

# ARTS & SCIENCES

from the museum of arts & sciences, in association with the smithsonian institution  
spring 2022



## *Illuminating Childhood:* A 19th Century Magic Lantern and Slides





*The best commercial properties in Volusia County.  
Locally owned, managed, & leased.  
Call now for great lease rates.*

ORMOND  
TOWNE SQUARE



The  
Shoppes  
at Beville Road

Coming Soon:  
**Dal Mare**  
Italian Steakhouse



HARVARD  
SQUARE



300 North Nova Road  
Ormond Beach, FL 32174  
(386) 673-3100  
[www.TheJaffeCorp.com](http://www.TheJaffeCorp.com)

# ARTS&SCIENCES

## IN THIS ISSUE



4 LETTER FROM THE  
EXECUTIVE DIRECTOR

18 SPRING 2022 EXHIBITIONS &  
EVENT CALENDAR

6 VOLUNTEER NEWS

26 MOAS GUILD NEWS  
BY DIANE ROGERS  
Spring into Next Quarter!

8 ILLUMINATING CHILDHOOD:  
A 19TH MAGIC LANTERN  
AND SLIDES FROM THE MOAS  
COLLECTION BY RUTH GRIM

28 OVER AND OUT  
BY CHRISTIAN TRAVERSON  
A New Golden Age of Astronomy

14 THE TEN-YEAR ANNIVERSARY  
OF THE DAYTONA BEACH  
MASTODON BY ZACH ZACHARIAS



**Interim Executive Director**  
MARIA HANE

RUTH GRIM, Chief Curator and Gary R. Libby Curator of Art  
ERIC MAUK, Curator of Exhibits  
MEGAN FINLEY, Curatorial Assistant  
ROBERT WOHLRAB, Curatorial Assistant  
JAMES ZACHARIAS, Senior Curator of Education  
and Curator of History  
NICOLE MESSERVY, Education Associate  
JOHN HERMAN, Group Tours and Education Coordinator  
SETH MAYO, Curator of Astronomy  
JASON SCHREINER, Planetarium Coordinator  
CHRISTIAN TRAVERSON, Planetarium Educator  
CARISSA ROWEN, Planetarium Educator  
STEVE CONKLIN, Director of Finance  
DIANNE MORRIS, Finance Associate  
STEPHANIE MASON-TEAGUE, Director of Operations  
MONICA MITRY, Development Manager  
JENELLE CODIANNE, Director of Marketing  
and Public Relations  
CLAIRE BRUBAKER, Marketing and Social Media Manager  
ALEXANDRA MIDDLETON, Director of Sales  
and Special Events  
DORIS STRNAD, Rental Manager  
JOHN BRUCE, Security Supervisor  
BRANDON SHEPPARD, Director of Facilities

**Guest Relations Team**  
CLARISSA LEON, Guest Relations Associate  
EILEEN PATOCKA, Guest Relations Associate  
LISA SHAW, Guest Relations Coordinator  
KAILYN SMITH-ALDRICH, Guest Relations Associate  
SARA WINKLEPLECK, Guest Relations Associate  
KATHRYN YOHE, Guest Relations Associate

**Maintenance Team**  
DEAN CORMIER, Facilities Assistant  
ISRAEL TAYLOR, Facilities Assistant  
CARLOS ZELLARS, Facilities Assistant

**Security Team**  
ASHLEY ADAIR, Security  
SKYLAR BENTON, Security  
CALEB CANLON, Security  
ANDY GION, Security  
EVE GREER, Security  
RAYMOND HALL, Security  
SHELBY JARRELL, Security  
AMANDA MITCHELL, Security  
ANGELO PIERCE, JR., Security  
KYLE RANKIN, Security  
ROBIN SATHOFF, Security

ARTS&SCIENCES

**Editor**  
JENELLE CODIANNE

**Contributing Writers**  
RUTH GRIM  
DIANE ROGERS  
CHRISTIAN TRAVERSON  
ZACH ZACHARIAS

**Art Director**  
JENELLE CODIANNE



(LEFT TO RIGHT) MOAS GUILD PRESIDENT, DIANE ROGERS PRESENTS THE GUILD'S 2021 FUNDRAISING CHECK FOR \$45,000 TO MOAS INTERIM EXECUTIVE DIRECTOR, MARIA HANE



MARIA HANE

I am writing this letter as the Interim Executive Director and am thrilled to be a part of such an important community asset for Daytona Beach and surrounding area.

The Museum of Arts & Sciences (MOAS) sits among the top tier museums in the country. It is the only Smithsonian Affiliated Museum in the greater Daytona area and is accredited by the American Alliance of Museums. Each of these distinctions speaks to the highest quality of programming, interpretation, and education serving the region. Accreditation further assures best practices in the less public facing, yet foundational aspects of governance, fiscal management, and collection care meeting the core standards for museums. The Institute of Museums and Library Services estimates there are 35,000 museums nationwide. Of those, only 24% of museums in the Southeast Region of the U.S. are accredited.

In this position, the Museum is embarking on a new path after nearly a decade of leadership under Andrew Sandall. His tenure transformed the Museum's campus and staff profile leading to the institution's most

successful year in 2019. The Museum served nearly 163k visitors – an all-time high on record. Membership, indicating affinity and personal investment, was at its highest in 2015 upon the continued expansion of the MOAS campus. A generous gift from the Lohman family elevated both the Museum and planetarium's educational reach and impact through a three-year partnership with the Volusia County school district. The Museum's new endowment has secured financial and operational stability for the future. The Cici and Hyatt Brown Museum of Art opening in 2015 along with campus renovations, new exhibit spaces, and innovative programming reaching new audiences are among the many improvements that have repositioned the Museum as a major regional resource. Andrew's leadership legacy provides an exciting opportunity for the Board of Trustees to launch a nationwide search for the Museum's next Executive Director. As the Interim Executive Director with nearly 20 years of museum leadership experience, I can attest to the value of this position in attracting top talent to Daytona Beach.

I would love to hear your ideas and thoughts as I get to know the MOAS family and hope to meet many of you over the next several months.



2022 BOARD OF TRUSTEES

Katherine Hurst Miller, President  
Bill Chapin, FAIA, Vice President  
Dr. Kent Sharples, Assistant Vice President  
Todd Huffstickler, Treasurer  
Andy Watts, Assistant Treasurer  
Ann Phillips, Secretary  
Cici Brown, Trustee Liaison  
Tom Hart, Past President  
Melinda Dawson  
Jeri Delgado  
Randy Dye  
Bruce Heugel  
Garrett Klayer  
Dr. Ashley Lentz  
Diane Rogers, MOAS Guild Representative  
Judge Belle Schumann  
Jill Simpkins  
Jack White  
Amy Workowski  
Allison Morris Zacharias

HONORARY TRUSTEES

Miriam Blickman  
Anderson Bouchelle (Deceased)  
J. Hyatt Brown  
Alys Clancy (Deceased)  
Tippen Davidson (Deceased)  
Susan Root Feibleman (Deceased)  
Thurman Gillespy, Jr., MD (Deceased)  
Herbert Kerman (Deceased)  
Chapman Root (Deceased)  
Jan Thompson (Deceased)

**Executive Director Emeritus**  
Gary R. Libby

**Arts & Sciences** is published quarterly by the Museum of Arts & Sciences, 352 S. Nova Road, Daytona Beach, Florida 32114, telephone 386.255.0285, website [www.moas.org](http://www.moas.org). Income from contributors helps offset a portion of the expense involved in the production of this publication.

ADVERTISING INQUIRIES

All inquiries regarding advertising should be directed to the MOAS Marketing and Public Relations Department at 386.255.0285, ext. 320.

2022 EXHIBIT SPONSORS

**GOLD**  
Abdulhussein Family  
Brown & Brown, Inc.  
Cici and Hyatt Brown  
Daytona Beach News-Journal  
Destination Daytona Beach  
Guild of the Museum of Arts & Sciences  
Halifax Health  
ICI Homes  
NASCAR  
Zgraph, Inc.

**SILVER**  
Cobb Cole  
CTO Realty Growth, Inc.  
Embry-Riddle Aeronautical University  
Jon Hall Chevrolet

**BRONZE**  
Bahama House  
Bomar Construction, Inc.  
Giles Electric Company  
L. Gale Lemerand and Jill Simpkins  
Gene and Diane Rogers  
Stuart and Lisa Sixma  
David and Toni Slick



ABOUT THE MUSEUM OF ARTS AND SCIENCES

The Museum of Arts and Sciences is a not-for-profit educational institution, chartered by the State of Florida in 1962 and accredited by the American Alliance of Museums. Museum collections and research include Cuban and Florida art, American fine and decorative arts, European fine and decorative arts, pre-Columbian and African artifacts, Pleistocene fossils, Florida history and regional natural history. Permanent and changing exhibitions, lectures, and classes highlight educational programs. The Museum houses changing arts and sciences exhibition galleries, permanent collection galleries, a gallery of American art, paintings, decorative arts and furniture, the Charles and Linda Williams Children's Museum, the Cici and Hyatt Brown Museum of Art, the Cuban Fine and Folk Art Museum, the Lowell and Nancy Lohman Family Planetarium, library, the Frischer Sculpture Garden, maintains nature trails in a 90-acre preserve in adjacent Tusawilla Park, and operates Gamble Place in Port Orange.

The Museum of Arts and Sciences is recognized by the State of Florida as a cultural institution and receives major funding from the State of Florida, Department of State, Division of Cultural Affairs and the Florida Council on Arts and Culture.

Major Museum programs and activities for members, school children and the general public are also supported by grants from the County of Volusia, the Guild of the Museum of Arts & Sciences, Elfum Community Fund, and over 30 Major Sponsors from the community.

**MUSEUM HOURS:**  
10 a.m. – 5 p.m. Monday through Saturday  
11 a.m. – 5 p.m. Sunday

The Museum of Arts and Sciences is committed to the Americans with Disabilities Act by making our facility and programs accessible to all people. If you have any special requirements, suggestions, or recommendations, please contact our representative, Executive Director, Andrew Sandall, at 386.255.0285. If you prefer, you may contact the Cultural Council of Volusia County representative at 386.257.6000, or the Division of Cultural Affairs, The Capitol, Tallahassee 850.487.2980, or TT 850.488.5779.

A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL OR RECOMMENDATION BY THE STATE. THE TOLL-FREE NUMBER IS 1.800.435.7352. FLORIDA REGISTRATION #CH-1851





# VOLUNTEER *of the Quarter*



## CAROL ANN MORITZ

Carol Ann has been retired for about ten years and joined MOAS as a volunteer in the Museum Store, just three months before the opening of the Cici and Hyatt Brown Museum of Art. She then became a Gallery Specialist at the Cici and Hyatt Brown Museum of Art after a fellow Gallery Specialist suggested she train to be one.

In November of 2016 Carol Ann began the Florida Vistas Book Club after reading *Forever Island* by Patrick Smith. Thanks to her hard work the book club has been going strong ever since, despite the challenges faced from COVID. In 2021 the Florida Vistas Book Club returned virtually via zoom after the short hiatus. This year, the book club will be trying something new with a combination of in-person and virtual attendance. Participants can choose the method they are most comfortable with. Carol Ann hopes that we can return to all in-person meetings soon!

Before Carol Ann retired, she was an educational administrator at the community college level, as well as in the corporate education market in Tokyo, Japan for 15 years. She continues to teach through a variety of tutoring activities.

Carol Ann and her husband, Bob, have one kitten, two children, five granddaughters, and now a great grandson. She also enjoys reading, cooking, crocheting, and needlework.

## YOU DESERVE IT.

YOU DESERVE TO LOOK AND  
FEEL YOUR VERY BEST.

WE'RE HERE TO HELP.

### MEDICAL SPA

CHEMICAL PEELS  
HALO & BBL LASERFACIALS  
FACIALS & HYDRAFACIALS  
BOTOX & FILLERS  
COOLSCULPTING  
ULTHERAPY  
MICRONEEDLING

### SURGICAL PROCEDURES

FACIAL SURGERY  
BREAST ENHANCEMENT  
BODY CONTOURING

### MEDICAL GRADE CARE PRODUCTS

ZO SKIN HEALTH  
ALASTIN

Lentz  
Plastic  
Surgery  
& MEDICAL SPA



SCAN ME

DRLENTZ.COM | 1265 W. GRANADA BLVD., STE. 3, ORMOND BEACH | 386.252.8051

Daytona Beach  
**symphony**  
SOCIETY



## Thanks for Supporting the Daytona Beach Symphony Society

**Our 70th Anniversary Season  
was a great success thanks to your  
support! Our upcoming 2022-2023  
Season will offer a dazzling array  
of international symphony  
orchestras, opera, and dance. To  
ensure our upcoming season is a  
success, your on-going financial  
support of our season and our YES!  
(Youth Experiencing Symphony)  
Program is essential.**

**Mission Statement:**  
*Bringing to life the richness of  
performing arts to our community.*

**Please support the  
Symphony Society and  
donate today!**



### SHOW YOUR SUPPORT

- \$2,000+ Conductor Circle
- \$1,500+ Grand Maestro Circle
- \$1,000+ Maestro Circle
- \$500+ Virtuoso Circle
- \$350+ Concertmaster Circle
- \$100+ Principal Circle
- \$25+ Soloist Circle

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

E-MAIL \_\_\_\_\_

*Please bill my credit card*

CARD NUMBER \_\_\_\_\_ EXP. DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

*I've enclosed a check payable to the Daytona Beach  
Symphony Society. I would like my name to appear as:*

MAIL: PO BOX 2, DAYTONA BEACH, FL 32115

PHONE: 386.253.2901 | FAX: 386.253.5774

EMAIL: INFO@DBSS.ORG

Gifts to the Symphony Society are deductible for income tax purposes. Certain benefits may not be tax-deductible. Please inquire. A copy of the official registration and financial information may be obtained from the Division of Consumer Services by calling toll-free within the state (800-435-7352). Registration does not imply endorsement, approval or recommendation by the state.

**FOR MORE INFORMATION CALL 386.253.2901 OR VISIT DBSS.ORG**



# ILLUMINATING CHILDHOOD

A 19TH CENTURY MAGIC LANTERN  
AND SLIDES IN THE MOAS COLLECTION



One of the items included in the exhibition *Child's Play: Historical Toys and Games from the Collection* is a "Magic Lantern" that was a popular form of children's entertainment in the 19th and early 20th centuries. Long before Saturday morning cartoons were a mainstay of childhood, magic lanterns projected images on the wall through hand-painted glass slides showing scenes of myriad different children's stories, fables, morals, anecdotes, and sometimes just visual jokes and sight gags.

How children played in America changed dramatically during the 19th century. Manufactured toys were not common in the early 1800s and were mostly purchased by the wealthy in the major cities. By the latter part of the century, however, things began to change. Increased industrial production across the board of all manner of new items included also, of course, toys. The American market, in particular, saw a huge influx of inexpensive machine-made toys imported from Europe, especially Germany. Nuremberg was a center for metalworking factories that produced a great variety of cheap toys. German toy manufacturers controlled more than half of the world toy market by the 1890s and one of the favorite items was the Magic Lantern.



One of the most popular Magic Lantern manufacturers in Nuremberg was the Gebrüder Bing (Bing Brothers) Company and the MOAS collection has a number of sets of Magic Lantern slides from this company.



Some of the most charming lantern slides in the MOAS collection include scenes such as this which shows a father making a shadow puppet image of a rabbit on a door to entertain his children and a comedic series of three scenes showing three unfortunate fishermen – one who has just had his toupee pulled off by an errant fishing hook, the next whose huge nose has found the jaws of a large fish jumping out of the water and the last, a fisherman hoping for fish in his net and pulling up only a frog. (The vignette of the stork and the frog in the water may be a reference to the popular Aesop's fable of the Stork and Frogs, in which the frogs wished for a king and were sent a stork who then ate them. "Be careful what you wish for.") It's easy to imagine over a century ago the gleeful laughter of the children as these scenes were projected on the wall, for the perils and pitfalls of authority figures have been a source of comedy since ancient times.





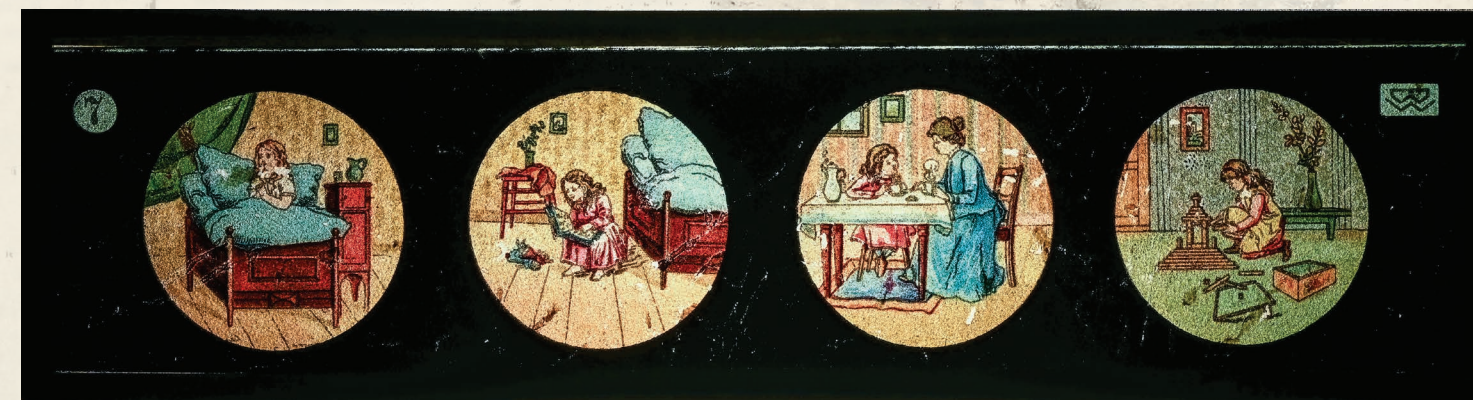


Other stork imagery in the MOAS lantern slide collection involves the age-old dodge to the question “Where do babies come from?” In this slide from the Gebrüder Bing Company, circa 1895 we see that the storks pluck babies off of lilypads and carry them on their backs to send them down the chimney like Santa Claus to a grateful, waiting mother and father.

Speaking of Santa Claus, the MOAS lantern slide collection also has a Christmas scene in which we see a mother admonishing her children to go to sleep (the clock in the background shows after 10:00pm, well past children’s bedtime in this era) so that Santa can come to bring presents, followed by Santa (or is it the father of the family being discovered in the act?) himself arriving to leave his goodies and the mother bringing one of the children in her arms to see what he has left. In a bit of early product-placement marketing, a Magic Lantern is depicted on the table under the Christmas tree as a gift for one of the children.



A Magic Lantern as a Christmas gift in this era was most certainly for a little boy. 19th century and early 20th century Magic Lanterns were marketed mainly as toys for boys and early publications in this period



were full of advertisements proclaiming these as the perfect gifts for young boys, particularly at Christmas time. As a machine and “mechanical,” this type of toy was perceived as masculine. And often the subject matter of these painted slides seemed to be aimed at boys, such as the previous image showing a play battle on hobby horses with play swords, a push broom for a horse, and a cannon with dogs standing in for the horses pulling it. And a reluctant little girl being pulled into the fray.

The activities of girls were depicted as considerably tamer in these lantern slides and they consisted of reading, playing with dolls, having tea with mother, and building chapels out of building blocks (at least she got to play at being an architect).

Other scenes in the Museum’s lantern slide collection include passages from Der kleine Däumling, or the fairy tale of Tom Thumb as well as the exploits of a hapless hunter who loses his hare to a competitor when a stag tramples him and he falls down discharging his rifle and spilling all of his gunpowder. And, finally, the delights of the circus brought into the 19th century drawing room, complete with horse tricks and a clowning jester.

These miniature paintings, which would have been blown up to nearly life-size to entertain the children of over a century and a quarter ago, provide a fascinating view into a simpler time when delight came at such an easy price. The lives of even middle-class children were much harder in this era and, at the very least, full of rules, structure, and discipline. These small, modest objects give us an idea of their happier moments and are a precursor to the moving pictures of the 20th century.

**The Magic Lantern and slides depicted in this article are all gifts of Mary Mohan Dow and Kenneth Worcester Dow.**





# PROVIDING COMMUNITY NEWS AND ADVERTISING FOR OVER 138 YEARS

**LOCALiQ | Daytona Beach**

**NEWSJOURNALONLINE.COM**

ADVERTISING 386.681.2491 - CIRCULATION 877.777.6673  
EDITORIAL 386.681.2222

**Wm  
CHAPIN**  
F.A.I.A. • ARCHITECT

444 Seabreeze Blvd. - suite 200  
Daytona Beach, Florida 32118  
p: 386-299-8363  
williamchapin@mac.com  
www.williamchapin.com

**VAN HOOSE**

Ed Van Hoose  
Ormond Beach, FL

Restoration and Conservation  
of Antique Furniture

386.677.6655  
vanhooseed@yahoo.com



Largest Selection of  
Engagement Rings  
Bracelets, Earrings  
Necklaces, Diamonds  
Colored Stones  
Waterford & Lladro

Expert Jewelry  
Design and Repair

Highest Prices Paid  
for Jewelry and Gold

Trades Welcome

**386-252-6135**

SeabreezeJewelry.com

529 Seabreeze Blvd., Daytona Beach  
Open Mon - Sat 10:30am to 5:00pm, Friday 10:30am to 9:00pm



Appraisals by Inhouse GIA Graduate Gemologist

Family owned and operated for over 40 years



**SAFAVID DYNASTY 1501 - 1736**

THE MONGOL RUIN OF PERSIAN CIVILIZATION WAS UNPRECEDENTED. LIBRARIES, IRRIGATION SYSTEMS, PALACES AND SIMPLE PEOPLE ALL WERE BROUGHT TO UTTER DESTRUCTION. IN A CULTURE WHERE MATHEMATICS, POETRY, MEDICINE AND ART WERE IN FULL FLOWER, GHENGIS KHAN SPARED NOTHING. TWO HUNDRED YEARS OF DARKNESS LAY AHEAD... UNTIL

**SHAH ISMAIL I 1497 - 1524**



**THE ACSENSION OF THE SAFAVIDS!**

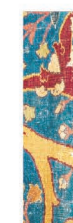
**SHAH ISMAIL I  
AND HIS  
QIZILBASH ARMY**

*FEND OFF THREATS FROM  
ALL SIDES. THEY FIGHT  
THE OTTOMANS, THE  
UZBEKS, AND ALL COMERS  
TO REUNIFY IRAN. THE  
CAPITAL MOVES TO TABRIZ.*

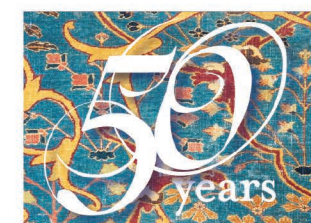


The Qizilbash believed Ismail to be invincible. After his defeat by the Turks, it is said that he died a broken man.

The great carpets that we know, were seeded in the 15th Century, with the ascension of the Safavids, and the great flourish of creative expression.



**Falasiri**  
ORIENTAL RUGS  
WORLD CLASS CARPETS IN THE HEART OF VERO



BUY  
SELL  
APPRAISE  
HAND WASH  
RESTORE

**FINE  
CARPETS  
&  
TEXTILES**





## The Ten-Year Anniversary of the

# DAYTONA BEACH MASTODON

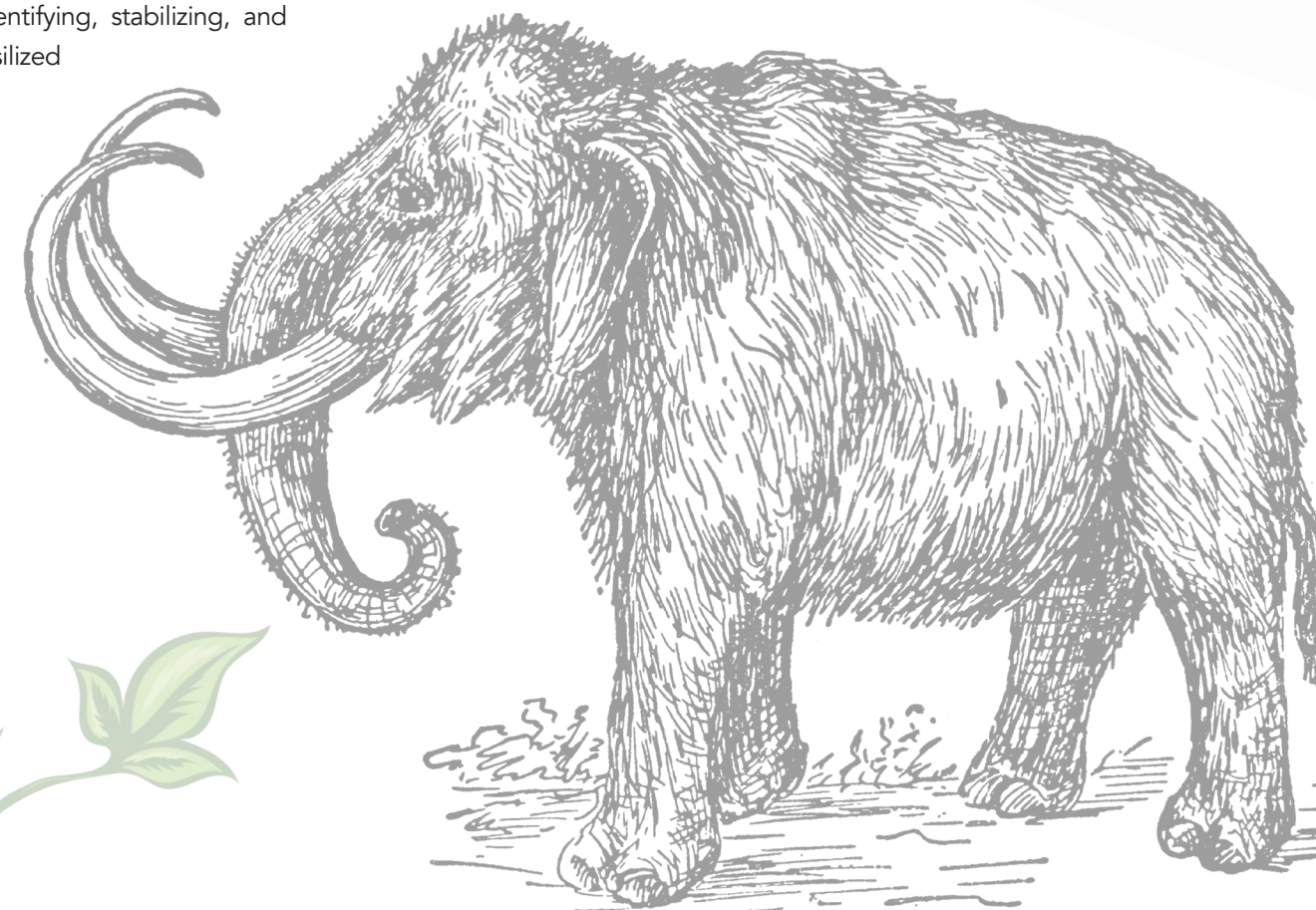
Just before the Thanksgiving holiday in 2011, I received an email about some dinosaur bones unearthed by a Daytona Beach city construction crew working just off of Nova Road. At first, I did not pay it much attention because dinosaurs never lived in Florida. But then again, Nova Road has a history of fossilized mega-fauna like the Museum's most famous resident, the giant ground sloth. I opened the jpeg image and saw a huge lower jaw with intact teeth on my computer screen. I immediately recognized it as the lower mandible (jaw) of an American mastodon elephant. I called the Museum's Executive Director and was instructed to head out to the construction site where the city was digging a stormwater retention pond.

Once on-site, we met Chris Barney of 4C Trucking and Excavation. He and his foremen showed me the area where the large jaw was found and where a few mysterious rocks were embedded in the north wall of the future retention pond. The pond was full of thick mud, and I was wearing a dress shirt and tie. After purchasing some expendable clothes at the nearby Dollar General, I was finally dressed to jump into the goopy mud for a closer look. As I looked at the mysterious rocks, I used my index finger to remove bits of mud. I realized these were not rocks at all, but two large tusks pointing north into the north wall. A closer inspection revealed several exposed vertebrae. It was very exciting to consider the possibility of a mastodon skeleton, but not completely unsurprising. In 1975, the giant ground sloth was discovered only about 2.5 miles away when the city was excavating along Reed Canal Road.

The City of Daytona Beach generously stopped the construction project and gave us a window of time to investigate. Much like the Museum did in 1975 when the giant ground sloth was discovered, the Museum quickly organized a team of volunteers that included staff members, amateur paleontologists, and even a few Board of Trustees members to help excavate the construction site. I called in two close friends of mine, Don and April Brunning, who have experience identifying, stabilizing, and removing fossilized



APRIL BRUNNING, MOAS SENIOR CURATOR OF EDUCATION AND HISTORY, ZACH ZACHARIAS, AND DON BRUNNING HOLDING A MASTODON JAW BONE.





bones. Their help and expertise were vital in guiding the volunteer team over the next four days as we canvassed the construction site and excavated as much of the skeleton as we could find. It was a team effort to excavate and sift through piles of dirt. Don Brunning led the team in wrapping the tusks in a plaster casing to stabilize them. They are very fragile to work with and great care must be used when removing from them the dirt. Unfortunately, the rest of the skeleton was not found in situ and had been dug up before the construction crew realized what they had discovered.

The Museum's Public Relations Department sent out a press release and word spread throughout the local media about an ancient mastodon being discovered in Daytona Beach. For many people this seemed shocking as our area is recognized for its beaches and racing. How could a

huge ice age mammal end up here? In the last ice age, the area around northeast Florida teemed with now-extinct megafauna like giant ground sloths, glyptodonts, saber-toothed cats, mammoths, and more. Dr. David Webb, a paleontologist from the University of Florida, described Volusia County as, "today's Serengeti in Africa except with ice age mammals literally bumping into each other there were so many of them." In fact, present day Nova Road runs over what is known as the Daytona Bone Bed. News teams from everywhere were interested in this scientific discovery. I remember working on the site and seeing helicopters overhead. Don and I were amazed when we saw a brave cameraman on the edge of the cabin filming us. The 6:00 pm news was doing a live feed. It was then I realized this is a big deal to our community. The Daytona Beach News-Journal

covered the excavation in detail with multiple articles throughout the year. Remarkably, it was voted the sixth most popular news story of 2012.

What did we find? Once the excavation was over and the giant tusks were carefully put into plaster jackets, the tusks and all the bone parts were brought to the Museum. Now began the long process of piecing the fragments together. We had fossil bones from every part of the body from tail vertebrae, toe bones, skull parts, rib fragments, leg pieces, and more. A special volunteer, Maggie Greer, saw all the news coverage and joined the team. She had worked in the fossil paleo lab at the University of Indiana. She cleaned and sorted all of the bones and categorized them. We realized through examination that we had more than one deceased mastodon. We found teeth from a baby and part of its tusk, meaning we

APRIL BRUNNING AND DON BRUNNING APPLYING A PLASTER CAST TO THE MASTODON BONES.



ABOVE: A MASTODON TUSK AND ASSORTED BONES THAT WERE FOUND DURING THE DIG.



ABOVE: THE MOUNTED DAYTONA MASTODON WITHIN THE PREHISTORY OF FLORIDA GALLERY AT MOAS.

had at least two individuals that died there together. We also had the tips of the tusks, which is very rare to find.

What exactly is a mastodon? A mastodon is a type of extinct elephant that split off from mammoths about 20 million years ago. Mammoths evolved out of Africa and moved throughout Europe, Asia and, eventually, North America. The mastodon's evolution happened mostly in North and Central America. Think of a mastodon as a husky version of a mammoth that is both stockier and shorter. It had a flat head with straighter tusks growing up to 8 feet in length. Mastodons were also covered in a shaggy coat of fur. Their teeth were adapted to browsing on shrubs, trees, and bushes. Mammoth teeth are adapted for grazing on grasses. It is also important to note that woolly mammoths never lived in Florida. Rather, its larger, less-wooly cousin, the Southern Mammoth, occupied the Florida peninsula.

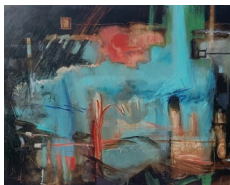
When what is now known as the L. Gale Lemerand Wing of the Museum was rebuilt in 2015, plans were included to add the Daytona Mastodon to the exhibit. We did not have enough remains for a complete skeleton but our team had a great idea to put the skeleton in a silhouette on the wall with the salvageable bones mounted in this unique fashion. The Museum, the City of Daytona Beach, and so many wonderful volunteers, both professional and amateur, gave of their time and passion to make sure the fossils were saved, preserved, and displayed. Now, two ice age giants, the giant ground sloth and the mastodon, stand together bringing awe, inspiration, and science to our community.



# SPRING EXHIBITS



**CRACK IN THE MOON: THE ART OF ALETTE SIMMONS JIMÉNEZ**  
**OPEN THROUGH MAY 8, 2022**  
**KARSHAN CENTER OF GRAPHIC ART**  
The work of multidisciplinary Miami based artist, Alette Simmons-Jiménez, is rooted in a tradition that values vision as well as craft. Her work celebrates the physicality of the handmade while incorporating tangible spiritual components from our natural surroundings. On receiving a BFA from Newcomb College/Tulane (New Orleans) she relocated to the Dominican Republic and began a studio practice. Eventually relocating to the Dominican Republic and began a studio practice. Eventually relocating to Miami, her paintings, sculptures, collages and installation pieces reflected the energy and multi-cultural layers that have become synonymous with the Miami art scene. Finding beauty in all types of substances from fabrics, strings, beads, plexiglass, and vinyl coverings, Alette Simmons Jiménez's art represents imagination and innovation in simple yet surprising ways. *Image Credit: "A STICK, A STONE, A TREE" - m/m painting collage, oil, acrylic, china marker, fabrics, fibers, and papers, on hanging canvas tapestry, grommets, 84" x 60" (2020). Courtesy of the artist.*



**FLORIDA PALETTE: FLORIDA ARTISTS GROUP ANNUAL EXHIBITION**  
**OPEN THROUGH APRIL 17, 2022**  
**GARY R. LIBBY ENTRY COURT AND L. GALE LEMERAND WING**  
The Florida Artists Group (FLAG) was incorporated in 1949 as a not-for-profit organization of professional visual artists who have attained international, national, and statewide recognition. As a juried show, this exhibition brings to Daytona Beach some of the best Florida artists working today. *Image Credit: Margaret Schnebly Hodge, Impermanence, 2021, oil on canvas. Courtesy of the artist.*



**A RIVER RUNS THROUGH IT: HUDSON RIVER SCHOOL AND OTHER LANDSCAPES FROM THE COLLECTION**  
**OPENING APRIL 23, 2022**  
**THROUGH JULY 31, 2022**  
**GARY R. LIBBY ENTRY COURT**  
19th and early 20th century scenes of waterways from around the country, including fine examples of Hudson River School painting as well as traditions of American landscape painting from other areas in the United States. *Image Credit: Charleston, South Carolina, United States' Charles Fraser (1782-1860), On The Ashley River, South Carolina, 1840; oil on canvas; Gift of Kenneth Worcester Dow and Mary Mohan Dow; 89.16.020*

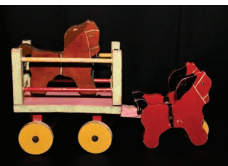


**VOLUSIA CREATES ART**  
**OPEN THROUGH APRIL 23, 2022**  
**BOUCHELLE CHANGING GALLERY & NORTH WING CORRIDOR**  
From preschool through high school, the Annual Volusia Creates Art program demonstrates the amazing pool of artistic talent. This judged exhibit features the best student works of art from around the county. This premier exhibit showcases a wide range of subject matter from portraiture to abstract sculpture.



**LADIES FIRSTS: THE ART OF CARLOS LUNA**  
**OPEN THROUGH APRIL 24, 2022**  
**FORD GALLERY AND NORTH WING CORRIDOR**  
One of the foremost contemporary Cuban American artists, Carlos Luna is part of a generation of Latin American artists who embrace their strong heritage and traditions while reinventing themselves along the way. Luna tells stories and narrates fables through detailed and richly painted canvases, mixed media works on paper, lavish tapestries, sculptures and installations.

This first major exhibition of Luna's work in many years is an homage to women and femininity. It is a tribute to the creative power and strength of the women in his own life as well as on the larger world stage. *Image Credit: Carlos Luna, Bailaora, 2015, Jacquard tapestry, 101x85 inc. Courtesy of the artist.*



**CHILD'S PLAY: HISTORICAL TOYS AND GAMES FROM THE COLLECTION**  
**OPENING APRIL 30, 2022**  
**THROUGH AUGUST 28, 2022**  
**BOUCHELLE CHANGING GALLERY**  
MOAS has many unique and whimsical toys and games from centuries past in its collection. This exhibition will bring together examples from Europe and America and look at the unique aspects of these treasured items that brought joy to children many decades ago. *Image Credit: Early 20th century, Toy Horse Cart with Horses; painted wood; The Root Family Museum; 99.24.2132*



**BEYOND THE PLATE: MURALS AND OTHER CERAMICS FROM THE KENDALL ART CENTER**  
**OPENING MAY 7, 2022**  
**THROUGH JULY 17, 2022**  
**FORD GALLERY**  
A selection of ceramic murals and other works by some of Miami's best known Cuban artists working today, including a monumental chess set made of fired and glazed clay by the artist Yvonne Ferrer. *Image Credit: Yvonne Ferrer, Humanity's Gambit, fired and glazed ceramic.*



**THE BITTEN LINE: ETCHINGS FROM THE COLLECTION**  
**OPENING MAY 17, 2022**  
**THROUGH JULY 17, 2022**  
**KARSHAN CENTER OF GRAPHIC ART**  
The Museum of Arts & Sciences has fine examples of the art of etching from the Renaissance to the present era including artists such as Rembrandt, Hogarth, Degas, Renoir and many others. These works will be brought together in a celebration of this cherished print medium, valued through the ages for the ability to bring forth rich contrast with its intense black ink impressions. *Image Credit: United States, Frank N. Wilcox (1887-1964), Fisherman of Percé, 1928; etching; donated by Mr. & Mrs. Prasse Bittel in memory of Leona E. Prasse; 92.05.008*



**FLORIDA WOMEN'S ARTS ASSOCIATION**  
**OPEN THROUGH MAY 22, 2022**  
**ROOT HALL**  
This organization brings recognition to the achievements of Florida women artists by exhibiting and supporting art by women and by educating the public about their accomplishments. This unique exhibition of painted umbrellas evokes the beauty of the first Spring rains. Rain realistically has no color, but imagine if you will these clear drops of rain alighting on the colors of nature infusing them with depth and perspective.



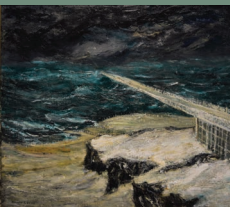
**KABLAM! POP ART/OP ART FROM THE COLLECTION**  
**OPENING MAY 28**  
**THROUGH JULY 31, 2022**  
**ROOT HALL**  
MOAS has some of the major names in mid-twentieth century Pop Art and Optical Art, including Warhol, Rauschenberg, Rosenquist, Robert Indiana and Richard Anuszkiewicz. This exhibition brings together these colorful, energetic works in homage to a groundbreaking period in 20th century art when great advances were made regarding what was considered worthy of depiction in fine art. *Image credit: John Matos (American, b. 1961); Kablam, 1999; serigraph; Gift of Martin Karlin; 2003.04.005*

## CURRENTLY ON DISPLAY AT THE CICI AND HYATT BROWN MUSEUM OF ART



**VOLUSIA COUNTY**  
Scenes from Volusia County and the importance of art schools and art venues in the development of culture within the county. *Featured painting: South Beach Street, Daytona, James Ralph Wilcox, Volusia County*

**"THE LATEST NEWS FROM FLORIDA": WOOD ENGRAVINGS FROM 19TH CENTURY PERIODICALS**  
**A. WORLEY BROWN & FAMILY GALLERY**  
Wood engravings from 19th century illustrated magazines and journals documenting events in the remote land of Florida - a state that few northerners knew a lot about or would ever visit. *Featured Painting: Harper's Weekly, Ft. Pickens 1861*



**FLORIDA WEATHER**  
**FRANCE FAMILY GALLERY**  
Experience a myriad of Florida weather in just one day. The Florida Weather gallery offers a look at Florida weather as represented by art. *Featured painting: Naomi Duckman (Furth); Storm on Seven Mile Bridge, Florida Keys, 1935*



**GONE FISHIN'**  
**SENA H. AND THOMAS L. ZANE GALLERY**  
This exhibition emphasizes Florida's reputation for being one of the greatest sport fishing areas in the world. From locals with simple cane poles to celebrities on yachts decked out for challenging sailfish and tarpon. *Featured painting: Sam Stoltz, Strife of the Sea*

**THE SEMINOLE AND THE EVERGLADES**  
**FRANCE FAMILY GALLERY**  
The Everglades is a region of tropical wetlands that occupies the southern portion of Florida. Water leaving the vast, shallow Lake Okeechobee in the wet season forms a slow-moving river 60 miles wide and over 100 miles long. Human habitation in the southern portion of the Florida peninsula dates from 15,000 years ago. The region was dominated by the native Calusa and Tequesta tribes. After European colonization, both tribes declined. The Seminole nation emerged out of groups of Native Americans, mostly Creek, from what are now the northern Muscogee peoples. Artists from the early 19th century on have found the visual characteristics of the people and the land compelling subjects for artworks. *Featured painting: James F. Hutchinson; Seminole Man, 1992*



# SPRING PROGRAMS

## MUSEUM NOTICE:

Please note that any of these events are subject to change or cancellation.

Please check the event calendar at [MOAS.org](http://MOAS.org) for the latest updates on these upcoming events.

## ONGOING EVENTS

### Wednesday, Yoga in the Gallery Wednesday, 5:30pm-6:30pm

Take a break from your busy day and enjoy weekly Yoga in the Gallery at the Cici and Hyatt Brown Museum of Art. Meet in the lobby to join registered yoga instructor, Ashley Brooks of Holistic Movements, for an hour-long session that will provide you with an opportunity to practice a series of gentle yoga poses. Class is open to all experience levels. Please bring a mat, towel, and water. Space is limited and registration is required. RSVP to the Museum at 386-255-0285. \$5.00 for members, \$10.00 for non-members.

## APRIL

### Saturday, April 9 12:00pm-5:00pm MOAS Space Day

Join us for the Museum's biggest celestial event of the year as we celebrate all things space in an engaging and interactive environment for the whole family. Learn about the science, exploration, and beauty of space through exciting lectures, shows in the Lohman Planetarium, hands-on activities, and solar observing with telescopes in our front entrance courtyard (weather permitting). Throughout the Museum, there will be displays and activities from the GE Volunteers, ERAU's ERFSEDS Rocket Club, Amateur Astronomy Club, Society of Women Engineers, and Astronomy Professors from the University's Physical Sciences Department. A food truck will also be set up in our courtyard loop for your enjoyment. Stay tuned for our speaker and show lineup in the Lohman Planetarium. We cannot wait to see you for this out-of-this-world event. Free for members or with paid museum admission. Tickets for planetarium presentations are included with admission and are on a first-come, first-served basis.

### Saturday, April 9 7:00pm-10:00pm Second Saturday Laser Rock Concerts

7:00pm Laser Retro (80s hits)  
8:00pm Rush 2112  
9:00pm Pink Floyd – The Dark Side of the Moon  
Seating for these concerts is very limited to allow for proper social distancing. Advanced purchase of tickets is recommended by calling the Museum at 386-255-0285. \$5.00 for one show, \$7.00 for two shows, \$9.00 for three shows.

### Thursday, April 14 11:00am-12:00pm VIRTUAL MEMBER-ONLY Coffee with a

**Curator | Elegant Abodes of Volusia County**  
Grab your coffee and join Senior Curator of Education and History, Zach Zacharias virtually on ZOOM to learn about the famous historic homes and owners that make up Volusia County from the John B. Stetson Mansion to Debary Hall and many others spread throughout every city in the county. Learn about Volusia County's history and its role in the Gilded Age. Discover the county's unique architectural history and how it played a role in the lives of the people who lived here. Register online at [MOAS.org](http://MOAS.org) or by calling the Museum at 386-255-0285. Free for members. Must be a MOAS member to attend.

### Thursday, April 21 2:00pm-3:30pm Florida Vistas Book Club: *The Gladesmen: Gator Hunters, Moonshiners and Skiffers* by Glenn Simmons

Join us at the Cici and Hyatt Brown Museum of art for our next Florida Vistas Book Club meeting where we will be discussing *The Gladesmen: Gator Hunters, Moonshiners and Skiffers*. To learn more about this book visit [MOAS.org](http://MOAS.org). Advanced RSVP for this program is required by registering online at [MOAS.org](http://MOAS.org) or by calling the Museum at 386-255-0285. Free for members, \$5.00 for non-members

### Thursday, April 21 5:30pm-7:30pm Wine Tasting: Backyard Spring BBQ

Join us at the Cici and Hyatt Brown Museum of Art for our quarterly wine tasting series with S.R. Perrott. Spend the evening among friends while you sip up knowledge on swirling, tasting, and describing wine while learning about different pairings of light appetizers by Ravish Catering. With spring right around the corner, this quarter's program will be featuring different wines that would make great additions to any backyard BBQ! This event is for ages 21 and older. Advanced purchase is required as seating is limited. Call the Museum at 386-255-0285 or visit [MOAS.org](http://MOAS.org) to reserve your seat. No refunds after April 15. \$35.00 for members, \$45.00 for non-members.

### Friday, April 22 2:00pm-2:50pm and 3:00pm-3:50pm Planet Earth II, Blue Planet II

Join us in the Lohman Planetarium for a very special presentation as we mark the 52nd anniversary of the first Earth Day with an episode each of the BBC's Planet Earth II and Blue Planet II. Accompanied by the music of Hans Zimmer, both series are presented and narrated by naturalist Sir David Attenborough. View your home planet like never before in 4K Ultra High Definition. Popcorn and snacks will be available for purchase at the concession stand. This event is free for members or with paid museum admission. Seating is limited and available on a first come, first served basis for each show.

### Friday, April 22 2:00pm-3:00pm Porch Talk at Gamble Place: Introduction to the Vikings

Discover the tremendous impact Vikings had on the history and culture of Western civilization. Join Senior Curator of Education and History, Zach Zacharias at Gamble Place in Port Orange to learn about the real history of the Norsemen. The Vikings were an unprecedented expansion of Scandinavian peoples moving into the wider medieval world. As traders and raiders, explorers and colonists, they ranged from eastern North America to the Asian steppe, from Dublin to Carolingians. Learn about the Viking warships and how they dominated the seas for over 300 years. Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285. Free for members or \$5.00 for non-members.

### Friday, April 22 6:00pm-9:30pm MOAS Astronomy Night at the Ballpark

Join the Museum of Arts & Sciences for a special night at the Jackie Robinson Ballpark! Be sure to be one of the first 500 fans at the ballpark to receive a free Astronomy Night t-shirt! Gates open at 6:00pm and the Tortugas will take on the Bradenton Marauders at 7:00pm. Following the game, there will be a special live night sky tour with MOAS Curator of Astronomy, Seth Mayo where we will be looking at our Daytona sky. We will have the opportunity to catch the last glimpse of the winter constellations of Orion, Taurus, and Gemini, while mainly showcasing the prominent spring celestial objects that are now high up at this time of the year. The Big Dipper will be quite noticeable on this evening and Seth will demonstrate how to use this famous star pattern to easily find the North Star. Seth will also provide some fun facts about the fascinating deep sky objects hidden among the starfield. Check out <https://www.milb.com/daytona> to purchase tickets.

### Saturday, April 23 3:00pm-4:00pm An Afternoon with Florida History: Ophelia, Florida Suffragette

Join History Reenactor, Dianne Jacoby, in the Root Family Auditorium at the Museum of Arts & Sciences as she performs Ophelia, Florida Suffragette. A woman's right to vote was finally granted 102 years ago back in 1920! Raised in a traditional family, Ophelia ponders the roles and rights of Florida women leading up to the fight for the right to vote. What was her part in it? At first, Ophelia attends the early Florida Suffragette meetings. But soon more confrontational tactics become necessary if Washington is to take women's right to vote seriously. What struggles did women face attaining the right to vote? Why did Suffragettes wear white? Why did Florid wait until 1969 to ratify suffrage for women? Find out when you celebrate with Ophelia, Florida Suffragette. Free for members, with paid museum admission, or \$7.00 for non-members.

### Monday, April 25 5:00pm-7:00pm MOAS After Hours: In Partnership with The Locals Mix

Join us at the Museum of Arts & Sciences for exclusive after-hours access to the Museum's galleries, happy hour drink specials, and live music by Sammy Rose and DJ Jukebox Bully, in partnership with The Locals Mix. This After Hours will feature the planetarium show, Sonification of Space. This show will infuse mind-bending sound and beautiful astronomical imagery together for an immersive celestial experience. Using content from NASA's "Data Sonification" project, which converted various space telescope images into an auditory format, we will gain a unique perspective of the universe using multiple sensory methods. You will get to "hear" the visual data from objects like the Whirlpool Galaxy, Cat's Eye Nebula, Supernova 1987A, and even our own Milky Way's galactic center. Free for members, \$5.00 for non-members.

## MAY

### Friday, May 6 8:00pm-11:00pm Spring Sky Festival

Enjoy the splendor of the night sky as we host a star party in our MOAS Entry Courtyard, highlighting the spring night sky and maybe catch a stray Eta Aquarid meteor. We will have a wide variety of telescopes set up outside to observe the crescent Moon, Leo Triplet of galaxies, Hercules Globular Cluster, and much more. Throughout the evening we will be performing live outdoor sky tours with green laser pointers, and there will be astronomy programs held inside the Lohman Planetarium. The outdoor portion of the event is free and is weather permitting. Lohman Planetarium shows are free for members, \$5.00 per show for non-members, and free for children 5 and under. Parking is limited. Planetarium shows have limited seating and are first-come, first-served.

### Lohman Planetarium Show Schedule 8:00pm Live "The Sky Tonight" Show 9:00pm Flight Through the Universe

### Wednesday, May 11 6:00pm-7:00pm VIRTUAL LECTURE: Ask Our Curator of

**Astronomy**  
Join MOAS Curator of Astronomy, Seth Mayo, virtually on ZOOM for this audience-guided show that can take you anywhere in the universe that you would like to go! Come with your questions, curiosities, and interests, as we navigate freely through powerful astronomical software. We cannot wait to explore the universe with you! Register online at [MOAS.org](http://MOAS.org) or by calling the Museum at 386-255-0285. Free for members, \$7.00 for non-members.

### Thursday, May 12 11:00am-12:00pm MEMBER-ONLY Coffee with a Curator: Beyond the Plate

Join Chief Curator/Gary R. Libby Curator of Art, Ruth Grim in the Ford Gallery at MOAS for a presentation on the exhibition *Beyond the Plate: Murals and Other Ceramics from the Kendall Art Center*. Founded by Leonardo Rodriguez, the Kendal Art Center is one of the leading venues in the Miami area devoted to the creation and presentation of contemporary Cuban-American Art. Register online at [MOAS.org](http://MOAS.org) or by calling the Museum at 386-255-0285. Free for members. Must be a MOAS member to attend.

### Friday, May 13 7:00pm-8:30pm Movie Night in the Lohman Planetarium: Friday the 13th Part II

Five years after the massacre at Camp Crystal Lake, the nerve-wracking legend of Jason Voorhees and his diabolical mother lives on. Despite warnings to stay away, new counselors explore the area and the horror returns. This film will be displayed in 16:9 aspect ratio on the Planetarium dome in stunning 4K Ultra High Definition. Popcorn and snacks will be available at the concession stand. Please arrive at least 15 minutes before the event start time as this event will start promptly with no late entry. Tickets may be purchased in advance by calling 386-255-0285. \$8.00 for members, \$10.00 for non-members

### Saturday, May 14 7:00pm-10:00pm Second Saturday Laser Rock Concerts

7:00pm Laser Vinyl  
8:00pm Laser Zeppelin  
9:00pm Laser Queen  
Seating for these concerts are limited. Advanced purchase of tickets is recommended by calling the Museum at 386-255-0285. \$5.00 for one show, \$7.00 for two shows, \$9.00 for three shows.

### Wednesday, May 18 3:00pm-4:00pm Talk and Walk: The Amazing Illustrations of Harper's Weekly, A Journal of Civilization

Join Senior Curator of Education and History, Zach Zacharias, at the Cici and Hyatt Brown Museum of Art for a look at the Florida images from Harper's Weekly. Once the most popular newspaper in America from 1855-1910, Harper's Weekly gave birth to modern journalism. Using amazing illustrations carved from wood engravings and new technology, Harper's Weekly could visually document moments in American and Florida history with great ease. A blend of art, technology, and history, this presentation takes you on a visual journey through the state during the Civil War and the Gilded Age of Florida. Free for members or with paid museum admission.

### Thursday, May 19 2:00pm-3:30pm Florida Vistas Book Club: *The Thief Taker's Choice: A Novel of the Second Seminole War* by Arthur C. Bivens, III

Join us at the Cici and Hyatt Brown Museum of art for our next Florida Vistas Book Club meeting where we will be discussing *The Thief Taker's Choice: A Novel of the Second Seminole War*. To learn more about this book visit [MOAS.org](http://MOAS.org). Advanced RSVP for this program is required by registering online at [MOAS.org](http://MOAS.org) or by calling the Museum at 386-255-0285. Free for members, \$5.00 for non-members.

### Thursday, May 19 4:00pm-4:45pm Special Lohman Planetarium Show: Birth of the Solar System

Join our Lohman Planetarium Volunteer and Stetson University physics student, Xavier Inosencio, as he presents on the fascinating evolution of our Solar System using our sophisticated planetarium universe software. Xavier will explore the birth of our Sun as it became a main sequence star and how that influenced and drove the chaotic formation of the planets and moons we find around us today. Free for members or with paid museum admission.

### Tuesday, May 24 5:30pm-7:00pm Spring Basket Arrangement Class with Simply Roses Florist

Join us in Root Hall at the Museum of Arts & Sciences for a creative and interactive floral arranging class with Ashlee Roberson, owner of Simply Roses Florist. Admission includes all supplies and florals to create a beautiful spring basket arrangement to bring home with you! Seating is limited and advanced registration is required. Visit [moas.org](http://moas.org) or call the Museum at 386-255-0285 to reserve your spot! \$30.00 for members, \$35.00 for non-members.

### Saturday, May 28 3:00pm-3:40pm Special Lohman Planetarium Show: Birth of the Solar System

Join our Lohman Planetarium Volunteer and Stetson University physics student, Xavier Inosencio, as he presents on the fascinating evolution of our Solar System using our sophisticated planetarium universe software. Xavier will explore the birth of our Sun as it became a main sequence star and how that influenced and drove the chaotic formation of the planets and moons we find around us today. Free for members or with paid museum admission.

## JUNE

### Friday, June 3 6:30pm-8:30pm Bonkerz Comedy Night

Join us in the Root Family Auditorium at the Museum of Arts & Sciences for a fun night with Bonkerz Comedy Club featuring comedian, Dean Napolitano as seen on HBO, The Late Late Show, Burn Notice, Last Vegas, Heroes, Transformers 3, and much more – with special guest Adam Snair. Doors open at 6pm. Show is recommended for ages 18 and older. Seating is limited and advanced registration is encouraged. Visit [MOAS.org](http://MOAS.org) or call the Museum at 386-255-0285 to purchase admission. \$10.00 for members, \$12.00 for non-members.



**Saturday, June 4**  
**10:00am-5:00pm**  
**Volusia County Chess Club 2022 Blitz**  
**Championship**

Join us in Root Hall at the Museum of Arts & Sciences for a real chess tournament and observe some of Volusia County's best chess players in action. This tournament is called Blitz Chess and is a battle to determine the area's best blitz player. Blitz Chess is also known as Speed Chess, 5-minute Chess, Lighting Chess (2-minute), and Bullet Chess (1-minute). Every player will play everyone else at the tournament two times, once as black and once as white. One point is given for a win, half a point for a draw, and no points for a loss. This player with the most points at the end of the tournament will take home a trophy and the title of Volusia County Chess Club Blitz Champion.

Free for members or with paid museum admission.

**Tuesday, June 7**  
**2:00pm-3:00pm**  
**Talk and Walk: Explore Africa with Head**  
**Gallery Specialist, Marion Whelton**

Join the Museum's Head Gallery Specialist in the Elaine and Thurman Gillespy, Jr. Gallery at MOAS for a tour of the African objects that were donated to the Museum in the 1980s. In their historic homeland, in isolated or highly organized communities, these items played vital roles in daily events. For example, in ceremonies for celebration, initiation from childhood into adulthood, and preparation for war or harvesting. The establishment of this seminal collection came at a time of intense growth for the Museum and is considered one of the most exciting and exotic groupings within the collection as a whole. Free for members or with paid museum admission.

**Thursday, June 9**  
**11:00am-12:00pm**  
**VIRTUAL MEMBER-ONLY Coffee with a**  
**Curator | Space Update**

Grab your coffee and join Curator of Astronomy, Seth Mayo virtually on ZOOM for an update on all of the exciting things going on in space. Seth will provide a look at the current night sky and preview some of the celestial highlights to look forward to for the rest of the year. Space exploration will also be a major topic as he provides updates on current and planned missions like the Mars Perseverance rover and the status of the James Webb Space Telescope. Register online at MOAS.org or by calling the Museum at 386-255-0285. Free for members. Must be a MOAS member to attend.

**Saturday, June 11**  
**7:00pm-10:00pm**  
**Second Saturday Laser Rock Concerts**

7:00pm Laser U2  
 8:00pm Laser Beatles  
 9:00pm Pink Floyd – The Wall  
 Seating for these concerts are limited. Advanced purchase of tickets is recommended by calling the Museum at 386-255-0285. \$5.00 for one show, \$7.00 for two shows, \$9.00 for three shows.

**Tuesday, June 14**  
**5:30pm-7:30pm**  
**Oceans Dance Social**

Join us at the Cici and Hyatt Brown Museum of Art for a fun night of cocktails and dancing. Guests can enjoy a cash bar with signature cocktails and complimentary appetizers followed by a private dance lesson by Oceans Dance Studio, surrounded by the artwork in the Museum's permanent gallery. Through music, movement, and making connections Oceans Dance Studio is a community looking to inspire adults seeking to learn the art of partner dancing. Group dance lessons are a fantastic way for experienced dancers and beginner dancers to learn a variety of dances. Group classes work on a rotation basis, which means we rotate partners during each class so it's never necessary to have a partner to learn any of the dances! Those ages 21 and older are welcome. Spots are limited. Register in advance online at MOAS.org or by calling the Museum at 386-255-0285. No refunds after June 7.

\$25.00 for members, \$30.00 for non-members.

**Wednesday, June 15**  
**12:00pm-1:30pm**  
**Lunch and Learn: Artworks from the**  
**Mezzanine**

Join Senior Curator of Education and History, Zach Zacharias, and Master Landscape Artist, Arnold Desmarais at the Cici and Hyatt Brown Museum of Art for a tour of the unique paintings on the upper mezzanine. Ecology, history, and beautiful landscapes of oils and watercolors are found on the top floor mezzanine. Call the Museum at 386-255-0285 to RSVP and to place your lunch order. Space is limited and advanced RSVP and paid lunch are required. Member Admission: Lecture is free plus \$10.00 boxed lunch. Non-Member Admission: Lecture is \$5.00 plus \$10.00 boxed lunch.

**Thursday, June 16**  
**2:00pm-3:30pm**  
**Florida Vistas Book Club: *The Houses of St.***  
***Augustine, 1565-1821* by Albert Manucy**

Join us at the Cici and Hyatt Brown Museum of art for our next Florida Vistas Book Club meeting where we will be discussing *The Houses of St. Augustine, 1565-1821*. To learn more about this book visit MOAS.org. Advanced RSVP for this program is required by registering online at MOAS.org or by calling the Museum at 386-255-0285. Free for members, \$5.00 for non-members.

**Friday, June 17**  
**7:00pm-10:00pm**  
**Movie Night in the Lohman Planetarium:**  
**Apollo 13**

April 11, 1970: the Apollo 13 mission launches from Cape Canaveral in an attempt to land on the Moon. Now more than 50 years later, join us in the Lohman Planetarium to watch Hollywood's retelling of this exciting mission gone wrong in Apollo 13. Tom Hanks stars as Astronaut Jim Lovell in this faithful retelling of historical events, which earned nine Academy Award nominations. Don't miss this Movie Night – "Failure is not an option." This film will be displayed in 16:9 aspect ratio on the planetarium dome in stunning 4K Ultra High Definition. Popcorn and snacks will be available for purchase at the concession stand. Please arrive at least 15 minutes before the event start time. Advanced purchase of tickets is recommended by calling 386-255-0285. \$8.00 for members, \$10.00 for non-members.

**Saturday, June 18**  
**3:00pm-4:30pm**  
**An Afternoon with Florida History: The Grand**  
**Dames | The Historic Hotels of Florida**

Florida's sands, sun, and laid-back lifestyle have attracted hoteliers for ages. These storied hotels of yesteryear are all still welcoming guests. Join Senior Curator of Education and History, Zach Zacharias in the Root Family Auditorium at the Museum of Arts & Sciences to take a modern day tour and to learn about the history of these historic luxury hotels from around the state. Free for members, with paid museum admission, or \$7.00 for non-members.

**Saturday, June 25**  
**7:00pm-10:00pm**  
**Summer Saturday Laser Rock Concerts**

7:00pm Hypnotica  
 8:00pm Pink Floyd – The Dark Side of the Moon  
 9:00pm Laser Queen  
 Seating for these concerts are limited. Advanced purchase of tickets is recommended by calling the Museum at 386-255-0285. \$5.00 for one show, \$7.00 for two shows, \$9.00 for three shows.

**Monday, June 27**  
**5:00pm-7:00pm**  
**MOAS After Hours: In Partnership with The**  
**Locals Mix**

Join us at the Museum of Arts & Sciences for exclusive after-hours access to the Museum's galleries, happy hour drink specials, and live music by May Tatro (CHVXS) and DJ Jukebox Bully, in partnership with The Locals Mix. Guests can enjoy an exhibit talk in the Ford Gallery with Chief Curator/Gary R. Libby Curator of Art, Ruth Grim and guest curators from the Kendall Art Center on the exhibition *Beyond the Plate: Murals and other Ceramics* from the Kendall Art Center. This exhibition highlights important large-scale works in fired and glazed ceramic as well as other sculptural pieces in a celebration of this art form and its history within Cuban art. Free for members, \$5.00 for non-members.

**Wednesday, June 29**  
**3:00pm-4:00pm**  
**The Art of the Horse: 30,000 Years of Art**

The horse is man's true best friend, the builder of civilization. The horse has been shown and celebrated since humans began creating art, and the impact of the horse has been immense on human culture. Join Senior Curator of Education and History, Zach Zacharias in the Root Family Auditorium for a unique look at world-class art examples and pieces from the collection. Discover how horses went from part of the background to front and center in portraitures. Free for members or with paid museum admission.

**SPRING BASKET**  
**ARRANGEMENT CLASS**  
 with  
**Simply Roses**

**THURSDAY, MAY 24 | 5:30PM-7:00PM**  
 at the **MUSEUM OF ARTS & SCIENCES**

Ashlee Roberson, owner of Simply Roses Florist, will walk you through the art and design of floral arranging. Admission includes all supplies and florals to create a beautiful spring basket arrangement to bring home with you!

Visit MOAS.org or call the Museum at 386-255-0285 to reserve your spot!

\$30.00 for members, \$35.00 for non-members

**MOAS**  
 MUSEUM OF ARTS & SCIENCES

**BONKERZ**  
 Comedy Productions

**MOAS**  
 MUSEUM OF ARTS & SCIENCES

**Dean Napolitano**  
 -AS SEEN ON HBO

**JUNE 3, 2022**  
 SHOW 6:30PM | DOORS 6:00PM

SHOW IS RECOMMENDED FOR AGES 18 AND OLDER

VISIT MOAS.ORG OR CALL  
 THE MUSEUM AT 386.255.0285

\$10.00 FOR MEMBERS  
 \$12.00 FOR FUTURE MEMBERS

**Follow Us @MOASDaytona**

ON OUR SOCIAL MEDIA CHANNELS FOR EVENT AND EXHIBIT  
 INFORMATION, RECAP PHOTOS, AND MORE!





MUSEUM OF ARTS & SCIENCES

# 2022 SUMMER LEARNING INSTITUTE

JUNE 13 - AUGUST 5

VISIT [MOAS.ORG](http://MOAS.ORG)  
FOR THE PROGRAM  
AND TO REGISTER!

## Your Community Center Stage

Celebrating 18 Years of Exciting Events,  
Art, Theater, Music, Travel,  
and Fabulous Festivals

**Print • Digital • Mobile**

To Advertise or Subscribe, Call, Click or Connect:  
386 299 9568 • [jang@gagepub.com](mailto:jang@gagepub.com)  
[www.gagepub.com](http://www.gagepub.com)

FLAGLER ORMOND HALIFAX NEWSMYRNA DELAND

**PROUD SPONSOR OF THE MUSEUM OF ARTS & SCIENCES**

**Wm CHAPIN**  
F.A.I.A • ARCHITECT

444 Seabreeze Blvd. - suite 200  
Daytona Beach, Florida 32118  
p: 386-299-8363  
[williamchapin@mac.com](mailto:williamchapin@mac.com)  
[www.williamchapin.com](http://www.williamchapin.com)

**VAN HOOSE**  
Ed Van Hoose  
Ormond Beach, FL

Restoration and Conservation  
of Antique Furniture

386.677.6655  
[vanhooseed@yahoo.com](mailto:vanhooseed@yahoo.com)

*Seabreeze*  
**FINE JEWELRY**

Daytona Regional Chamber of Commerce | Jewelers of America | BBB Accredited Business

Largest Selection of  
Engagement Rings  
Bracelets, Earrings  
Necklaces, Diamonds  
Colored Stones  
Waterford & Lladro

Expert Jewelry  
Design and Repair

Highest Prices Paid  
for Jewelry and Gold

Trades Welcome

**386-252-6135**  
[SeabreezeJewelry.com](http://SeabreezeJewelry.com)  
529 Seabreeze Blvd., Daytona Beach  
Open Mon - Sat 10:30am to 5:00pm, Friday 10:30am to 9:00pm

Appraisals by Inhouse GIA Graduate Gemologist  
Family owned and operated for over 40 years





(FROM LEFT TO RIGHT) MAUREEN MAHONEY, SHERRY ERBE, JOANNA XENEDES, KARRIE HOULTON, MARGET TOH, DIANE ROGETS, DIANE LESSARD, CAROL ANN LAROZA, JOAN HORNEFF, SUSAN ZAHNISER, AND JENNIE PALMER

## Springing into the Next Quarter!

I hope you were able to attend our general meetings the first quarter of 2022. We had several great guest speakers with interesting topics that our members enjoyed. We always have a small social and a business meeting which are great ways to meet new friends. If you are interested in coming to one of our future meetings or fundraising events please give me a call!

In March we held our first "Bingo Luncheon" which was an enjoyable day for our friends and members. All our winners enjoyed the restaurant gift cards. We had a delicious lunch at the Palmetto Club, raffles, and a 50/50.

We are looking forward to our Annual Garden Party Luncheon on Tuesday, April 12th at the Cici and Hyatt Brown Museum Art at 11 am. The cost is \$45 for hors d'oeuvres and a plated lunch. We will have seasonal flowers and plants for purchase, raffles, and 50/50. A cash bar will be available. I hope you can join us. Call Jennie Palmer at 386-236-9810 for reservations.

In the next issue of *Arts & Sciences* magazine you will be hearing more about our Annual Children's Golf Classic to be held at Cypress Head Golf Course in Port Orange on Friday, October 7th. Also, please do not forget about our 60th Halifax Art Festival on Beach

Street in downtown Daytona Beach on November 5 and 6th. More details are to follow!

We will not be having meetings in June, July, or August but please come to our September Membership meeting on Sept 13th at 10 am at the Cici and Hyatt Brown Museum of Art. Remember, all Guild proceeds directly support the Museum.

**Diane Rogers, President**  
386-871-8177

## 2022 & 2023 Guild Officers

President ..... Diane Rogers  
1st Vice President ..... Sherry Erbe  
2nd Vice President ..... Maureen Mahoney  
Recording Secretary ..... Jennie Palmer  
Corresponding Secretary ..... Marget Toth  
Treasurer ..... Zayna Gibson  
Halifax Art Festival ..... Andrea Pair  
Golf Classic ..... Susan Zahniser  
Bingo Luncheon ..... Maureen Mahoney  
Diane Lessard  
April Garden Party ..... Karrie Houlton  
Joanna Xenedes  
Artful Interludes ..... Diane Lessard  
Membership/Directory .... Carol Ann Laroza  
Volunteers Hours ..... Claris Mac'kie  
Greeter ..... Karrie Houlton  
Hospitality ..... Marget Toth  
Carolyn Keene  
Musings ..... Carol Ann LaRoza  
Historian ..... Kathy Wilson  
Parliamentarian ..... Joan Horneff  
Communications ..... Jenelle Codianne



## HALIFAX ART FESTIVAL

**Support YOUR MOAS Guild for  
The Halifax Art Festival**

**Become a PATRON**

**Make a donation of \$100 - \$1000 (or more)**

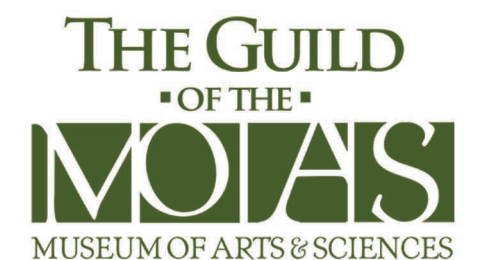
**AND GET**

- 1/2 of your donation back in Patron Dollars to spend at the HAF
- An invitation to three (3) **Patron Parties**
- The use of a **Patron Retreat** during the HAF that includes:
  - An indoor **BATHROOM**
  - A place to relax and get cooled off
  - Snacks · Soft Drinks · Wine

**COUNT ME IN AS A PATRON FOR THE 2022 HALIFAX ART FESTIVAL**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Email Address \_\_\_\_\_  
Telephone \_\_\_\_\_  
Amount (\$100 Minimum) \_\_\_\_\_  
Artful Supporter Amount \_\_\_\_\_

Send to: Halifax Art Festival Patron Chair, Sherry Erbe at [jobe896@aol.com](mailto:jobe896@aol.com)



**Join the Guild for an enjoyable  
way to support the Museum!**

**The Guild is a dynamic group who enjoy  
fellowship and a feeling of community.**

We invite you to attend our free meetings the second Tuesday of every month at the Cici and Hyatt Brown Museum of Art.

**For more info contact  
Sherry Erbe at [jobe896@aol.com](mailto:jobe896@aol.com)**



# A NEW GOLDEN AGE OF ASTRONOMY

This past December brought a bright streak across the early morning sky for many watching on Christmas day. A small dot could be tracked from its origin point, a launch complex in South America, to Earth's orbit. From beyond the Guiana Space Centre, amateur astrophotographers could catch a glimpse of the waning light reflected from the foil shell of a neatly packaged gift to its destination, roughly a million miles away from Earth.

For the world over, excitement was at its zenith, with scientists and stargazers alike waiting with bated breath for the long-anticipated launch of what is arguably the most ambitious project in astronomy and one of the

most complex instruments ever sent into the cosmos, the James Webb Space Telescope (JWST).

A multinational, collaborative effort led by NASA, the European Space Agency, and the Canadian Space Agency, is the culmination of several decades of work which led us to this exciting moment—an instrument with a reflective surface nearly three times the size of the Hubble Space Telescope. With certain capabilities beyond many Earth-based observatories, Webb will allow us to see farther into the early parts of the universe than any of its telescopic predecessors.

THIS ARTIST'S CONCEPTION SHOWS THE FULLY UNFOLDED JAMES WEBB TELESCOPE IN SPACE. CREDIT: ADRIANA MANRIQUE GUTIERREZ, NASA ANIMATOR



HERE IT IS: HUMANITY'S FINAL LOOK AT THE JAMES WEBB SPACE TELESCOPE AS IT HEADS INTO DEEP SPACE TO ANSWER OUR BIGGEST QUESTIONS. ALONE IN THE VASTNESS OF SPACE, WEBB WILL SOON BEGIN AN APPROXIMATELY TWO-WEEK PROCESS TO DEPLOY ITS ANTENNAS, MIRRORS, AND SUNSHIELD. THIS IMAGE WAS CAPTURED BY THE CAMERAS ON BOARD THE ROCKET'S UPPER STAGE AS THE TELESCOPE SEPARATED FROM IT. THE EARTH HOVER IN THE UPPER RIGHT. CREDIT: ARIANESPACE, ESA, NASA, CSA, CNES

the first time, be able to see into the early universe and beyond the veil of cosmic clouds and into the heart of stellar forming nebulae. To achieve this, four separate instrument systems were installed for varying regions of the electromagnetic spectrum Webb will look at.

Hubble can mostly see in the visible spectrum of light, as we see it and beyond, allowing for the discovery of evidence into the formation, expansion, and acceleration of the universe. Hubble's limited view within the infrared restricts researchers from being able to capture the light of the youngest galaxies that have experienced cosmic redshift—a process where the light from these distant objects has stretched over time into the infrared part of the spectrum.

Hubble's own orbit acts as a limiting factor as well, as the position of Hubble (~340 miles above Earth), once hailed as the new frontier for orbital

astronomy, acts as a hindrance to the telescope's observation of infrared, taking in the heat of our own planet. This is detrimental to infrared optics and in the past, telescopes needed novel ways to keep their sensors cool.

Because Webb is looking primarily into the infrared, the sensors need to be cold, very cold, at around temperatures of -370F (50 Kelvin). That's fairly close to a point known as absolute zero. To achieve these frigid temperatures, a sunshield, with five layers, each no thinner than a human hair, acts to shroud the telescope in continual night. This makes for a truly dark and absolutely cold observatory, removed from the distortion and heat of the Earth, Sun, and Moon.

Finally, to capture this faint light, Webb was built with 18 individual hexagonal mirrors made of gold-plated beryllium (a very lightweight metal, able hold shape at the coldest of temperatures) that altogether form Webb's now iconic honeycomb shape,

## Beyond the light of Hubble

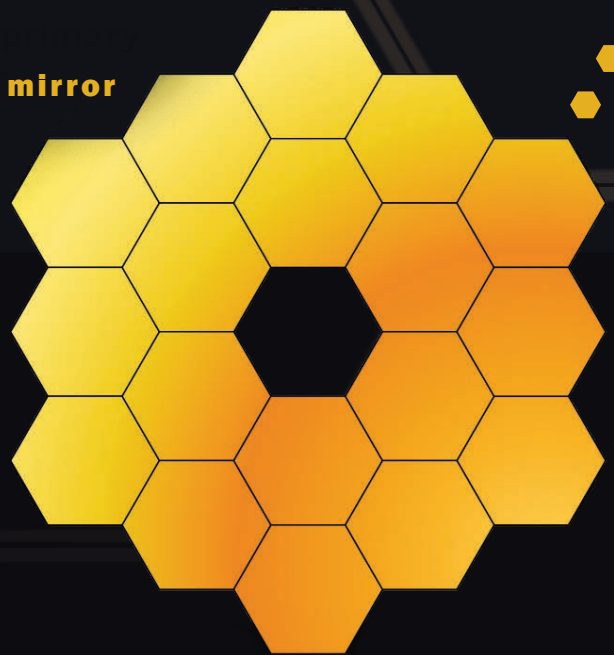
An evolution from the Hubble Space Telescope (HST), Webb will see farther than ever before, capturing the faintest light in the sky. Webb will focus on a band of the electromagnetic spectrum from within the visible red wavelength of light (0.06 microns) to the mid-infrared (28 microns). This distinction as an infrared observatory is important, as at these wavelengths we will, for



**Hubble  
primary mirror**



**JWST  
primary mirror**



WEBB WILL HAVE AN APPROXIMATELY 6.5 METER DIAMETER PRIMARY MIRROR, WHICH WOULD GIVE IT A SIGNIFICANTLY LARGER COLLECTING AREA THAN THE MIRRORS AVAILABLE ON THE CURRENT GENERATION OF SPACE TELESCOPES. HUBBLE'S MIRROR IS A MUCH SMALLER 2.4 METERS IN DIAMETER AND ITS CORRESPONDING COLLECTING AREA IS 4.5 M<sup>2</sup>, GIVING WEBB AROUND 6.25 TIMES (SEE CALCULATION) MORE COLLECTING AREA! WEBB WILL HAVE SIGNIFICANTLY LARGER FIELD OF VIEW THAN THE NICMOS CAMERA ON HUBBLE (COVERING MORE THAN ~15 TIMES THE AREA) AND SIGNIFICANTLY BETTER SPATIAL RESOLUTION THAN IS AVAILABLE WITH THE INFRARED SPITZER SPACE TELESCOPE. CREDIT: NASA

a reflective surface area of 21-feet across, which is nearly three times the size of Hubble. A gold coating was utilized since it is a good reflector of infrared.

### The unfurling of a giant, an exciting trip to L2

The task of sending anything into space, let alone an observatory the size of a tennis court, is a mammoth endeavor. To get into space, Webb needed some serious hardware in the form of the leviathan Ariane 5 rocket—a heavy-lift launch platform built by Arianespace for the European Space Agency.

With the power of an Ariane 5 rocket, Webb was able to coast its way to a LaGrange point around the Sun, a point known as L2 that was selected to protect the instruments from the light of the Sun, Earth, and Moon, while also allowing for the telescope to maintain a stable orbit with minimal use of fuel.

Webb wasn't idle on its journey, however, as it was instructed to unfurl like origami: deploying the

delicate sunshield, unfolding and latching the secondary mirror, and rotating the port and starboard mirror segments to lock into its final form. This process took place over Webb's month-long trip to its destination, with a final mid-course maneuver that was made toward the end of the journey for insertion into the desired orbit around L2.

### The road to Webb

Like the million-mile journey to L2, the road to Webb was a long and challenging one, going back even before the launch of Hubble, when the need for an observatory to look into the infrared arose. Early concepts of a telescope, removed from many of the constraints that ground and even orbital based observatories faced, began forming in workshops held by NASA around 1989. In 1990, a call to develop a large infrared, extremely cold telescope, in tandem with, and later as successor to Hubble, was proposed.

With the highly rocky start to Webb's predecessor (Hubble

was met with many delays, only to launch with an incorrectly ground reflective surface, crippling the observatory for three years), scientists knew that a more complex observatory was a longshot, but necessary as it became clear that the future of astrophysics depended on seeing into these wavelengths.

Construction began on certain portions of the telescope in 2004, such as the primary mirror and optical instruments, though like Hubble, Webb was met with a string of delays and budget overruns, while even facing near cancellation from a congressional committee. Eventually, as each of these challenges were overcome, construction finally ended in 2016.

It was certainly worth the effort, with NASA leadership confident that many of the issues that affected Hubble acted as lessons learned, and decades of painstaking work from scientists, engineers, and researchers led to the extraordinary achievement of Webb and its flawless deployment to L2.

### Mirrors aligned!

The excitement of December's Launch and subsequent deployment has brought on "Webb mania," where journalists, educators, and social media personalities, have been anxious to see what's next with Webb!

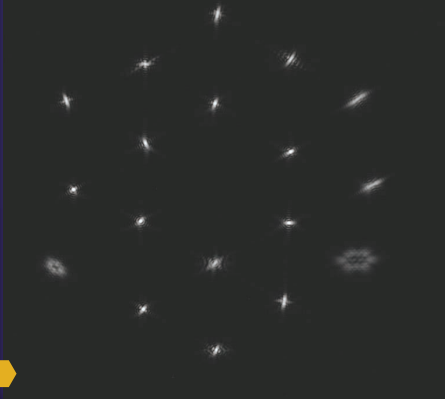
Over the next few months, NASA will continue to conduct several checkouts with the observatory's optics and have already aligned each of the 18 mirrors, pointing Webb at a single bright star to demonstrate that the observatory can acquire images. It's already shaping up to be an incredible journey as the primary mirror segments align to work as a single unit, and we're already able to see some interesting kaleidoscope-like images showing up from 18 distorted reflections of the same star!

### First light.

Our Lohman Planetarium has been in a buzz since launch, as we look forward to the future of astronomy, with many of us waiting to see "first light", that is, what will be first imaged by Webb, while also trying to guess what the first scientific data received may tell us about the early universe and the formation of the first galaxies!

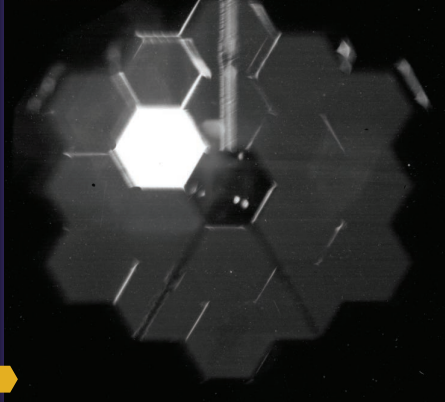
From the oldest light of the universe, the first stars, galaxies, and black holes, and even into the nature of planets beyond our own, the James Webb Space Telescope will quite literally expand our horizons. So when you gaze up at the sky on a clear night, with the enormity of the universe in full view, know that you'll be seeing a universe made a little more clear by the gold mirrors of Webb.

IMAGE ARRAY



THIS EARLY WEBB ALIGNMENT IMAGE, WITH DOTS OF STARLIGHT ARRANGED IN A PATTERN SIMILAR TO THE HONEYCOMB SHAPE OF THE PRIMARY MIRROR, IS CALLED AN "IMAGE ARRAY." CREDIT: NASA/ STSCL/J. DEPASQUALE

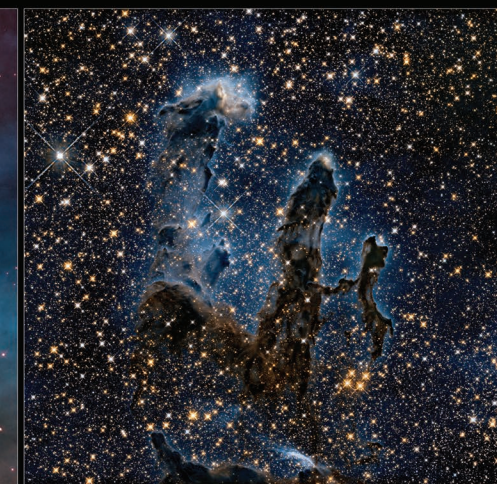
PRIMARY MIRROR SELFIE



THIS "SELFIE" WAS CREATED USING A SPECIALIZED PUPIL IMAGING LENS INSIDE OF THE NIRCAM INSTRUMENT THAT WAS DESIGNED TO TAKE IMAGES OF THE PRIMARY MIRROR SEGMENTS INSTEAD OF IMAGES OF SPACE. THIS CONFIGURATION IS NOT USED DURING SCIENTIFIC OPERATIONS AND IS USED STRICTLY FOR ENGINEERING AND ALIGNMENT PURPOSES. IN THIS CASE, THE BRIGHT SEGMENT WAS POINTED AT A BRIGHT STAR, WHILE THE OTHERS AREN'T CURRENTLY IN THE SAME ALIGNMENT. THIS IMAGE GAVE AN EARLY INDICATION OF THE PRIMARY MIRROR ALIGNMENT TO THE INSTRUMENT. CREDIT: NASA



Visible - WFC3 - 2015



Infrared - WFC3 - 2015

THIS IMAGE COMPARES TWO NEW VIEWS OF THE EAGLE NEBULA'S PILLARS OF CREATION CAPTURED BY HUBBLE. ON THE LEFT THE PILLARS ARE SEEN IN VISIBLE LIGHT, CAPTURING THE MULTI-COLOURED GLOW OF GAS CLOUDS, WISPY TENDRILS OF DARK COSMIC DUST, AND THE RUST-COLOURED ELEPHANTS' TRUNKS OF THE NEBULA'S FAMOUS PILLARS. THE RIGHT IMAGE IS TAKEN IN INFRARED LIGHT, WHICH PENETRATES MUCH OF THE OBSCURING DUST AND GAS AND UNVEILS A MORE UNFAMILIAR VIEW OF THE PILLARS. CREDIT: NASA, ESA/HUBBLE AND THE HUBBLE HERITAGE TEAM





MUSEUM OF ARTS & SCIENCES  
In Association with the Smithsonian Institution

352 South Nova Road  
Daytona Beach, FL 32114  
[www.moas.org](http://www.moas.org)

TIME BOUND MATERIAL

CENTRAL FLORIDA'S #1 BEST  
AVAILABILITY OF NEW CHEVY'S.

**JON HALL**



2022 Camaro  
Convertible

**FIND PERFORMANCE AND  
STYLE IN A NEW CHEVY CAMARO.**



**FIND  
NEW  
ROADS**

Jon Hall Chevrolet • 551 N. Nova Rd., Daytona Beach, FL  
386-255-4444 • [www.jonhall.com](http://www.jonhall.com)



124858