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Cosmic Loops

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Eating Bottles, Drinking Clouds

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From archaeologists in the jungle to neuroscientists in the lab, it's the promise of discovery that compels pioneers. While some scientists must travel the Earth, others need only explore the mind or the microscopic landscape on and in our bodies to reshape our perspectives. Join us this season as we piece together unfamiliar worlds—from the lost civilization of the Maya to newly revealed abilities encoded in our bodies and minds.
Maya: Hidden Worlds Revealed

On Exhibit | Limited Engagement
Admission (includes Exhibit Halls entry) $29, $27, $25 (adult, senior, child)
$5 for Members

The ruined cities of the ancient Maya have captured our imaginations since news of their discovery in the jungles of Central America in the mid-19th century. Uncover the rise and decline of this majestic civilization—including its social, natural, and spiritual realms—through never-before seen artifacts, hands-on activities, multimedia components, and re-created environments.

More than a thousand years ago, the Maya built elaborate cities without modern machinery or even the wheel; they communicated using one of the world’s first written languages; they measured time accurately using complicated calendar systems; and they had an advanced understanding of astronomy and agriculture.

Experience a cross-section of Maya life, from divine kings to the artisans and laborers who formed the backbone of society. And learn how the Maya people and their culture endure to this day.

Made possible with support from the National Endowment for the Humanities.

Maya: Hidden Worlds Revealed is presented in both English and Spanish.
The Thrill of the Find: Murals and Mysteries of the Maya

Wednesday, January 21; 7:00 p.m.
Admission $15

William Saturno, PhD, assistant professor of archaeology, Boston University; director, Proyecto San Bartolo/Xultún, Instituto de Antropología e Historia, Guatemala; research associate, Peabody Museum of Archaeology and Ethnology, Harvard University

While seeking refuge from the grueling heat of the Guatemalan jungle, William Saturno crawled down a looter’s trench to rest in the shade. He casually turned on his flashlight and gazed up at 2,000-year-old Maya murals in the site now known as San Bartolo. Nearly a decade later, but only five miles away, Saturno and his student Max Chamberlain uncovered an earthen mound hiding a Maya house adorned by murals unlike any ever found before. Hear tales of Saturno’s adventures and discoveries, and learn what these stunning murals reveal about the Maya, their lives, and their society.

Tickets on sale beginning Thursday, January 8 (Tuesday, January 6 for Museum members).
Purchase tickets in advance at mos.org/events.

Mystery of the Maya

Now Showing in the Mugar Omni Theater
Admission $10, $9, $8 (adult, senior, child)

Told through a modern-day archaeologist and a young Maya descendant who explore ruins and legends to unlock the secrets of the past, Mystery of the Maya takes you on a breathtaking trip through their culture and history. Feel as if you are actually there as you witness archaeologist Alberto Ruiz’s 1952 discovery of a secret burial tomb deep inside Palenque’s Temple of the Inscriptions.

Sponsored by MathWorks®
Crops, Water, and Climate Change: What Can We Learn from the Maya?

Wednesday, February 11; 7:00 p.m.
Admission $15

William L. Fash Jr., PhD, Charles P. Bowditch Professor of Central American and Mexican Archaeology and Ethnology, Harvard University | Douglas Kennett, PhD, professor of environmental anthropology, Pennsylvania State University | Timothy Beach, PhD, professor and C.B. Smith Centennial Chair, Department of Geography and the Environment, University of Texas at Austin | Vernon L. Scarborough, PhD, Distinguished University Research Professor, Charles P. Taft Professor, Department of Anthropology, University of Cincinnati

The Maya's ingenious manipulation of natural resources is awe-inspiring; jungle-covered ruins reveal sophisticated agricultural techniques, water pipe systems, and reservoirs. Nonetheless, when faced with a changing climate, vital resources became scant and the Maya civilization was stressed beyond survival. Join scholars who are transforming our understanding of the collapse of the Maya and what we can learn from their wondrous achievements and mysterious demise.

Tickets on sale beginning Thursday, January 8 (Tuesday, January 6 for Museum members). Purchase tickets in advance at mos.org/events.
The Origins of Maya Civilization: New Insights from Ceibal

Thursday, February 19; 6:00 p.m.
Admission Free
Location: Peabody Museum of Archaeology and Ethnology at Harvard University, Geological Lecture Hall, 24 Oxford Street, Cambridge

Takeshi Inomata, PhD, professor and Agnese Nelms Haury Chair, School of Anthropology, University of Arizona | Daniela Triadan, PhD, associate professor, School of Anthropology, University of Arizona

In the 1960s, Gordon Willey and a team of Harvard archaeologists led the investigation of Ceibal, a Maya site in Guatemala. Their research revealed that Ceibal was a very early settlement, one that predated the cities constructed in the heyday of Maya civilization. Recent excavations in Ceibal, directed by Takeshi Inomata and Daniela Triadan, have produced exciting new findings, including the discovery of what is considered the earliest ceremonial complex in the Maya lowlands, dating to 950 BCE. Inomata and Triadan will discuss the new discoveries and what they reveal about the origins of Maya culture and society.

No advance registration is required.

Tales of the Maya Skies

Now Showing in the Charles Hayden Planetarium
Admission $10, $9, $8 (adult, senior, child)

Witness the beauty of Chichén Itzá, Mexico, and listen to the story of the ancient Maya civilization. With unprecedented realism, Tales of the Maya Skies immerses you in Maya science, art, and mythology, using full-dome digital technology to transport you back into their world. Produced by Chabot Space & Science Center.
Depression, Suicide, and Resilience

Wednesday, April 1; 7:00 p.m.
Admission Free

Bruce M. Cohen, MD, PhD, psychiatrist and director, Program for Neuropsychiatric Research at McLean Hospital; Robertson-Steele Professor of Psychiatry at Harvard Medical School; Matthew N. Nock, PhD, professor of psychology and director of the Laboratory for Clinical and Developmental Research, Harvard University; Dost Öngür, MD, PhD, chief of Psychotic Disorders Division, McLean Hospital; associate professor of psychiatry at Harvard Medical School

According to the World Health Organization, depression is the leading cause of disability throughout the world and its prevalence is growing. With appropriate treatment, however, an estimated 80% of patients will experience relief. Step into the world of depression and to the forefront of techniques that may reduce its pervasiveness and the incidence of suicide, and may increase well-being.

Advance registration begins at 9:00 a.m., Wednesday, March 18 (Monday, March 16 for Museum members) at mos.org/events.

This program is free thanks to the generosity of the Lowell Institute.
Alive Inside: Music as Medicine

Wednesday, May 6; 7:00 p.m.
Admission Free

Takao Hensch, PhD, director of the Conte Center at Harvard; professor of neurology, Harvard Medical School; professor of molecular and cellular biology, Center for Brain Science, Harvard University | Gottfried Schlaug, MD, PhD, director of the Music and Neuroimaging Laboratory and the Stroke Recovery Laboratory; associate professor of neurology, Beth Israel Deaconess Medical Center and Harvard Medical School

Imagine awakening memories, emotions, and long-extinguished passions after years of numbness. The stirring documentary Alive Inside beautifully depicts the miraculous revitalization of Alzheimer's and dementia patients through the simple experience of listening to music. Alive Inside's inspirational story left audiences humming, clapping, and cheering at the 2014 Sundance Film Festival, where it won an Audience Award.

Join us for a screening and provocative discussion to explore music and the mind, the brain’s plasticity, and the power of music to heal in cases where prescription medication falls short.

Advance registration begins at 9:00 a.m., Wednesday, April 22 (Monday, April 20 for Museum members) at mos.org/events.

This program is free thanks to the generosity of the Lowell Institute. Additional funding provided by the Richard S. Morse Fund.

Bacteria and Viruses: The Good, the Bad, and the Ugly

Friday, March 20 and Saturday, March 21
Admission Free with Exhibit Halls entry

Learn about the microbes on us, in us, and around us, and how they influence human health. Participate in hands-on activities, including mapping the bacteria living on your own skin, creating your own hand sanitizer, and building your own virus. And hear the latest on cutting-edge research in the field of microbiology and health from Museum educators and guest scientists from the community.

Health programming sponsored by
Cosmic Loops: Music Beneath the Stars

Thursday, March 26; 7:15 p.m.
Admission $18

Ian Ethan, composer/musician | Eugene Friesen, composer/musician

Celebrate Einstein’s theory of relativity in the immersive environment of the Charles Hayden Planetarium. Soar through nebulas, black holes, and time itself while acoustic double-neck guitarist Ian Ethan and Grammy-winning cellist Eugene Friesen play multilayered compositions using real-time live looping technology with no pre-recorded sounds. Travel into another dimension with live music and the Planetarium team’s stunning visions overhead.

Tickets on sale beginning Thursday, January 8 (Tuesday, January 6 for Museum members).
Purchase tickets in advance at mos.org/events.

Part of 2015 Cambridge Science Festival’s “Celebrating Einstein” events marking the 100th anniversary of Einstein’s general theory of relativity. For details, visit cambridgesciencefestival.org.

J-Walt’s Spontaneous Fantasia

Tuesday, April 21; 6:30 p.m.
Admission $15

J-Walt, artist

Take a journey through the fantastic worlds of interactive art and performance with Spontaneous Fantasia. Sample a virtual reality where 3-D dancing figures and landscapes are all designed from scratch and in real time under the dome of the Charles Hayden Planetarium. This immersive musical and visual experience is created by J-Walt, a performer, filmmaker, graphic artist, and composer. Using self-designed software, a touchpad, and a joystick, J-Walt takes computer animation into uncharted territories before your eyes.

Tickets on sale beginning Thursday, January 8 (Tuesday, January 6 for Museum members).
Purchase tickets in advance at mos.org/events.

Part of the Cambridge Science Festival.
CELEBRITY SCIENCE SERIES
A Reno Family Foundation Symposium

Eating Bottles, Drinking Clouds, and Texting Your Evening Meal

Wednesday, April 29; 6:30 p.m.
Admission $35
Location: Café ArtScience and Le Laboratoire Cambridge, 650 East Kendall Street, Cambridge

David Edwards, PhD, inventor and biomedical engineer; founder and director, Le Laboratoire, Paris, France, and Cambridge, Massachusetts; Gordon McKay Professor of the Practice of Idea Translation, Harvard School of Engineering and Applied Sciences; author, ArtScience: Creativity in the Post-Google Generation

Join us for an evening of discovery with David Edwards, the inventor whose artsience experiments are becoming cultural game-changers. Embark on sensorial adventure at Edwards’s newest culture lab, where the public is invited to join his “willful, joyful experimentation.” Sip poetic clouds of intense flavor from Le Whaf, explore olfactory music with the magical oPhone, and drink water out of flavorful, nutrient-rich WikiFood packaging. Contribute your own creative ideas to sensorial trends that will be changing our world.

Edwards sees a new kind of learning igniting across America. In maker spaces, innovation programs, and cultural discovery environments, people young and old are starting to “learn to learn” to discover the undiscovered. Among the youngest people ever elected to the National Academy of Engineering, Edwards sees “culture labs,” like Le Laboratoire Cambridge, as propellers of discovery learning and a hopeful path for pioneering solutions to seemingly intractable global challenges.

Tickets on sale beginning Thursday, January 8 (Tuesday, January 6 for Museum members).
Purchase tickets in advance at mos.org/events.

Funding for this program provided by the Reno Family Foundation Fund. Additional funding provided by the Barbara and Malcolm L. Sherman Fund for Adult Programs.
The Photography of Modernist Cuisine

On Exhibit Through June 28
Admission Free with Exhibit Halls entry

The Photography of Modernist Cuisine reveals the colorful and surprising world of food as you have never seen it before. Accomplished scientist, author, and photographer Nathan Myhrvold and his team use hyper-magnified shots and cutaway views of food and cooking implements to offer a fresh perspective on familiar food sources. Their work is evidence that the intersection of science and art can be as beautiful as it is enlightening.
Food on Film Presents: FED UP

**Wednesday, March 25; 7:00 p.m.**
**Admission Free**

**Mark Hyman, MD**, physician and *New York Times* bestselling author; founder and medical director of The UltraWellness Center; director, Cleveland Clinic Center for Functional Medicine

Traditional wisdom prescribes a relatively simple course for weight loss: eat less and exercise more. But what if the modern food industry has learned to manipulate the prescription? *FED UP* takes on industrial food giants and the products causing millions of Americans to become obese, diabetic, and difficult to treat. Join Mark Hyman, a physician featured in the film, for a screening and discussion of the defining public health issue of our time.

Advance registration begins at 9:00 a.m., Wednesday, March 11 (Monday, March 9 for Museum members) at mos.org/events.

*This program is free thanks to the generosity of the Lowell Institute. Additional funding provided by the Richard S. Morse Fund.*

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**Humpback Whales**

**Opens February 13 in the Mugar Omni Theater**
**Admission $10, $9, $8** (adult, senior, child)

An extraordinary journey into the mysterious world of one of nature's most awe-inspiring marine mammals, *Humpback Whales* takes audiences to Alaska, Hawaii, and the Kingdom of Tonga for an immersive look at how these whales communicate, sing, feed, play, and take care of their young. After being nearly driven to extinction 50 years ago, humpbacks are making a steady recovery and are now found in every ocean on earth. Join a team of researchers as they reveal what makes humpbacks the most acrobatic of all whales, why only the males sing, and how these intelligent 50-foot, 48-ton animals migrate more than 6,000 miles round-trip every year.

*Humpback Whales is a MacGillivray Freeman film presented by Pacific Life.*

Sponsored by [MathWorks](https://www.mathworks.com)
AND MORE…

With events popping up throughout the season, the Museum has something for everyone.

From Dream to Discovery: Inside NASA Engineering

Now Showing in the Charles Hayden Planetarium
Admission $10, $9, $8 (adult, senior, child)

Join NASA engineers as they design, test, and launch today’s most exciting missions into space. Witness the enormity of the new James Webb Space Telescope, the intensity of Goddard Space Flight Center’s testing facilities, and the excitement of the New Horizons mission to Pluto. From blueprint to blastoff, experience how unmanned space flight is pushing the frontiers of human exploration to the very edges of the universe.

This material is based upon work supported by NASA under grant number NNX12AL19G. Any opinions, findings, and conclusions or recommendations expressed are those of the Museum of Science, Boston and do not necessarily reflect the views of the National Aeronautics and Space Administration (NASA).
Provocative Question Forum: Nanotech and Consumer Products

**Thursday, March 19; 7:00 p.m.**

Admission **Free**

Stain-resistant pants. Odor-proof socks. Anti-bacterial toothpaste. Nanotechnology is addressing some of society’s most pressing problems—energy, clean water, computing, and medicine—and now is moving outside the laboratory to the marketplace. Thousands of consumer products, such as sunscreens, cosmetics, textiles, washing machines, and adhesive bandages, are already available through nanotechnology. However, unlike medications and nano-materials used in carefully controlled laboratory research studies, these products are largely unregulated. Are nanoparticles different from other over-the-counter consumer items? Should there be warning signs or labels? Learn about the issues, discuss the trade-offs, and share your recommendations. This program will inform a future component in the *Hall of Human Life*.

Advance registration begins at 9:00 a.m., Thursday, March 5 (Tuesday, March 3 for Museum members) at mos.org/events.

Top Ten Science Stories of 2014

**Daily in January; 2:30 p.m.**

Admission **Free** with Exhibit Halls entry

The *Gordon Current Science & Technology Center* has been keeping up with innovative research and late-breaking scientific news all year, from the race to contain the Ebola outbreak to exciting new space exploration. In an annual tradition, the team highlights their picks for the ten most interesting and important science stories of 2014. Discover which stories made the cut and which one sits atop them all as our number-one science story of the year!
Afternoon Report

Daily in March and April; 2:30 p.m.
Admission Free with Exhibit Halls entry

Join our on-stage anchor in the Gordon Current Science & Technology Center for a rapid-fire news report with the latest headlines on your favorite science subjects. Segments of this live presentation may include breaking news, in-depth stories, video clips, special guests, and reports from the field.

Cambridge Science Festival

Friday, April 17 – Sunday, April 26
Admission Free with Exhibit Halls entry

Did you know that the world’s largest air-insulated Van de Graaff generator (star of our famous Lightning! show) was developed in Cambridge? Learn about this and much more during the Cambridge Science Festival. The festival showcases science, technology, engineering, and math in one of the strongest hubs for STEM in the United States—Cambridge! Although only half of the Museum is located in Cambridge, the whole institution will be abuzz with activities during this weeklong celebration. Stay tuned to mos.org for Museum-specific activities and visit cambridgesciencefestival.org for all of the week’s offerings.

Meet Astronaut Chris Cassidy

Sunday, April 19; 2:30 p.m.
Admission Free with Exhibit Halls entry

Astronaut Chris Cassidy has spent 181 days in space, including five space walks as part of shuttle mission STS-127 and as a member of the International Space Station crew on Expedition 35. Learn more about being an astronaut and living in space for months at a time.

COMING SUMMER 2015

The Science Behind Pixar

Step into the fun and engaging world of Pixar Animation Studios to learn what turns the spark of an idea into a groundbreaking film. Experience the magic of working at Pixar through hands-on interactive activities. Come face-to-face with your favorite characters including Sulley, Buzz Lightyear, and Dory! Get the ultimate behind-the-scenes look at the science to developing and producing iconic Pixar films from Toy Story to Inside Out.
The Science Behind Pixar
Step into the fun and engaging world of Pixar Animation Studios to learn what turns the spark of an idea into a groundbreaking film. Experience the magic of working at Pixar through hands-on interactive activities. Come face-to-face with your favorite characters including Sulley, Buzz Lightyear, and Dory! Get the ultimate behind-the-scenes look at the science to developing and producing iconic Pixar films from Toy Story to Inside Out.

Photo © Nicolaus Czarnecki

SUSTAINING LIFE

Food on Film presents: FED UP
Sustaining Life | Free

J-Walt's Spontaneous Fantasia
When Science Meets Art | $15

Eating Bottles, Drinking Clouds, and Texting Your Evening Meal
On Being Human | $35

Alive Inside: Music as Medicine
On Being Human | Free

AT A GLANCE

Dates and times are subject to change. For up-to-date information: 617-723-2500, 617-589-0417 (TTY), mos.org/events.
ADVANCE REGISTRATION
makes it easier for you to sign up for Museum programs.

To guarantee seating, many of our free programs for adults offer advance registration. The link to register is found on each event listing page at mos.org/events. Registration for each program begins at 9:00 a.m. two weeks prior to the event date. On the day of the program, please check in at the lobby starting one hour prior to the program start time to claim your seating pass. Any seating passes not claimed 15 minutes before the program will be released to walk-in visitors. If you have questions, or to make a reservation over the phone, please contact Science Central at 617-723-2500, open daily 9:00 a.m. to 5:00 p.m.

MEMBER BENEFIT: Museum of Science members can register for the free programs in advance of the general public.

WALK-IN VISITORS: A limited number of passes will be available for walk-in visitors on the evening of a free program: first come, first served. While we suggest using the advance registration system to guarantee a seating pass, in the event that online registration has been maximized, we are usually able to accommodate everyone who would like to attend.

Purchase Tickets:
Purchase tickets at the Museum box office, by phone at 617-723-2500, or online at mos.org/events.

Adult offerings are funded in part by the Barbara and Malcolm L. Sherman Fund for Adult Programs and by the David and Marion Ellis Endowment Fund.

For information about accessibility in the Museum: mos.org/accessibility. For questions or accommodation requests: 617-589-3102, accessibility@mos.org. Please request ASL interpreters at least two weeks in advance.

The Museum of Science gratefully acknowledges the support of our Premier Partners:
The Science Behind the Stars

Tuesday, April 14; 6:00 – 9:00 p.m.
Honorary co-chairs are Amy and Joshua Boger, Nonnie and Rick Burnes, and Cheryl and Bill Swanson.

Join us in the Museum’s Blue Wing to show your support for the Museum of Science, Boston. Enjoy a lovely dinner and lively entertainment, and toast the 2015 Star of STEM: Microsoft. Dan'l Lewin, Microsoft's corporate vice president for technology and civic engagement, will accept the award.

Individual tickets are $300 and include dinner, an awards presentation, and interactive experiences. Sponsorship levels start at $3,000. For more information, contact advancement special events at 617-589-0185 or visit mos.org/thesciencebehind.

BUILDING A PHILANTHROPIC COMMUNITY

Honoring leaders in science communications.

Imagine | Innovate | Inspire
The Campaign for the Museum of Science

The Museum’s adult offerings are a campaign funding priority, and charitable support from members and friends in the community helps to ensure robust programming at little to no cost. We hope you will consider making a tax-deductible campaign gift in support of these programs. For more information, please contact Jim Kraus at 617-589-0181 or jkraus@mos.org.