



OKLAHOMA

HUMANITIES

FALL | WINTER 2025

CULTURE | ISSUES | IDEAS



SPACE



CAROLINE LOWERY

Executive Director
caroline@okhumanities.org

PERSPECTIVE

FROM THE EXECUTIVE DIRECTOR

Oklahoma Humanities magazine has always brought people together in conversation and contemplation. Some topics presented by the magazine have been difficult, but the essence of the humanities is to examine, evaluate, and face all parts of a situation, particularly those that are challenging.

As many of you know, Oklahoma Humanities is currently navigating a deeply challenging time. In early April, without advanced notice or explanation, our Congressionally mandated federal funding was abruptly terminated. Although a federal district court recently granted a preliminary injunction and ruled that this termination was unlawful, the funding remains inaccessible to state councils.

As we work closely with national and local partners to secure additional support, we are stretching every dollar and adapting to meet the moment. In every decision we make, we are prioritizing our Oklahoma communities that rely on us for access to, and resources for, the humanities while also protecting our long-term sustainability and survival.

As a result, we have had to make difficult choices including vacating our physical office, going fully remote, and suspending all grant programs. Unfortunately, we have also had to make additional budget cuts including laying off members of our invaluable staff.

Still, we are moving forward.

A temporarily stabilizing grant from the Mellon Foundation and generous matching support from local donors like you allowed us to continue delivering core programs this fall in flexible and adaptive ways. Our signature book discussion program, *Let's Talk About It*, returned in an "abridged" format, bringing meaningful dialogue to rural libraries, tribal and community centers, and correctional institutions across Oklahoma. While smaller in scale, these programs remain grounded in the power of literature to foster dialogue and connection. Our award-winning *Oklahoma Humanities* magazine also continued with this special digital-only edition that explores a timely theme and amplifies voices from around the state.

While this is not the season we planned for, it is one we are meeting with resilience, creativity, and a firm commitment to our mission. In 2026, we will again offer *Let's Talk About It: Abridged Version* in addition to publishing one digital issue of the magazine. And, if federal funds become available, we will distribute that money back into our Oklahoma communities via grants as we have done for the last fifty-four years.

We are proud to continue this important work, particularly in these uncertain times, and are deeply grateful for the unwavering support of our community, partners, and donors. Your belief in the power of the humanities to connect communities is what fuels us.

Thank you for standing with us.

CONTENTS

SPACE

FALL | WINTER 2025 | VOL. 18, NO. 2

**7 SPACE: THE FINAL FRONTIER
OF DIPLOMACY**

Finding common ground high above
the Earth.

By Shad Satterthwaite

**14 WHY YOU SHOULD NEVER SEND
SANDWICHES TO SPACE**

Serving up the course of cosmic food.

By Jennifer Levasseur

22 ANYTHING BUT LANDLOCKED

Oklahoma is a land of wide-open *space*.

24 SLIPPING INTO SHADOW

Sharing the experience of a solar eclipse.

By multiple contributors

36 NIGHT SKY

The power of writing and remembering.

By Kashona Notah

**44 INNER SPACE: VOYAGER'S
LOVE LETTER TO EARTH**

The pixel that changed our perspective.

By Joshua Grasso

IN EVERY ISSUE

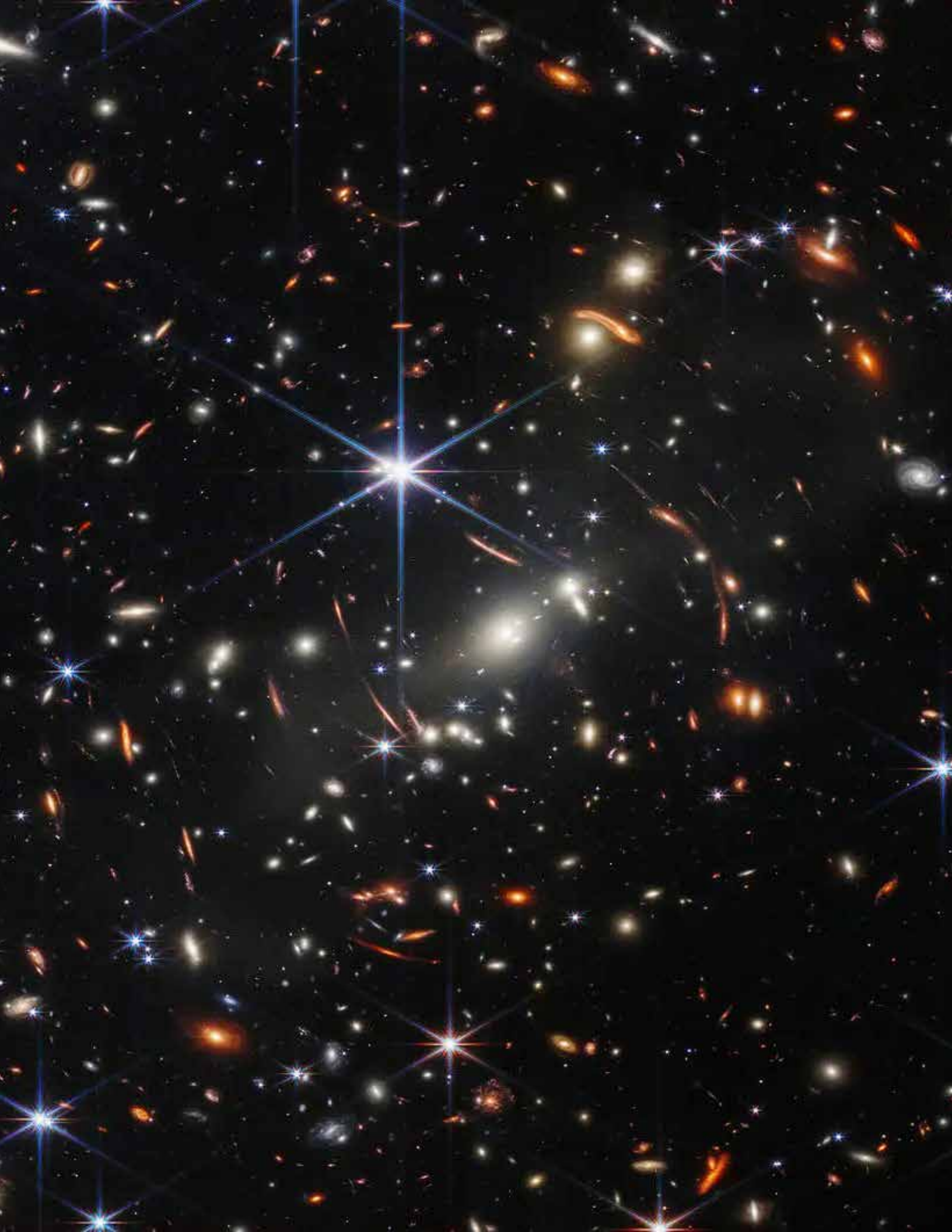
2 Perspective | From the Executive Director

6 Sidenote | From the Editor

56 Noteworthy | OH News

ON THE COVER:

Greg Rakozy, 2015. unsplash.com.





Fran Parchcorn

**THE 2025
EDITOR'S CIRCLE**

Donors who designate gifts of \$500 or more for *Oklahoma Humanities* magazine join the Editor's Circle. Thanks to these generous donors, we distribute this award-winning publication free of charge to Oklahomans in all 77 counties. Thank you—we're grateful for your generosity!

OPPOSITE PAGE:

Revealed to the public in 2022, this photograph taken by the James Webb Telescope provided one of the deepest and detailed images of the universe to date. Although containing thousands of galaxies, the image represents a fraction of the night sky, approximately the "size of a grain of sand held at arm's length," according to NASA. The galaxy cluster is SMACS 0723 and its light took billions of years to reach Earth. This is how the galaxy cluster appeared roughly 4.6 billion years ago. When we look at this image, we are looking into the past.

Image credit: NASA, ESA, CSA, and STScI.



OKLAHOMA
HUMANITIES

Culture | Issues | Ideas

EXECUTIVE DIRECTOR

Caroline Lowery
caroline@okhumanities.org

**ASSOCIATE DIRECTOR
& EDITOR EMERITUS**

Carla Walker
carla@okhumanities.org

**EDITOR & DIRECTOR OF
COMMUNICATIONS**

Kimberly Roblin
kimberly@okhumanities.org

SENIOR PROGRAM OFFICER

Kelly Burns
kelly@okhumanities.org

PROGRAM OFFICER

Rayne McKinney
rayne@okhumanities.org

DIRECTOR OF ADMINISTRATION

Khylee Forgety
khylee@okhumanities.org

ADMINISTRATIVE ASSISTANT

Shana Keith-Ward
shana@okhumanities.org

Oklahoma Humanities magazine is an award-winning collection of cultures, issues, and ideas—a rich mix of humanities scholarship, insightful narratives, informed opinions, and beautiful images, for a read that is smart, balanced, educational, and entertaining. It reaches Oklahomans in all 77 counties and is free of advocacy and advertising, supported by donors like you.

Opinions expressed by authors, and any views, findings, conclusions, or recommendations do not necessarily represent those of the National Endowment for the Humanities, Oklahoma Humanities, its Board of Trustees, staff, or donors. Copyright 2025 by Oklahoma Humanities. All rights reserved.

The magazine has been published since 2008 by Oklahoma Humanities, PO Box 31733, Edmond, OK 73003, (405) 235-0280, ohc@okhumanities.org. Our privacy policy is posted on our website.

Oklahoma Humanities is the state affiliate of the National Endowment for the Humanities.



**NATIONAL
ENDOWMENT
FOR THE
HUMANITIES**



SIDENOTE

KIMBERLY ROBLIN
kimberly@okhumanities.org

I haven't seen her in nearly forty years. I imagine she looks different now. I know I do. Certainly taller. Not quite four years old or four feet tall, I had to stand on tiptoe as my fingertips found the windowsill. Somewhere between a pull-up and a flexed-arm hang, she came into view. No crisp edges or searing detail—just a cosmic smudge set low in the southeastern sky like someone had tried to erase a star with rubber too old and brittle. My memory of her is similarly hazy, but I do remember. Halley's Comet was beautiful.


I couldn't tell that she was moving, but she was. Her stillness belied a tremendous speed that meant she'd soon be gone. Sensing my disappointment, my mom reassured me that I might see her again. Far in the future, when I was older than my grandparents, she would return. I didn't focus on the details. All I heard was that there was a chance. In that moment, Halley's became synonymous with hope. Now almost four decades later and another three still to go, the traveler of both time and space is coming.

She doesn't intersect with everyone and only visits Earth every seventy-six years on average. Those lucky enough to coincide with her join a unique company. Nomads, hunters, farmers, merchants and mariners, William the Conqueror, Genghis Khan, William

Howard Taft, countless others, me, and quite possibly, you, share something concrete. We all looked up, looked *out*, and saw her streaking across the sky.

I've thought of her often through the years and especially the past few months. Although we selected the theme of SPACE long before we lost our federal funding, it lends itself to our current situation. Space is a frontier. It represents the unknown and requires optimism and the willingness to push forward when the horizon is unclear. I'm grateful to our longtime graphic designer, Anne Richardson, and this issue's authors—Shad Satterthwaite, Jennifer Levasseur, Kashona Notah, and Joshua Grasso—for their flexibility and willingness to still participate when we moved to a digital-only issue.

We might not know what the future holds for Oklahoma Humanities. Will abridged programming continue despite layoffs? Will there be a new, physical office in five years? What will the organization look like in ten? But we do know that Halley's Comet is coming, no longer moving away, but moving towards us from the darkness. Her orbit, her cycle, gives me hope. Hope that our absence is temporary and that our stillness belies motion. Hope that we will intersect with Oklahomans once again. Hope that Oklahoma Humanities will return—brighter and more visible than before.



Apollo-Soyuz Test Project
(ASTP), Soyuz Commander
Alexei A. Leonov and Apollo
Docking Module Pilot Donald
Slayton in Soyuz. National
Archives and Records
Administration.

SPACE: THE FINAL FRONTIER OF DIPLOMACY

SHAD SATTERTHWAITE



On July 15, 1975, Oklahoma native Thomas P. Stafford blasted into space for the fourth and final time. A pioneer of space flight in the 1960s with Project Gemini and Apollo 10, he had come within nine miles of the lunar surface and paved the way for Neil Armstrong's historic steps two months later. This last mission was different.

Below him, the country navigated a tumultuous time. President Ford had assumed office the previous year following Richard Nixon's resignation amid the Watergate scandal. High levels of unemployment, inflation, and stagnant growth plagued the economy still reeling from the oil embargo and subsequent energy crisis. The Vietnam War had ended and triggered debates over its lessons and costs. And all this against the backdrop of the Cold War between the United States and the Soviet Union.

But the Apollo-Soyuz Test Project had the potential to ease this tension. Two days after launch, the Apollo capsule carrying Stafford, Donald K. Slayton, and Vance D. Brand successfully docked with the Soviet Soyuz capsule carrying cosmonauts Alexei A. Leonov and Valery N. Kubasov. The world watched as the doors opened and the crews shook hands, effectively closing the Space Race while opening "up a new era in the history of man," according to Stafford.

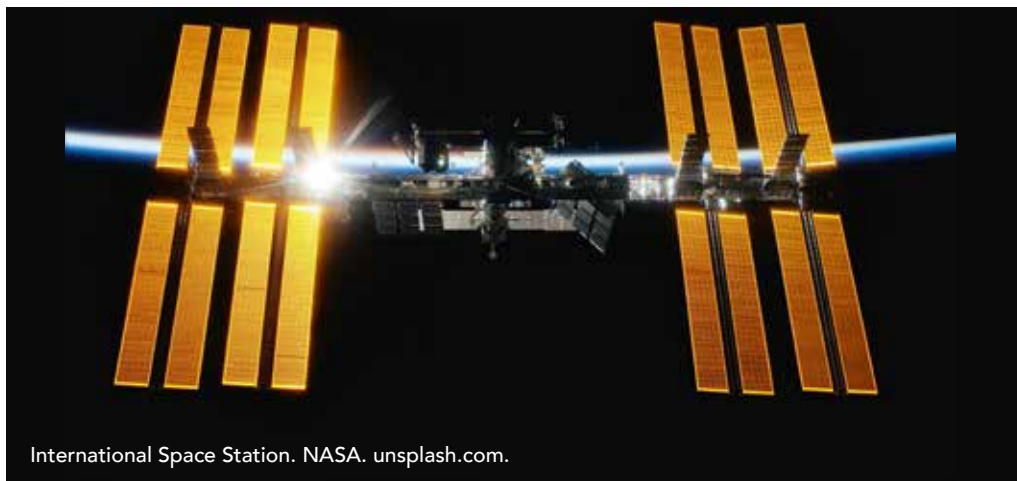
It was the first time two countries worked together jointly in space, but it would not be the last. In the pursuit of scientific progress and exploration, more than 600 people from forty-seven countries have flown to space since the Apollo-Soyuz mission. Fostering technological advancement while also strengthening geopolitical stability, international space collaborations demonstrate that even in times of political discord, nations can find common ground high above the Earth.



American Apollo spacecraft as seen from the Soviet Soyuz spacecraft in orbit. July 17-19, 1975. NASA.



Soviet Soyuz spacecraft. July 18, 1975. NASA.



International Space Station. NASA. unsplash.com.

THE INTERNATIONAL SPACE STATION

The International Space Station (ISS) is one of the most enduring and significant symbols of this global cooperation. Its origins trace to President Ronald Reagan's State of the Union Address on January 25, 1984, when he directed NASA to develop a continuously inhabited space station within a ten-year time frame:

America has always been greatest when we dared to be great. We can reach for greatness again. We can follow our dreams to distant stars, living and working in space for peaceful, economic, and scientific gain. Tonight, I am directing NASA to develop a permanently manned space station and to do it within a decade.

A space station will permit quantum leaps in our research in science, communications, in metals, and in lifesaving medicines which could be manufactured only in space. We want our friends to help us meet these challenges and share in their benefits. NASA will invite other countries to participate so we can strengthen peace, build prosperity, and expand freedom for all who share our goals.

Although the first iteration, *Freedom*, proved too expensive, it solidified involvement from Europe (ESA), Japan (JAXA), and Canada (CSA). When the Cold War came to an end years later, allies and former adversaries could finally combine forces and technologies. In 1993, Russia joined the project and in 1998, all participating agencies signed the ISS Intergovernmental Agreement that established the responsibilities and logistics of using and operating the station. Assembled in orbit, the ISS has been continuously inhabited since November 2000, a temporary home for more than 280 individuals from twenty-three countries. Diplomatically, it has been a cornerstone of peaceful scientific collaboration, bringing together astronauts and researchers from multiple countries to conduct more than 3,000 experiments.

Yet geopolitical conflicts on Earth can and still do influence space partnerships. During periods of political tension—such as the strained relations in the 2010s between the U.S. and Russia—the station has remained a mostly cooperative space, but the recent war in Ukraine has tested this relationship. Russia announced that it would withdraw from the ISS in 2024 to build its own space station. It later deferred its exit until 2028.

The ISS is not the only space station, however. Excluded from the ISS due to U.S. restrictions, China has historically operated independently in space exploration, though they have increasingly sought international partnerships, particularly with developing nations and non-Western space agencies. The Tiangong Space Station, completed in 2022, is open to international cooperation, with experiments from countries like Switzerland, Italy, and Mexico, planned for onboard conduction.

LUNAR AMBITIONS

Experiments and work done on the ISS inform another international effort—returning to the moon. No one has stepped foot on the lunar surface since Apollo 17's Gene Cernan and Harrison Schmitt more than fifty years ago.

Initiated by NASA in 2017, the Artemis Program seeks to return humans to the Moon and establish a long-term lunar presence. Unlike the Cold War-era Apollo missions, Artemis is an international endeavor, relying on partnerships with ESA, JAXA, CSA, and MBRSC. Key components, such as the Lunar Gateway (a planned space station in lunar orbit), involve contributions from multiple countries. The ESA provides service modules for the Orion spacecraft, while Japan and Canada contribute robotic systems and life-support technologies.

The diplomatic significance of Artemis extends beyond its scientific goals. The Artemis Accords, introduced by NASA in coordination with the U.S. State Department in 2020, serve as a modern space law framework,

reinforcing international teamwork while reducing the risk of conflict over lunar resources. NASA Administrator Jim Bridenstine summarized their significance following the initial signing by the U.S., UK, UAE, Luxembourg, Japan, Italy, Canada and Australia:

With today's signing, we are uniting with our partners to explore the Moon and are establishing vital principles that will create a safe, peaceful, and prosperous future in space for all of humanity to enjoy.

Now signed by over fifty countries, they establish norms for responsible behavior on the Moon, including resource utilization, debris management, and peaceful cooperation. They encourage peaceful international collaboration in space and affirm that such ventures benefit not only space exploration but enhance international relationships as well. Finland, Bangladesh, and Norway became the 53rd, 54th, and 55th countries to join in early 2025.

This initiative builds on decades of global space diplomacy and ensures that exploration remains open to all interested nations. But Artemis is not the only effort. As more nations seek alternatives to Western-led space initiatives, China's growing role in international space efforts continues to shift the balance of global space politics.

SPACE AGENCIES—Acronyms from around the Globe

The National Aeronautics and Space Administration (NASA) is the United States government agency responsible for the nation's civilian space program and for aeronautics and aerospace research. Established in 1958, NASA has led numerous pioneering missions in space exploration, Earth science, planetary science, and human spaceflight.

The European Space Agency (ESA) is a prime example of a multinational space agency. Founded in 1975, ESA brings together 23 member states, pooling resources to compete with major space powers like the U.S., Russia, and China. Its collaborative approach strengthens diplomatic ties by uniting European nations in a shared vision. By partnering with the U.S., Russia, and emerging space nations, ESA acts as a bridge between global powers.

The Canadian Space Agency (CSA) is Canada's national space organization, established in 1989. The agency is responsible for all civil space-related activities in the country and is headquartered in Saint-Hubert, Quebec. CSA coordinates space science, research, satellite communications, Earth observation, and international collaborations.

The China National Space Administration (CNSA) is the national space agency of the People's Republic of China, responsible for planning and executing the country's civil space missions. It was established in 1993, and oversees satellite development, crewed spaceflight, deep space exploration, and international cooperation.

The competition between the Artemis Accords and China's International Lunar Research Station highlights the geopolitical stakes in space. Just as the Cold War Space Race reflected broader ideological battles, today's space partnerships reflect shifting global alliances. As more nations launch their own space programs, balancing competition with cooperation will be crucial. Together, China and Russia have plans for a joint Moon base by the 2030s.



Selfie taken by Perseverance on May 10, 2025.
NASA and Jet Propulsion Laboratory (JPL).

RED ROVERS

Returning to the Moon to experiment and establish infrastructure is critical to the exploration of another body in our solar system. According to NASA, "we will use what we learn on and around the Moon to take the next giant leap: sending the first astronauts to Mars." Like the Moon, its exploration has also been a multinational endeavor, with several countries contributing to various missions.

Launched on July 30, 2020, the Perseverance rover landed February 18, 2021, on a site believed to have once held water. Relying on specialized sensing instruments from international

partners including France, Italy, Spain, and Norway, the rover's primary mission is to search for signs of past microbial life, collect soil and rock samples, and prepare for sample return missions.

Through the Mars Sample Return (MSR) mission, NASA and ESA are leading efforts to return Martian soil samples through a landmark interplanetary and multi-launch collaboration planned for the 2030s. Rover-collected samples will be retrieved and sent to Earth by an ESA-developed orbiter.

Developed by ESA in collaboration with Roscosmos, the ExoMars program investigates the Martian environment, habitability, and whether life ever existed.

In July 2020, China launched the Zhurong rover, its first successful Mars rover. Its mission aims to study Martian surface geology, soil, climate, magnetic fields, and search for subsurface water ice to better understand Mars' history and potential habitability. It is equipped with scientific instruments including ground-penetrating radar and climate sensors. The project involved collaboration with European researchers, with ESA supporting data relay and scientific cooperation in atmospheric modeling and surface analysis.

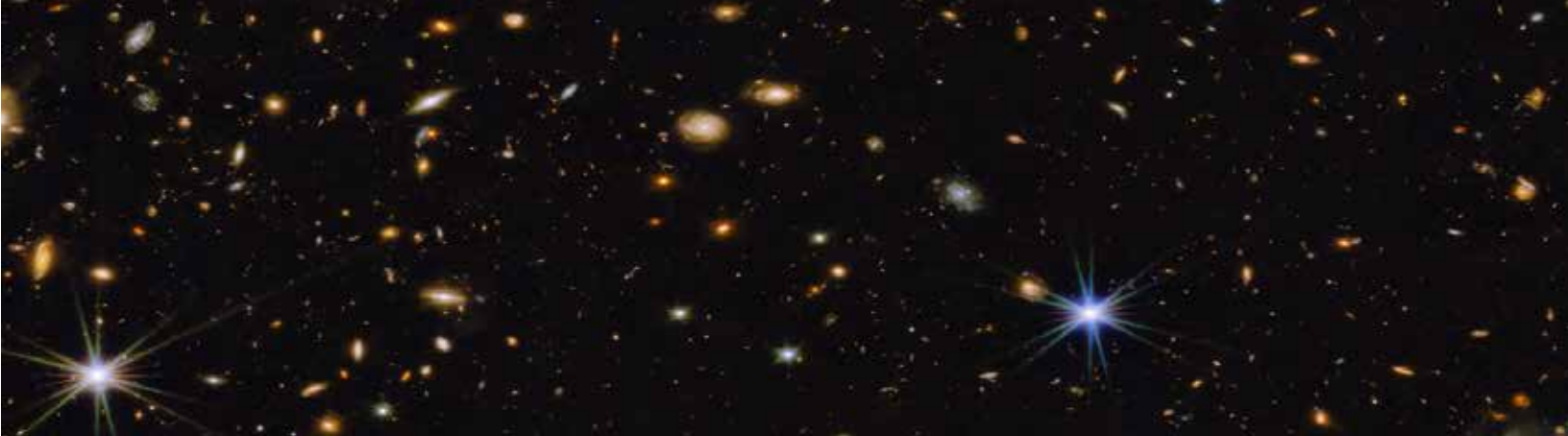
These international efforts strengthen diplomatic ties by fostering shared scientific goals. The complexity

The Japan Aerospace Exploration Agency (JAXA) is Japan's national space agency, established in 2003 through the merger of three previous organizations. It is responsible for space and planetary research, satellite development, Earth observation, astronomy, and human spaceflight. It is headquartered in Tokyo and plays a leading role in both national and international space exploration.

The Russian Federal Space Agency (Roscosmos) is Russia's national space agency responsible for the country's space science, exploration, satellite systems, and crewed spaceflight programs. Established in 1992 (and restructured in 2015 into a state corporation), Roscosmos continues the legacy of the Soviet space program, which achieved launching the first artificial satellite (Sputnik) and sending the first human (Yuri Gagarin) into space.

The Asia-Pacific Space Cooperation Organization (APSCO) is an intergovernmental organization established to enhance regional cooperation in space science, technology, and applications by sharing satellite data, developing joint space missions, building capacity through training and education, and promoting peaceful uses of outer space. Officially founded in 2008, it's headquartered in Beijing, China, and includes member states such as China, Pakistan, Iran, Thailand, Turkey, Bangladesh, Peru, and others.

The Mohammed Bin Rashid Space Centre (MBRSC) is the United Arab Emirates' (UAE) leading space agency, established in 2006. It is responsible for the UAE's national space program, including satellite development, space exploration, and research initiatives aimed at advancing science and technology in the region.



of Mars exploration demands expertise from multiple nations, and by working together, space agencies reduce costs and increase mission success rates. Diplomatically, Mars cooperation serves as a neutral ground for countries with otherwise competitive relationships, promoting peaceful engagement in the long-term push for interplanetary exploration.

READING WAVELENGTHS

Just as critical to physically exploring space is looking at, and in a sense “listening” to it, with radio telescopes. The James Webb Space Telescope (JWST) is a space observatory developed through an international collaboration between NASA, the ESA, and the CSA. Launched on December 25, 2021, it is designed to observe the universe in infrared wavelengths, enabling it to study the formation of stars and galaxies, explore exoplanet atmospheres, and look deeper into the cosmos than ever before.

ESA played a crucial role in its mission by providing key components and support, including: the Ariane 5 launch vehicle (which successfully delivered JWST into space from the Guiana Space Centre in French Guiana), and two of JWST’s four scientific instruments: the Near-Infrared Spectrograph (NIRSpec) and the Mid-Infrared Instrument (MIRI). ESA also contributed personnel and expertise to mission operations and science planning, ensuring strong European participation in the telescope’s discoveries.

The Square Kilometer Array (SKA) is one of the world’s most ambitious radio telescope projects, aimed at exploring deep space phenomena, including black holes, cosmic radiation, and extraterrestrial signals. SKA is led by an international consortium of countries, including Australia, South Africa, the UK, China, India, and others. Once operational, it will be the largest and most advanced radio telescope ever built.

Another example of international deep space cooperation is the Laser Interferometer Space Antenna (LISA), a gravitational wave observatory involving NASA and ESA. LISA will revolutionize our understanding of black holes and the universe’s structure.

Such deep space projects require decades of collaboration, reinforcing long-term diplomatic relations. They also highlight how space research extends beyond Earth-focused geopolitics, fostering partnerships purely for scientific discovery. Nations involved in projects like SKA and LISA commit to shared governance structures, ensuring that discoveries remain open to the global scientific community.

Exploring deep space allows us to “see” into the past, but what about the future?



Very Large Array. Socorro, New Mexico.
Yifu Wu. unsplash.com.



Combining imagery from the Hubble and Webb Telescopes, a snapshot of the universe emerges with previously unknown and near countless galaxies. The faintest items in the photo are roughly 1 billion times fainter than the human eye can see. NASA, ESA, CSA, A. Pagan (STScI) & R. Jansen (ASU).

UNLIMITED OPPORTUNITIES

International collaboration in space exploration has consistently led to scientific breakthroughs, technological advancements, and strengthened diplomatic relations. From Cold War rivals working together on the ISS to emerging space powers like China developing inclusive programs, these collaborations prove that space remains one of the last frontiers where countries can set aside political differences in pursuit of common goals.

As humanity moves toward Moon settlements, Mars exploration, asteroid mining, and deep space research, such cooperation will be even more critical in shaping the future of space governance and diplomacy. Will nations establish a space equivalent to the United Nations? How will resource claims be managed to prevent conflicts? Questions such as these will shape the next frontier of space diplomacy.

The rise of commercial space players such as SpaceX, Blue Origin, and Axiom Space introduces a new dynamic to space diplomacy. With multinational investments and collaborations, private companies now influence international space policies alongside governments. The partnership between NASA and SpaceX for lunar missions exemplifies how public-private cooperation is shaping the future of exploration.

At the heart of collaborative space exploration though is still the human element. The men of the Apollo-Soyuz are a testament to this. They worked together for only forty-seven hours but became friends for life. When Leonov died in 2019, Tom Stafford traveled to the Moscow suburb Mytishchi and delivered his friend's eulogy in Russian.

ESA astronaut Andreas Mogensen described a similar perspective he gained while orbiting 250 miles above the Earth on the ISS:

When you look down, you see continents. You can pinpoint where countries are, but you can't see borders between countries. You realize that we're all just humans living on the same planet, and if we could learn to get along a little bit better and cooperate a little more, our challenges would disappear because they are self-made . . . you really get a feeling of the Earth as a single globe, not 195 different countries.

As Alexei Leonov once eloquently summarized, "My home is Tom Stafford's home."

SHAD SATTERTHWAITE is the director of executive business programs in aerospace and defense at the Michael F. Price College of Business at the University of Oklahoma. With a PhD in Political Science, he is a retired colonel in the U.S. Army Reserves and served two tours in Afghanistan. His last assignment was as a faculty instructor at the Army War College.

EXTRA! READ | THINK | TALK | LINK

- How was the ISS constructed? Watch an animation of the International Space Station's assembly. NASA. bit.ly/4iYwxSx.
- How do experiments in space impact life on Earth? "15 Ways the ISS Benefits Humanity." nasa.gov.



Astronaut Stafford and Cosmonaut Leonov together in Soyuz Orbital Module. July 17-19, 1975. NASA.



JENNIFER LEVASSEUR

Rarely does a weekend pass by when I don't wake to the sweet scent of French toast and sizzling sausages, but it's not until I smell coffee that my eyes feel the urge to open. Weekday meals are a far more functional affair. After a trip to the gym, I might have toast with jam, yogurt with fruit, and a cup of tea. Or if I'm already sitting behind my desk at the office, a bowl of microwaved instant oatmeal. Lunch is a salad or leftovers and for snacking I keep apples, bananas, or oranges in my work bag. And at the table with my husband and children, I'll have a dinner of steamed vegetables, potatoes, and some kind of protein.

Recognizable to many, my routine demonstrates the role food plays in our daily lives. On a biological level, it's a necessity. Our physical bodies require calories and nutrients to convert into energy. On a social level, it fosters comfort, connection, and community. Either way, we want food that tastes, smells, and looks appetizing. None of that ends just because a person leaves the Earth's surface. It intensifies. For astronauts, familiar food serves up a chance to feel closer to home when so distant.

But microgravity turns the sensory experience of food on its head. We've all seen the videos of astronauts floating candy-covered chocolate candies (NASA's non-commercial name for M&Ms) from one person's hand to another's mouth. This flying food ballet, while eye-catching and humorous, demonstrates the challenge for astronauts and engineers: eating in space is fundamentally different than eating on Earth. Luckily, since 1961 when Yuri Gagarin became the first person in space and the first to eat food—beef and liver paste with a chocolate sauce chaser—things have only improved for those reaching orbit and beyond.

PASTES, PILLS, AND A CORNED BEEF SANDWICH

When the human part of the Space Race kicked off, rockets powerful enough to put anything into space had only been around for about a decade. Almost everything for these first launches was experimental and military technologies informed most of the work. The space program utilized pressure garments, life support systems, control systems, and urine containment devices developed for sustaining high altitude test pilots and soldiers during the 1940s and 1950s. They often utilized the test pilots as astronauts, and they utilized food technology.

Throughout history, food preservation improvements allowed people—nomads, soldiers, explorers, and astronauts—to venture farther and farther from home and known sources of food. Metal and glass packaging in the early nineteenth century followed by pasteurization in the 1860s, and the introduction of tins and plastic during World War II, was revolutionary. Food became lighter to carry and more convenient to store and heat. When it came time to consider what and how an astronaut might eat while orbiting Earth, NASA engineers turned to the U.S. Army's nutritional and technological research done in the 1950s.

LEFT: John Glenn's "meal" of beef and vegetables eaten on Friendship 7, 1962. Smithsonian National Air and Space Museum. RIGHT: Beef steak and potatoes. MaraZe. shutterstock.com.



Comfort food was not on these early menus. With the changing gravity and pressure, the first flight foods included simplified items like mashed fruits and vegetables stored in tubes, tablets, and sticks. Almost no consideration was given to flavor, seasoning, or even similarity to actual food. Yuri Gagarin and John Glenn both "enjoyed" mashed versions of familiar foods that had the texture and appearance of toothpaste. To test if people could easily chew and swallow in microgravity, NASA then sent along chocolate-flavored malted milk tablets. While both methods were successful in terms of packaging and format, their bland flavor left much to be desired.

On the Soviet side of the food iron curtain, pureed versions of common foods remained the norm for cosmonauts into the 1980s, something Russian commander Alexei Leonov took full advantage of during the Apollo-Soyuz Test Project in 1975 when he pranked the American crew by replacing the labels on the tubes of borscht (beet soup) with those of famous vodkas.

Thankfully, the somewhat insulting suggestion that astronauts eat a baby food-equivalent ended quickly for Americans—Glenn was easily able to chew and swallow the chalky tablets. Later Mercury missions included experimental bite-sized foods and some freeze-dried powders that required added liquid. There was a limited supply of six pounds of potable water inside the spacecraft, so astronauts were expected to "rehydrate" the food cubes with their own saliva. Powdered drinks required some creativity with the water drinking hose and tube system the astronaut used for hydration. The final Mercury astronaut, Gordon Cooper, orbited Earth for over a day and benefited from new additions such

as a water dispenser for the latest innovations in dehydrated food.

The crewed Gemini program ran for just two years in 1965 and 1966, but included a wider array of food types and preparations. Especially helpful was the ability to use a special dispenser to rehydrate some foods with warm water. Packaging was lighter and included more flexible, sealed plastic bags with small valves for inserting the water spigot.

Despite the growing options, enjoyment of the food became the biggest battle for U.S. astronauts. Mercury astronauts, often the commanders of early Gemini missions, feared the food would continue to be mostly dry and tasteless. Anyone who has eaten dehydrated strawberries in cereals or what some claim to be "astronaut ice cream" from a museum gift shop will testify that the removal of water removes flavor as well. Hopes were not high as the program began with Gemini 3 in March 1965, but its pilot John Young had an idea.

After entering orbit, the noted prankster pulled a corned beef sandwich, somewhat fresh from a Florida deli, from his spacesuit pocket. He and mission commander "Gus" Grissom took a few bites of the rather warm sandwich before it started to break into crumbs—the bane of any microgravity eating experience, to be avoided at all costs. The two were lightly disciplined after the mission ended, but the stunt would never be forgotten.

The corned beef sandwich incident strikes at the very heart of what NASA's astronauts have always sought in communicating with engineers about the state of their spacecraft. From an Earth-bound point of view, it sounds obvious that as



Survival food kit used by Mercury astronauts. On the menu? Orange-grapefruit juice, pineapple juice, cocoa, pears, strawberries, mushroom soup, chicken with gravy, beef with vegetables, and more. 1962. NASA.

much as possible, *leaving* Earth shouldn't be too different from *living* on Earth. Understandably, some things have to change when a spacecraft needs to travel at certain speeds to achieve orbital velocity, and rocket engines, even when combined, have a limit on how much weight they can propel. The comforts of home, things often taken for granted, need to be redefined or reconfigured.

People, however, still want to share meals with each other. They want food to taste, smell, and feel like they remember from the last time it was eaten. They want to smell things that recall memories of childhood or special moments in life. Leaving Earth, at great risk to their own lives, prompts the human emotional need for connection rather than the disconnection taking place. Food becomes a simple representation of the social, nutritional, emotional, and physiological cravings of each person. Absence makes the heart grow fonder. A perfectly crafted corned beef sandwich symbolized the need for flavor and the familiar, not rebellion.

FRUITCAKE AND FINGER FOODS

If the eating experience of Mercury and Gemini taught engineers and astronauts

anything, it was that neither Jetsons-like food pills nor deli sandwiches would suffice for human spaceflight. Not everything that goes into space needs to look "spacey." Some foods can look and taste just as they always do. But not everything can or should look like a warm corned beef sandwich either. Gemini menus for pre-flight selection expanded significantly, with attention paid to replicating typical meals for nutritional, psychological, and personal preference needs.

Human spaceflight hitting its stride meant that research into nutrition and packaging for the special conditions of microgravity allowed the food itself to reflect socially common food norms. Spacey food headed to the Moon could look more like normal food, just packaged in ways to account for health, logistics, and microgravity. For each astronaut, food scientists packed meals that looked relatively close to what you might expect to see on the table of a middle-class family's home in the mid-1960s. Chicken salad, bread, brownies, and instant coffee—though packaged in laminated plastic packages—made a fairly normal mid-day meal.

A significant technological development that directly influenced space food—and many foods in grocery stores today—was something



Food for the two-man Gemini 7 spaceflight in preparation for stowage. December, 1965. NASA.



Astronaut Ed Gibson near the "kitchen" of Skylab 4. 1973. NASA.



Three members of the Apollo-Soyuz Test Project sample and select food options for the mission. From left to right, cosmonaut Valery Kubasov, astronaut Vance Brand, and Alexei Leonov, commander of the Soyuz crew. Leonov tries butter cookies while Brand drinks orange juice. April 23, 1974. NASA.

you might not have heard of but have probably handled a few times—the retort pouch. Rather than squeeze rehydrated food from a plastic bag through a straw and into the mouth, the retort packaging of flexible plastic and metal layers allowed food to retain its water content and consistency while being thermo-stabilized. This made it possible to provide items like meats, stews, and “wet” foods that retained their original shape and taste, though not temperature. Unfortunately, Apollo spacecraft did not include an oven. This packaging was literally a space age development, one that transformed the ability of food manufacturers to keep foods shelf-stable for far longer periods of time. Grocery stores today show the reach of this technology with shelf-stable milk, fishes, meats, and other foods contained by flexible metal and plastic pouches.

While Apollo astronauts benefitted from warm water that made rehydratable foods more palatable, room-temperature hot dogs from thermostabilized retort packages probably did little to satisfy their cravings. Flavor, or at least the intensity of flavor became a point of contention with most of the food provided by the food researchers at NASA’s Johnson Space Center and its contracted food providers and packagers. Many astronauts experience a sensation like nasal congestion while in space. Without gravity pulling body fluids towards the feet, fluids circulate in the body more evenly, thus creating the feeling of a head cold. More fluid near the nose and mouth tends to affect the sense of taste, so the stronger the flavor, the more obvious to somebody with excess fluid in the head. Popular foods of the time ripe for their own space iteration included the globally popular 1960s dessert: fruitcake. The spices in fruitcake offered more flavor intensity than spaghetti with meat sauce or turkey and gravy. Fruitcake had the added benefit of being naturally more shelf-stable than other desserts, so gelatin-coated bites were packaged for easy consumption and minimal crumbs.

But fruitcake is hardly the real food innovation or most popular food culture phenomenon to come from the Apollo program. In the category of debunking space mythology are two of the most beloved tropes of the human spaceflight program: the orange powdered beverage, Tang, and freeze-dried astronaut ice cream. As a government agency, NASA cannot purchase commercial items and identify them, which would constitute free advertising for a brand. So, while NASA did purchase Tang to use as a powdered beverage option for any spaceflight, it certainly was not invented for space (it entered the commercial market before astronauts were even selected in 1959).

Similarly, the idea of having an ice cream treat sounds like an ideal way to end a day of hard work in space. Blocks of freeze-dried



Coffee with milk, Soviet. National Air and Space Museum.

ice cream sold in museum gift shops around the world defy the lesson learned by NASA during the corned beef sandwich incident. Opening a package immediately reveals a fragile Styrofoam-like block already broken and shedding crumbs. While some NASA sources claim that the brick-shaped treat flew on Apollo 7, interviews with the mission's lunar module pilot Walt Cunningham revealed it was not included or remembered from the flight. And considering the multiple references to Apollo food packaging, taste, and hydration issues in the Apollo 7 spacecraft audio transcript, ice cream would certainly have been novel enough to make the list of comments.

AT THE TABLE

The three rotations of crew to the Skylab orbital workshop in 1973 and 1974 used much of the remaining Apollo hardware and equipment, all launched with the station itself in May 1973. That included the food. With the luxury of a homier environment, the galley of Skylab was stocked with canned food rather than dehydrated or thermostabilized packages. The galley itself was spacious by comparison even to an Apollo command module. A central pedestal “table” split into three sections, one for each crewmember, with a series of slots for the cans in each tabletop. Those slots were not only holders for the cans but also conductive heating slots—canned meats, vegetables, and other dishes could be warmed and eaten. Skylab astronauts, like nineteenth-century naval crews, could have meals with high caloric density and relatively preserved nutritional content, in extraordinary comfort.

Skylab's large galley and complement of foods created a different atmosphere that crews previously had no opportunity to enjoy: a space of community and sharing in an almost traditional setting. With a literal kitchen table at the center, Skylab crews prepared and ate meals in an Earth-like way, enjoying more Earth-like food than ever before. This centralized location for eating was part of the grander design of the orbital space station. In design of the facility and the design of the missions, the collaboration and community created became part of the research.

Could crews stay in space for weeks or even months and sustain a psychologically and physiologically healthy environment? While not as elaborately furnished as imagined by designers, the living and working spaces of Skylab became the first U.S. experiment in long-duration space habitation. It laid the groundwork for how crew composition, mission planning, space design, and equipment available proceeded well into the early twenty-first century on the International Space Station (ISS).



An uneaten, compressed coffee cake flown on Skylab. Not quite as appealing as the real thing. LEFT: National Air and Space Museum. RIGHT: Rachael Gorjestani, 2017. unsplash.com.



Candy-coated chocolates returned from the STS-27 Space Shuttle (*Atlantis*) mission. 1988. National Air and Space Museum.



ESA astronaut and flight engineer, Samantha Cristoforetti, makes her lunch on the International Space Station using a food rehydrator. 2014. NASA.



Karen Nyberg, engineer of Expedition 36 on the International Space Station, has a bit of fun with her food. 2013. NASA.



NASA astronaut Kjell Lindgren unpacks the fresh fruit recently delivered to the International Space Station. 2015. NASA.

In the fifty years since the Skylab 4 crew left NASA's first orbital outpost, food choices, packaging, and eating habits in space have progressed dramatically. Not only are foods today more flavorful thanks to feedback from past recipes, but there are also options for sending supplies of fresh foods, including *real* ice cream, to orbit. Rehydratable shrimp cocktail is a preferred food (probably due to the strong flavor of horseradish in the sauce), as is the extended shelf-life tortilla (an all-purpose container for just about any contents). A vast array of new menu options addressed nutritional needs for longer duration missions. Astronauts cannot go to a grocery store, though they do have a type of pantry. Perishable and shelf stable foods arrive in batches during resupply spacecraft arrivals. Selections for daily meal plans

happen well in advance of a mission so the packages can be organized into containers before launches.

Cultural preferences and specialty diets can be accommodated, from Asian-derived tofu dishes to treats sent from celebrity chefs. With larger conduction ovens and rehydration stations (now with hot water), crews can enjoy meals together and have their favorite condiments close at hand to modify food if it doesn't strike the right flavor profile on any given day. And with the international composition of most crews, with members from Russia, the United States, Japan, Europeans, and south Asian countries at any given time, sharing meals from home that tap into memory and eating traditions allows an actual international family of astronauts to thrive in low Earth orbit.



Dinner time for Samantha Cristoforetti during Expedition 42 on the International Space Station. 2014. NASA.



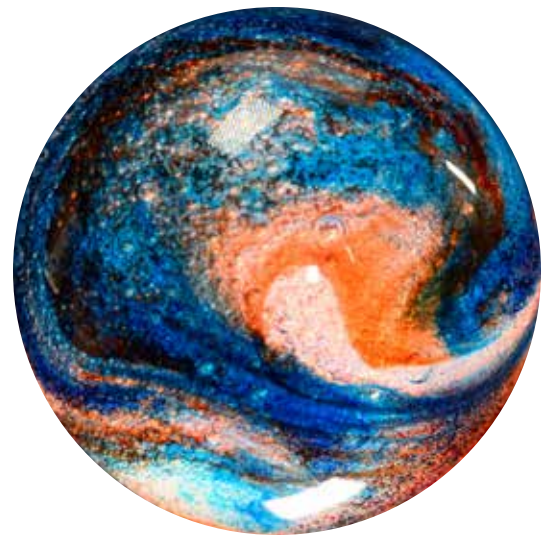
Space charcuterie delivered to Expedition 62 on the International Space Station. Includes cheese, figs, nuts, and salami. 2020. NASA.

THE NEXT COURSE

Engineers and food nutrition specialists are studying how to use the knowledge gained from twenty-five years on the ISS for future trips to the Moon and Mars. How do we minimize the size of those food supplies while maintaining nutritional value? Could growing vegetables or baking with pre-measured ingredients help minimize the volume needed for food? We know from the ISS that watching plants grow and smelling baked goods brings joy to crewmembers (though nobody got to eat the cookies baked in space). How can anything shelf-stable for years maintain the necessary macro- and micronutrient requirements of hard-working astronauts? And just how long should we make a tortilla last?

Maybe the future will require a Mark Watney (Matt Damon's character from *The Martian*) to "science the sh*t out of this" when supply ships run late getting to Mars. Or might food all look like pills taken by the Jetsons of cartoon fame? Sixty years later and we're still discovering and troubleshooting just how different eating in space is than eating on Earth. The evolution of space food is a testament to engineering, experimentation, and the endurance of early astronauts. Although it has significantly improved even in just the last few decades, there is still much to learn before the first delicatessen opens on Mars.

JENNIFER LEVASSEUR is a curator at the National Air and Space Museum and is responsible for the astronaut cameras, chronographs, the Space Shuttle, and International Space Station programs. She received her BA in History from the University of Michigan in 1999, an MA in American Studies from George Washington University in 2002, and a PhD in History at George Mason University in 2014. Her book, *Through Astronaut Eyes: Photography from Early Human Spaceflight* looks at the cultural significance of astronaut photography.



A drop of water filled with food coloring by Don Pettit, flight engineer of Expedition 72 on the International Space Station. 2024. NASA.

ANYTHING BUT LANDLOCKED

We might be bound by Kansas, Missouri, Arkansas, Texas, New Mexico, and Colorado. But above? We're bound by nothing. From astronauts to an astrobleme, museums to observatories, Oklahoma is a land of wide-open space.

OPPORTUNITIES & OBSERVATORIES



Courtesy Tulsa Air and Space Museum.

Stafford Air & Space Museum

3000 Logan Road | Weatherford
staffordmuseum.org

Explore the history of early flight, the Space Race, and find out what Snoopy, space, and General Thomas Stafford have in common at this Smithsonian Affiliate located just one hour west of Oklahoma City.

Tulsa Air and Space Museum

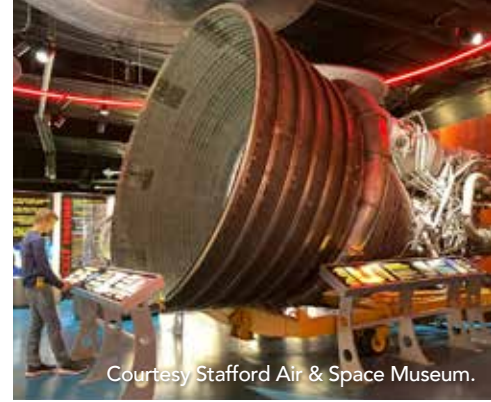
3624 N 74th E Ave | Tulsa
tulsamuseum.org

Step into the cockpit of a shuttle simulator or travel the galaxy at the planetarium. Don't miss the exhibition on the Tuskegee Airmen!

Science Museum Oklahoma

2020 Remington Pl | Oklahoma City
sciencemuseumok.org

Train in a Mercury capsule simulator, tour the Oklahoma Aviation and Space Hall of Fame and sit back, relax, and enjoy the show at the state-of-the-art, renovated Love's Planetarium where 8 million stars await.



Courtesy Stafford Air & Space Museum.



Welcome to Ames.
Courtesy TravelOK.

Ames Crater and Astrobleme Museum

Main Street | Ames
Open every day 24/7

What lies beneath the small town of Ames, Oklahoma, might surprise you. More than 400 million years ago, a meteor slammed into the Earth's surface and created a crater several miles across. Drop by the outdoor museum and learn how this event still impacts Oklahoma's oil and gas industry today.

Lunar Sooners

ou.edu/cas/physics-astronomy/outreach/lunar-sooners

This student organization at the University of Oklahoma frequently hosts stargazing events and is even available to make off campus presentations with its traveling planetarium.

University of Oklahoma Observatory

ou.edu/cas/physics-astronomy/outreach/observatory

Stop by Norman any Wednesday evening from mid-August through early May to attend a "star party" hosted by the Physics and Astronomy Department on the roof of Lin Hall. Find specific times on their website.

ACT Observatory

astrotulsa.com/events

Operated by the Astronomy Club of Tulsa, this observatory is located thirty miles southwest of downtown Tulsa. Find dates and times for viewing on their website.



Lunar Sooners logo.
Courtesy Lunar Sooners.

Oklahoma Air & Space Port and Aerospace Industrial Park

spaceport.ok.gov

Located in Burns Flat, this airport is one of only fourteen FAA-licensed spaceports operating in the United States and was the first built in a landlocked state.

International Space Station

nasa.gov/spot-the-station

Download NASA's "Spot the Station" app to determine when the ISS will be visible from your location.

Oklahoma City Comets

milb.com/oklahoma-city

Oklahoma City's minor league baseball team honors Oklahoma's Mickey Mantle, known as the "Commerce Comet."



Claremore mural including Stuart Roosa. John Hammer, artist.

ASTRONAUTS & OTHERS

Colonel Leroy Gordon Cooper, Jr.

Hometown: Shawnee

Missions: Project Mercury "Faith 7" and Gemini 5

Hours in space: 222



Mercury astronaut L. Gordon Cooper Jr. wearing a spacesuit during Mercury-Atlas 9 prelaunch activities. NASA.

General Thomas Stafford

Hometown: Weatherford

Missions: Gemini 6, Gemini 9, Apollo 10, and Apollo-Soyuz

Hours in space: 507

Stuart Roosa

Town: Claremore

Missions: Apollo 14

Hours in space: 216

Owen Kay Garriott

Hometown: Enid

Missions: Skylab 3 and Spacelab 1

Hours in space: 1,674

William Pogue

Hometown: Okemah

Missions: Skylab 4

Hours in space: 2,017 hours (84 days)

Shannon Wells Lucid

Town: Bethany

Missions: *Discovery* STS-51G; *Atlantis* STS-34; *Atlantis* STS-43; *Columbia* STS-58; *Atlantis* STS-76

Hours in space: 5,354 hours (223 days)

John Herrington (Chickasaw Nation)

Hometown: Wetumka

Missions: *Endeavour* STS-113

Hours in space: 330

Geraldyn Cobb

Hometown: Norman

Mission: Although Cobb never went to space, she was the first female astronaut trainee in 1960 and successfully passed the rigorous physical and psychological testing. She testified unsuccessfully before Congress in 1963 for the inclusion of women astronauts.

Donna Lee Shirley

Hometown: Pauls Valley

Mission: An aerospace engineer, Shirley worked at NASA before joining Caltech's Jet Propulsion Laboratory in 1966 where she served as a mission analyst and conceptual developer. She was also the founding manager of its Mars Exploration Program.



This view of North America at night is a composite image assembled from data acquired by the Suomi National Polar-orbiting Partnership (Suomi NPP) satellite over nine days in April 2012 and thirteen days in October 2012. NASA.



Jerrie Cobb poses with a Mercury capsule at Kennedy Space Center. Cobb spent nearly three years in the early 1960s trying to convince government leaders to permit female astronauts. NASA.



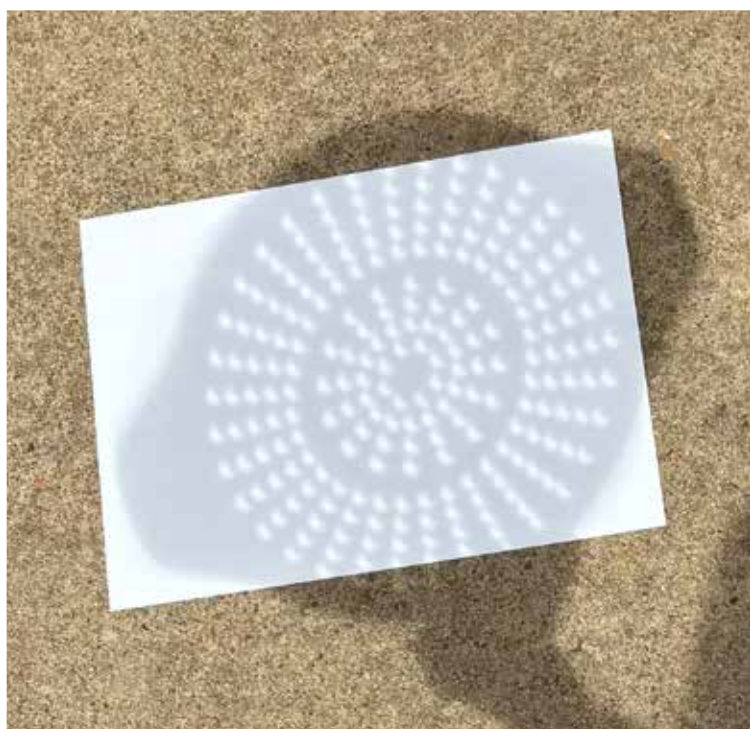
Composite image shows the progression of the total solar eclipse in Dallas on April 8, 2024. Keegan Barber, NASA.



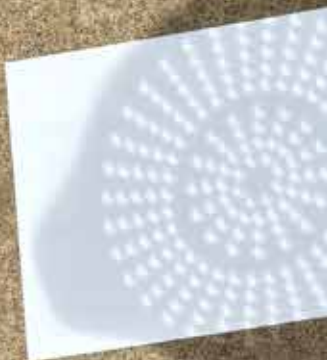
Humans instinctively fear the dark with one exception—the expanse overhead. For millennia, we’ve looked up and looked out into the darkness of space. The night sky has drawn us, mystified us, and inspired us. Sometimes we can even glimpse it during the day.

On April 8, 2024, a total solar eclipse transfixed those in its path, including many in Oklahoma. Easy to take for granted, the event is not a given. It is a Goldilocks. The Moon is 400 times smaller than the Sun yet completely obscures it for a few minutes because the Sun, by chance, is 400 times farther away than the Moon. The cosmic conditions are just right. If the Sun was larger or closer, or if the Moon was smaller or at a greater distance, totality would not exist. The Moon’s slowly expanding orbit means that one day, millions of years from now, it won’t.

We invited the public to submit photographs or short descriptive pieces of what they witnessed on April 8. For the first time in our magazine’s history, we did not require authors with degrees, cultural knowledge, or relevant careers. To be human and to experience the eclipse was expertise enough.



STEPHANIE MILLER
Taken in Stillwater, Oklahoma.







REBECCA JACOBS-POLLEZ

An Obfuscated Day

Once off the freeway, my husband and I must have made thirty turns along narrow roads before finally reaching our friends' house and property near Austin, Texas. Their home was in the path of totality for the 2024 eclipse. We had become friends while working at NASA, and the other two guests were current NASA employees. The idea of spending the eclipse with space aficionados seemed perfect. That was until we watched the clouds grow darker and thicker the closer we came to the house.

At supper, the ominous clouds continued gathering as we discussed what might happen the next day. How dark would it get? How cold? What would the animals and birds do? Our hostess had been looking for hummingbird nests to see if the birds would return to them during the darkness.

The morning dawned ash colored and dim. Once the eclipse started, we looked through our black glasses and pin hole viewers, but the occasional glimpse is all we saw of the Sun. Totality was blocked by thick, slowly swirling clouds. It never became dark, just a shade of late sunset. And yet, the temperature fell, surprisingly quickly. The hummingbirds vanished. The songbirds quieted. The world became silent except for a few dogs barking in the distance. Finally, as light began to return one bird started singing. Our host said, "Listen, it's the morning song." Clouds may have obscured totality, but nature still provided a fascinating display of the eclipse's impact.

JANICE FRANCIS-SMITH

April Eclipse

Kerrville, Texas
Hill country
Music festival campgrounds
Path of totality
The skies did exactly
What had been explained
Scientifically, astronomically
Timed to the moment
The show started right on schedule
Played out upon a stage of clouds
The spotlight, at last
Itself the center of attention
Predicted and yet completely
Surprising, disorienting
Darkness and light
Inverted. High on the hill
The old men stood
Squinting toward the sky
Out of all the things they'd seen
In this world, this was
A true first, signs and wonders
A sliver of sun and then
The brilliant flood
As the day returned
Nonchalantly
Impersonating normalcy



Taken in Kerrville, Texas.







CHARLES D. KENNEY

Here is one photo that I particularly like, as it shows just a hint of color from erupting jets of plasma. I could not see those things with my eyes and was astonished to see this when I looked at my photos, taken with a hand-held 14-year old camera. It seems so suggestive to me, which was what the whole eclipse experience was like, suggesting worlds and realities beyond those we encounter every day.





Taken in Paris, Arkansas.

RHYS MARTIN

Nobody can prepare you for a total eclipse. People will use words like “amazing” or “unreal” but those words are also used to describe other things. You may have even experienced an eclipse yourself at, say, 80% coverage. Or 90%. Maybe even 98%. You might think that seeing it at 100% totality is no big deal. Again, nobody can prepare you for it. Not even yourself. There are no words that can accurately describe how the entire environment changes. The birds change. The bugs change. The temperature cools. It gets so dark that the streetlights come on, but it’s not the same darkness that we know from a lifetime of sunsets. There is a moment of silence, from everyone and everything around you. In that short window of time, you are all united in awe. In that moment, you are an incredibly small part of the universe . . . but also someone special. You are a person on Earth witnessing a remarkable celestial event, one that seems mathematically impossible. Then, just as quickly as it happened, it is over. The Sun peeks out and everything goes back to how it was before; everything, that is, except you. You’ll go on and try desperately to tell others what the experience was like, knowing that nobody can truly prepare them.

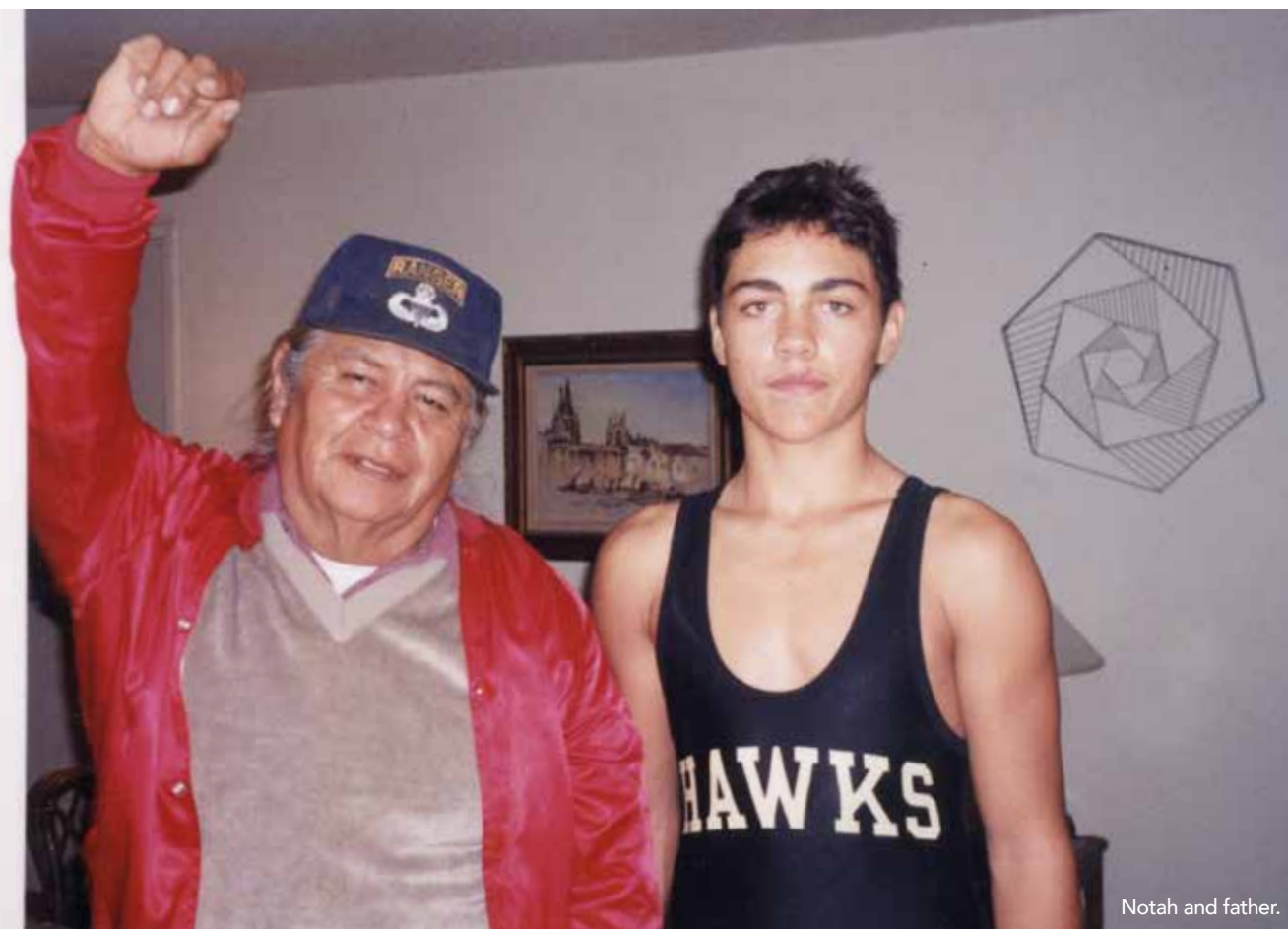


Monument Valley in the Navajo Nation. Ganapathy Kumar, 2018. unsplash.com.

A full-page background image showing a night sky with many stars over a desert landscape. In the foreground, there are dark, reddish-brown desert ridges. In the middle ground, a prominent, flat-topped rock formation (a butte) stands out against the dark sky. To the right, another smaller butte is visible. The sky is a deep blue, and the stars are small white dots.

NIGHT SKY

Kashona Notah



My dad never got to see me become a writer or educator. Although he was always supportive of my creative pursuits, he passed away when I was nineteen and working full-time in construction. He did not get to see me decide to go to college after almost ten years in the workforce, graduate, get into an MFA program for fiction, or pursue creative writing as a profession. He did not get to see how I now share my passion through education. It might have been hard for him to even imagine back then.

Born on the Diné (Navajo) Nation in 1940, my dad came from an era when Native people and voices were not supported in the ways they are now. Like a lot of Natives from his generation, he experienced deep racism and lived through things that are unimaginable for most. During his lifetime, Native writers like Joy Harjo, Leslie Marmon Silko, N. Scott Momaday, Louise Erdrich, and Greg Sarris became literary heroes only by fighting fiercely to gain exposure and defy the odds.

While I personally believe my dad still watches over me in some way, witnessing my choices and current realities, it is still hard to really know what he might say about who I have become. Like a lot of folks who have lost a loved one, I long for one more conversation with him, but first I revisit his memory. I revisit our memories. They remind me of how lucky I was, that I was born to something special, and even if I did not know it at the time, it reminds me that I was given the tools to become what I am today.

LOOKING TO THE STARS

We lived in a HUD home on the West Side of San Bernardino, California, a desperate existence in many ways, but there was a lot of love there. I wrestled and played football and would lift weights under the starlight, imagining stories that might exist in the cosmos.

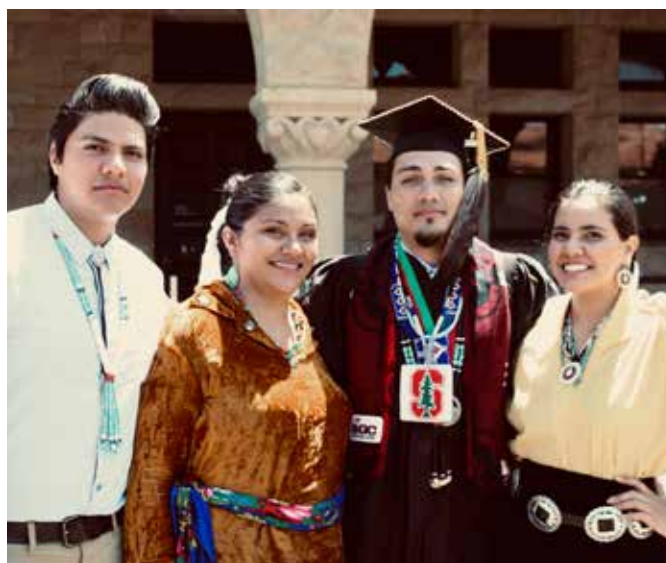
My father would sometimes come out and sit with me while I pumped iron. Our home did not have air conditioning, the blazing summers a part of what brought us together on those nights. After a little time together, perhaps after a story or two about his job or our family, my dad would leave me to my workout. He would walk a bit further out onto our plot of land and begin whispering Diné to the sky.

I didn't understand his first language, only a couple of words here and there. A few times I asked him what he was doing, knowing his routine was related to prayer, something he did most mornings with the sunrise, but also knowing he was not holding ceremony. As an Indian boarding school survivor, my dad sometimes grappled with sharing Diné traditions and teachings he grew up with before Catholic influence. So unfortunately, he did not ever fully explain. His answers were interrelated though.

He said he was speaking to our grandparents and that everyone comes from the stars. He said that leaders of the past were up there, and he said he was asking the stars for answers. In all instances, his responses signaled something I only came to understand later, the Diné belief that one can look up into the firmament for guidance. For Diné people, origin figures are represented in the sky, and if you are having trouble in your life, or you need to better understand familial roles and responsibilities, you can look to the stars for direction.

LUCY

My dad would have liked Lucy in the sky with stories. Launched by NASA in 2021, she is the first spacecraft to explore the Trojan asteroids that orbit the Sun with Jupiter. She'll never return to Earth and unlike Voyager 1 and 2, will never leave our solar system. But like the golden records on those earlier spacecrafts, Lucy does carry messages meant for the future. Her expanded mission is not to communicate with extraterrestrial life about human existence but to advise our own successors. Humankind's distant



Kashona Notah family photographs.

descendants, perhaps astro-archaeologists of sorts, are meant to find Lucy and read a plaque on board that protects “words of advice, words of wisdom, words of joy, and words of inspiration” from diverse and prominent leaders including Albert Einstein, Carl Sagan, Juan Felipe Herrera, Paul McCartney, Martin Luther King, Jr., and 23rd U.S. Poet Laureate and Muscogee Nation citizen, Joy Harjo. Harjo’s included words read:

Remember the earth whose skin you are: red earth, black earth, yellow earth, white earth, brown earth, we are earth.

Remember the plants, trees, animal life who all have their tribes, their families, their histories, too. Remember you are all people and all people are you. Remember you are this universe and this universe is you.

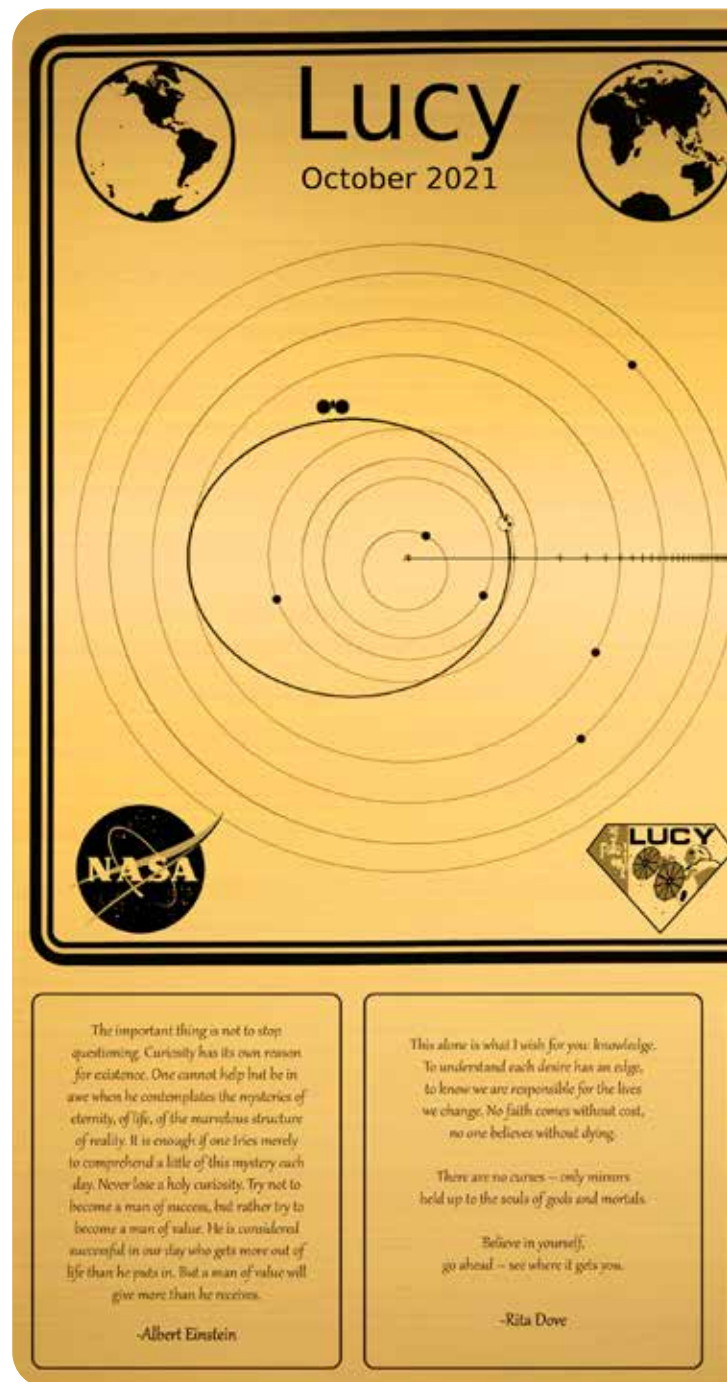
Remember.

Harjo’s chosen poem does more than break down barriers for all Native people. It puts a Native writer’s voice out beyond the stratosphere, perhaps a mark of just how far we have come. The Lucy Plaque is a representation of what humankind is today and what we want the future to know, or not to forget. If I am being optimistic, which becomes harder and harder with ongoing attacks on Native people, lands, and sovereignty, Harjo’s inclusion feels like we have more of a seat at the table.

With bestselling books like Tommy Orange’s *There There*, Terese Mailhot’s *Heart Berries*, and the many modern Native writers that followed, and with successful shows like *Reservation Dogs*, *Dark Winds*, and *Rutherford Falls*, Native voices are now far more prevalent. We have more control of our own narrative, which is a beautiful thing. Of course there are still problems, obstacles rooted in that deep kind of racism my dad faced, but the mere fact that a Native poet can advise the future of humanity feels like Native people are very much a part of literary traditions now recognized by the world.

BECOMING A STORYTELLER

News of my dad’s cancer came one day after school when I was fourteen. My family was told that it was terminal, that he probably had four years, and that the



Lucy Plaque. Southwest Research Institute.

battle would be filled with intense therapies and surgeries. We were told the illness would take his life. The news was devastating. Distraught and confused, it seemed that writing was all I could do to stay sane. I needed to put it all somewhere. Beginning with poems, that became songs, that became short stories and novels, I wrote to understand unfairness in the world.

I was consumed with feeling wronged. I simply could not understand why the Creator would ever take my dad away, even if I was told he would go into the next world where there is more joy and happiness. It almost felt personal. My father, the man who met my mom when she

I'm writing to you from a world you'll have a hard time imagining, to a world I can't picture no matter how hard I try. Do you still have birds that wake you up in the morning with their singing and lovers who gaze at the stars trying to read in them the fate of their love? If you do, we'll recognize one another.

-Charles Simic

Remember the earth whose skin you are: red earth, black earth, yellow earth, white earth, brown earth, we are earth.

Remember the plants, trees, animal life who all have their tribes, their families, their histories, too. Remember you are this people and all people are you. Remember you are this universe and this universe is you.
Remember.

-Joy Harjo (Muscogee Creek Nation)

Will you join your memories to mine? Can we be part of your history? Or has some chain appeared by now to keep your dreams and ours forever apart? We've achieved things of which we're proud; done many things of which we're ashamed. Do you prefer us to drift just into the darkness? Or will you reach towards this frail extended hand in excited kinship?

-Kazuo Ishiguro

We all shine on ... like the moon and the stars and the sun.

-John Lennon

Above the fields,
above the roofs of the village houses,
the brilliance that made all life possible
becomes the cold stars.

Lie still and watch:
they give nothing but ask nothing.

-Louise Glück

We, the inquisitive people of Earth, sent this robot spacecraft to explore the pristine small bodies orbiting near the largest planet in our solar system. We sought to trace our own origins as far back as evidence allowed. Even as we looked to the ancient past, we thought ahead to the day you might recover this relic of our science.

-Dava Sobel

Cutting off fundamental, curiosity-driven science is like eating the seed corn. We may have a little more to eat next winter but what will we plant so we and our children will have enough to get through the winters to come?

-Carl Sagan

Daha çok sevmek, daha çok
görmek, daha çok düşünmek
istendi. Daha çok görmek, daha
çok anlamak, daha çok
görmek istendi. Şimdi beşden
kalanlar bu istekler ve bu
bedenler. Hazine, rüyalar, uyku
ve epikler vardı. İnanılmaz ya-
laşagatlar ve kalemle de vardı.
Çünkü hiçbir şey hayat kadar
güçlü, elamat. Yanı hariç. Evet,
tabii, tek teselli yanı hariç.

-Orhan Pamuk

Peace and Love.

-Ringo Starr

A dream you dream alone
is only a dream.
A dream you dream together
is reality.

-Yoko Ono

And in the end the love you take is
equal to the love you make.

-Paul McCartney

When the axe is carried into the woods,
All the trees think
"At least the handle is one of us"

-Turkish Proverb submitted by Billy Collins

When you've seen beyond yourself then you
may find peace of mind is waiting there.

-George Harrison

Who wants to live forever?
—when love must die.

-Brian May

We are not makers of history. We are made by history.

-Martin Luther King Jr.

W całą naszą historię staraliśmy się patrzeć kim jesteśmy, skąd i dokąd idziemy. Jednak wszystko
widziliśmy osobno i nie umieliśmy dostrzec współzależności i powszechności wielopokoleniowych
skomplikowanych związków. Dziś wiemy, że „osobna” jest złudzeniem, bo przecież jesteśmy obracaniem
czasu, ciągłą przestrzenią, zalewającą abordaż w nieskończone wielkom koncertu. Wiedza, która nie
potrafi łączyć ze sobą różnych faktów jest nie warta.

-Olga Tokarczuk

"Adelante, adelante, Lucy!"
"Todos del pueblo cantamos
millones de millas recorrimos
celestes Trojans, el ojo de Júpiter, el Sol
a.000.000 de años jinetes solares
forjados de esperanza —
¿Amor?
la tierra estaba dividida hubo
odio hubo enfermedades
la ártica desolándose
nos reunimos florecimos
la bondad nos sanó
dando timbres, Lucy nos protegió
por senderos planetesimales
el amor nos salvó
¿Quiénes seremos?
Compañía
Humanidad—Lucy."

-Juan Felipe Herrera

Blessed be the people who see
The drum in the bones of Lucy:
That the worlds braved by humankind
Be worlds that leave us humans kind.
Let each dawn find us courageous,
Heeding the light forevermore.
May ancient hope inspire us,
At our uncompromising core,
To keep rising for an earth more
Than worth fighting for.

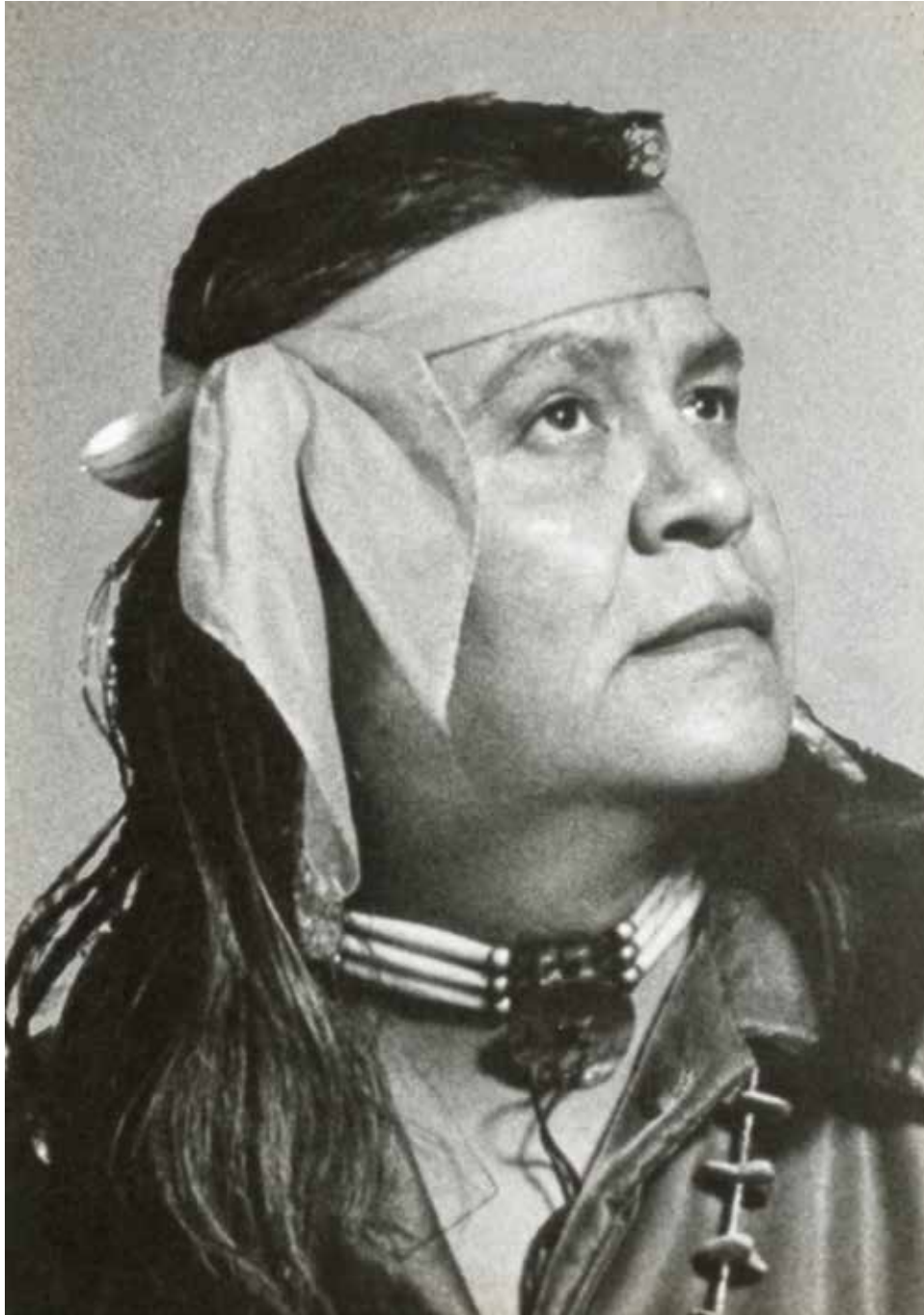
-Amanda Gorman



was already pregnant with me, raising me as his own since birth, my protector, would suffer before leaving this world, and there was nothing our family could do to stop it.

As hard as it was, instead of completely losing myself, I found a way to become my truest self through writing. My answer was literature. Books were not really supported in the underfunded district and struggling community I grew up in, but I was lucky because everyone at my house read regularly. Hurting, I leaned into home, becoming an avid reader and writer, regardless of what anyone outside might say. And if there was ever any bullying, I gave the bullies hell.

Looking back now, I know that writing is probably what saved my life. Writing served the important purpose of organizing my thoughts, allowed me to escape when I needed, and it kept me going all at the same time. I always had something I was working toward. I could always get through the next day if I knew there was still more to do on my projects. Writing music, poetry, and stories gave me goals to accomplish, things to try and work out, and I could still dream about what might come next for my characters in whatever medium I was working in. Writing kept me on track.



Notah's father.

LIVING THROUGH LOSS

I ultimately lost my father at nineteen. As the doctors had promised, after several years, the cancer overtook him. When he passed, I lost my best friend, which I know a lot of people say after someone has passed, but he really was. He was who got me through my hardest moments, and I feel I owe him everything. He was the best father I could ever ask for.

It has never been easy, but I have learned to live through my dad's absence by filling my life with words. Inspired by writers like Harjo, I now do my best to bring the stories that are closest to my heart forward. More than anything, I see myself as a storyteller, and I hope to inspire future generations by teaching them the art and craft of writing too. I believe in the power of writing, and I refuse to believe that writing is not all that important, or that it is something that can be outsourced to AI. Writing and storytelling, the true power of it, is how we can connect as human beings. And writing has the power to continue saving lives.

It has taken me a lot of years to process, but I sometimes think of myself as the same person I was back in San Bernardino. Although my life has changed exponentially, I am still sitting with my dad out underneath the stars, I am still that kid watching his father speak Diné to the sky, I am still dreaming. But I am different too. Because of the Native writers that preceded me, those who are part of my story too, I am no longer destined only for labor. Instead, I am living my life as a writer. I am everything before me, everything behind me, I am everything below me, and everything above me.

ONE MORE NIGHT

I imagine a reality where my dad has returned for one more night to look up at the stars with me. Maybe I have bought a telescope and am trying to find Lucy through the viewfinder. He is sitting on a nearby weight bench and drinking sweet tea. As I look, I tell my dad that a Native poet's words are on a

spacecraft up there somewhere, waiting to be read by the descendants of all humanity. I tell him that I am a writer too, and if a Native writer can make it to space, maybe I can make a life for myself too. I tell him that I am happy and that I love what I do.

My dad smiles. "Native poets have been in the sky all along, advising Diné since the beginning of time."

I think about his words, what he means, and then after a moment, we both laugh because his sense of humor is on point. I feel acknowledged, supported, and that my dad knows what I do is important.

"Dad. I wish you were still here."

"I am. I am always with you, protecting and supporting you."

"But I can't see you."

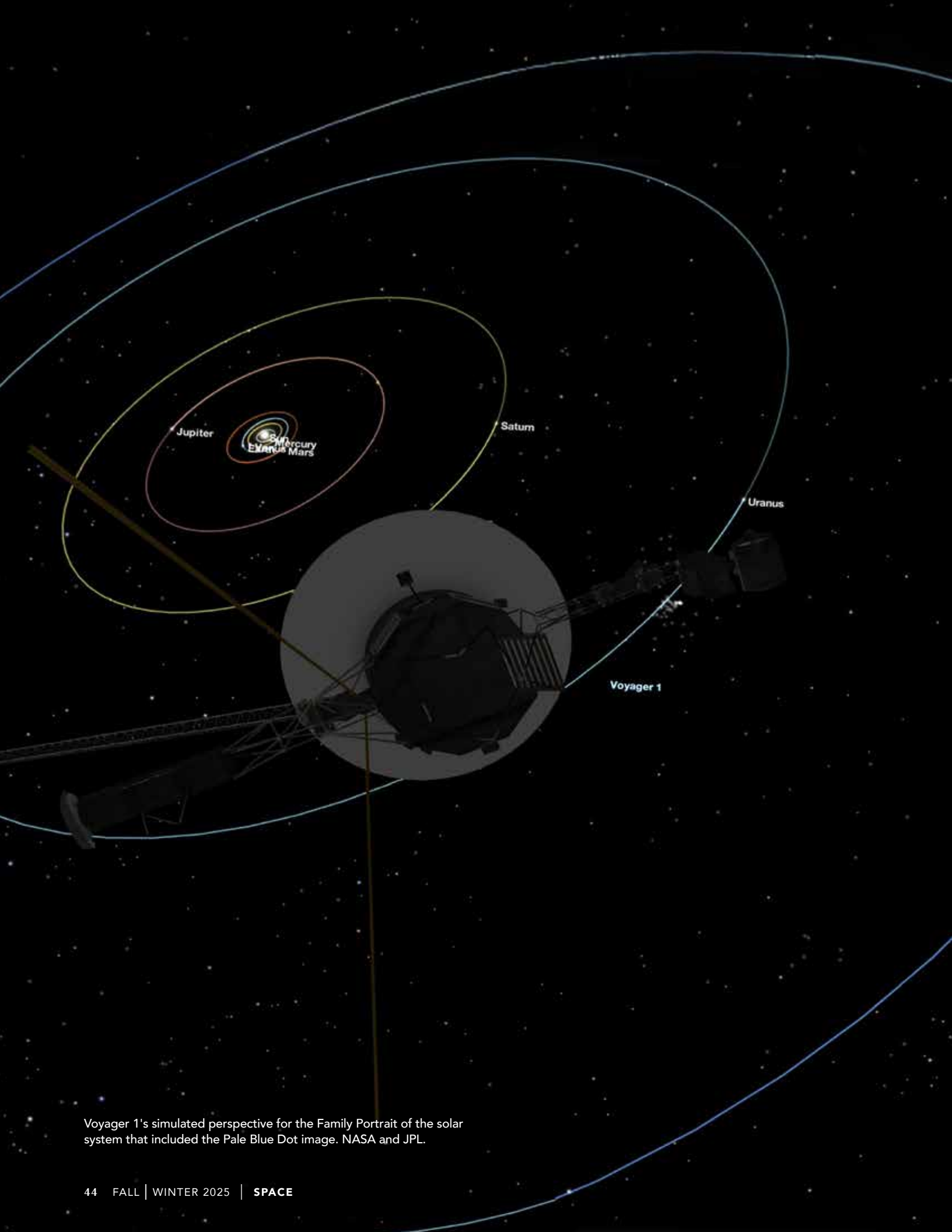
"You can. Don't forget where I looked for guidance. You watched me do it. You know how."

"The night sky?" I ask.

"Shit yeah, you're writing about it right now for a reason," he says. "It's a reminder, a way you can always find me. Remember to always look up at the stars."

My dad casts his eyes skyward again. "There is space for Native voices like yours now," he says. "That was not always the case. I'm proud of the life you have chosen. I see you, and I love you, Son. Ayóó anííníshní."

KASHONA NOTAH is a writer and 2024-2026 Tulsa Artist Fellow. His work has appeared in *Ploughshares*, *The Southern Review*, *Yellow Medicine Review*, and elsewhere. He earned an MFA in fiction from the Helen Zell Writers' Program at the University of Michigan, and a BA in English with a minor in Native American Studies from Stanford University. Among other honors, he is the recipient of the Alice Hoffman Prize for Fiction, the Hopwood Award for Fiction, the Hopwood Award for Nonfiction, and the National Native Media Award for environmental coverage. In addition, his writing has been supported by Blue Mountain Center and the Sewanee Writers' Conference. He is an Iñupiaq tribal citizen and was raised since birth within a Diné family through his late adoptive father. Originally from San Bernardino, California, Notah currently lives in Tulsa, Oklahoma.



Voyager 1's simulated perspective for the Family Portrait of the solar system that included the Pale Blue Dot image. NASA and JPL.



INNER SPACE:

Voyager's Love Letter to Earth

JOSHUA GRASSO

I try to show it once a semester, always teasing it out first. I tell my Humanities and World Literature students that during the course we'll examine the most important image in the history of civilization. A photo that encompasses the meaning of the word 'humanities' more than anything else. I usually wait until midterms, when we've grappled with several key ideas and the students feel more comfortable with the material and each other. On that fateful day, I ask: "Remember that picture I told you about? Are you ready to see it?"

The choreographed reveal begins. I pull down the screen and power on the projector. In the glare of fluorescent lights, the first slide appears dark, out of focus. “There it is,” I tell them. “The only textbook you’ll ever need for this class.” A hush of amusement, confusion, and uncertainty deepens.

Wondering aloud if it’s the wrong one, I feign a careful inspection before proclaiming it is indeed the correct slide. “Ah, it must be the lights.” I flick them off while the slide looms ominously overhead and a largely black square with three, faint bands of color emerges: the dimmest one at the far left, reddish in color; a greenish-blue one in the center; and a much bolder one at the far right, appearing yellowish red. As the students’ eyes adjust to the darkness, they can make out one more detail in the ambiguous photo’s yellow-red band—a dot so small it might be a speck of dust on the projector or the screen itself.

How could *this* be the most important photo in the history of mankind? I let the students speculate about its nature. At least one student ventures: “Is it the night sky through a telescope?” Another counters, tentatively, “It looks like a microscope slide.” I congratulate them both on being right as more confusion and nervous laughter follow. Finally, sensing that the students are at or near the breaking point, I reveal its identity and quote the photo’s true expert, writer and astronomer Carl Sagan.

Look again at that dot. That’s here. That’s home. That’s us. On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives . . . every hunter and forager, every hero and coward, every creator and destroyer of civilization, every king and peasant, every young couple in love, every mother and father, hopeful child, inventor and explorer, every teacher of morals, every corrupt politician, every “superstar,” every “supreme leader,” every saint and sinner in the history of our species lived there—on a mote of dust suspended in a sunbeam.

Copyright © 1994 by Carl Sagan, Copyright © 2006 by Democritus Properties, LLC.

Sighs of understanding replace the silence. The students finally get the ‘punchline,’ though not everyone appreciates the joke. Sure, it’s a picture of the Earth from millions of miles away, but why take a picture if no one can tell what it is? If a picture is worth a thousand words, how much did they pay for this one? And who or *what* took it?





TO BOLDLY GO ...

On September 5, 1977, the Voyager 1 spacecraft lifted off from Cape Canaveral on a journey that straddled science fact and fiction. Following in the wake of Voyager 2, launched two weeks earlier, it was also bound for Jupiter and Saturn to take historic photographs of the gas giants and their rarely-glimpsed moons.

The previous Pioneer 10 and 11 missions had already charted the neighborhood of Jupiter and Saturn, but even with the map they produced, the Voyager navigators were basically flying blind. Messages and commands took hours to reach one another. Nothing could be experienced or corrected in real time. Not the ‘hard geography’ of uncharted rocks and dust or the ‘soft geography’ of solar storms and radiation belts.

Human beings were incapable of such a feat

without computerized assistance. The Voyagers were among the first autonomous spacecraft, able to transmit data and exert some self-control over their maneuvers and machinery. This union of man and machine allowed the Voyagers to defy time, space, and a thousand obstacles in-between. For two years, they conducted hairpin maneuvers and navigated asteroids before somehow slipping into Jovian orbit, an object so vast and deadly that the smallest mistake would scrap the entire mission—and possibly, the future of NASA space exploration—in a nanosecond. They captured some of the most jaw-dropping images of the planet and its moons, including a now-famous image of Io with an erupting volcano.

Next, they turned to Saturn with Voyager 1 arriving in the fall of 1980 and Voyager 2 in the summer of 1981. They gave us our first clear images of Saturn’s moons, even discovering new ones. Titan’s atmosphere and Enceladus’ icy exterior came into focus. Day after day, the Voyagers filled in the gaps of our solar system’s geography, making the mission, by anyone’s metric, a resounding success. But the cosmic cartographers were not done.

Built to only last around five years, they surprised everyone by continuing their journeys as their trajectories dramatically diverged. There would be no more flybys for Voyager 1 as its path past Titan had irrevocably taken it out of the solar system’s planetary plane, but an alignment that happens every 175 years meant that Voyager 2’s trajectory would take it past the outer planets of Uranus and Neptune—farther than the Pioneer predecessors had ever gone.

The Voyagers had become smarter, more seasoned travelers, learning to negotiate the hostile environment without round-the-clock software updates. This was crucial for the continuing mission, as Uranus is as far from Saturn as Saturn is from Earth. A signal from either Voyager would be almost impossibly weak, far less than that of a watch battery. To compensate, NASA would have to use an array of receiving dishes around the globe and even build new ones to pick up the signals.

Amazingly, Voyager 2 made it, offering us our first glimpses of the mysterious planet Uranus in 1986. From there, it undertook an even more perilous journey to Neptune, which at the time of the voyage, had drifted even further from the Sun than Pluto.

With each encounter we came face-to-face with worlds that had previously only been pale blue dots, or in some cases, fuzzy white ones. The swirling storms of Neptune swam into view, as well as the crazy mishmash of Uranus' moon, Miranda, that resembles two or three planets stitched together.

As Voyager 2 made its way out of Neptune's orbit in 1989, it was the end of an era. The world back home had changed irrecoverably since Voyagers' conception in the late 1960s. Much of the original ground crew had either moved on or retired. There seemed to be nothing left for the Voyagers to do but quietly sign off as they sped toward the forbidding blackness of interstellar space.

A FAMILY PORTRAIT

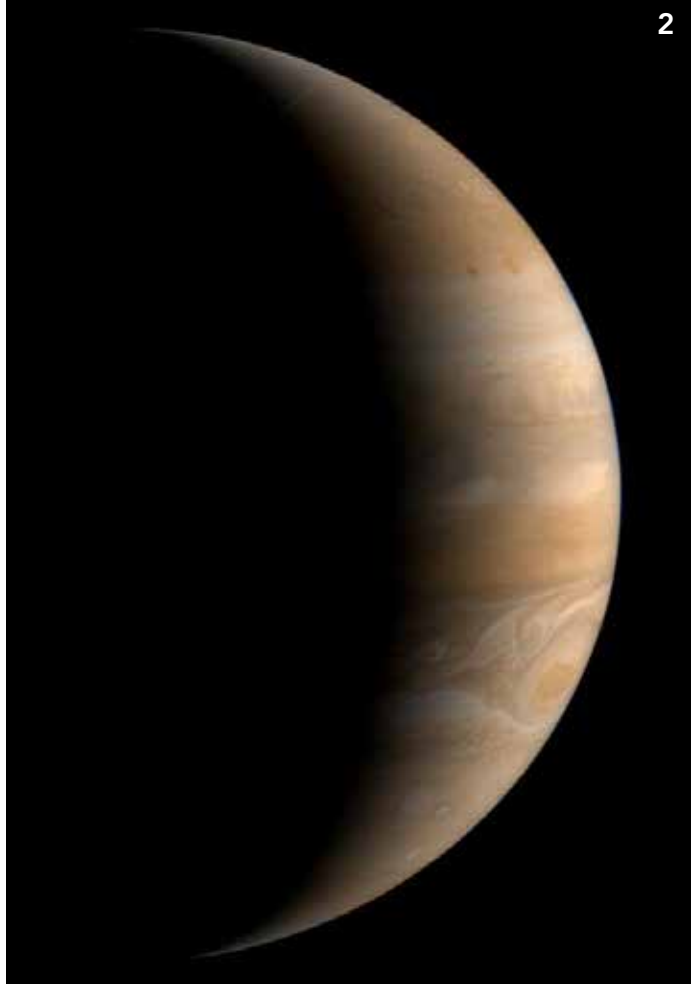
Strangely enough, the picture that came to define the entire journey—what is today known as the “Pale Blue Dot”—was a highly-contested afterthought. While the Apollo missions had elicited visceral and emotional thrills with their manned crews, Carl Sagan understood that without astronauts, the Voyagers risked losing the public's interest and investment. He suggested Voyager send a photograph of Earth, a ‘postcard,’ from Saturn. Let the people of Earth see what Voyager sees. Let them imagine themselves in space and become, even for a few seconds, its crew.

Yet many NASA scientists frowned on photography in tandem with exploration. Pictures had limited scientific value and much of Voyagers' instrumentation was aimed at capturing the invisible phenomenon of stars and planets. While cameras eventually won the day, as well as the hearts of millions with images of rings and red spots, Voyager was still a mission of science; they couldn't stop mission-critical activities every few hours to stage a convenient photo-op. They also worried pointing the cameras towards the Sun might damage them. Sagan conceded their point, but in late 1989, the Voyager team granted his sixth and final request. The original mission was all but over. There was almost nothing left to photograph.

On the poetically appropriate day of February 14th, 1990, the team asked Voyager 1 to look towards home one last time and snap a series of photographs “just 34 minutes before it powered off its cameras forever,” according to NASA. This ‘love letter’ was a vision of the receding solar system as seen from 6 billion kilometers (3.7 billion miles or 5.5 light hours)



Antenna in Goldstone, California, being upgraded for Voyager 2's trek past Neptune, 1989. NASA and JPL.





TRAVELING THE SOLAR SYSTEM WITH VOYAGER

- 1) **September 18, 1977:** Voyager 1 was 7.35 million miles from home when it took this picture. Showing the Earth and Moon, it was the first of its kind taken by a spacecraft.
- 2) **March 24, 1979:** Voyager 1 captured a closeup of Jupiter.
- 3) **November 3, 1980:** Voyager 1 recorded Saturn and two of its moons.
- 4) **January 25, 1986:** Voyager 2 snapped a parting shot of Uranus.
- 5) **July 3, 1989:** Voyager 2 returned this image of Neptune and its largest satellite, Triton.

All photos NASA and JPL.

Radio telescopes can still "see" Voyager by detecting its signal. Here, Voyager 1's signal, received on February 21, 2013, is another kind of pale blue dot. It was 11.5 billion miles away at the time. JPL.





Voyager in deep space (artist concept). JPL.

from the sun. Though difficult to distinguish, there are six planets visible: Venus, Earth, Jupiter, Saturn, Uranus, and Neptune.

Sunlight bouncing off the spacecraft near the camera caused the beams of faint, colored light. This magical mistake allowed the Earth to appear like a “mote of dust suspended in a sunbeam” in Sagan’s words. Earth occupies less than a pixel. The last photograph ever taken by Voyager 1 was, in a sense, a cosmic selfie.

FULL OF METAPHORS

Manipulated to enhance the colors and magnify the Earth, the photograph is a work of art, not just an image, that tells a story. Though many would call it science *fact*, in some ways, the “Pale Blue Dot” is the ultimate work of science fiction. And as Ursula K. Le Guin famously wrote in the introduction to her 1969 novel, *The Left Hand of Darkness*:

Science fiction is metaphor . . . What sets it apart from older forms of fiction seems to be its use of new metaphors . . . [s]pace travel is one of these metaphors; so is an alternative society, an alternative biology; the future is another. The future, in fiction, is a metaphor.

This sense of metaphor evokes René Magritte’s famously cryptic and cheeky painting of a pipe, *The Treachery of Images* (1929) which boldly proclaims (in French) this is not a pipe. We might similarly caption this photo, this is not the Earth, or, this is not in space. A photo this cosmically impossible to comprehend is no longer a static image, or a mere illustration of the Earth from space. Like any work of art, it now has the power to question, complicate, inspire, and illuminate our very existence.

Like a Pollock or Kandinsky painting, it is not entirely clear what the viewer is supposed to see in the image. It might be anything—or nothing at all. Yet with a gentle nudge from Sagan—“That’s here. That’s home. That’s us.”—we are rocketed straight into the realm of science fiction. We realize that this speck represents a vision of humanity reduced to Lilliputian terms, where mankind’s greatest cities and empires are not just small, but invisible. Where countries are nonexistent, and the differences between their nations obsolete. It erases distinctions and is simultaneously a vision of the future and the past. It suggests space is a perspective. Outer space compels us to look inward.

If every work of art comes from a specific perspective at a specific point in history (think Shakespeare in the Elizabethan era), then the stars truly aligned to capture this image. It was taken from a machine, looking with human eyes at a void impossible to glimpse from Earth, in the twilight of the twentieth century. It was only through these ‘eyes,’ at that particular moment, that we could see ourselves as others see us. We could see everybody who ever lived in a single instant, in one great family portrait of life. We could reduce everything we know to a pale blue dot in an infinite sea of nothing.

This is the vision of space which Sagan always championed, and one of the main reasons he wanted mankind to explore the cosmos. Not merely to see *out there*, but to glimpse *in here*, and understand what we could become in the twenty-first century. As he wrote in his 1980 book, *Cosmos*:

Understanding where we live is an essential precondition for improving the neighborhood. Knowing what other neighborhoods are like also helps. If we long for our planet to be important, there is something we can do about it. We make our world significant by the courage of our questions and by the depth of our answers.

What does it mean, after all, to live on a planet in a solar system in a vast galaxy of stars? How can we live thoughtfully on this world if we have no conception of other worlds, and thus fail to recognize the great beauty, and utter fragility, of our own? As Sagan suggests, we can ask better questions about ourselves (practical ones, ethical ones, hypothetical ones) by seeing ourselves as the ‘aliens’ would.

By merging with Voyager, a semi-autonomous spacecraft, basically a robot, we were able to transcend our limitations long enough to finally glimpse our humanity. Technology allowed humanity to finally see ourselves in a way we never could.

FINAL TRANSMISSION

Ultimately, space travel is not about *space* at all. It is a quest. If we are not transformed by the journey, then why walk out the front door, much less rocket ourselves through space? Like all quests in literature, it inevitably leads back home. What we learn ‘out there’ becomes the raw material for future stories, works of art, and lesson plans. What we learn out there helps us explore and understand our ‘inner space.’

When I show this picture to my students, I want them to see the entire world—our world, all worlds—as a work of art. Not just because of its beauty and originality, but because of its possibility. We look up to see the stars, but in this photo, there is no up or down, no ‘over here’ and ‘out there.’ Space is everywhere, and the Earth is a small but indivisible part of it. The same is true of this world, *down here*; the only directions and divisions we see are internal, man-made. This means we can erase them with a simple change of perspective, from viewing it through the eyes of another.

So if you ever find yourself in a classroom with a dark, out-of-focus slide staring back at you, don’t suspect foul play or technical difficulties. Think of Voyager 1, now the most distant manmade object from Earth at roughly 15.4 billion miles away in interstellar space. Think of that spacecraft still speeding away from us and prepare to look deep into the void as it did. See yourself. Note the family resemblance which makes us all one species on a lifelong quest to find our humanity in the cosmos.

Look again at that dot. That’s here. That’s home. That’s us.

JOSHUA GRASSO has a PhD from Miami University, Ohio, and is Professor of English at East Central University in Ada, Oklahoma, where he teaches courses in British and World Literature. As a lifelong lover of fantasy and science fiction, his stories have appeared in speculative journals such as *Broadswords and Blasters*, *Red Planet Magazine*, *Apparition Lit*, and the anthology *Magissa*. Learn more at his Amazon author page.



Pale Blue Dot Revisited. To celebrate the 30th anniversary of the Pale Blue Dot, NASA used modern image-processing software to revisit the famous photo. NASA and JPL.



Sarah Milligan, Chair
Oklahoma State University

Dr. Elizabeth Bass
Vice-Chair/Secretary
Norman

Jennifer Stevenson
Treasurer
Oklahoma City

Dr. Tonnia Anderson
University of Science and
Arts of Oklahoma

Jennie Buchanan
Altus

Shar Carter
Langston University

Suzette V. Chang
Oklahoma City

Dr. Kalenda Eaton
University of Oklahoma

Dr. Shawn Holliday
Northwestern Oklahoma
State University

Marcy Jarrett
Midwest City

Dr. Shun Kiang
University of Central
Oklahoma

Quraysh Ali Lansana
Tulsa

Judie Matthews
Oklahoma City

Christopher Murphy
Northeastern State
University

Francine Parchcorn
Chickasaw Nation

Erin Peters
Tulsa

Dr. Alyssa Provencio
University of Central
Oklahoma

Uzma Saleemi
Edmond

Lynne Schonacher
Arcadia

Dr. Amanda Smith
Southwestern Oklahoma
State University

Dr. Stacy Takacs
Oklahoma State University

Dr. Rebekah Wagenbach
Oklahoma Panhandle
State University

Dr. Moira Watson
Oklahoma City

Laura Watts
Oklahoma City



NOTEWORTHY

FROM THE BOARD OF TRUSTEES

Sarah Milligan, Chair

While I am humbled to serve as the Chair of the Board of Trustees for such an amazing organization, it is surreal to summarize this moment as we face unprecedented precarity for our future and that of all state humanities councils. When the new Board Members began their term in November 2024, navigating the abrupt loss of federal funding previously appropriated through Congress wasn't part of their orientation. We could not have predicted that our Congressional mandate, in place since 1965, would be in jeopardy.

What we do know is that Oklahoma Humanities (OH) has made an incredible impact over the last fifty years and I want to use this time to acknowledge and celebrate it. Oklahoma was one of the first five states to launch state humanities councils through a program developed by the National Endowment for the Humanities in 1971. Early efforts engaged Oklahomans on issues related to "Citizen Values in Community Decisions," a prescient inauguration for an organization that has subsequently and steadily supported creative opportunities that promote topics focused on people, culture, communities, and our societal civic underpinnings. OH has encouraged Oklahomans in all of Oklahoma's 77 counties to be curious, keep learning, and communicate across perceived boundaries about what matters to us as human beings sharing space and time.

We've done this through our in-house programs as well as grants. For forty years, OH has initiated and mediated community discussions through our book club, *Let's Talk About It*, in rural

and urban community hubs, libraries, tribal centers, and even places of incarceration. Since 1994, we have partnered with the Smithsonian Institute to bring traveling exhibitions to rural Oklahoma with *Museum on Main Street*. And for more than fifteen years, we have sparked conversations and continuing education with *Oklahoma Humanities* magazine. In addition, we have distributed \$42 million in federal funding for community events and educational opportunities, planting seeds of interest and knowledge about history and culture. Matched 1:1 through non-federal support systems, these funds amplified local agency and interactions.

Our organizational footprint is evident in every single Oklahoma county and it is devastating to envision a future where this quality-of-life enrichment epicenter is not available to us all.

While the Board works to support OH staff through this time of uncertainty, we also work to foster optimism and resilience. In this moment, I am particularly grateful for the varying skills and expertise of all Board Members and their overwhelming show of support and efforts on behalf of this organization we so value.

There will be an "other side" of the events we are currently experiencing. The solid foundation and organizational management established over the decades makes it possible for OH to weather this current storm. We do not know what the other side will look like, but I remain hopeful and thankful when I see the swell of supporters that there will be a point for rebuilding. We hope to see you then.

THANK YOU

In 1971, we joined five other states in a National Endowment for the Humanities (NEH) pilot program that established a grassroots network to ensure federal funding reached communities most at need. The pilot was so successful that 56 state and jurisdictional humanities councils arose across the country.

For more than fifty years, we shepherded funds from the nation's capital directly to Oklahoma neighborhoods, annually awarding over a quarter-million dollars in federal grants to cultural organizations at the local level.

We also connected Oklahomans in all 77 counties to the humanities through our free programs: the curious reader to our dynamic book club, *Let's Talk About It*; the teacher to

accessible and engaging content in *Oklahoma Humanities* magazine; and the small-town resident to the Smithsonian through *Museum on Main Street*.

We are proud to have a legacy of responsible federal grant management, equitable funding distribution, engaging public programs, and support for humanities scholarship.

Our work and success were made possible not only through our partnership with the NEH, but with nonprofits statewide, generous foundations, individual donors, Board Members, and engaged citizens. Together, we all connected Oklahomans to cultural programming, important conversations, and to each other. Thank you for all being a part of our story.

BOARD MEMBERS

Dr. Brad Agnew	Shar Carter	Dr. Britton Gildersleeve	Dr. Renée Kogel	Donald Newman	Bill Smedley
Patrick Alexander	Dr. John Catlin	Joan Gilmore	Edwynne Krumme	Larry Nichols	Dr. Amanda Smith
Sandra Alexander	Judy Cawthon	Patti Gipson	Dr. George Krumme	Dr. Margo Norris	Dr. Charles Smith
Dr. Finnegan Alford	Suzette Chang	Lish Glasser	Dr. Scott LaMascus	Jane Oden	Dr. Chrisotpher Smith
Dr. Benjamin Alpers	Dr. Cida Chase	Vicki Gourley	Mona Lambird	Tal Oden	Jeane Hoffman Smith
Dr. Tonnia Anderson	Dr. C.B. Clark	Sharon Gowdy	Quraysh Ali Lansana	Dr. Mary O'Toole	Dr. William Snodgrass
Agho Armoudian	Ed Cleveland	Dr. Neil Hackett	Dr. Ed Lawry	Dr. Bruce Owen	Dr. Sherill Spaar
Dr. Lionel Arnold	Nancy Cody	Dr. William Hagan	Dr. Paul Lehman	Mary Beth Ozmun	Jennifer Stevenson
Dr. Ruth Arrington	Louis Coleman	Katherine Hale	Dr. Dennis Letts	Fran Parchcorn	Dr. Greg Sutton
Dr. Mikel Ary	Oscar Cook	Sue Hale	Dr. David Levy	Dr. Clarence Parker	Dr. Stacy Takacs
Dr. Garrick Bailey	Charlotte Cooper	Carol Hampton	Dr. Mary Anne Lewis	Dr. Lewis Parkhill	Claudia Tarrington
Dr. David Baird	Steffie Corcoran	Dr. Kimberly Hanger	Sylvia Lewis	Jane Patten	Dr. Kaye Tatros
Robert Barr	Dr. Thomas Cowger	Jay Hannah	Midge Lindsey	Erin Peters	Dr. Gordon Taylor
Lona Barrick	Dr. Viki Pettijohn Craig	Erick Harris	Dr. Patricia Loughlin	Charlotte Phillips	Martha Sue Thompson
Edward Barth	Dr. Lawrence Cress	Dr. Thomas Harrison	Dr. Richard Lowitt	Dr. Nancy Phillips	Dr. Linda Thornton
Dr. Elizabeth Bass	Dr. Duane Cummins	Larry Hawkins	Dr. Neil Luebke	Dr. James Plexico	James Tolbert III
Kay Bass	Nancy Davies	Tom Hieronymous	Anne Luthey	Mary Blankenship	Dr. Alvin O. Turner
Dr. Benjamin Bates	Dr. Barbara Davis	Edna Mae Holden	Anne Lynch	Pointer	Gloria Valencia-Weber
Martin Belsky	Beverly Davis	Don Holladay	Judy Marcum	Ted Poole	Dr. Jerry Vannatta
Dr. Dianne Denniehy	Dr. Gwenn Davis	Dr. Shawn Holliday	John Martin	Brénda Porton	Wilma Victor
Berry	Sharon King Davis	Dr. Anne Holt	Dr. Thomas Martin	Carolyn Price	Dr. Rebekah Wagenbach
Evelyn Boake	Kathy Dick	Dr. Smith Holt	Judie Matthews	Dr. Alyssa Provencio	Valorie Walters
Ann Bohanon	Dr. Dewayne Dickens	David Hooten	Dr. Robert Mayer	Roger Randle	Dr. Moira Watson
Richard Bohanon	Dr. John Dowgray	Dr. Jacob Howland	Dr. Susan McCarthy	Dr. Joanna Rapf	Laura Watts
Dr. John Boots	Dallas Drumright	Dr. Albert Hurtado	Dr. Virginia McCombs	Dr. Greta Reed	Alba Weaver
William Boston, Jr.	Lauren Dualap	Marilyn Inhofe-Tucker	Lynn McIntosh	Linda Reese	Susan Webb
Lee Brawner	William Dunn	Fawn Ingmire	Judy Eason McIntyre	Mabel Rice	W. Roger Webb
Dr. Mary Brodnax	Karen Dye	Linda Jacobs	Lois McMillan	Sue Ann Rodger	Dr. Michael Whalon
Paula Brooks	Dr. Kalenda Eaton	Dr. Lance Janda	Mary Melon	William Rodgers	Dr. John White
Dr. Kenny Brown	Dr. Mark Eaton	Marcy Jarrett	Stuart Meltzer	Uzma Saleemi	Dr. Thurman White
Dr. Randy Brown	Dr. George Economou	Hannibal Johnson	Mary Ellen Meredith	Susan Savage	Dr. Nancy Wilkinson
Steve Brown	Carol Eldridge	Mary Johnson	Teresa Miller	Dr. Carol Saylor	Burch Williams
Dr. William Bryans	Dr. Lars Engle	Patty Johnston	Sarah Milligan	Lynne Schonacher	Cynthia Williams
Jennie Buchanan	Dr. Marilyn Feaver	Sarah Jones	Dr. W. Neil Morton	Gail Scott	Darlene Williams
Mary-Ann Bumgarner	Ken Fergeson	Dr. Dian Jordan	Dr. Paige Mulhollan	Dr. Rick Sherrod	Penny Williams
Philip Busey	Mead Ferguson	Dr. Nyla Khan	Christopher Murphy	Dr. Kenneth Shipp	Molly Williford
Marilyn Bush	Dr. Michael Ford	Dr. Shun Kiang	Peggy Murphy	Kimber Shoop III	Martin Wing
Dr. Richard Bush	Kristin Frankfurt	Alan King	Dr. Lloyd Musselman	Theo Silas	Nancy Wolov
William Carey	Dr. Ann Frankland	Dr. James Kirby	Dr. Lynn Musslewhite	Dr. Lynne Simpson	J. Ron Wright
David "Chip" Carter	Cynthia Friedemann	Dr. Thomas Kirk	Fred Myers	Dr. William Sims	Jesse Wright
	Hugh Gagnett	Hilary Kitz	Ann Neal	Wylma Smart	Dr. Glenda Zumwalt
	Barbara Snow Gilbert	Dr. Sunu Kodumthara	Lou Nelson		

DONORS

A Sweet Hot Mess
Cecilia Abrams
Dr. Julia L. Abramson
Absentee Shawnee Tribe
Ad Astra Foundation
John Adams
Judith & Jean Adams Charitable Foundation
Dr. Richmond B. Adams
Susan Adams
Sharman Addy
Dr. Stephen & Ellen Adelson
Alex & Teresa Adwan
Dr. Theodore & Jeanne Agnew
Mechelle Aitson-Roessler
Dr. Petar & Alexandra Alaupovic
Lois E. Albert
Harold C. Aldridge, Jr.
Linda & Patrick Alexander Fund
Sandra J. Alexander
James R. Allen
Allied Arts
Sharon Allred
Drs. Benjamin Alpers & Karin Schutjer
Alpha Kappa Alpha
Ann Simmons Alspaugh
Nancy Alsup
Gene Alvord
Amazon Smile
Al & Cathy Ambler
American Electric Power
American Exchange Bank
American Fidelity Foundation
Eldon W. Ames
D.C. & Janice Anderson
Dr. David Anderson
Doris Anderson
Kenneth Anderson
Tonnaia L. Anderson
DeEtte Andrews
Anshe Emet Synagogue of Chicago
Antheanaum Club
Antique Auto Club of America
Jami Rhoades Antonisse
Aon Risk Services, Inc. of OK
Apache Corporation
Arbuckle Historical Society and Museum
Steve & Patty Armbruster
Patty Armer
Catherine & John Armitage
Agho & Garabed Armoudian
Robyn Arn
Mary Sue Arnn
Dr. Lionel Arnold
M.E. & Helen Arnold
Ronald Arterbery
Arvest Bank
Michael Shawn Ashley
Dr. Henry Asin
Rilla Askew & Paul Austin
Carl & Deborah Astley
Mary W. Athens
Melissa Potter Atkinson
Maxine S. Austin
Clare Auwarter
Tom & Jeffrey Ann Averill
Tito Aznar
Leonard & Rosemary Bachle
Henry & Heather Baer
Hester Baer
Barbara Bailey
Burck & Sandra Bailey
Dr. Garrick Bailey
W. David & Brenda Baird
Steven B. Baker
Vaden Bales
Bama Companies, Inc.
BancFirst
Bank of Commerce
Bank of Oklahoma
Diane Barker
Norma Pace Barnard
Dr. Robert J. Barnard
Barnes & Noble

Dr. Jim Barnes
Joe T. Barnes
Florence Barnett
Robert Barr
Doris T. Barrett
Jan Barrick
Lona A. Barrick
John E. Barry
J. Edward Barth Fund
Ann C. Bartlett
Hon. Dewey Bartlett
Michael & Marilyn Bartlett
Kenneth & Elaine Barton
Marilyn L. Barton
Dr. Elizabeth & Alec Bass
Kathy Bass
Kay Bass
Loretta Bass
Travis Bass
Patricia Bassel
Dr. Benjamin Bates
Lou Ann Batey
Bruce & Courtney Baugher
Dr. T.H. Baughman
Marcia Baumel
Mary E. Beach
Pam Bean
Dr. Justin Beasley
Susie Beasley
Judy Beauchamp
Beaver Express Service, LLC
D.O. & Joyce Becker
Marci Beikmann
Dixie Belcher
James Bell
Dr. Paul Bell, Jr.
Sharon & Gregory Bell
Donald & Virginia Bellows
Bruce Benbrook
Sheryl Benbrook
Royce & Joyce Bender
Jerry & Jackie Bendorf
Dr. Regina Bennett
William R. Bennett
Donald & Donna Benson
Dr. Mayrene Bentley
Shirley S. Bentley
Dr. Rosemarie Benya
Karl & Jimmie Bergey, Jr.
Steve & Debra Berlin
Vera Berlin
Brad & Jeanine Berrong
Howard K. Berry, Jr.
Jean Berry
Robert B. Berry
Bethlehem Baptist Church
Better Days Foundation
Kay Bickham
Marian & Dennis Bires
Ann E. Birney
Robert & Sharon Bish
Dr. Kathleen Black
The Blackbaud Giving Fund
Dr. Bob & Debbie Blackburn
Charles & Carol Blackwood
Martha Royce Blaine
H. Henley Blair
Colleen Bland-Flikeid
Jap & Nancy Blankenship
Dr. Jerry & Carolynne Blankenship
Eleanor Blanton
David Blatt
Bill Bleakley
Kimberlee Bledsoe
Mary Ann Blochowiak
Myra Goodall Block
Ralph & Cathie Blodgett
Jeff & Lori Blumenthal
Morris & Linda Blumenthal
Rose Blunk
BNSF Railway Foundation
Evelyn Boake
Boeing Company
Ronald Boggs
Julie Bohannon
Ann Bohanon
John & Lillian Boland
Suzanne E. Boles

Howard & Georgia Bond
Jason Bondy
J. Ted Bonham
Andrew & Barbara Bonner
Christopher & Jennifer Bono
William Boston, Jr.
James & JoAnne Bottomley
Lucille J. Boutte
Mervin Bovaird Foundation
Jack Bowers
Christopher Bowman
Gary & Lovilla Bowser
Roger & Angela Box
Betty S. Boyd
Morgan Boyd
Marilyn S. Bradford
Peter Bradford
Janet Bradley
Dr. Joseph Bradley
Paul & Ozella Bradley
Richard Bradley
David Brady
Neva L. Brannin
Dr. Irvin Braverman
Nancy Brawner
Virginia Breeden
Carol Bridges
Rebecca Brien
Dr. J. Scott & Sue-Briggs
Bob & Connie Bright
Sally J. Bright
Fran Britton
Kay & Terry Britton
Drs. Mary Brodnax & Hans Nollert
Paula & Pat Brooks
Annette & Rick Brown
Anthony Brown
Gary Brown
James R. Brown Foundation
Kelly Brown
Ken & Beth Brown
Linda Brown
Hon. Mike & Tammy Brown
Dr. Randy Brown
Rosalie Brown
Steven Brown
Robert & Karen Browne
Wendy Brunner
Jack & Judy Bryan
Bill & Mary Bryans
Ann M. Bryce
Elmer L. Bryden
Jennie Buchanan
Barbara K. Bucholtz
Nina Buck
Claudia Buckmaster
Earl & Joanne Buckmaster
Nancy Buckminster
Barry Buell
Ken & Barb Buettner
Susan Bullard
John & Mary Ann Bumgarner
Cliff & Diane Bunn
Ryan Bunyan
Thomas M. Buoye
Martha Burger
Bob Burke
Barbara Burleson
Gerald Burns
Judy Burns
Kathy Burns
Kelly Burns
Sharon Burris
SuAn Burton
Sharon & Randall Burum
Ken Busby
Phillip & Heather Busey
Dr. Mary R. Buster
Samonia & Dennis Byford
Roy V. Bynum, Jr.
Dr. Joseph F. Byrnes
C.H. Guernsey & Company
C.N. Investigations & Security
Hon. Bernest Cain
John Calabro
Susan H. Caldwell
Kelly Callant
Neil Cambre

Cameron University
David G. Campbell
Judy Cantrell
Dr. Patricia H. Capra
Margaret Carder
Dr. Scherrey P. Cardwell
Rolf & Nicki Carlsen
Ed & Karen Carlton
Jim & Ruth Carnagey
Dr. George & Janie Carney
Evelyn C. Carter
Joe & Michelle Carter
Kimeron Carter
M. Scott Carter
Dr. William Carter
Joe & Sara Caskey
William & Benny Cason
Theresa & Joe Casper
Jerry Cathey
Philip Caudill
David Cawthon
Judy Cawthon
Dr. Richard & Peggy Chambers
Richard & Kitty Champlin
Mary Chancellor
Frances Chandler
Jane Chandler
Dr. Roy Chaney
Suzette Chang
Richard & Ruth Charnay
Yolanda Charney
Dr. Cida S. Chase
Doris Chediak
Cherokee Nation
Cherokee National Historical Society
Cherokee Strip Historical Society
Cherokee Strip Regional Heritage Center
Chesapeake Operating, Inc.
Chickasaw Nation
Dr. Helen Chiou
Chisholm Trail Heritage Center Association
Choctaw Nation
Joe Christophe
Citgo Petroleum Corporation
Citizen Potawatomi Nation
Dr. Carter Blue Clark
Ed & Mary Clark
Ernest R. Clark
Steven & Jane Clark
S. Ross Clarke
William Cleary
Alan Clemaas
Edwin Clemens
Helen Peeler Clements
Helen Cline
Gwen Clingan
Clonian Club
Ann E. Cloutier
John J. Coates, Jr.
Mary Ann Coates
Max & Jean Cobb
Cobb's Carpet Center
James M. Coburn
Jack & Jane Cochran
Nancy Cody
Robert Coit
Mary Colbert
Burna & Jim Cole
Lee Ann Cole
Francel Coleman
Kenny & Martha Collings
Don & Vivian Collins
Cathy Collum
Communities Foundation of Oklahoma
Chris & Dana Condley
Dr. Terry & Julie Conley
Carol Conner
ConocoPhillips
Jimmie J. Cook
Peggy Cook
Nancy Cook-Senn
Cookies by Design
Charlotte Ream Cooper
Teresa Cooper
Dr. Bill & Mariam Corbett

Rochelle Cordray
Robin Cornwell
Ed & Susanne Corr
Larry & Linda Correa
Miriam Costilow
Frantzie Couch
Joel Cousins
Pat Coutts
Dr. John & Linda Coward
Chester & Linda Cowen
Dr. Thomas & Vicki Cowger
Carol Cox
Clint Cox
Glenn A. Cox
Evelyn Coyle
Dr. Viki Craig
Della Craighead
Anne Oakes Cramer
Bruce Crauder
Paul & Carroll Craun
Enola Crayton
Creek Council House Museum Association
Rita Crockett & Edwin Miller
Cromwell Family Corporation
John Cromwell
W.E. Cromwell
Dr. Lena & Kendall Crouso
Dr. James J. Crowder
Crowe & Dunlevy
Hon. Johnnie & Kipp Crutchfield
Terri L. Cummings
Janet Cundiff
Pat Cunningham
Ryan Cunningham
Stanley & Suzanne Cunningham
William Cunningham
Eva Dadlez
Kyle Dahlem
Julie Ann Dais
Doug & Earnest Dalton
Harry & Barbara Dandelles
Frances E. Danely
Joan Dark
Tom & Phyllis Daughtrey
Beverly Davenport
Richard & Ruth Davidson
Dr. Mark & Kristen Davies
Nancy & Frank Davies
Beverly & Don Davis
Brandi & Joel Davis
George & Rebecca Davis
Dr. Glenn Davis
John & Tracie Davis
Julie Davis
Kay Davis
Lawrence Davis
Mary Downing Davis
Sharon King Davis
Dr. Nancy Dawson
Richard & Janet Dayringer
Tami De Angelis
Al & Rita Dearmon
Jim Dearn
Rebecca Deaton
Helen DeBolt
Dr. Bill Decker
Dr. Kay Decker
Ivy & Joseph Dempsey
Paula K. Denson
Fran & Gary Derrick
Freda Deskin
John & Darla DeSteiguer
Gary & Roz Detrich
Marie Dettie Youth & Family Services
Bill & Janie Deupree
Devon Energy Corporation
Marion Briscoe DeVore
Dr. Donald Dewitt
Emily Dial-Driver
Gloria Dialectic
Jerry & Kathy Dick
Carrie Dickens
Dr. Dewayne Dickens
Clint & Kathy Dickson
Claire Diehl
Mary Diehl

Carl & Barbara
William & Wau
Dan & Kay Dillon
Christine Dillon
Perry C. Dillon
Darrel Dionne
Tomek-Dionne
Bob Dishman
Kristine E. Dixon
Elliott & Grayce
Brad & Kimber
Robert S. Doen
Robert & Susan
Keith Donaldson
Juanita Doughe
Jon Douthitt
Ray & Linda Do
Ann G. Doyle
June Drabek
William J. Drab
Ford & Vanessa
Frederick & Jan
Richard P. Dula
Dr. James & En
Duncan Public
Alex Duncan
James Duncan,
Linda Duncan
Michael Duncan
Rita Duncan
Ron Duncan
Shannon Dunc
William & Barb
Conrad & Judy
Diana Duran
Kenneth Dvora
Kenneth & Kar
Dr. Kathleen Ea
R. Eugene Ears
Debra East
Eastern Shawn
Kalenda Eaton
Shanon & Davi
Drew Edmonds
Eleanor Edmon
Ruth Eichepber
Elizabeth Eick
Stephan & Elle
Kathy Elbert
Dr. Randi Eldev
Kent & Lea Eld
Charles & Caro
Nancy & Robert
Richard Ellwan
William & Mari
Roseanne Engle
Drs. Lars & Lai
Alan & Janice E
Nancy English
Enid Rotary Clu
Dr. Eugene & S
Linda A. Epper
John & Barbara
Keith Erwin
Dr. Robert & D
Barbara L. Esk
Ethics and Exo
Journalism Fe
Dr. Cheryl Evar
Dr. Patrick & C
Eventbrite
Mark A. Everett
Sandra Ewing
Exxon Corpora
Hon. Mike & Sh
Jan & Gary Far
Eunice & Hube
Christiane & Br
Robbie Farley
Janis Farr
J. Patrick Farre
Jalal Farzaneh
Ruth Ann Fate
Dr. John & Mar
Federation of S
Councils
Raymond Feldm
David Fennema

Dieterle	Ferguson Family Foundation	Harold T. Garvin	Katherine E. Hale	Allan & Diane Holcomb	Leif & Inga Johnson
hilla Diggs	Ken Ferguson	Dr. Susan Garzon	Lou Hale	Edna Mae Holden	Marcia & Myron Johnson
ingham	Dallas E. Ferguson	Dr. Loren Gatch	Sue Hale	JoAnn Holden	Sheila G. Johnson
n	Julie Ferguson	John Gault	Dale & Danelle Hall	Johna Glaze Holford	Willa Johnson
and Joy	Mary Ferguson	Alice Gehrke	Mike Hall	Tom & Sally Holford	Patty J. Johnston
e	Donald & Sally Ferrell	Rita Geiger	Ruth Hall	Don & Kay Holladay	Sam & Leora Johnston
on	Fidelity Charitable	Scott Gelfand	Sallye Hall	Brian & Heather Holland	Wray Jolley
Doane	Melvin Fiegel	Gelvin Foundation	Tom & Carolyn Hall	Shawn Patrick Holliday	Dr. William Jolly
ly Doenges	M.J. Figard	Dr. Robert Gengler	Diane Hamill	Ray Hollingshead	Jones PR
ges	First Family Federal Credit Union	Drs. Pamela Genova & Dave	Ann Hamilton	Almarian Hollingsworth	Adrian Owen Jones
Dolan, Jr.	First National Bank	Hambright	Carol Jean Hamilton	Dr. Ernest Holloway	Beverly Jones
n	First National Bank & Trust	Dr. Perry J. Gethner	Phyllis Hammer	Hon. Jerome A. Holmes	Curtis & Tammy Jones
pty	First National Bank of Henryetta	Michael & Stephanie Giacomo	Kirk Hammons	Jill Holmes	H. Rodman Jones
owns	First United Bank	Dr. Gilbert & Aulena Gibson	Rev. Canon Dr. Carol & James	Karen Holmes	Jenkin Lloyd Jones
ek	Howard & Charlene Firth	Barbara & Harry Gilbert	Hampton	Ginger Holsted	Dr. Jill Jones
a Drummond	Dick & Malinda Fischer	Gilder Lehrman Institute	Teddie Hamrick-Brookman	Dr. Anne Holt	Karen L. Jones
et Drummond	LeRoy & Martha Fischer	Dr. D. Britton Gildersleeve	George & Shirley Hann, Jr.	David Holt	Kathryn Jones
aney Foundation	Connie & Barbara Fisher	Dr. Paul & Ann Gilje	Jay & Valerie Hannah	David & Whitney Hooten	Dr. Krista M. Jones
ily Dunagin, Jr.	Dr. Deena & Tom Fisher	Jacqueline Gilley	Mary Hapgood	Dr. Virginia Hoover	Stephen & Sherrel Jones
Library	Phyllis Fist	Casey Gilliam	Har-Ber Village Museum, Inc.	Stephen & Cheryl Hopkins	Dr. Dian & Doug Jordan
Sr.	Drs. Johnny & Jane Fitch	Fred & Lynda Gipson	Robert & Jean Harbison	Jeri Horinek	Donald A. Jordan
n	Lucy Lou Fite	Claudia M. Glasser	Frances E. Hardin	James Horn	Linda Joseph
an	Grace Fites	Steve & E. Glasser	Alton Hardman	Steve Horn	Willis & Lois Joseph
ara Dunn	Juanita M. Fitz	John & Mary Lynn Glasson	Rosemary Hardy	Katherine Hornor	E. Carey & Carol Joullian IV
Duprez	Five Civilized Tribes Museum	GoadAbode	Joy Harjo-Sapulpa	Dr. Andrew & Odette Horton	Journal Record Publishing
k	Dr. Margaret A. Flansburg	Dr. Carla Goble	Ralph & Elva Harmon	Hotel Ambassador	Sandy Joyner
en Dye	David & Pam Fleischaker	Charles B. Goddard Foundation	Dr. J.D. Trout Harwood	John & Sally Houck, Jr.	Karla Juarez
arnest	Becky Fleming	Clifton S. Goddin	Gene Harper	Dr. Paul & Chris Houk	A. Theodore Kachel
om	John Fleming	Kathi Goebel	Patricia Harper	Dr. Jason Houston	Harold Kachel
ee Tribe	Dr. Brooks Flippen	Dr. Kay Goebel	Harris Foundation, Inc.	Howard Brothers Florist	George Kaiser
d Eaton	Dr. Tracy Floreani	Charles & Juanitta Goins	Bill Harris	Robin Howard	George Kaiser Family Foundation
son	James Floyd	Arnold P. Gold Foundation	Erick W. Harris	Elaine Howe	Frances & Ralph Kampschmidt
ndson	Dr. Pamela K. Fly	Dr. Robert Gold	Mae Harris	Bette Hubbard	Craig Kanske
nger	Guy Folger	Golden Limit Consistory	Rabbi Vered Harris	JoAnn Huber	Kappa Alpha Psi
man	Matthew Fong & Lacy Kelly	Letty Goldenberg	Dr. Thomas & Kathy Harrison	Stacey Huddleston	Kathleen Kastelic
n Eisner	Candy Ford	Mary Golloway	Marsha Harrod	David Hudson	Justice Yvonne Kauger
vik	Joe & Sherry Ford	Alecia Gonzales	Joel Hart	John & Janet Hudson	Kaw City Museum Association
ridge	Charlotte Fore	Corinne Gooch	Philip D. Hart	Leslie & Cliff Hudson	Paula Keefer
lynn Ellenbrook	Mary Carol Foreman	Judith F. Goodale	Lorene C. Hasbrouck Charitable	Patricia Murphy Hudson	Sally Keel
Ellis	Dr. Franklin & Judy Forney	Sharilyn L. Edlund & Marilyn K.	Trust	Erika Huffman	Amy Kelley
nger	Sue & Bill Forney	Goodban	Suzette & S. Kim Hatfield	Jane Huffstetler	Ashley Kemp
on Elson, Jr.	Cheryl Fogrest	Jerry & Donna Goodman	William D. Hawk	Jacque Hughes	Betty Kemp
el	Arthur Foster	Joann Goodner	Larry & Paula Hawkins	Valere Hull	Valarie Keown
rd Engle	Jack Foster	James Goodwin	David Hays	Marian C. Hulsey	The Kerr Foundation, Inc.
English	Joe & Linda Foster	Nancy Goodwin	Dr. John & Linda Hays	Carol Humphrey	Katie Key
b	Stan & Beverly Foster	John & Judy Goodyear	Heard Museum Library	David & Vicki Hunt	KGOU Radio
herry Enrico	Martin & Lea Fourkiller	Vicki Gourley	Dr. Owen & Charlette Hearne	Phil & Linda Hurst	Nyla Khan
ey	Jeanne Fowler	Steven & Helen Koons Gragert	Mary Ann Heck	Dr. Albert & Jean Hurtado	Dr. Shun Kiang
Erickson	Doug Fox	C. Hubert Gragg	Jo Heiliger	Dr. Samuel & Rebecca Huskey	Juanita Kidd
rothy Escamilla	Gini Fox	D. Joseph & Ellen Graham	Joy Heiman	Dr. James & Kathy Huston	Dr. Clara Sue Kidwell
ridge	Virginia Fox	John Graham	John & Melvena Heisch	Reid & Patsy Hutchens	Caroline Kilgo
ellence in	Dr. Gerald Frank	Mary Graham	Wallace Heller	Betsy Hyde	Aaron Killough
oundation	Bill & Kristin Frankfurt	William & Tedi Ann Graham	Gay Hellman	Dr. Woosik Hyun	Valerie F. Kimble
ns	Frankfurt-Short-Bruza Associates	Brenda Granger	Arnold G. Henderson	Dr. Freedom & Nwando Ikedionwu	Kimray, Inc.
arole Jo Evans	Dr. Ann Frankland	Dr. Nathan & Linda Grantham	Dr. George & Barbara Henderson	IMCO Recycling	James & Aloah Kincaid
	Gerald Franklin	E. Ann Graves	Jim & Mary Henderson	Inasmuch Foundation	Bill & Martha King
	James & Charlotte Franklin	Queen E. Graves	Frank & Bonnie Henke	Ellen & Dale Ingram	Carol F. King
	J. Douglas Frantz	Dr. Gary Gray	Donna Henry	Mattie L. Ivie	Karen King
	Leota Frantz	Gwen Grayson	James L. Henry	Mary Jackson	Lynnea King
	Sondra Franzmann	Greater Enid Arts & Humanities	John A. Henry III	Dr. Rachel C. Jackson	Suzan King
	Joan Frates	Council	Pres. Robert & Dr. Jan Henry	Beverly Jacobs	Virginia King
	Mary Y. Frates	Ginny Greenberg	Ruth Ellen Henry	Rebecca Jacobs-Pollez	Dr. Thomas A. Kirk
	Dr. Marc & Linda Frazier	Tom Greening	Henryetta Community Association	Ron Jacobs	Travis Kirk
	Miriam Freedman	Marjorie Greer	John A. Hensley	Venice J. James	Kirkpatrick Family Fund
	Ron Freeland	Edith Gregory	Darrell & Ann Herber	Drs. Lance & Sara Janda	Kirkpatrick Foundation, Inc.
	Pattie M. Freeman	Karen Gregory	Heritage Bank	Marcy Jarrett	Kirschner Trusts Affiliated Fund
	Patricia & Robert Freihoff-Lewin	Alyson Greiner & Luis Montes	Robert & Betsy Herring	Patricia Jaynes	Hilary Kitz
	Jerry Fretz	John Griffin	Sabrina Herrmann	Jann Jeffrey	Don & Ruth Kizziar
	John B. Frick	Marjorie Griswold	Dr. Allen Hertzke	Robert Jennings	Barbara J. Klein
	Cynthia Friedemann	John & Virginia Groendyke	Stephen Heyman	Harriet Jensen	Scott Richard Klein
	Virginia Frobels	Gene & Ann Groff	Carole Huff Hicks	Janice Jensen	Rosella Kliewer
	Dr. Richard Frohock	Dr. Mary Kay Gumerlock	Dannie Bea Hightower	Melanie Jester	P. Diane & David Knapp
	Dr. Andrew & Diana Frost	Jean Gumerson	Michael & Judy Hightower	Jewish Federation of Tulsa	Ruth L. Knee
	Maggie Fuchs	Linda Gunnells	Elbert & Marion Hill	Foundation	Rev. Henry Knight
	George & Mary Fulk	Odell Gunter	Everett W. Hill	Gary & Mary Jia	Chris E. Knox
	Full Circle Bookstore	Herbert & Roseline Gussman	Frank & Bette Jo Hill	Traci Jinkens	Lucy Lee Knutson
	Gary & Connie Fuller	Foundation	Robert & Judith Hill	Richard A. Jobe	Linda Litton Koch
	Dr. Munson & Vaughndean Fuller	Dr. Gerald & Julie Gustafson	Hills Nursing Home, Inc.	Dr. M. Jane Johansson	Gary Kodasest
	Gerald & Betty Ann Furseth	Calvin Guth	Barbara Hillyer	Lee C. Johns	Dr. Sunu Kodumthara
	Joh Gainey	Guthrie Public Library	Homer & Doris Hilst	Albert Harvey Johnson	Linda Koenig
	Julie Gallagher	Marcia Haag	Cherie Hinson	Albert Johnson	Harold & Lou Kohlman
	Doug & Theresa Gardiner	Bonnie Haas	Dr. Catherine Hobbs	Alice Johnson	Mary Kokojan
	Nelda J. Gardner	Susan Haase	Dr. Dan S. Hobbs	Bryan Johnson	Elizabeth Kondor
	Ernie Garland	Nona M. Hack	Michael Hobbs	Carlos & Pam Johnson	Michael & Joan Korenblit
	Jane T. Garrett	Dr. Gwen Hackler	Larry & Judy Hoberock	Carol Johnson	KOSU Radio
	Lionel H. Garrett	Dr. William & Charlotte Hagan	Elaine Hobson	Deborah Johnson	Phillip Koszarek
	Stephen & Linda Garrett	Dianne & Jimmy Hahn	Hannibal B. Johnson	Gary Kramer	Mark J. Krapff
	Jin J. Garton	Jimmy Hahn	Robin & Mary Ann Hohweiler	Josephine LaHunta Johnson	
		William J. Hakel			

Mike & Laurie Krimbill	Robert & Roxana Lorton	Glen McIntyre	Christine Myers-Baker	Hon. Marian Opala	Norris & Betty I
Dr. Marvin & Lily Kroeker	Dr. Patricia Loughlin	Hon. Judy Eason McIntyre	NAACP of Lawton	Greg Oppel	Ken & Barbara
George Krumme	Love County Library	Dr. Steve & Glenda McKeever	Charles & Kathy Nation	Clark & Sara Osborn	Dr. Alyssa L. Pr
Paul & Mary Kruska	Tom & Betty Love	Joe & Linda McKenzie	National Cowboy & Western Heritage Museum	Dr. Mark Osborn	Pryor Arts & Hu
Robn Kumiega	Love's Travel Stops & Country Stores	Dr. Tom McKeon	National Cowboy & Western Heritage Museum Docents	William & Jane Osborn	Public Service C
Gary & Kay Kuykendall	Vince LoVoi	Ken & Debbie McKinney	Native American Cultural and Educational Authority	Joseph & Mary O'Toole	Darren Purcell
KWGS FM Radio	Caroline & Matt Lowery	Dick McKnight	Chuck & Ann Neal	Anne Ott	Betty Quinlan
Helon La Gree	Dr. Richard Lowitt	Mayo & Mary McKnight	Dr. Judy Neale	Ottawa County Historical Society	Kim Quinn
Frank & Sue Lacey	Virginia Lowrey	Mason & Joyce McLain	Malisa & Steven Nell	Drs. Karla Oty & John McArthur	Roger & Joy Qui
Chuck Laenger	A. Thomas & Peck Loy	Dave & Jean McLaughlin	Victor & Leah Nellis	OU Humanities Forum	Penn V. Rabb, Jr.
Melinda LaFevers	Tom Lucas	Cecil McLaury	Robert Nelson	Elizabeth F. Owen	Dr. Josephine R
Robert J. LaFortune	Lucent Technologies	Marcia McManigal	Annette H. Nelson	Dr. Charles Owens	Ken Ragan
Joakim & Vivian Laguros	Charlene Luckey	Lois McMillan	Barbara Nelson	Mia Owens	David & Kim Ra
Michael S. Laird	Dr. Neil & Phyllis Luebke	Margaret McMillen	Jess & Lou Nelson	Oxley Foundation	H.E. Rainbolt
Lori Lake	Robert & Karen Luke	Patty McNeer	John H. Nelson	Minnette Page	Anna Lou Rand
Gloria Lamar	Anne Luthey	Ingrid McNutt	Leon & Marlene Nelson	Cheryl Paine	Rodger Randle
Drs. Scott LaMascus & Alice Mankin	James P. Luton	Frank & Nadine McPherson	Kelly & Shandy Nemecek	Carolyn Pallett	Leroy & Phyllis
Linda P. Lambert	Mary Beth Lykins	Michael & Constance McQuinn	NEO A&M College Development Foundation	Panera Bread	Lee Raney
Bryna Lane	Anne G. Lynch	Dr. William Michael McShan	Dick & Carole Neptune	Fran Parochorn	Myrna Ranney
Dana Wilson Lane	Donald Lynch, Jr.	Susan McVey	Network for Good	Fieldon Parham	Dr. Daniel J. Ra
Frank & Susan Lane	Patsy L. Lyon	Maryjo Meacham	Karen & George Neurohr	Jody Parker	Dr. Joanna Rap
J. Paul & Sara Lane	Lyric Theatre of Oklahoma	Meade Investment Company	New Hope C.O.G.I.C.	Joseph L. Parker, Jr.	Keith Rapp
David & Sandra Laney	Mabrey Bancorporation	K.T. Meade	David Newcomb	Lewis & Floy Parkhill	Hon. Dana Rasu
Laura Lang	Dr. J. David Macey, Jr.	Dr. Buddy & Ginny Medbery	Mary Ann Newcomer	Mark Parkhurst	Jane Ratliff
Charlotte Lankard	Bert Mackie	Robert & Trina Medley	Newkirk Main Street	Ruth Parkhurst	Lynn Ratliff
Quraysh Ali Lansana	Pauline Dwyer Macklanburg and Robert A. Macklanburg, Jr. Foundation	Lew & Suzy Meibergen	Martin L. J. Newman	Thelma Reece Parks	Steve & Susan R
Linda & Tim Larason	Michael & Peggy Madden	Paul & Lisa Melchior	Rita Newman	Charlotte Parrack	George & Nancy
Jan & Rex Largent	Helga Madland	Drs. Robert & Cindy Melichar	Larry & Polly Nichols	Jack & Ramona Parrish	Jeraldine Redco
Steve & Judy Largent	Carol Maggart	The Andrew W. Mellon Foundation	Max Nichols	William & June Parry	Billie F. Redden
Dr. Gary Larson	Shirley Mahan	Menes Temple #32	Sharon Nichols	James Parsons	Art & Judy Reed
Mary Larson	Josephine Mahon	Mary Ellen Meredith	Ron Nick	Mildred Parsons	Vojai Reed
Dr. Alexa Larson-Thorisch	Dan & Debbie Mahoney	Dr. Kenneth Merrill	Vivian Nida	David Pasto	John & Linda Re
Kaylon & Andy Lasser	Dr. Edward Main	Frank & Mary Merritt	Rebecca Ninemire	Rebecca J. Patten	Registry of Okla
Dr. Sean Latham	Ruth Lair Males	Robyn Meslin	Dr. Ruprecht & Biss Nitschke	Bernie & Annette Patterson	Dr. Morris & Ma
Donald & Susan Lauffer	Barbara K. Malicote	J.D. Metcalfe	Joann Nitzel	Dr. Peter & Naomi Patton	John Reid
Drs. Jason & Susanne Lavery	Ann Malloy	Kenneth & Patricia Meyers	John Noerdlinger	Homer Paul	Ralph & Claire F
Betty Jo Law	William E. Malone	Mezcalita Press, LLC	Hans Nollert	William G. Paul	Eve Reim
Larry & Daisy Lawler	Jacob Manatowa-Bailey	Miami Arts and Humanities Council	Lilian Nordean	Pauls Valley Friends of the Library	Valerie Reimers
Kenneth & Amanda Lawrence	Mary Mangham	Joe Miano	James & Madalynne Norick	Dr. Jennifer Paustenbaugh	Pam & Dave Re
Edward Lawry	Donald & Sallye Mann	Charles Migliorino	Charles & Barbara Norman	Pawnee Bill Ranch Association	Anne & Graham
Lawton Douglass Alumni Association	Marsh USA, Inc.	George & Louise Milacek	Hon. Mike & Trude Norman	Twilla Dawn Peace	Cathryn Render
James H. Lazalier	Zack Marshall	Gail S. Miller	Leonard C. Northcutt	Douglas & Patty Peacock	Dr. Phil & Sana
Dr. Linda Leavell	Dwayne & Krystal Martin	Julia Wheeler Miller	Northwestern State University Foundation	Dr. Stan & Raina Pelofsky	Lana Reynolds
Dr. Shirley Leckie	John K. Martin	Richard & Betsy Miller	Northside Chamber of Commerce	Martha L. Pendleton	Maxey Reynolds
Marian LeCrone	Mary Jane Martin	Teresa Miller	Phillip & Carol Norton	Cheryl Pennington	Roxanne Rhoad
Larry & Marilyn Lee	Thomas Martin	Larry Milligan	Jana Novak	Dr. William Pennington	Sherry Rhodes
Mary Lee	William & Mary Martin	Sarah Milligan	Eugene Novogrodsky	Linda Perkins	Willard & Marti
P. Mildred Lee	Sam Marvin	Angela Million	Nowata County Historical Society & Museum	Brenda Perry	Billy & Verna R
Marvin Leeper	Lucille P. Massey	Marcia Minsky	L. Nutter	Timothy Perttula	Hugh & Cindy R
Paul Lehman	Anne Masters	Rosalee Minsky	Mary Ellen Obrecht	Erin Peters	Nita Richards
Cathy & Kurt Leichter	Claude & Roberta Matchette	Dr. Amalia Miranda	Virginia Ockershauser	Dr. Richard & Helen Peters	Mary Richards
Frances Leonard	Thomas E. Matson	Jeanetta Mish	Scott & Stacy O'Daniel	Shirley Pettingill	Pauline Richter
Tim & Nancy Leonard	June Matthews	Carson Misner	OG&E	David Pettyjohn	Dr. Sara Jane R
Billie Letts	Paul Matthews	Juanita Mitchell	Martin & Deborah O'Gwynn	Dr. Terry Phelps	Ride Into Histor
Robert Leveridge	Jeffrey & Diane Maxwell	Kari Mitchell	OK Endowment for Literacy & Reading	Phi Beta Sigma	Bradley Riebe
Dr. Bertha Levy	Dr. Anita May	Marilyn Mitchell	OKC Foundation for Architecture	Phillips Petroleum Company	Richard Riggs
David & Lynne Levy	Drs. Robert & Elizabeth Mayer	Dr. James Mock	Oklahoma Arts Council	Nancy Phillips	Lesley Rimmel
Diane Lewis	Bervis McBride, Jr.	Bob & Suzanne Mogelnicki	Oklahoma Capitol Complex and Centennial Commemoration Commission	T.S. Phillips Investments, Inc.	Dr. Francine Ri
Kay & Bob Lewis	Sue McCall	Asoka & Ola Molinas	Oklahoma Center for Nonprofits	Tom & Suzan Phillips	Dr. Galen & Bo
Dr. Mary Anne Lewis	Dr. Susan McCarthy	James A. Molledahl	Oklahoma Center for Poets & Writers	Vicki & John Phillips	Dr. Jere Robers
Dr. Xiao-Bing Li	Laura Thomson McCarty	Connie Monnot	Plains Indians & Pioneers Museum	Philomathic Club, GFWC	Mark & Susan R
Liberty Foundation, Inc.	McCasland Foundation	Joseph Monroe	Earle & Anne Plyler	James Pickel	Dr. Bernard & M
William & Adelaide Liedtke III	Johnny & Cindy McCharen	Luis Montes	David Poarch	Paul G. Pierce	Ben H. Robinson
Roger I. Lienke	Bill McCloud	D.W. Moore	Jason Pogue	Peter G. Pierce III	Helen M. Robin
Dr. Bill & Mary Lillard	Dolores McClure	Ed & Sandra Moore	Naomi & Greg Poindexter	Vernon & Linda Pierce	John & Loretta
Lincoln County Historical Society	Katherine & Kenneth McCollom	Melvin Moran	Mary & Joe Pointer	Pioneer Library System	K.C. Robinson
Midge Lindsey	Dr. Don & Virginia McCombs	Siobhan & Jeff Morava	Randel & Jeanne Polk	Joe & Barbara Pirkle	Richard Robins
John & Caroline Linehan	Bob & Carol McCormick	Dan & Andrea Morgan	Amy Polonchek	Plains Indians & Pioneers Museum	Dr. Timothy & L
Dr. Charlene J. Lingo	Janice McCormick	Dianna K. Morgan	Dr. Carolyn Pool	Susan Plumb	Robert Roblin
James Linker	George & Bonnie McCoy	F.L. Morgan	Mary Ed Porter	Earle & Anne Plyler	Carol Rochat
Jane Lipman	Katherine McCraw	Diane Morris	Roma Lee Porter	David Poarch	D. Joe & Mary R
Martha Lippert	C. L. McCune	John Morris	Pottawatomie Telephone Company	Jason Pogue	Bill & Linda Ro
Jesse Lipson	Clifford McCune	Virginia L. Morris	Ray & Pat Potts	Naomi & Greg Poindexter	Sue Ann & Jim I
Kathleen Listman	Tommy McDaniel	Gay Morrow	Prescor, Inc.	Mary & Joe Pointer	Lenora Rodrigu
John Little	James McDowell, Sr.	Margaret Moss	Dennis & Carol Preston	Randel & Jeanne Polk	Roger Mills Arts
Larry & Julie Littlefield	Barbara McEndree	Miriam Moss	Joanne Prewett	Amy Polonchek	Council
Betty Littleton	Custer & Maxine McFalls	Lou Ann Moudy	Price Tower Arts Center	Dr. Carolyn Pool	Shirley Rogers
Roger H. Lloyd	McGee Foundation	Henry Moy*	Marcy Price	Mary Ed Porter	W. Edward Rol
Louis & Dorris Loeffler, Jr.	Betty McGee	Jane Munger	Mark & Janet Price	Roma Lee Porter	Dr. Peter Rollin
Ruth Loeffler	Dr. Patrick & Rita McGinnis	Christopher Murphy	Mary & Bill Price	Pottawatomie Telephone Company	Raelene Rollins
F. Arlene Logan	Julia McHale	Tom Murphy		Ray & Pat Potts	Joe & Shirley Ro
Leonard M. Logan IV	Lora McHenry	Constance Murray		Prescor, Inc.	Gordon Romine
Conner & Bobie Logsdon	Elaine S. Mellroy-Hargrove	Marilyn Murray		Dennis & Carol Preston	Robert Rorschach
Kathy Lohrey	Alice McInnis	Michelle Murray		Joanne Prewett	Hazel Rose Fan
Dr. Tsianina Lomawaima	Kate McIntire	Dr. Margaret Musgrove		Price Tower Arts Center	Drs. Jim & Cind
Jane Long	Lynn A. McIntosh	Lloyd & Nancy Musselman		Marcy Price	Albert Ross
Jeannine Long		Alice Musser		Mark & Janet Price	Barbara Ross
Dave & Lana Lopez		Lynn Muslewite		Mary & Bill Price	Dianne Ross

Price	Mark Ross	Daniel Simon	Dean & Carol Stringer	University of Oklahoma Press	Pete White
Privett	Jim Roth	Linda Simonton	Stuart Family Foundation	Urban Tulsa Weekly	Robert W. White
ovencio	Zel & Leonard Rozin	Lynda Simpson	Dr. Mara Sukholutskaya	Felicia Urbanski	Albert E. Whitehead
umanities Council	Kathy Rubey	Dr. Lynne Simpson	Andy & Sue Moss Sullivan	M. Teresa Valero	Bryan & Frances Whitehurst
Co. of Oklahoma	Daron Rudy	Dr. Robert & Beatrice Simpson	Carol Sulphur	Dr. Jean & Brad Van Delinder	Virginia Whitekiller
	Joseph & Vestina Ruffin	Dr. Eric Singleton	Laurie Sundborg	Andrea VanDeventer	Robert & Sally Whiteneck
	Jack & Teresa Runnels	George & Kari Singleton	Gertrude Sundgren	Jerry Vannatta	Brian Whitley
	Dr. David Russell	Sandy & Jacquelyn Singleton	Cathy Suttle	Dr. Dean & Vesta VanTrease	Charles Whitlow
	Dr. Tom Russell	Marcella & Mian Sirhandi	Dr. Greg Sutton	Robert & Sharon Varnum	Whole Foods Market Tulsa
	Pat & Grace Ryan	Ann Sitz	Susan L. Sutton	Dr. Andrew Vassar & Mary Ann Gardner	Frank & Carol Wiebelt
	David & Carolyn Sacks	Martha Skeeters	Effie Sweetin	David S. Vassar	Clark Wiens
	Dr. Hugh & Pat Sage	Skinner Tank Company	Laurence N. Swink	Judge Paul & Jan Vassar	Charles & Renate Wigginn
	Uzma Saleemi	Barbara Claire Slagle	Tara Tabatabaie	Theresa Vaughan	Wayne & Paula Wilburn
	Meg Salyer	Dr. Pamela Slateligggett	Patty Tabor	John Raymond Velde	Dan Wilcox
	Kay Samaripa	John & Janet Slater	Dr. Stacy Takacs	Sri Vemuri	Terry Wilcox
	Sarkeys Foundation	Marsha W. Slaughter	Timothy Tallichief	Dennis & Ilena Vernon	Eddie & Joan Wilcoxon
Randolph	Gregg & Chelin Satherlie	John K. and Shyla Slay, Jr.	Suzanne Tate	James Vernon	Nancy Wilkinson
	Thackery Saussy	Dr. Bonner & Heidi Slayton	Dr. Kaye Tatro	Max Vest	Teresa Willems
	Susan Savage	Gail Sloop	Dr. Gordon Taylor	Donna Vogel	Williams
ansom	Nouna Schacher	Richard & Norma Small	Jack & Jennie Taylor	Andrea & Tom Volturo	Williams Co.
	Faye Schader	Richard & Norma Small Charitable Fund	Dr. Rhonda Taylor	John Vrana	C. Craig Williams
ure	Kim Schaefer	Barbara Smallwood	Sharon J. Taylor	Carolyn Wade	Darlene & Robert Williams
	Dr. Kurt & Judith Schaefer	Jearl Smart Foundation	Wally Taylor	J. Blake Wade	David Williams
	John & Evelyn Schmidt	Darryl Smette	Temple B'Nai Israel	R. B. Waguespack	Jaci McAfee Williams
Raybourn	Kathy Schmidt	Nancy Smiley	Jo Ann Teter	Ernest & Ellen Walcher	John E. Williams
Records	Gerald & Rose Schneider	Amanda Smith	Margaret Tanner Tewson	James Waldo	Kelli Williams
rn	Blair & Jeannie Schoeb	Charles & Katherine Smith	Ethel L. Thomas	Carple Waldvogel	Larry Williams
	Charlene Schoepfel	Dale & Nancy Smith	Sandra Thomas	Carla Walker	Laurie A. Williams
	Sue Schofield	Donna Smith	Warren M. Thomas	Eddie Walker	Margaret H. Williams
	David & Sandra Schomaker	Garnet Ann Smith	Wendy E. Thomas	James & Joy Walker	Penny Williams
ese	Lynne Schonacher	Gerree Smith	Libby Thomas-Wheat	Dr. Stephen Walker	Ted Williams
thoma City	Albert & Eloise Schrempf	Harrison & Joanne Smith	Ann Thompson	Tom Walker	W.D. & M.J. Williams
arianne Reichlin	Charles & Kathleen Schroeder	Kim Smith	David & Judith Thompson	Ben & Bonnie Walkingstick	Candace Willingham
	Lou Schroeder	Lora G. Smith	Don & Barbara Eikner Thompson	Phyllis Waller	Dr. Diane J. Willis
Reiger	Paulette A. Schroeder	Lucy Smith	Jana Thompson	Michael Wallis	Selma Wilner
	Schuman Publishing Co.	Dr. Michael & Lynn Smith	John Thompson	Brenda & Peter Walters	Dr. Edith Newton Wilson
	Charles & Lynn Schusterman Family Foundation	Dr. Rose Marie Smith	Lynnette Thompson	Perry Walters	Mary H. Wilson
	Mark & Kay Schweinfurth	Bishop Thomas Smith	M.E. & Ann Thompson, Jr.	Valorie Lynn Walters	Carla Wimberly
Renberg	Ronald Scribner	Vivian Smith	Martha Sue Thompson	Shirley Walterscheidt	Martin R. Wing
	Harry & Joan Seay	Wayne & Mary Jo Smith	Michael J. Thompson	Lew O. Ward	Judy Wingfield
Rettig	Security State Bank	Edmund Sneed	Hon. Ralph & Barbara Thompson	Tonya Ward	Harbour & Mickey Winn III
	Dr. James & Diane Seebass	Chris Snider	Suzanne Thompson	Johni Wardwell	Tom Winter
	Robert Segal	Kenneth & Georgia Snoke	Wade Hoyt Thomson	Elaine Warner	M. Winters
les	Ron & Mary Segal	Charlie Soap	Beth Thornton	Larkin & Jean Warner	Nancy Wolov
	Dr. David Selby	Dr. John & Carol Sokatch	Pastor James Thornton	Jim & Susan Warram	Lisa Wood
ia Rhynes	Teddye Sells	Sandra Soli	Norman & Sheryl Thygesen	Jean M. Warren	Mark & Gale Wood
ice	George & Sharon Seminoff	Morton Solomon	Dr. Harold Tisdal	W. Guy Warren, Jr.	Charlotte Wood-Wilson
Rice	Seminole Nation Historical Society & Museum	Adam Soltani	Haven Tobias	Dr. Pam Washington	William M. Woodard
on	Carl Sennhenn	Sonic Industries, Inc.	Nathaniel & Calva Todd	Jim & Luann Waters	Dylan & Sandra Woods
	Amy & Dean Sergeant	Southern Prairie Library System	James & Beth Tolbert III	Ann Watson	Harry A. Woods, Jr.
ichter	Dean Sergeant	Southwestern Urban Foundation	Miles & Molly Tolbert	C.K. Watson	Woody Guthrie Publications
ry	Paula Settoon	Dr. Sherill Spaar	Tonkawa Historical Society	Carolyn Watson Rural Oklahoma Community Foundation	Catherine W. Wooten
	Jean Setzer	David Spears	Bill & Elizabeth Torbett	Melinda Watterson-Thiesing	Dick & Anne Workman
	John Seward	John Spears	Brenda Towe	Laura Watts	William & Kathryn Worley
ngold	Grace W. Shaefer	Donna Spring	Harrison & Terry Townes	Johnny Weatherford	Harold & Margaret Worrell
bbie Robbins	Gary Shaffer	Springer Company	Dr. Mary Lee Townsend	Alba Weaver	Carol Wright
on	Dr. Nathan & Manda Shank	St. John's Baptist Church	Timothy R. Traynor	Nathan & Susan Webb	Keith & Patty Wright
Robertson	Ben & Shirley Shanker	Susan Stackler	Sven & Renata Treitel	Daniel G. Webber	Ron & Barbara Wright
arcy Robinowitz	Brett Sharp	Ronald & Helen Stakem	David & Sharon Trojan	Steve & Desiree Webber	Susanne M. Wymer
on	Judy Shaw	P.J. Stallings	Sandy Trudgeon	Charles & Marion Weber Foundation	Donna Yaffe
Robinson	Shawnee Friends of the Library	Rob & Mary Stallings	Jane Tubb	Bettye Wedgeworth	Tom & Ellen Yates
	Dr. William & Carol Sheehan	Mary Stanley	Gladys Tucker	Wednesday Study Club	Lonnie & Jeanne Yearwood
	Brenda Sheik	Mary Helen Stanley	June Tucker	Melissa Weiss	Sandra Lethem Yeo
	Leanita Shelby	Starbucks Coffee	Dr. Leslie Tucker	Robert S. Weiss	Nancy Yoch
	Roger & Carol Sheldon	State Beauty Supply	Ralph & Marilyn Tucker	Don & Virginia Welch	Alycen & Lawrence Yoder
	Jim & Melanie Shelley	Helen Stein	Tuesday Study Club	Wells Fargo	John Yoeckel
	Rabbi Charles P. Sherman	Phoebe Stein	Tulsa Community College Foundation	Lisa Wells	E. Lorene Yordi
	Ellen Sherman	Robert & Kim Stem	Tulsa Community Foundation	Brent & Gina Wendling	Karen Youmans
Rockett	Joy Sherman	Lynda Stephenson	Betty Turmon	Leo G. Werneke	Clark & Beth Young
ldgers	Jody & Don Sherry	Dr. Laura M. Stevens	Steve Turnbo	Grace L. Wessels	Dr. George E. Young, Sr.
Rodgers	Linda Shindler	Jennifer Stevenson	Dr. Alvin & Carmelita Turner	Jackie West	John Young
ez	Jean A. Shipman	Erma L. Stewart	Janis Turner	The Gerald H. Westby, Jr. Foundation	Sue T. Young
s & Humanities	Kimber Shoop III	Jesse Stewart	Winford Turner	Kathleen P. Westby Foundation	Thomas E. Young
	Jack Marwood Short	Marion Stewart	Mike & Susan Turpen	Jerome M. Westheimer, Jr.	William R. Young
son	James Showalter	Emmy Scott Stidham	Kally Tuttle	Wanda Westheimer	Yummy Mummy
s	Terry & Danielle Shreve	Dr. John C. Stobbe	Linda P. Tutwiler	Kenneth & Ruth Weston	Fred Zahn, Jr.
	Emily Alexander Shurley	Stock Exchange Bank	TV Guide, Inc.	Marlene Wetzel	Anne & Henry Zarrow Foundation
	Dr. Robert & Betty Shuttee	Frank & Jean Stockham	UBS Securities	Angela Whisenhunt	Zarrow Families Foundation
olston	Richard L. Sias	Jerald Stone	Dr. Von & Kirsten Underwood	Beverly J. White	Aileen Zeigler
ch	Bruce E. Siebert	Scott Stone	Union Pacific Foundation	Charles White	Dr. James Zeigler
nily Foundation	John Sieracki	Stanley R. Stoner	Unity Health Center	Lloyd C. White	Rev. Richard & Peggy Ziglar
y Rosenthal	Mary & Richard Sigal	Jon & Martha Stoodley	University of Central Oklahoma Foundation	Millar B. White, Jr.	Jeannette Zink
	Theo Silas	Dr. Patrick & Jessica Stout	University of Oklahoma		Mel & Bonnie Zuback
	Frank Silovsky	Weldon & Connie Stout	University of Oklahoma Foundation		
	Linda Simms	Dr. Jimmy & Marilyn Strange	University of Oklahoma HSC		
	Loren Simms	David & Emily Stratton			
		Fred & Martha Strauss			



OKLAHOMA
HUMANITIES

PO Box 31733
Edmond, OK 73003

Look for another digital issue in 2026.