kip S. Thorne, Ph.D., Rainier Weiss, Ph.D., and Barry Barish, Ph.D.
Dr. Kip S. Thorne, Dr. Rainier Weiss, and Dr. Barry Barish contributed to the development of the Laser Interferometer Gravitational-Wave Observatory (LIGO), an observatory that detects gravitational waves. In 2015, LIGO scientists directly observed gravitational waves for the first time.
1993
First Latina in Space: Ellen Ochoa, Ph.D.
Dr. Ellen Ochoa is a Mexican American engineer, former astronaut, and former director of the Johnson Space Center. Ochoa co-invented three optical devices: a system that inspects objects, a system that identifies and can "recognize" objects, and a system that minimizes distortion in the images taken of an object. Ochoa became the first Latina to go to space when she served on a nine-day mission aboard the Space Shuttle Discovery.
2015
Merging Blackholes: Nergis Mavalvala, Ph.D.
Dr. Nergis Mavalvala's major scientific contributions focused on enhancing gravitational wave detection. Most of Mavalvala's pioneering work was on quantum states of light, which significantly improved the sensitivity of Laser Interferometer Gravitational-Wave Observatory (LIGO) detectors. Her research led to more precise measurements and a higher rate of discoveries, including the first direct detection of gravitational waves from the merging of two black holes.

Astronomy


Leaving Earth
America is known for many "firsts" in the story of human space exploration. These historic events were made possible by the individuals who contributed to ground- breaking discoveries and innovations.
EXPLORE MORE!
How do you think our view of space changes when we leave Earth?
1961
First American in Space: Alan Bartlett Shepard Jr.
Alan Bartlett Shepherd Jr. became the first American to travel into space aboard the Freedom 7 Mercury capsule in 1961. His suborbital flight marked a critical step in human spaceflight. Shepard later became the commander for Apollo 14, which put the U.S. back on the Moon.
1969
First Man on the Moon: Neil Armstrong
Neil Armstrong was a naval aviator before becoming an aeronautical research pilot for NASA's High-Speed Flight Station, now known as the Armstrong Flight Research Center. In 1966, Armstrong commanded his first mission, Gemini 8, and in 1969, he commanded the Apollo 11 lunar landing mission. On July 20, 1969, Armstrong became the first man on the moon.
1992
Breaking Barriers: Mae Carol Jemison, Ph.D.
Dr. Mae Carol Jemison was a medical doctor and Peace Corps officer who, in the wake of the Challenger tragedy, applied to become an astronaut candidate. She was one of 15 out of 2,000 applicants chosen for NASA Astronaut Group 12. In 1992, she was assigned to the STS-47 crew as a mission specialist. She became the first African-American woman in space when she flew on the Space Shuttle Endeavour.
1970
Innovating Technologies: Judith Love Cohen
Judith Love Cohen is known for her critical work on NASA's Abort Guidance System for the Apollo program, which was vital in the safe return of the Apollo 13 astronauts. Beyond Apollo, her innovations included guidance systems for the Minuteman missile, ground systems for the Hubble Space Telescope, and later, children's books inspiring girls in STEM. Cohen is also the mother of actor Jack Black.

Sharing Science with the Public
Great science communicators effortlessly bridge the gap between scientific innovation and the public. These charismatic individuals have brought awareness, understanding, and curiosity about the cosmos to America and beyond.
KEEP LOOKING UP!
1976
Pioneering Astronomy Education: Jack Horkheimer
Jack Horkheimer was a pioneering astronomy educator and the longtime director of the Miami Space Transit Planetarium (now the Frost Planetarium). Through his planetarium programs and TV series, Star Hustlers, later renamed to Star Gazers, he made observing the universe accessible and engaging for millions of people. His legacy lives on in the programs shown at the Frost Planetarium.
1980
Translating Science through Entertainment: Carl Sagan, Ph.D.
Through his television series, Cosmos, Dr. Carl Sagan translated complex space science into stories that helped millions connect emotionally to the universe. Sagan also proposed that NASA take a photograph of the Earth from over 3.5 billion miles away, resulting in the famous photograph titled Pale Blue Dot from the Voyager 1 Space Probe.
1997
Science Communication Continues: Neil deGrasse Tyson, Ph.D.
Dr. Neil deGrasse Tyson's early research primarily focused on stellar evolution and galactic structure. He founded the Department of Astrophysics at the American Museum of Natural History. While Tyson has published dozens of scientific papers, he is most known for being a science communicator, phrasing seemingly indigestible content in a way that almost anyone can understand.
EXPLORE MORE!
Share your favorite thing about space with a friend or family member.
2020
Diversity in STEM: Diana Trujillo
Diana Trujillo is a Colombian-American aerospace engineer who served as Flight Director at NASA's Jet Propulsion Laboratory and the Robotic Arm System lead for the Mars Perseverance mission. Trujillo worked full-time to fund her English lessons at Miami Dade College.

Aeronautics & Flight

What it Takes to be Airborne

How did we become airborne, and how did flight change the way we experience the world? From the laws of physics to bold inventions and creative problem-solving, humanity's path to flight transformed how we travel, communicate, and connect. Driven in part by the ingenuity and engineering feats of American scientists, this journey led to a more global and connected society.

Sections/Themes

- Understanding motion and forces
- Engineering the sky
- Making flight a global system

5 posters

168 sq. ft.

Celebrating American Innovation

Aeronautics & Fight

What it Takes to be Airborne

How did we become airborne, and what feats of physics did we achieve along the way? Bold inventions and creative problem solving–rooted in physics and engineering–have transformed how we travel, communicate, and connect.

Celebrating American Innovation

Discover the American spirit of creativity and discovery by exploring 250 American scientists, engineers, and innovators.

Scan to view the resource guide

Understanding Motion and Forces

Long before powered airplanes, Americans experimented with balloons, kites, and gliders, showing that human flight was possible. Scientific understanding of motion and forces transformed these early attempts into controlled, powered flight. For years American scientists and engineers worked to understand how forces such as lift, drag, and air resistance act on flying objects.

1894

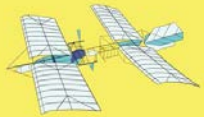
Engineering the Plane: **Octave Chanute**

Octave Chanute analyzed and documented flying machine experiments in the late 19th century. He designed and repeatedly tested a biwing glider, which travelled over 300 feet though the air.

1896

Exploring the Foundations of Physics: **Samuel Langley**

Samuel Langley conducted early experiments to study propulsion and aerodynamic lift. He designed and tested a series of flying models, powered by lightweight steam engines. The Langley Aerodrome No. 5 flew about 3,000 feet over the Potomac River!



Understanding Motion and Forces *(Continued)*

1903

The First Airplane: **Wilbur and Orville Wright**

The Wright brothers helped launch the aviation age on December 17, 1903 when Orville piloted their aircraft 120 feet through the air in 12 seconds. Together, they proved that sustained flight was possible by inventing, building, and flying the world's first successful airplane.

1906

Advancing Flight: **Charles Wesley Peters**

Charles Wesley Peters was the first African American man to design, build, and fly an airplane. He flew for the first time at 17 years old in a glider that he designed and built himself, traveling the length of a football field. Later, he attached an air-cooled automobile engine to his motorized airplane to create a plane capable of flying for up to 12 minutes at a time.

1953

Flight Grounded in Science: **Mary W. Jackson and Christine Darden, Ph.D.**

Mary Jackson and Dr. Christine Darden advanced aerodynamic research using wind tunnels and mathematical analysis to study airflow, boundary layers, and the forces acting on aircrafts at high and supersonic speeds. Together, these engineers transformed the science of flight from experimentation into a discipline grounded in data and physics, while simultaneously paving the way for women in STEM.

Engineering to Take to the Sky

As the thought of humans touching the heavens became more than just a theory, engineers helped transform flight into practical technology.

1911

Innovations to Propel Us Forward: **Glenn Hammond Curtiss**

Glenn Hammond Curtiss transformed flight from a fragile experiment into a practical technology. His innovations with engines and seaplanes expanded aviation's speed, range, and real-world applications. He developed a powerful and lightweight engine for the Aerial Experiment Association, leading him to become one of America's aviation pioneers.

1932

Connecting Continents: **Amelia Earhart**

Amelia Earhart, one of the most famous American pilots, was the first woman to complete a solo transatlantic flight. Her record-breaking flights challenged both physical limits and social expectations.

1935

Flying for Everyone: **Donald Wills Douglas Sr.**

Donald Wills Douglas Sr. was an engineer whose contributions made air travel safe and dependable through the development of the commercial aircraft. In addition to producing many civil and military aircrafts, he designed and produced the first airplanes to circumnavigate the Earth as well as the first commercial passenger plane.

Aeronautics & Fight

Human Health

Collaboration in Healthcare

In healthcare, human connection matters at every level: from the relationship between patients and doctors to the collaborative work behind new treatments, medical equipment, and discoveries. Across American history, scientists working together have developed vaccines, improved blood transfusions and transplants, and transformed lives.

Sections/Themes

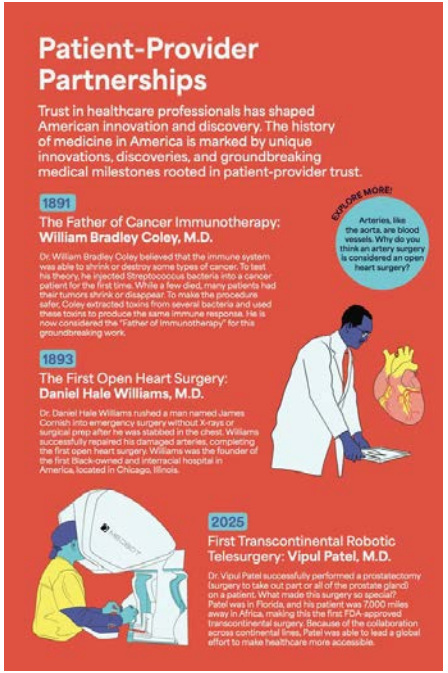
- Patient–Provider Partnerships
- Peer Connection & Mutual Support
- Community Voice & Experience

4 posters

120 sq. ft.

Celebrating American Innovation

Human Health



Paleontology

The Puzzle of Earth's Past

From uncovering new fossils to developing technologies that deepen our understanding of the past, the story of natural history is one of exploration and collaboration across centuries. American innovation has helped identify new frontiers in natural history, paving the way for new ways of seeing, studying, and rediscovering our planet's past.

Sections/Themes

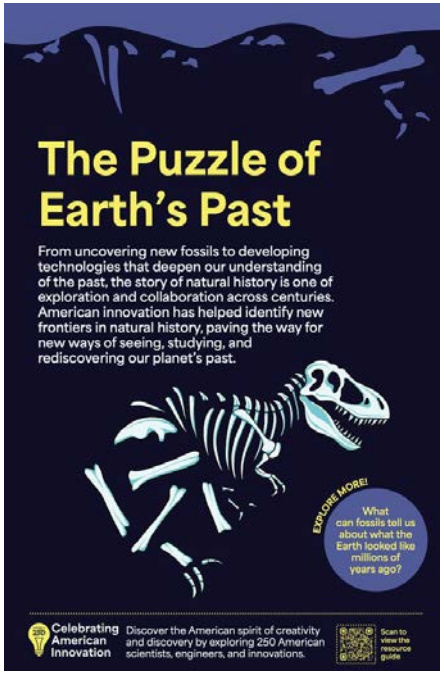
- Breaking Ground on Discovery
- Imagining Earth's past
- How emerging technologies can help us understand past discoveries

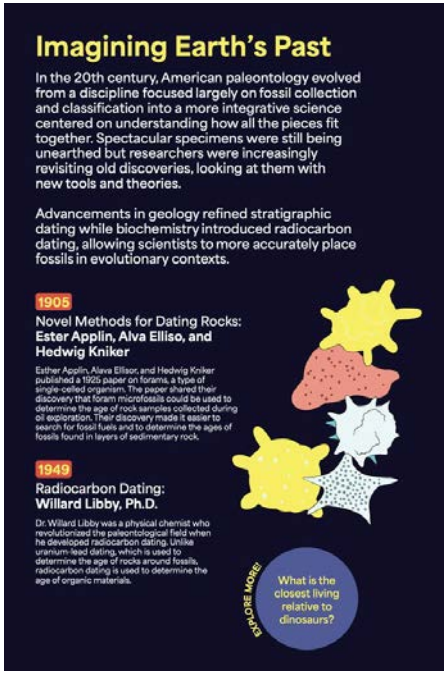
4 posters

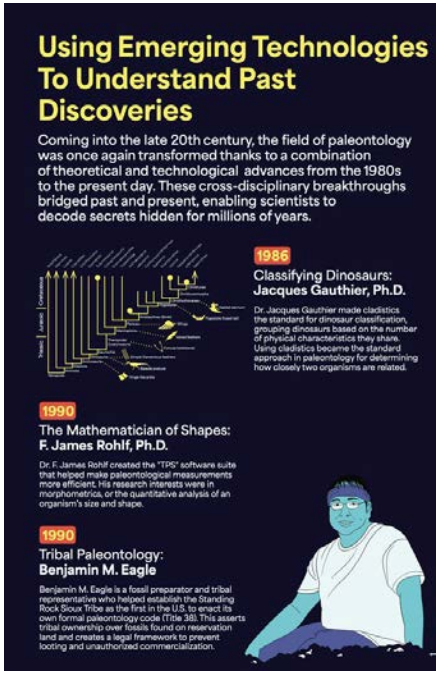
112 sq. ft.

Celebrating American Innovation

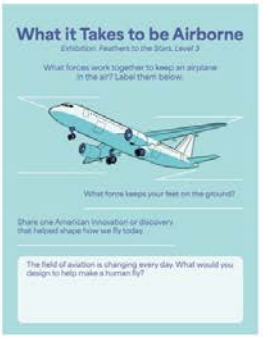
Paleontology







Optional: Provide opportunities for visitors to engage further with this interactive activity guide



Available to be edited to align with your institution. Printing costs not included.

Logstistics

FROST SCIENCE

Celebrating American Innovation

How to Credit Frost Science

We will provide an introduction poster which provides and overview of the exhibit and credits Frost Science.

Option 1:

Place the introduction poster at least once alongside poster exhibit.

Option 2:

Include the below copy at least once alongside the poster exhibit.

★ *This exhibit was curated and designed by the Phillip and Patricia Frost Museum of Science in Miami, Florida. Learn more at frostscience.org/america250.*

Celebrating American Innovation

Packages Available

Option 1: Posters as-is

All posters as is along with additional assets. This includes:

- 1 Introduction poster (24x36)
- 24 content posters (24x36)
- Suite of logos and illustrations

Option 2: Graphics and Assets to Build-your-own

All poster exhibit assets for teams to use however. Organizations may resize or edit assets as needed. This includes the .ai working files of the poster assets.

Celebrating American Innovation

Resource Guide

FROST SCIENCE

Celebrating American Innovation

250 American Scientists and Innovators

Resource guides are on our webpage and are organized by:

- All 250 individuals
- Discipline
- Timelines

1. Timothy Folger (1768)

Timothy Folger, a cousin of Benjamin Franklin, was a hydrographer and captain of a merchant ship. Drawing on his years of whaling experience, Folger helped Franklin chart the Gulf Stream in 1768, work that contributed to the first scientific study of the ocean current in 1775.

2. Robert Fulton (1807)

Robert Fulton was an inventor and engineer best known for developing the first successful commercial steamboat service in 1807. His achievement helped launch the era of powered watercraft, reducing dependence on wind-driven water transport.

3. Lieutenant Charles Wilkes (1838)

Lieutenant Charles Wilkes was a naval officer in command of the exploratory expedition that discovered the part of Antarctica now known as Wilkes Land. Wilkes' explorations proved Antarctica was a continent, shaping the way we understand Earth's geography.

4. John Ericsson (1843)

John Ericsson, a Swedish American inventor and mechanical engineer, developed one of the first practical screw propellers and oversaw the

Celebrating American Innovation

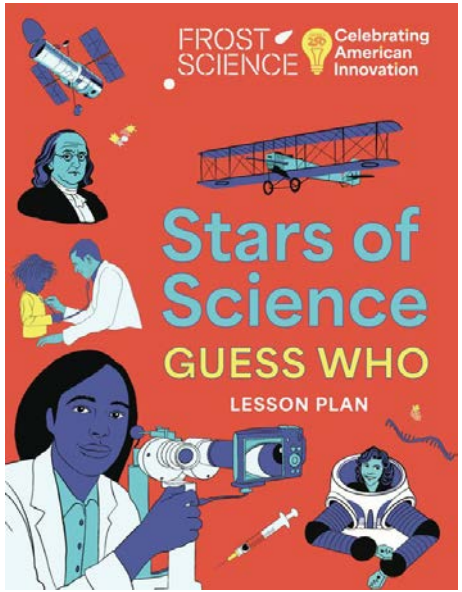
Lesson Plan

FROST SCIENCE

Celebrating American Innovation

Stars of Science

Students will play a game exploring American scientists, engineers, and innovators and their landmark discoveries or inventions. They will then delve deeper into the work of an innovator of their choice to see how their work has influenced discoveries and inventions around the world. Students will take what they learned to represent their innovator and legacy in a creative way.



Grades 6-12

Considerations for grades K-5

Celebrating American Innovation

Planetarium Show

FROST SCIENCE

Celebrating American Innovation

Celebrating American Innovation Show

Resource guides are on our webpage and are organized by:

- 4-minutes - .mp4
- To play prior to regular guest shows as a trailer
- Watch Now!

Celebrating American Innovation

Addie Bouck,
Program Coordinator,
America 250 - Colorado 150 Commission
History Colorado
Denver, CO
addie.bouck@state.co.us

AMERICA 250 | COLORADO 150

Getting Involved

John Fielder, Sunlight Basin, Weminuche Wilderness
History Colorado, 2023.1.1770

COLORADO IN 2026

America's 250th:

SEMIQUINCENTENNIAL

Colorado's 150th:

SESQUICENTENNIAL

Colorado's

SESQUISEMIQUINCENTENNIAL

John Fielder, Colorado Trail Columbines
History Colorado, USE.259.12

COLORADO IN 2026

America's 250th:

SEMIQUINCENTENNIAL

Colorado's 150th:

SESQUICENTENNIAL

Colorado's

SESQUISEMIQUINCENTENNIAL

The America 250 - Colorado 150 Commission

- 21 Commissioners
- Statewide Advisory Panel
- Housed at our states historical society: History Colorado
- am250co150.org

John Fielder, Colorado Trail Columbines
History Colorado, USE.259.12

COLORADO IN 2026

America's 250th:

SEMIQUINCENTENNIAL

Colorado's 150th:

SESQUICENTENNIAL

Colorado's

SESQUISEMIQUINCENTENNIAL

The America 250 - Colorado 150 Commission

- 21 Commissioners
- Statewide Advisory Panel
- Housed at our states historical society: History Colorado
- am250co150.org

13 SIGNATURE INITIATIVES

COMMUNITY RESOURCES

John Fielder, Colorado Trail Columbines
History Colorado, USE.259.12

AMERICA 250 | COLORADO 150

PRINT ON DEMAND EXHIBITION:

MOMENTS THAT MADE US

John Fielder, Snowy Mountain Range in Kebler Pass
History Colorado, 2023.1.190

MOMENTS THAT MADE US

Our story was never inevitable. We shaped it at every turn.

Moments That Made US (MTMU) is a **free**, **customizable**, **print-on-demand** exhibition exploring the ideals at the heart of the Declaration of Independence through moments in our history that have defined their meaning.

EXHIBITION OVERVIEW

21 panels provided panels, including:

- (1) Intro panel
- (5) Theme panels
- (15) National historic “moments” panels
- (2) Customizable panels for the optional addition of local content

The panels are designed to be **modular**, so organizations can choose to display some or all of the provided panels, and adding local content is optional.

EXHIBITION CONTENT

Five theme panels:

1. Life, Liberty, and the Pursuit of Happiness
2. Consent of the governed
3. Created equal
4. Free and Independent States
5. We mutually pledge to each other our Lives, our Fortunes and our sacred Honor

Each theme panel comes with 3 historic moments for a total of **15 content panels**

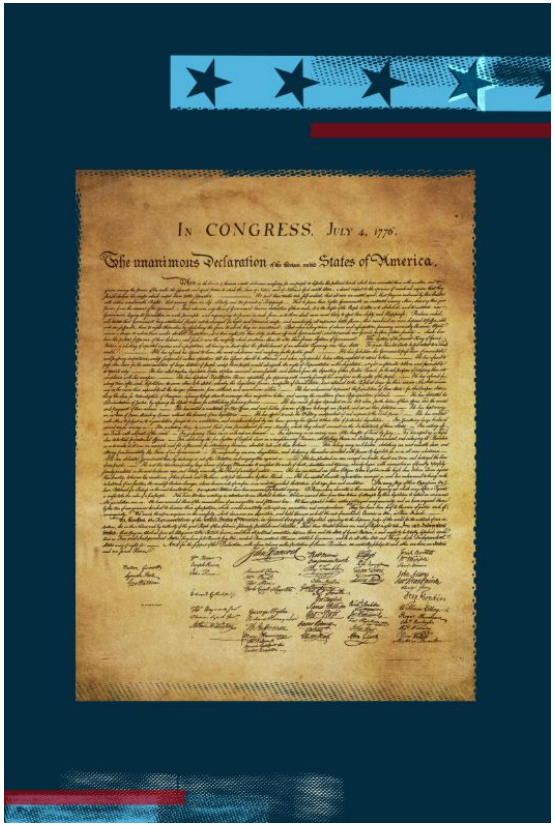


Image of the Declaration of Independence

Boston Tea Party - Consent of the Governed

Women's Vote - Free and Independent States

EXHIBITION DISTRIBUTION

Access the exhibition now at:
https://www.historycolorado.org/initiative-exhibition-for-community-organizations

State Partners:

- Exhibition was developed by a multi-state exhibition team
- It is now being distributed by our partners throughout the US
- Many of our distribution partners are adding state specific content

If you are interested in becoming a partner, please let me know!

Engagement across the United States:

- As of early June, there have been more than **500** organizations and individuals who have accessed the Moments That Made US exhibition
- 34 states and in D.C.
- Libraries, community centers, museums, schools and more

AMERICA 250 | COLORADO 150

OTHER NATIONAL INITIATIVES

John Fielder, Snowy Mountain Range in Kebler Pass
History Colorado, 2023.1.190

OTHER NATIONAL INITIATIVES

America's Potluck

A national initiative originating in Utah that is planning potlucks around the US on **July 5th, 2026.**

- Website: https://america250.utah.gov/americaspotluck/

Sharing the Spirit of America

Organized by Hawaii's America 250 Commission, Americans across the world - from the Caribbean, across North America, to the western edge of the Pacific - will simultaneously read the Declaration of Independence. Start time is based on 6pm (EDT), **July 8, 2026**

- Website: https://hawaiiamerica250.org/sharing-the-spirit-of-america

Light to Unite

The National Flag Foundation asks all of America, to the extent possible, to light red, white, and blue on **July 4th, 2026** as a national evening of unity to celebrate our nation's 250th Birthday.

- Website: https://nationalflagfoundation.org/light-to-unite/

National and Statewide Calendars

- America250 national calendar: https://america250.org/calendar/?view=map&date=allFutureEvents

- State commission's local calendars - states are very active!
  - Colorado's: https://www.colorado.com/am250-co150-events

Resources, Reminders and Q&A

NISE Network Related Resources

Learn more at nisenet.org/america250

AMERICA 250

Photo by Brandon Mowinkel on Unsplash

Resources & Opportunities

Learn more and access the NISE Network's online digital resources
nisenet.org/browse-topic

NISE NETWORK
NEWSLETTER

Read our monthly newsletter
nisenet.org/newsletter

NISE NETWORK
ONLINE WORKSHOPS

Past Recordings of Online Workshops
nisenet.org/online-workshop-recordings

Follow NISE Net on social networking
nisenet.org/social

See you next time!
Upcoming Online Workshops...

NISE NETWORK
ONLINE WORKSHOPS

Tuesdays; 2pm-3pm Eastern /
11am-12pm Pacific

- **July 21st:** Practical Approaches to Immersive Digital Experiences in Museums
- **August 11th:** Ready for Roman - Resources for Celebrating the Launch of NASA's Nancy Grace Roman Space Telescope

Learn more and register at nisenet.org/events

Thank You

Grantee

This material is based upon work supported by NASA under cooperative agreement award number 80NSSC22M0122. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).

Center for Innovation in Informal STEM Learning
Arizona State University

NISE
NATIONAL INFORMAL STEM EDUCATION NETWORK