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ARTS & SCIENCES

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ON THE COVER

Top Fan: France, c. 1875,
Sultane style fan (‘a la sultane: sticks are visible on the recto or front of leaf) Silk, Bone

Bottom Fan: China (Cantonese), c. 1880
Asymmetrical "Thousand Faces" (Applied Faces) Fan; Double-sided, Paper, Ivory, Silk, Wood

Looking for unique and meaningful holiday gifts?
Browse our "Holiday Gift Guide" on page 26!

………..
Dear Friends,

Heading into fall is always an exciting time for us at the Museum of Arts & Sciences. First, we say goodbye to the energy and enthusiasm of our young Summer Learning Institute students and then kick-off the fall season with our ever-popular ‘September with the Smithsonian’ programs. The culmination of the month-long event series is the much-anticipated visit from our friends, the Smithsonian Jazz Masterworks Orchestra.

At the beginning of summer, I made my annual trip up to Washington D.C. to attend the Smithsonian Affiliates Conference where I met up with staff and leadership from both fellow affiliate museums and the Smithsonian Institution itself. There was a real energy there this year, much of it due to the appointment in late May of Lonnie G. Bunch III as the 14th Secretary of the Smithsonian, a rare opportunity to spend time with colleagues from all over the United States and even as far as Panama. It was a great chance to hear what everyone was working on, how they were using the Smithsonian resources to provide innovative programs and exhibits, and ways we were solving problems and issues that are common to many of us. This year, we also got to spend considerable time with the directors and staff of the main Smithsonian museums as well as Smithsonian Institution leadership to hear about all of the amazing things they are doing. Unfortunately, Lonnie Bunch had only taken offices a few days prior to our arrival and was understandably too busy to come spend time with us!

I took away several things from my time in Washington D.C., especially the renewed spirit of collaboration that has come along with the appointment of so many new senior staff members across the institution. It was so heartening to see and hear how affiliates like ourselves are valued, and how the larger museums in D.C. view our collaborations as two-way interactions, not just the lending of items from their reserve collections. It was interesting to hear how selective the process to become a Smithsonian Affiliate is, and how few museums that apply manage to gain affiliate status. Our links to the wonderful people at the Smithsonian and all our fellow affiliates is definitely something to be proud of!

We are definitely looking at a packed schedule of events at the Museum as we head towards the holidays. I hope you can find something in our calendar to come try! Our staff has worked so hard this year developing exhibits, events, and programs that not only showcase the MOAS themes and topics you look forward to, but also to provide opportunities for our community to try something new or learn about a new perspective on a topic of interest.

Between working with our staff on ideas for innovative programs and exhibits along with the research we have been doing on the Museum’s reach and impact within the community as we continue to raise money for our endowment, it is hard not to become overwhelmed by the sheer amount of people we have grown to serve. Your feedback helps us to improve on what we are doing, but more than anything it helps our staff know and understand the difference they are making in our community through their work. We live in a great city and it is so gratifying to know that we are contributing to making it so vibrant.

Sincerely,

Andrew Sandall
Executive Director
ABOUT THE MUSEUM

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, a state-of-the-art planetarium, library, the Frischer Sculpture Garden, maintains nature trails in a 90-acre preserve in adjacent Tuscawilla 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, Elfun 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 at 386.257.6000, or the Division of Cultural Affairs, The Capitol, Tallahassee 850.487.2980, or TT 850.488.5779.


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**Intern Spotlights**

**Nicole Valenzi**  
*Education Intern*

Nicole is a senior studying Visual Arts and Media Management at the University of Central Florida, with minors in Studio Art and Business. Her plan once she graduates is to work in a museum or gallery to help educate and inspire its visitors any way she can. She was raised in Daytona Beach, and has been a frequent visitor of the Museum of Arts & Sciences since she was a child. Whether as a visitor, a front desk and gift shop volunteer, or now as an intern, she has always immensely enjoyed her time with the Museum and its staff and keeps coming back for more! She plans to continue volunteering during her senior year and is excited to see the exhibitions that she helped prepare materials for over the summer. Nicole learned so much from the MOAS Education Department team this summer and is excited to take that knowledge into her future career.

**Summerau Toole**  
*Curatorial Intern*

While interning at the Museum of Arts & Sciences, Summerau had the opportunity to discover the other side of presenting art, from a curatorial perspective. As a Studio Arts and Business minor, previously she explored artwork from her own personal lens, but had not yet taken into account the other ways one might observe art with the consideration of the art’s history.

Her summer as a Curatorial Intern has opened many new doors for her. She learned about teamwork by working with both the Curatorial and Education Departments, time management by prioritizing projects, research skills, and communication skills through writing about various art pieces. She shared that learning to write about art for the public was something new and challenging to tackle.

The work Summerau has done with the Museum this summer has been very valuable as an aspiring artist and prospective museum employee. She enjoyed her time at MOAS, as being able to work with art has always been a dream.

**Paige Spera**  
*Education Intern*

Paige is a senior at The Catholic University of America in Washington, D.C. where she is pursuing a major in History and minors in Spanish and Philosophy. Following graduation, she plans to attend law school and begin a career in sports and entertainment law. Whether in Connecticut, where she was raised, in the District of Columbia, or in Daytona Beach, she enjoys visiting new museums and learning about the communities’ history. While interning at the Museum of Arts & Sciences, Paige especially enjoyed giving tours to very little kids and fielding all their fun questions.
Volunteer of the Quarter

Chong Reichard

Chong (pronounced [jeong]) has volunteered in the MOAS Museum Store since 2015, when she and her husband of 42 years, Ron, retired to Daytona Beach. Volunteering allows Chong to stay active and connected. "I like to offer my time and services in any way I can, meet new people, and enjoy the experience," Chong says.

She feels the Museum Store is a unique space, and especially enjoys helping guests find gifts and reminders of their visit. Her favorite volunteering events at MOAS are the annual Volunteer Brunch and the Holiday Luncheon where she gets to meet new faces and talk with other volunteers she does not see often. Her enthusiasm for volunteering also extends to her twice a year visits to Seoul, South Korea, where she volunteers at the front desk of a senior community school, and serves hot food to the elderly at local parks with members of her childhood church. Prior to resettling in Florida, she welcomed guests to special exhibits as a volunteer greeter at Hawaii’s Bishop Museum.

Chong grew up in a blooming, post-war Seoul. She graduated from Yonsei University with a degree in Music before marrying Ron and raising their two children in Florida, Maryland, Seoul, and Hawaii. She honed her diplomatic skills working at the U.S. Embassy in Seoul, spending many years in the Consular Section and in the Customs Attaché Office. When she and Ron moved to Hawaii, she embraced an opportunity to teach English as a second language to adults at the Wahiawa Community School, and continues to mentor and tutor her former students online. Outside of volunteering and teaching, Chong enjoys traveling the world, visiting her children and grandchildren in Washington, D.C., and spending the afternoon at Starbucks with a cup of coffee and her E-books.
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Email the Museum's Development Manager, Monica Mitry at monica@moas.org for more information on volunteering!
On view in the Bouchelle Changing Gallery near Visible Storage in the North Wing of MOAS are selections from a very fine local collection of decorative personal fans. We are very lucky indeed to have the opportunity to show these pieces from the collection of Judy Bush who has been acquiring beautiful antique and modern examples of different types of fans from around the world. If you haven’t had a chance to see this exhibition yet, then please put it on your calendar, because it’s a rare chance to see truly lovely objects that speak to a bygone era of woman’s fashion and personal adornment.

Fans for personal cooling have a long history. Some of the earliest known examples date back to 3200 B.C. in Egypt. In fact, a beautiful fan was actually found in Tutankhamen’s tomb dating around 1355 B.C. And other ancient examples are known from countries around the world in China, Japan, Assyria (modern-day Syria and Iraq), Greece, and Italy.

In the Renaissance, fans were made for the wealthy from the rarest materials available and embellished with fine metals and jewels. The tradition of turning fans into miniature paintings seems to have caught on in Europe during this time but the height of this practice came during the 18th century. This was the Golden age of artisan fans, particularly in France.
A rare Vernis Martin fan is also in this exhibition. The name comes from the Martin family of French 18th century furniture designers who perfected a type of lacquer to simulate the highly-desirable lacquers coming to Europe from the Orient at this time. Vernis Martin Brisé (a fan made of sticks only and no vellum) are renowned for their elaborate, fully painted sticks revealing deep-toned images with deep green or golden reds; the most popular colors.

Later 19th century fans often reflected the great age of French landscape painting as depicted in the hand-painted fan here with rosewood sticks. Birds and flowers abound in this lovely waterside view from c. 1875-1880, proving that artists and
The late 19th century taste for the exotic extended to other forms of Asian fans, such as the vibrant fuchsia and ivory sultane fan in this exhibition (fig. 4). The term “sultane” refers to a type of fan in which the sticks are seen from the front and the back of the leaf. This type of fan is identified with middle eastern attire of ages past such as the sultanate Ottoman Empire (modern day Turkey) lasting into the 19th century.

From China, a favorite fan type called the “thousand faces” fan (fig. 8) also gained favor in the 19th century as all things Asian were the height of vogue. Chinese artisans displayed their painting skills by attempting to include as many figures as possible on the small surface of the fan leaves and added additional embellishments such as tiny mother-of-pearl faces and silk clothing to impress Western buyers. Look closely at the “Thousand Faces” fan in this exhibition and you will see the delicate slivers of ivory on each face as well as the brilliant primary reds, blues, and greens complemented by gold-decorated black lacquer favored in 19th century Mandarin decorative arts.

The turn of the 19th century also saw fans with Art Nouveau and Art Deco stylings. One such exquisite example from c. 1895-1910 (fig. 5) has its sheer cream-colored silk leaf and celluloid sticks adorned with silver and black sequins and spangles in a stylized, natural vine pattern. It’s freeform naturalism places it in French Art Nouveau but it’s silvery eye-catching sparkle seem to hint at the brilliance and flare of the Jazz Age between the world wars. Crossover between Art Nouveau and Art Deco is common in the decorative arts and this elegant piece is a treasured reminder of a time when great attention was paid to women’s fashion accessories and the notice that they would bring the owner. The owner of this fan was certainly no wallflower.

Some of the fans in the exhibition are painted in strong early 20th century Modernist style. One of these is from the Casa Rubio in Seville, Spain – a famous shop known for its fans and flamenco attire that was a landmark in Seville since the turn of the 19th century (fig. 6). In beautiful expressionistic strokes it shows a celebration and mounted procession of turbaned riders on horseback accompanied by fireworks in the background, all set-off against deep blue sky at dusk. It captures the magic of the festivities in vibrant color contrasts and simple, bold brushstrokes, in keeping with early 20th century French Modernist painting.

Fans used for advertising businesses became common from the 1920s on, as did souvenir fans from popular vacation landmarks. Fascinating examples of these are included in the exhibition with some from Florida locations. The one pictured (fig. 7) dates from this era or slightly earlier in St. Augustine and depicts Ponce de Leon, palm fronds, oranges and orange blossoms, the Castillo de San Marcos and it’s Coat of Arms and the famous gates of the city. With air conditioning still a long way off in the Sunshine State, these fans must certainly have been a favorite souvenir of tourists coming here over a century ago.

With beautiful imagery and rich, delicate embellished details, the fans in FANtastic! Decorative Fans from a Private Collection are sure to delight as they represent artistic tastes across centuries and cultures. They are mini works of functional art meant to enhance the attire, reputation and status of the women who held them. Today they remind us of elegant eras past, remnants of a time when no object was too small or ordinary for artistic decoration of a high quality.
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People have always been fascinated by pirates, but what most people think they know comes from movies, television shows, plays, and novels. Pirate lore is a very fragmented history and one that is overrun with ridiculous myths. Things like peg legs, talking birds, and eye patches were created by Hollywood’s myth-making machine. Movies are a bad place to get your history from!

It is a monumental task to break the general public hold on pirate myths as they get passed down by various entertainment sources, generation after generation.

The truth is that pirates were historical figures who became mythologized. What we know about them comes mostly from court documents, especially testimony by their victims as well as some pirates who threw themselves on the mercy of the courts in an attempt to save their own lives.

Pirate Myth

If you have ever mimicked pirate speak by saying “Arrrgh!” or “Shiver me timbers!” you are incorrect. Pirates never really spoke like that. In reality, no one knows exactly how pirates spoke because they never wrote down their vernacular speech.

Another famous pirate myth is treasure maps leading to buried treasure. There has never been even one documented case of pirates burying their treasure or of a map leading to the hidden loot. In fact, pirates rarely possessed gold – they stole items like tools, rope, food, clothing, and general merchant cargo. If they managed to acquire any money, they immediately spent it in port on gambling, liquor, and women. If pirates did bury their ill-gotten gains on a lonely island, they would never be able to relocate it because changing inlets and shifting sands would make this impossible.

Another favorite myth is that pirates made their prisoners walk the plank. This is a total fabrication made for fiction with no basis in history. If they wanted to get rid of you for breaking ships rules they just threw you overboard or abandoned you on a desert island with no water.
Real Life Pirates

What about the real life of pirates? What we know from the fragmented historical record is that most pirates were young men with a life expectancy of around 26 years. Many of them were people who did not fit into normal society and taking to the sea offered a freedom they could not attain in a royal navy or on a merchant ship where mundane routine was the order of the day. Most pirates were sailors from the lower class who became disillusioned with life under unfair and unforgiving conditions.

Sir Francis Drake

One of the first notorious pirates to attack east Florida was Sir Francis Drake who became an English celebrity in his day. Unlike many later pirates, he was an accomplished seaman and navigator, and the first captain to sail around the globe who lived to tell the tale (Ferdinand Magellan was killed before he completed his circumnavigation). The Spanish saw Drake, whom they called the Sea Dragon, as the most ruthless pirate that ever lived. In 1586, while returning back to England on the swift gulfstream current, Drake heard rumors of a tiny outpost on the Spanish frontier in La Florida. After spotting a wooden watchtower, he attacked the military outpost with a vengeance. He destroyed the wooden fort, confiscated the soldiers’ pay box, burned every standing building, and stole everything he could lay his hands on. By the time he left, St. Augustine was leveled to the ground. Most of the Spanish citizens survived by escaping into the woods and seeking refuge with the local Timucuan Indians.

Robert Searles

Another famous pirate to attack east Florida was Englishmen Robert Searles. His attack on St. Augustine caused a lasting and profound change to the city. His crew captured a ship off the coast of Cuba carrying flour to St. Augustine and used it as the ultimate camouflage. As he sailed it into St. Augustine’s harbor, he made the Spanish crew carry on their duties as if nothing was wrong while his men hid below decks ready for action. St. Augustine was always on edge and sent out the harbor pilot just to make sure everything was copacetic. Searles’ crew captured the harbor pilot and forced him to give the all-clear signal to the town. Searle and company laid in wait until midnight to make their advance on the city. When midnight fell upon the sleeping town, the pirates came ashore with guns blazing and chaos broke out in the streets.

With little resistance from the Spanish soldiers, pirates pillaged and murdered. They killed over 60 citizens, which represented over a quarter of the city’s population. Anyone who was not of pure Spanish blood was taken captive and sold into slavery. Prominent citizens were held as hostages and were released only when a ransom of food, clothing, and tools was met. Curiously, the pirates did not destroy the city. Witnesses reported the pirates took soundings of the harbor, which meant they intended to return for a second round. It took many months for word to reach back to Spain of the devastating attack. However, the Spanish crown was determined to take action to ensure this would never happen again.

Florida had a significant strategic value to Spain because it protected their trade route from Cuba to Europe. The aftermath of the Searles’ attack resulted in the Spanish finally deciding to dedicate funds to upgrade their defenses and build a massive coquina fort. The Castillo de San Marcos was completed in 1695, and is the oldest masonry fort in North America. Searle’s pirate attack was the last successful taking of the town. Once the fort was completed the city was never defeated again even when facing overwhelming forces.
The story of the pirate Henry Jennings is remarkable as he is one of the few pirates that actually acquired treasure, and lots of it. In 1715, the Spanish Crown was desperate for money to fund years of on-going wars. The Spanish king ordered the Spanish treasure fleet to set sail from Cuba in August despite the threat of hurricane season. As the fleet neared Cape Canaveral, a hurricane smashed it against the Florida coast. The ships, carrying jewels, gold, and silver, were torn apart in the shallow waters from Port St. Lucie to Melbourne Beach. The royal treasure now sat in shallow water a mere 100 yards offshore. As the survivors tried to get word back to Cuba, the rumors began to spread throughout the Caribbean of the wrecked treasure fleet.

Henry Jennings, a captain and landowner in Jamaica, heard these rumors. In spring, 1716, he gathered a crew and departed from Port Royal, Jamaica, on his ship, The Bathsheba. Upon arriving in Florida, he found the Spanish attempting to salvage the treasure near present day Sebastian Inlet. He attacked their encampment and stole over 340,000 pieces of eight from the lightly guarded storehouse without killing a single person. He returned a second time and stole more treasure before retiring from pirating.

The early 1700s became known as the Golden Age of Pirates. This is when pirates that we know today, like Blackbeard and Calico Jack, operated. In 1717, the English government finally took decisive action to stop the out-of-control piracy in the Caribbean. The King of England declared a royal proclamation to stop the looting. All pirates who accepted the royal proclamation by signing their names received a royal pardon. The king sent Woodes Rogers, a former pirate himself, to oversee and enforce the proclamation. Henry Jennings signed the royal pardon and retired a wealthy pirate, probably to Bermuda or Charleston, before fading into pirate history. He remains one of the rare pirates that retired on their booty.

WITHIN THE CICI AND HYATT BROWN COLLECTION, THERE EXISTS A REMARKABLE PAINTING OF AN UNKNOWN PIRATE.

It is painted by Andrew Wyeth, the youngest son of the famous N.C. Wyeth, the great illustrator of Treasure Island. Andrew’s teacher was his famous father and he gained an impressive national reputation as a great artist apart from his father. In his painting, The Landing Party ca. 1930, rendered in ink on paper, Wyeth depicts two pirates dragging their skiff on a Florida sandy beach. The black and white image shows several typical Florida cabbage palms in the background and clouds gathering above them. The pirate who is walking away from his skiff appears to be dressed as if some type of captain with a long sword. The scene depicts a romantic version of pirates on a faraway beach, the type of image most of us have grown up with.

From the children’s story, Treasure Island to the Disney property, Pirates of the Caribbean, pirates have captured our imaginations. We romanticize the stories with images of treasure hidden on sandy beaches among the coconut trees, tall ships sailing on wide open oceans, and freedom from the rigors of society. The romance of the pirates is strong but take the time to delve into the real history of pirates and you will find a fascinating history that is different from that of Hollywood. It is a history tied to international politics woven in an emerging global sea trade, and is definitely part of Florida’s unique history.
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news-journalonline.com/foodwineandbrew
Man began decorating objects over 70,000 years ago... first incising ornamental patterns on rocks like this one found in the Blombos caves of South Africa. We did this long before the domestication of animals or the development of pottery. It seems beauty demanded tribute even then. Amazingly, the need to adorn objects began its curious seduction at a time when simple survival was a difficult achievement. With that function, culture began.

It is surmised by some, that after the development of language and the mastery of fire, the next important discovery of some 30,000 years ago, was simply, string -- a "String Revolution," if you will. It first would have been piled to bundle and carry tools making us more mobile species. Curious fingers found ways to create mesh baskets, nets, then simple string skirts. It was twisted and plaited, knotted and tied string skirts. Pigments were added like the ochre similar to the Blombos stone... the urge to create began long ago...

Before the birth of weaving, came the birth of art.
VISIONS OF THE FUTURE
ONGOING THROUGH 2019 – PLANETARIUM LOBBY
This colorful, creative poster series from NASA's Jet Propulsion Laboratory, now on display in the Planetarium Lobby, imagines possible future travel destinations to real exotic locations in space. The retro-style artwork takes inspiration from travel advertisements of the past and combines them with intriguing objects within our Solar System and far-off exoplanets. Photo Credit: Trappist-1e, NASA

SYNCHRONICITY: SELECTIONS FROM BEAUX ARTS OF CENTRAL FLORIDA
THROUGH OCTOBER 20, 2019 – GARY R. LIBBY ENTRY COURT
Works in a wide variety of media from this longstanding central Florida contemporary artists' organization was founded in 1962 by the students of the late Lillian “Lu” Belmont of New York City. This group is comprised of 50 professional artists, working in all mediums, who place a strong emphasis on the experimental creative approach with a strong emphasis on quality work. The artists are encouraged to expand their horizons and constantly stretch their abilities. Photo Credit: Gail Bokor, Into My World, mixed media

WILLIAM SCHAFF: THE WAY OF THE EQUINE
THROUGH OCTOBER 20, 2019 – ROOT HALL
A longstanding presence in the Central Florida art world, William “Bill” Schaaff is known for his powerful, evocative images of horses in his paintings and sculpture. The horse figure as an iconic metaphor for power, sensuality, transition, and beauty has occupied a dominate place in his visual vocabulary. This exhibition organized by the Polk Museum of Art in Lakeland, Florida, brings the vibrant work of this accomplished artist to Daytona Beach for the first time. Photo Credit: William Schaaff, Puriﬁcation Rites (Liberation), c. 2004, mixed media drawing

PERSONAL TO POLITICAL: CELEBRATING THE AFRICAN AMERICAN ARTISTS OF PAULSON FONTAINE PRESS
THROUGH OCTOBER 27, 2019 – KARSHAN CENTER OF GRAPHIC ART
This exciting exhibition features works by African American artists who have helped to shape the contemporary art conversation in the Bay Area and beyond. The show covers a wide range of prints, paintings, quilts, and sculptures, and includes an array of abstract and formal imagery. Narratives speaking to personal experiences and political perspectives are woven throughout. The source of this show is a Berkley based fine art print studio, Paulson Fontaine Press, which over the past two decades has developed an unparalleled roster of internationally celebrated artists who characterize the fresh perspectives that are today's avant-garde. Personal to Political: Celebrating the African American Artists of Paulson Fontaine Press was organized by Carrie Lederer, Curator of Exhibitions, Bedford Gallery, Lesher Center for the Arts, Walnut Creek, CA. Photo Credit: Mary Lee Bendolph, Patch, 2014, color softground etching with aquatint and spitbite aquatint, 38” x 53.5”; Courtesy of Paulson Fontaine Press, Berkeley, CA

FANTASTIC! DECORATIVE FANS FROM A PRIVATE COLLECTION
THROUGH JANUARY 12, 2020 – BOUCHELLE CHANGING GALLERY
A collection of over 50 fans from the 18th to the early 20th centuries including mourning fans, hand colored lithographs, hand painted feather fans, lace fans, exotic fans, and advertising fans constructed from a variety of materials including ivory, bone, wood, leather, mother of pearl, tortoiseshell, celluloid, coconut ﬁber, silk, sequins, and spangles. Ladies in centuries past rarely were without a hand fan to cool themselves in the summer heat and these popular items often were decorated with small paintings and other adornment so that they reflect the artistic tastes of their area. Photo Credit: Lady's Fan, 19th century, silk with sequin and watercolor decoration

BIODIVERSITY IN THE ART OF CAREL PIETER BREST VAN KEMPEN
OPENING OCTOBER 9
THROUGH DECEMBER 14, 2019 – FORD GALLERY
Carel Pieter Brest van Kempen is a painter of Dutch descent, who explores the rich diversity of the natural world from exceptionally unique perspectives. This exhibition of over 50 major works by this modern-day Audubon, celebrates the natural world at the critical moment when literally thousands of species on our planet are facing the possibility of extinction. This exhibition produced by David J. Wagner, L.L.C. Photo Credit: Carel Pieter Brest Van Kempen, Black Skimmer, Acrylic on Board

PAINTING WITH PAPER: THE ART OF AKIKO SUGIYAMA
OPENING OCTOBER 26 THROUGH FEBRUARY 2, 2020 – GARY R. LIBBY ENTRY COURT
An exhibit of work by Akiko Sugiyama who creates her pieces by folding, rolling, twisting, cutting, painting, texturizing, sewing, wrapping, and spinning a range of papers, often incorporating those forms with found objects, such as branches and other materials. While her process is intricate, the finished pieces often possess a profound simplicity with references to the natural world. Photo Credit: Akiko Sugiyama, Untitled, 2018, seed pod, hand dyed, rolled and stitched Japanese paper

AROUND THE BEND: PLEIN AIR PAINTINGS FROM THE COLLECTION OF KEVIN MILLER AND HAL STRINGER
OPENING NOVEMBER 2, 2019
THROUGH FEBRUARY 23, 2020 – ROOT HALL
An exhibit that brings together some of the best Florida painters working in the tradition of Plein Air painting today, highlighting the depth of the collection of Kevin Miller and Hal Stringer, strong proponents of plein air painting in the Sunshine state. Photo Credit: Stephen Bach, East Washington Street Park, Oil on Canvas

ARTS AND CULTURE OF MICRONESIA
OPENING DECEMBER 20, 2019 THROUGH FEBRUARY 16, 2020 – FORD GALLERY
An exhibit showcasing many cultural and artistic relics from Micronesia. Arts and Culture of Micronesia will feature many diverse objects and traditional crafts from the personal collection of Barbara Wavell. A hand-crafted outrigger canoe, traditional baskets and bowls, storyboards depicting ancient tales, and numerous objects unique to these tiny islands will be on display from December through late February. Photo Credit: Carved board from 1951 in Airai Palau, carved by Baules.

POP ART/OP ART FROM THE MOAS COLLECTION
OPENING NOVEMBER 2, 2019 THROUGH JANUARY 19, 2020 – KARSHAN CENTER OF GRAPHIC ART
With some of the biggest names in mid-twentieth century Modernism represented, this exhibition highlights the Pop Art and Op Art movements so popular in the U.S. and around the world in the 1960s, 70s and 80s. Works by Warhol, Rauschenberg, Indiana, Oldenburg, and Rosenquist join many other of their contemporaries to highlight this vibrant, fun, and colorful period in Western art where everything from Campbell soup cans to rusted metal to optical illusions made with linear abstraction were all the rage in the art world. Photo Credit: James Rosenquist, American, 1933-2017, Short Ends, 1970, Lithograph

Stay in touch! For the latest exhibit and programming information, sign up for our e-newsletter on the Museum’s homepage at MOAS.org!
**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 future members.

**October**

**Thursday, October 10**

**5:30pm-7:30pm**

**Wine Tasting: Corks for a Cause**

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 wines while learning about different pairings with light appetizers from Ravish Catering (formerly Panheads Catering). This month’s program features six different wines that each contribute 20% of sales back to a local or national cause with a direct tie to Daytona Beach. This event is for ages 21 and over. Seating is limited. Visit MOAS.org or call the Museum at 386-255-0285 to purchase your admission and reserve your seat! No refunds after October 7. $30.00 for members, $40.00 for future members.

**Saturday, October 12**

**11:00am-4:00pm**

**Fall Family Festival**

Join educators, Kelsey Hansen and Nicole Messerey, at the Museum of Arts & Sciences for our 3rd annual Fall Family Festival! Activities will include a variety of crafts and games, story time, trick or treating in the galleries, and a special Halloween laser show in the Planterum! Children may dress up and participate in a fun costume contest (see details on our calendar at MOAS.org or on our Facebook event page). For more information about this event please contact Nicole Messerey at 386-255-0285 ext. 313. Free for members or with paid museum admission.

**Wednesday, October 16**

**3:00pm-5:00pm**

**National Fossil Day and Afterschool Program**

Bring your fossils to the Museum for identification during our children’s fossil Paleo-Lab, a family fun afternoon of sorting, classifying, and identifying real Florida fossils. Learn how to identify bone, teeth, and marine fossils that are millions of years old. Take a tour of the Prehistory of Florida Gallery and view unique specimens that are not currently on display. Learn how to preserve your own fossils and participate in other fun activities. Free for members or with paid museum admission.

**Saturday, October 12**

**7:00pm-9:45pm**

**Second Saturday Laser Rock Concert**

7:00pm Fright Light Laser Show
8:00pm Pink Floyd - The Wall
9:00pm Pink Floyd - The Dark Side of the Moon
6:00pm for one show, $7.00 for two shows, and $9.00 for three shows. Tickets may be purchased in advance by calling 386-255-0285.

**Wednesday, October 16**

**3:00pm-5:00pm**

**National Fossil Day and Afterschool Program**

**Thursday, October 17**

**2:00pm-3:30pm**

**Florida Vistas Book Club: Cuban Roots by Michael Pyle**

Join us for our next Florida history book club meeting at the Cici and Hyatt Brown Museum of Art where we will be discussing the book, Cuban Roots. Learn more about the book at MOAS.org. Light refreshments will be served. RSVP by calling the Museum at 386-255-0285.

**Free for members, $5.00 for future members.**

**Friday, October 18**

**2:00pm-3:00pm**

**Porch Talk and Gamble Place: Unusual Tales of the Everglades**

Join MOAS Senior Curator of Education and History, Zach Zacharias, at Gamble Place in Port Orange to hear unusual stories from life in the Everglades from the last 150 years. This talk includes information on the building of the Tamiami Trail, the invention of the seaplane, the 122-year old hermit of Panther Key, the cities of Flamingo and Chokoloski, and Al Capone's

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**ARTS & SCIENCES MAGAZINE 21**
Florida hideout. Space is limited advanced registration is required. RSVP by calling the Museum at 386-255-0285.
Free for members or $5.00 for future members.

Friday, October 18 7:00pm-10:00pm Rescheduled - Sci-Fi Movie Night in the Planetarium: The Martian
By popular demand, the MOAS Planetarium proudly presents, The Martian. Matt Damon stars as astronaut Mark Watney, a modern Robinson Crusoe. After becoming stranded on Mars, Watney must endure the harshest of environmental conditions to survive long enough for rescue. 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. After the movie, stay with us in the Planetarium for a discussion on the habitability of Mars with Planetarium Educator, John Herman. Tickets may be purchased in advance by calling 386-255-0285.
$8.00 for members, $10.00 for future members.

Saturday, October 19 1:00pm-3:00pm Film Class: FX Makeup
Join filmmaker, Gary Lester, at the Museum of Arts & Sciences, in creating amazing cinematic makeup effects, all on a shoestring budget! Students will use everyday cosmetic and kitchen supplies to create unique zombie makeup and realistic wounds and injuries. This class comes just in time for Halloween or your next indie film project! Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285.
$15.00 for members, $20.00 for future members.

Saturday, October 19 7:00pm-9:30pm Rescheduled - Encore Sci-Fi Movie Night in the Planetarium: The Martian
By popular demand, the MOAS Planetarium proudly presents, The Martian. Matt Damon stars as astronaut Mark Watney, a modern Robinson Crusoe. After becoming stranded on Mars, Watney must endure the harshest of environmental conditions to survive long enough for rescue. 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 future members.

Tuesday, October 22 3:00pm-4:00pm Talk and Walk with the Collector: Fantastic! Decorative Fans from a Private Collection
Join the collector of the exhibition Fantastic! Decorative Fans from a Private Collection, Judy Bush, for a discussion at the Museum of Arts & Sciences on her collection of over 50 fans from the 18th to early-20th centuries. This collection includes mourning fans, hand-colored lithographs, hand-painted feather fans, lace fans, exotic fans, and advertising fans constructed from a variety of materials including ivory, bone, wood, leather, mother of pearl, tortoiseshell, celluloid, coconut fiber, silk, sequins, and spangles. Free for members or with paid museum admission.

Friday, October 25 7:00pm-9:15pm Sci-Fi Horror Movie Night in the Planetarium: A Quiet Place
Prepare for Halloween with some science fiction horror. John Krasinski writes, directs, and stars in this post-apocalyptic story centering on a family’s struggle to remain quiet and alive in a world plagued by terrible creatures with an acute sense of hearing. Earning a slew of awards, A Quiet Place ranked among the best movies of 2018. 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. After the film, stay with us for a discussion on nonverbal communication with ERAU Associate Dean of the College of Arts and Sciences, Dr. Donna Barbie. Tickets may be purchased in advance by calling 386-255-0285.
$8.00 for members, $10.00 for future members.

Saturday, October 26 2:00pm-4:00pm The Art and Science of Soundscape
This fall, Atlantic Center for the Arts presents a complete program of soundscape activities in Tuscawilla Preserve at MOAS. Join ACA Soundwalk facilitator, Eve Payor, and Stetson University professor, Nathan Wolek, for a day of listening with the environment. Activities begin at 2:00 pm with a Soundwalk through the lush wilderness area of Tuscawilla Preserve, guided by listening awareness prompts. At 3:00 pm, delve deeper into the richness of soundscape as you experience the hyperreal resolution of field recording. Professor Wolek will share how you see soundscapes and understand the micro-world of sounds. For more information visit MOAS.org. Space is limited and advanced RSVP is recommended by calling the Museum at 386-255-0285.
Free for members or with paid museum admission.

Monday, October 28 5:00pm-7:00pm MOAS After Hours
Join us at the Museum of Arts & Sciences for exclusive after-hours access to the Museum's galleries and happy hour drink specials. Akiko Sugiyama, the featured artist of the Painting with Paper exhibition in the Entry Court, will give a talk on the techniques and inspiration behind her unique works of art centered around the time-honored Japanese paper making tradition. Delightfully creative and distinctive, Ms. Sugiyama's work has been exhibited and collected by museums around the country. Free for members, $5.00 for future members.

Tuesday, October 29 3:00pm-4:00pm Gamble Place Nature Walk
Gamble Place is more than a historic site—it is also home to critical ecosystems that house many types of Florida’s flora and fauna. Join MOAS Education Assistant, Kelsey Hansen, at Gamble Place in Port Orange, for a hike through some of Gamble Place’s trails while discussing the native, non-native plants and animals of the area. Space is limited. Advanced RSVP is required by calling the Museum at 386-255-0285.
Free for members, $5.00 for future members.

NOVEMBER
Tuesday, November 5 6:30pm-9:30pm Sci-Fi Movie Night in the Planetarium: Back to the Future Part II
“Doc... are you telling me you built a time machine out of a DeLorean?!!” Ride along with Marty McFly as he is launched at 88 miles per hour to November 5, 1955, where he attempts to correct mistakes from the past and return safely Back to the Future. This film will be displayed in 16:9 aspect ratio on the Planetarium dome in stunning high definition. Popcorn and snacks will be available at the concession stand. Please arrive at least 15 minutes before the event start time. After the film, stay with us for a discussion on time travel.
$8.00 for members, $10.00 for future members.

Thursday, November 7 3:00pm-4:00pm Florida History Lecture: Florida’s East Coast Pirates
Join MOAS Senior Curator of Education and History, Zach Zacharias, in the Root Family Auditorium for a look at the real life of pirates. The fictional pirate stories you heard while growing up are based on real pirates, and Florida has its share! Florida has a long history of pirates who attacked St. Augustine or operated off its coast. Learn about the real history of the Caribbean pirates and how they became part of Florida’s history.
Free for members or $7.00 for future members.

Thursday, November 7 6:00pm-8:00pm Bonkerz Comedy Club with Comedian, Carmen Vallone
Join us in the Root Family Auditorium for a fun night with Bonkerz Comedy Club, featuring comedian Carmen Vallone, as seen on Last Comic Standing, HBO, CBS, and Jamie Kennedy’s “Heckler” movie. With his enthusiastic smile, and highly twisted vision of everyday life, Carmen guides you through a night of entertainment as he talks about being from Upstate New York, living in Florida, and what life is like on the road. Never one to “attack” the audience, Carmen makes you feel right at home, and ensures you will never be scared to “sit in the front row.” He has been night clubbing with Bob Saget, he has enjoyed champagne with Joan Rivers, and has gone to the BBQ with Jim Carey. In addition to being a hilarious stand-up comedian, Carmen is also the host and producer of “A Joke Off!™”. A nationally touring comedy competition, currently in development for national TV. Guests will enjoy a reception prior to the show with light appetizers and a cash bar. This event is recommended for guests 18 and older. Visit MOAS.org or call the Museum at 386-255-0285 to purchase your admission. $15.00 for members, $20.00 for future members.

Friday, November 8 8:00am-5:00pm MOAS Member Trip to Kennedy Space Center
Join us for a trip to the Kennedy Space Center Visitor Complex and tour the collections in the gallery with MOAS Curator of Astronomy, Seth Mayo. Dine with an Astronaut for lunch with Cape Canaveral Air Station’s space shuttle pilot, Mike Fincke. Take in a live show and visit the spectacular IMAX Theater. This trip is limited to 25 MOAS members or guests. $45.00 per person, $40.00 for MOAS members. RSVP by calling the Museum at 386-255-0285.
FALL PROGRAMS

Free for members or with paid museum admission. Welcome to explore the universe with you!

Saturday, November 9
7:00pm-9:45pm
Second Saturday Laser Rock Concert
7:00pm Laser Beatles
8:00pm Laser Zeppelin
9:00pm Laser Queen NEW SHOW
$5.00 for one show, $7.00 for two shows, and $9.00 for three shows. Tickets may be purchased in advance by calling 386-255-0285.

Monday, November 11
8:00am-1:30pm
Rare Transit of Mercury
Observe a rare celestial treat as tiny, speedy Mercury moves directly between the Earth and the Sun. Over the course of six hours, the swift planet will appear to be a black dot, racing across the surface of our home star at 106,000 miles per hour. Weather permitting, a special solar telescope will be in the MOAS courtyard for safe viewing throughout the event. In the Planetarium, a live stream will accompany the entire transit period, as well as a special live show at 11:00am. Outdoor and Planetarium portions of this event are free to the public. (To enjoy the rest of MOAS after the show, regular admission must then be purchased.)

Wednesday, November 13
12:00pm-1:30pm
Lunch and Learn: Florida Historical Landscapes through the Lens of the Gilded Age
Join Senior Curator of Education and History, Zach Zacharias, at the Cici and Hyatt Brown Museum of Art for a history and art talk about the Gilded Age. Many of the early paintings in the collection reflect early Florida as a young state. The Gilded Age was a time of great change throughout the country as the industrial revolution hit high gear. Learn about the Gilded Age of Florida through paintings that reflect this rapid change in technology, culture, commerce, and the emergence of a “new Florida.” 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. Lecture is free plus the price of paid lunch for members. Lecture is $5.00 plus the price of paid lunch for future members.

Thursday, November 14
4:00pm-5:00pm
Ask a Planetarium Curator
Join us in the MOAS Planetarium 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 the Planetarium’s vast digital universe. We cannot wait to explore the universe with you! Free for members or with paid museum admission.

Saturday, November 16
1:00pm-3:00pm
Film Class: Exploring Photographic Techniques and Concepts
Join filmmaker, Gary Lester, at the Museum of Arts & Sciences as he illustrates how to use manual settings on a digital camera, as well as photographic techniques such as lighting, composition, and light metering. Learn all of the basics that you need to know to bring your photography to the next level. Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285. $15.00 for members, $20.00 for future members.

Saturday, November 16
3:00pm-4:30pm
Afternoon with Florida History
Join us in the Root Family Auditorium for a presentation on Florida history. Free for members, $7.00 for future members, or included with paid museum admission.

Truly Off the Beaten Path
Our local area and Florida have so many unique and “off the beaten path” places to visit. Discover natural wonders, scenic drives, and historic places not found in most of the books that promote “off the beaten path” destinations in Florida. Join MOAS Senior Curator of Education and History, Zach Zacharias for a presentation designed for residents who live in the state but are looking for truly hidden gems to visit. Discover places like Bio Lab Road, Scott Springs, and even a Cold War era nuclear launch base in the Everglades, now a national historic site open to visitors.

History of Volusia in Vintage Pictures
Tom Roberts, Volusia County Historic Preservation Board Chair, has been a longtime collector of vintage historic photographs of Northeast Florida and has amassed a significant collection. Follow in the footsteps of northern tourists on their way south by train, ship, and automobile to see the sights along Florida’s east coast. These rare photographs document a long journey across the south with brief stops in Kentucky coal country, Lookout Mountain, Tennessee, and the swamps and turpentine orchards of Georgia before a lengthy stay in Florida. Once in the Sunshine State, these photographs show rare locations and a few well-known tourist spots in Jacksonville, St. Augustine, Ormond Beach, Daytona Beach, New Smyrna, and DeLeon Springs.

Thursday, November 21
2:00pm-3:30pm
Florida Vistas Book Club: Angel City by Patrick Smith
Join us for our next Florida history book club meeting at the Cici and Hyatt Brown Museum of Art where we will be discussing the book, Angel City. Learn more about the book at MOAS.org. An added bonus of this month’s book club meeting will be a video featuring an interview with author, Patrick Smith, talking about the research and writing of this novel. Light refreshments will be served. RSVP by calling the Museum at 386-255-0285.
Free for members, $5.00 for future members.

Friday, November 22
2:00pm-3:00pm
Porch Talk at Gamble Place: A History of Florida’s Universities
In 1851, the Florida legislature voted to establish two seminaries of learning: West Florida Seminary, which later became Florida State University and East Florida Seminary which later became the University of Florida. Join MOAS Senior Curator of Education and History, Zach Zacharias, at Gamble Place in Port Orange to learn about the unique beginnings of some of Florida’s most famous Universities from the University of Miami, Stetson, Embry-Riddle, Florida State, University of Florida, and more. Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285. Free for members or $5.00 for future members.

Saturday, November 23
5:00pm-8:00pm
Night Sky Viewing Party – Conjunction of Venus and Jupiter
Marvel at the autumn night sky. The two brightest planets, Venus and Jupiter, will appear to almost touch each other in the western sky around sunset, creating a brilliant spectacle. Beautifully ringed Saturn and the fall constellations will also be in view. Weather permitting, join the Planetarium staff in the MOAS courtyard as we use our telescopes and laser pointers to guide you through this wondrous evening. Guests are welcome to bring their own chairs, telescopes/ binoculars, and curiosities about the universe. A special presentation of “The Sky Tonight” will take place in the Planetarium at 6:30pm (limited seating).
“The Sky Tonight” show is $5.00 for adults, $3.00 for children. The outdoor portion is free to the public.

Monday, November 25
3:00pm-4:00pm
Plein Air Painting Demo with Artist, Tom Sadler
Join artist, Tom Sadler, a Florida artist featured in the exhibit Around the Bend: Plein Air Paintings from the Collection of Kevin Miller and Hal Stringer, in Root Hall at the Museum of Arts & Sciences for a demonstration on his landscape painting technique. Free for members or with paid museum admission.

Monday, November 25
5:00pm-7:00pm
MOAS After Hours
Join us at the Museum of Arts & Sciences for exclusive after-hours access to the Museum’s galleries and happy hour drinks specials. Join collectors Kevin Miller and Hal Stringer for a discussion of the exhibition, Around the Bend: Plein Air Paintings from the Collection of Kevin Miller and Hal Stringer, and their history of collecting Florida plein air paintings. Free for members, $5.00 for future members.

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will see that the landscape and buildings have changed. Join MOAS Curator of Education and History, Zach Zacharias, in the Root Family Auditorium to take a walk back through time, learning about what was here before and how it has impacted the growth of the local communities. Learn about people and buildings, archeological and natural history sites, cities and waterways, and all things that make Volusia County such a unique and wonderful place. Free for members, $7.00 for future members, or included with paid museum admission.

Monday, December 9 5:30pm
MOAS Annual Dinner
Join us at the Museum of Arts & Sciences for the Museum’s annual meeting, featuring an awards presentation and installation of the MOAS officers and trustees. Dinner will be served and business attire is requested. A form to fill out and mail in can be found on page 21. Advanced RSVP is required by mailing in a form with payment, registering online at MOAS.org or by calling the Museum at 386-255-0285. $45.00 per person.

Wednesday, December 11 9:00am-11:00am
Eco Buggy Tour at Deep Creek Preserve
Join Volusia County’s Environmental Specialist, Trey Hannah, and Senior Curator of Education and History, Zach Zacharias, for a two-hour tour of the 8,000-acre Deep Creek Preserve in New Smyrna Beach. Travel on the Eco Buggy Tram and discover the pinewood flats, long leaf pine habitats, wetlands, dome swamps, and stop to check the wildlife cameras. Deep Creek Preserve is part of Volusia County's “Conservation Corridor,” purchased in 2011. Bring a blanket, water, and a camera and enjoy the ride through this amazing ecosystem while you learn about the flora and fauna of this important natural resource. Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285. The Eco Buggy Tram departs promptly at 9:00am from 964 South State Route 415, New Smyrna Beach. $12.00 for members, $15.00 for future members.

Thursday, December 12 3:00pm-4:00pm
Did You Paint That? With Cathedral Painter, Harley Bartlett
Imagine your reaction when a large mural on the side of a building unexpectedly surprises you, or you see a wonderful sky painted on the ceiling of a friend’s house. We all know of Michelangelo’s Sistine Chapel ceiling, and we are all aware of the great art painted long ago in faraway palaces and cathedrals. Join Rhode Island artist and cathedral painter, Harley Bartlett in the Root Family Auditorium and learn how he has adorned the walls and ceilings of public buildings, churches, and private homes with wonderful imagery. Free for members or with paid museum admission.

Friday, December 13 3:00pm-4:00pm
On Site with Florida History: Bulow Plantation Ruins Historic State Park
Join MOAS Senior Curator of Education and History, Zach Zacharias, at Bulow Plantation Ruins Historic State Park in Flagler County for a tour of the amazing ruins on site. Learn about the history of this site as it was the largest slave plantation in Florida. Learn about life on the plantation and its ultimate destruction by the Seminoles. The park is located at 3501 Old Kings Road in Flagler Beach. Space is limited and advanced registration is required. RSVP by calling the Museum at 386-255-0285. Please dress for the weather and wear your walking shoes. Free for members, $5.00 for future members. Parking is $4.00 per vehicle.

Friday, December 13 6:00pm-9:00pm
Family Movie Night in the Planetarium: WALL-E
This Planetarium proudly presents Disney’s WALL-E. It follows a solitary robot on a future, uninhabitable, deserted Earth, left to clean up garbage. However, he is visited by a female Robot called EVE, with whom he falls in love and pursues across the galaxy. An instant blockbuster, WALL-E won for Best Animated Feature at the Academy Awards and topped Time’s list of the “Best Movies of the Decade.” This film will be displayed in 16:9 aspect ratio on the Planetarium dome in high definition. Popcorn and snacks will be available at the concession stand. Please arrive at least 15 minutes before the event start time. Tickets may be purchased in advance by calling 386-255-0285. After the film, move outside with us to the MOAS courtyard (weather permitting) as we explore the galaxy ourselves with telescopes and watch for the Geminid meteor shower. $8.00 for members, $10.00 for future members.

Friday, December 13 7:30pm-9:00pm
Night Sky Viewing Party
Join us in the MOAS courtyard for some winter skygazing. Weather permitting, the Planetarium staff will have telescopes and laser pointers to guide you through the views of the full Moon and winter constellations. With any luck, we will also spot some Geminiid meteors as they blaze a trail across the sky. Snacks and hot beverages will be available for purchase at the concession stand. Guests are welcome to bring their own chairs, telescopes/binoculars, and their curiosities about the universe. This outdoor event is free to the public.

Saturday, December 14 7:00pm-9:45pm
Second Saturday Laser Rock Concert
7:00pm Laser Holidays
8:00pm Rush 2112
9:00pm Pink Floyd – The Dark Side of the Moon
$5.00 for one show, $7.00 for two shows, and $9.00 for three shows. Tickets may be purchased in advance by calling 386-255-0285.

Tuesday, December 17 6:00pm-8:00pm
Jingle & Mingle Holiday Social
Celebrate the holidays at the Museum of Arts & Sciences with exclusive after-hours access to the Museum’s galleries, appetizers, and door prizes. Finish up your holiday shopping with unique gifts from local indie artists and artisans, a wine tasting and sales station with a Sommelier from S.R. Perrott, and discounts and offers from the Museum Store. Come dressed in your most festive attire. RSVP by December 9 by calling the Museum at 386-255-0285. Free for members, $10.00 for future members.

Thursday, December 19 10:30am-3:00pm
Holiday Hangout
Need to get some extra holiday shopping done? Drop your child off at the Charles and Linda Williams Children’s Museum at MOAS for a little magical holiday fun! This year’s theme will focus on the Wizarding World Christmas. Children 4-10 years old are welcome. Space is limited and advanced registration is required. Please call the Museum at 386-255-0285 to reserve your child’s spot. $6.00 for members, $8.00 for future members.

Thursday, December 19 2:00pm-3:30pm
Florida Vistas Book Club: The Scent of Scandal by Craig Pittman
Join us for our next Florida history book club meeting at the Cici and Hyatt Brown Museum of Art where we will be discussing the book, The Scent of Scandal. Learn more about the book at MOAS.org. Light refreshments will be served. RSVP by calling the Museum at 386-255-0285. Free for members, $5.00 for future members.

MOAS Gallery Specialist Tour
Tour with our Gallery Specialists from 3:00 p.m. to 4:00 p.m. on the second Tuesday and fourth Thursday of every month as they provide in-depth information on individual galleries around the Museum of Arts & Sciences. These tours are open to the public unless otherwise noted.

Tuesday, October 8 - Juan Junco
(Cuban Gallery)
Tuesday, October 24 - Bob Skinner
(Cici and Hyatt Brown Museum of Art)
Tuesday, November 12 - Anne Gayla
(Root Family Museum)
Tuesday, December 10 - Kelsey Hansen
(Tusawilla Preserve)
WE NEVER LEFT
Artists of Southeast Indian Tribes

Good News! This MOAS organized exhibition which was curated by Guest Curator, Walter L. Meyer, and was on view in the Museum’s Root Hall Gallery from January-April 2019 is traveling to the HUB-Robeson Galleries at Penn State University. In conjunction with a major conference on Indigenous cultures, it will be on view from September 18 - November 3, 2019 and then will be returned to Florida to be installed at the Collier County Museum in Naples where it will be on view from November 16 - January 11, 2020. This MOAS product is helping to spread our name out-of-state and highlights our exhibitions focused on Florida’s culture and heritage.

Wm
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MOAS
MUSEUM OF ARTS & SCIENCES

The Board of Trustees of the Museum of Arts & Sciences cordially invites you to attend the 2019 Annual Dinner

ANNUAL MEETING, AWARDS PRESENTATION AND INSTALLATION OF OFFICERS AND TRUSTEES

Monday, December 9, 2019
5:30 p.m.

Museum of Arts & Sciences
352 S. Nova Road, Daytona Beach

Business Attire

Kindly reserve your Annual Dinner tickets:

Number of individual tickets @ $45

I am unable to attend but want to contribute: $________

Please select one entrée selection for each attendee: Fish_____ Chicken_____ Vegetarian_____

Name(s): ___________________________ ___________________________ ___________________________

Address: ___________________________ ___________________________ ___________________________

City, State, Zip: ___________________________ ___________________________ ___________________________

Phone: ___________________________ E-mail: ___________________________

Please charge my credit card: __MasterCard ___ Visa ___ American Express ___ Discover

Card Number: ___________________________ Exp. Date: ___________________________

Security Code: ___________________________

Signature: ___________________________

I have enclosed a check or money order for: $________

MAIL REPLY AND PAYMENT TO:
MUSEUM OF ARTS & SCIENCES, 352 S. NOVA RD., DAYTONA BEACH, FL 32114
For more information, contact MOAS at 386.255.0285
MOAS 2019

HOLIDAY GIFT GUIDE

Join us for Museum Store Sunday on Sunday, December 1st. Enjoy complimentary snacks while you shop and enter to win door prizes! Both Museum stores are open to the public during regular museum hours with no admission fee.

LET'S GET SLOTHED!
Find something for everyone this holiday season! From Africa to Cuba and beyond - impress your friends and family with unique gifts inspired by the Museum’s collections.

The “Fine Art” Things in Life

Outer Space
So often during the hot summer months, volunteer organizations do not meet and activities are minimal. That is certainly not the case with our MOAS Guild. We plan nearly all of our events six months to a year in advance, with ongoing work in preparation of the scheduled activities.

Of course, the Halifax Art Festival (HAF) is our largest and most financially significant project of the year. All of the volunteers’ hard work pays off in so many ways: personal fulfillment, interesting activities, fun events, successful fundraisers, community enrichment, and national recognition! Southern Artist Magazine has notified us that our festival has, once again, been ranked among the top art shows in the country, as adjudged by artists. Last year, our specific ranking was 24th in the nation. This year we are ranked 18th out of 100!!! All credit is due to the remarkable dedication of the volunteers responsible for this ranking. Understandably, we are very proud and pleased that the artists who participate here value how we conduct the HAF. Work on next year’s festival begins while the current festival is underway! This year the beautiful art selected for showcasing the festival is entitled, “Minding My Own” by Ray Brilli and will be available to enjoy on our official festival tee-shirts!

At one point this past spring, it looked as if our festival would have to be moved from our longtime Beach Street location due to the plan of road modifications. It has been determined, however, that construction will not begin until after our festival occurs. So, fortunately our location for this year will remain on Beach Street. At this stage of planning, we are VERY interested in securing volunteers to work at this year’s festival.

An important opportunity for readers to support the HAF is to become a Patron of the festival. This unique opportunity entails making a minimum donation of $100 (not limited to) to support the festival. Half of your donation will
be returned to you as Patron Dollars that you can spend at any artist booth. There will also be a patron’s retreat at the festival where patrons can relax and enjoy a snack.

**News and Updates**

Another opportunity to get involved is by contributing to the festival’s Book Booth. This is a great opportunity to clear out all of those books that you no longer want. Please drop off any book donations to the MOAS front desk.

Our excellent annual Children’s Museum Golf Classic was held September 26th, at the Plantation Bay Golf & Country Club, one of the finest golf courses in our area. As usual, the tournament was a great success, with over $1,000 in prize money awarded.

George Fortuna is once again chairing our popular Casino Night. This event will be held on November 9th at the Palmetto Club. Festivities will include Texas Hold ‘Em, Black Jack, a silent auction, music by Mr. DJ, dancing, and a delicious buffet. Tickets are $35.00 per person.

Chaired by Karrie Houlton, our Family Festival of Trees is scheduled for December 7th. More details on this fun event will be available soon at MOAS.org. Mark your calendars now.

Our always popular Artful Interludes are currently in the planning stages by the chair, Diane Lessard. Under consideration is a play at the Daytona Playhouse, Menopause the Musical at the Peabody Auditorium, a boat tour of the turtle mound with dinner at J.B.’s Fish Camp, and a private tea at the River Lily Inn. If you have suggestions from interludes, please contact Diane at 386-341-0479.

Here is my personal invitation to you:

1. Volunteer for the HAF.
2. Become a Patron of the HAF.
3. Enjoy a night out at Casino Night in November.
4. Bring the whole family to the Family Festival of Trees.
5. Join the Guild and share in the sheer joy of making a difference in our community. I’ll be looking for you!
National Symphony Orchestra of Ukraine
Olga Kern, piano

Wrocław, Poland Philharmonic Orchestra
David Fray, piano

Royal Philharmonic Orchestra
Khatia Buniatishvili, piano

La Traviata
Teatro Lirico D’Europa

Russian State Symphony Orchestra
Polina Osetinskaya, piano

Sleeping Beauty
Russian National Ballet

Siberian Virtuosi
State Ensemble of the Republic of Sakha

For more information call
386.253.2901 or visit DBSS.ORG
The first planet from the Sun in our Solar System will put on a show this fall. In a cosmic lineup that only occurs a handful of times per century, the tiny planet Mercury will be crossing the Sun from Earth’s vantage point on November 11, 2019.

Since Mercury will be making itself known by the crossing – or transiting – of the Sun, this provides an opportune moment to explore the small, yet fascinating world, in a little more detail.

**Mercury 101**

Many are familiar with Mercury as it is represented by the word “My” in one of the more popular planetary mnemonics to memorize the Solar System: “My Very Educated Mother Just Served Us Nine Pizzas” (“Pizzas” is used if Pluto is included).

Compared to Earth, Mercury orbits a bit more than a third of the distance from the Sun and is roughly a third its size. Due to its close proximity to our nearest star, Mercury feels a powerful gravitational pull that propels it around the Sun in just under 88 Earth days. This means for every Earth year a person would age four Mercurian years.

The speedy nature of Mercury is the reason for its name. Since ancient Roman times, Mercury was well known as one of the five prominent planets that danced around the sky throughout the year, doing so faster than any other planet. This inspired the Romans to eventually name the planet after their fastest traveling god, Mercury, whose winged sandals allowed him to perform his godly messenger duties at lightning pace.

The swift orbit of Mercury – at a blazing speed of 106,000 miles per hour – and its tight vicinity to the Sun, also means that the planet can be quite challenging to follow. Many observers of the sky may not be aware they actually spotted Mercury since it can resemble a very bright, non-twinkling star, that doesn’t stray too far from sunset in the west or sunrise in the east. Night to night, Mercury changes its position more drastically than any other planet, and careful observation is usually necessary due to the Sun being situated nearby.
Unmasking Mercury

Dating far back to when early observers tracked Mercury across the sky, there has been much speculation as to what the planet’s appearance would be.

It’s easy to assume that Mercury is glowing in a fiery red color as it is baked by the intense radiation from the Sun close by. This wouldn’t be a bad assumption since the Sun in Mercury’s sky is approximately 2 to 3.5 times larger (this size varies due to highly elliptical, or oval shaped orbit) than the Sun as seen from Earth, generating temperatures up to 840 degrees Fahrenheit on the dayside. However, the nightside is far cooler, dropping down to minus 275 degrees Fahrenheit – due to practically no insulating atmosphere covering the planet.

The reality is that Mercury looks just like our own Moon. This can somewhat be seen through telescopes on Earth but is an exceedingly difficult task due to the Sun’s blinding glare.

The planet first came into full view when the earliest spacecraft to visit Mercury, NASA’s Mariner 10 (1974-1975), took many close-up images of the surface during a series of flybys. The spacecraft first saw the recognizable pockmarks of numerous craters, scattered on a mostly gray and dusty surface. Just like our Moon, the extraordinarily thin atmosphere doesn’t disintegrate the meteors that strike Mercury’s surface, allowing for extensive cratering.

Mariner 10’s images of the planet also revealed massive scarps, or cliffs, stretching over numerous areas. These geological features were later found to be the result of ongoing shrinking of Mercury as its large iron core cools and contracts, crunching the planet down, and resulting in many cliff-like features. This produces Mercury-quakes as the planetary shrinking occurs.

By the end of the brief Mariner 10 mission, the spacecraft was only able to image about 45 percent of the surface due to Mercury’s very slow rotation, not allowing the necessary amount of time needed to expose all sides of the planet to sunshine.

The second and last mission to visit Mercury was that of NASA’s MESSENGER (Mercury, Space Environment, Geochemistry, and Ranging) spacecraft, that studied the planet between 2008 and 2015.

With a more technologically advanced spacecraft and higher resolution cameras, MESSENGER was used to remap the entire planetary surface, covering thousands of miles previously missed by Mariner 10.

The completed map of Mercury revealed the extent of ancient volcanism that occurred billions of years ago, helping scientists construct a more accurate historical timeline.

Major findings from the mission includes the detection of carbon-containing organic compounds on the surface, water discovered in the highest levels of the Mercurian atmosphere, and even water-ice on the poles.

Water – in any form – found on the closest planet to the Sun was a major surprise, revealing that this life-sustaining molecule is more abundant in extreme environments than previously thought. The water-ice is preserved in permanently shadowed craters that exist on both poles and may have been derived from icy comet impacts or water vapor that outgassed from the planet’s interior.

On April 30, 2015, the MESSENGER mission came to an end as the spacecraft ran out of fuel and plunged into the planet’s surface.

The next mission to Mercury is already on its way, having launched on October 20, 2018, and is called BepiColombo – a joint venture between the Europe Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA). Each agency has its own spacecraft that are coupled together: The Mercury Planetary Orbiter and the Mercury Magnetospheric Orbiter. These orbiters will arrive at Mercury in December of 2025 and will provide a next generation study of this inner world.
The Transit of Mercury

On November 11 of this year, the Sun, Mercury, and Earth will line up in the exact configuration for a transit to occur. Since Mercury’s orbit is tilted at a seven-degree difference to Earth’s orbit around the Sun, planetary lineups such as these don’t come around often – occurring only 13 or 14 times per century.

This event can actually be thought of as a very small eclipse, but unlike solar eclipses brought on by our Moon, Mercury is much farther away and has a far smaller angular diameter than the Moon, meaning that the planet will only cover a very tiny portion of the Sun.

The last time this occurred was as recent as May 9, 2016, but transits of Mercury have been closely observed and predicted for hundreds of years.

Transits of both Mercury and Venus (only possible for these innermost planets) across the Sun have not only been observed for their interesting celestial appearance, but were initially studied to ascertain a more accurate distance measurement between the Earth and Sun.

If one observer can precisely time when they see a planet cross over the edge of the Sun compared to another observer on a different spot on Earth, a mathematical concept known as parallax (the apparent change of position of an object as an observer moves) can be used to measure distance to the object using trigonometry.

These transit measurements were attempted long ago, although they were not perfectly accurate due to the difficulty in precise timings of these events.

The first to make accurate predictions of Mercury and Venus transits was one of the most famous astronomers in history, Johannes Kepler (1571-1630). The German astronomer – who fundamentally changed our understanding of planetary motion – produced the Rudolphine tables that fairly accurately predicted these transits.

Interestingly, these tables show that Mercury transits can only occur in the months of May or November due to the planet’s orbital characteristics.

One notable prediction by Kepler was that a transit of Mercury and Venus would occur on November and December, respectively, in 1631. It was thought at the time of Kepler that this celestial opportunity would make it possible to view these transits for the first time ever through telescopes.
Unfortunately, Kepler died the year before the double transit. By the time of the Mercury transit on November 7, 1631, only a few people were able to successfully witness the event, with the first being credited to Pierre Gassendi, since he gave a written account of the observation. Gassendi, a well-known French philosopher and astronomer, was able to observe the planetary crossing from Paris by projecting an image of the Sun through his telescope onto a white piece of paper and following Mercury across it.

The study of planetary transits is not utilized the same way as they were in the past but are now very important for discovering objects light years away from Earth. The highly successfully Kepler spacecraft, named after Johannes Kepler and that has discovered thousands of planets outside of our Solar System, used minute transits across distant stars to reveal exoplanets. The transit method of exoplanet detection has now become the most successful technique for astronomers.

For the transit of Mercury that occurs on Monday, November 11, the Sun will fortuitously be in the sky for Florida and much of the United States.

Starting at 7:36 a.m. EST, Mercury begins its triumphant trek across the Sun. By 10:20 a.m., Mercury will be the closest to the Sun’s center for the entire transit. After about a 5 ½ hour transit journey, Mercury will depart the Sun’s massive disk at precisely 1:04 p.m.

As the transit occurs, the unlit Earth-facing side of Mercury will be seen as a tiny black dot. Even sunspots – cool areas on the Sun created by magnetic disturbances – can dwarf Mercury in size if they are active and nearby.

To view the transit safely, a telescope with a proper solar filter needs to be used. (Never look directly at the Sun without proper protection). If performed carefully, the Sun can also be projected through a refracting telescope, or even binoculars, onto a white piece of paper where Mercury can be followed throughout the transit (just like Gassendi did back in 1631). A professional with the proper equipment and expertise should also be consulted for safe viewing practices.

Looking toward the future, the next transits of Mercury that occur in 2032 and 2039 will not be visible from North America. The next opportunity for this part of the world will be on May 7, 2049.

If the weather cooperates for this transit, the astronomical event will provide a good reminder of the beautiful workings of the Solar System.

**MERCUlRY WILL TAKE CENTER STAGE IN THIS ORBITAL PLAY.**

**Monday, November 11, 2019**

**From 8:00 a.m. to 1:30 p.m., MOAS will be celebrating the transit of Mercury.**

Weather permitting, a special solar telescope will be in the MOAS courtyard for safe viewing throughout the event. In the Planetarium, a live stream will accompany the entire transit period, as well as a special live show at 11:00 a.m. Outdoor and Planetarium portions of this event are free to the public. (To enjoy the rest of MOAS after the show, regular museum admission must then be purchased.)