

# HARVARD MUSEUMS <sup>OF</sup> SCIENCE & CULTURE

**FALL 2015 PROGRAMS • EXHIBITS • CLASSES**

Collection of Historical Scientific Instruments  
Harvard Museum of Natural History  
Harvard Semitic Museum  
Peabody Museum of Archaeology & Ethnology




# One world. Four museums.

The Harvard Museums of Science & Culture (HMSC) present fall programs and exhibitions as varied and compelling as the collections from which they draw. Discover the historical and cultural significance of ocarinas, beautifully painted wind instruments drawn from the Peabody Museum's extensive collections in *Ocarinas of the Americas: Music Made in Clay*, opening in October. Dive into a dynamic recreation of oceanic life in the interactive new exhibition, *Marine Life in the Putnam Family Gallery*, opening in the Harvard Museum of Natural History in November. Attend lectures by experts and noted scholars on a range of topics, including King Tutankhamun and Queen Nefertiti, the history of handheld navigational devices, the effects of climate change on shorebirds, ocean exploration technology, and the role light plays in art, science, and human health. Inspire and entertain future explorers by taking advantage of HMSC's wide array of programs and classes for kids and families. Come see the world, in four museums.

- **Collection of Historical Scientific Instruments**
- **Harvard Museum of Natural History**
- **Harvard Semitic Museum**
- **Peabody Museum of Archaeology & Ethnology**

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Free parking is available at the 52 Oxford Street Garage for all events marked with a  unless otherwise noted. Not applicable to classes or exhibitions.

### Images on front cover (clockwise from top left)



#### **Etui of silver and ivory mathematical instruments**

Troughton & Simms, London, ca. 1850. A small ornamental case for holding needles, cosmetics, and other articles. Polished and dyed green ray skin—also known as shagreen—provides a luxurious and durable covering to a portable kit of mathematical and drawing instruments.

Collection of Historical Scientific Instruments, DW0232



#### **Blaschka Sea Creature *Caliphylla* sp.**

A glass invertebrate model made by the father and son artists Leopold and Rudolf Blaschka (makers of the Glass Flowers). The Museum of Comparative Zoology has a collection of 430 invertebrate models, a selection of which is on display in the Harvard Museum of Natural History. This is a species of nudibranch, a group of marine gastropod mollusks known for their bizarre and colorful appearance.

Museum of Comparative Zoology, SC227. Photograph by David Brown



#### **Carved wood fish, painted**

Purchased in 1959 from an itinerant native carver in Bali while one of the co-donors, Dr. Walter H. Hodge, was on a plant-collecting trip in Java.

Gift of Walter H. & Barbara T. Hodge. ©President and Fellows of Harvard College  
Peabody Museum of Archaeology & Ethnology, PM 2005.19.2



#### **Late Predynastic slate cosmetic palette**

Palettes such as this one from the Nile Valley, dating from 4500–3100 B.C., are often found in Late Predynastic pit burials. They were used to grind pigments for preparing eye makeup (kohl) worn by both men and women and often took the shape of fish or other animals. Commonly sized to fit the human hand, other larger, elaborately-decorated palettes, presumably ceremonial or belonging to royalty, are known.

Gift of A. M. Lythgoe. Harvard Semitic Museum, 1902.54.3

## EXPLORING MICRO AND MACRO WORLDS

### How Does Light Advance Science?

Adam E. Cohen, Professor of Chemistry and Chemical Biology and of Physics  
Departments of Chemistry and Chemical Biology, Harvard University

Dimitar Sasselov, Phillips Professor of Astronomy, Harvard-Smithsonian Center for Astrophysics  
Director, Origins of Life Initiative, Harvard University



The human eye is an amazing organ, but it only enables us to see a small fraction of the physical world. With the aid of light and special instruments, however, it is possible to see and study a world that would otherwise be invisible, from the minute molecules that make us who we are to distant galaxies across the expanding universe. Adam Cohen and Dimitar Sasselov will discuss the role of light in expanding our ability to “see” and they will highlight recent advances in light-based technologies.

#### What's Light Got to Do with It? Lecture Series

Free and open to the public. **HMSC**

Wednesday, September 16, 6:00 pm

Science Center (Hall C), 1 Oxford St, Cambridge

Series presented in partnership with the Harvard Brain Science Initiative and the Harvard Art Museums



## THE NARROW EDGE

### A Tiny Bird, an Ancient Crab, and an Epic Journey

Deborah Cramer, Visiting Scholar, Massachusetts Institute of Technology



Each year, red knot sandpipers travel an incredible 19,000 miles, from the tip of South America to nesting grounds in the Arctic—and back again—eating millions of tiny horseshoe crab eggs along the way. Newly listed as threatened under the Endangered Species Act, the red knot is the twenty-first century’s “canary in the coal mine.” Join Deborah Cramer, author of *The Narrow Edge: A Tiny Bird, an Ancient Crab, and an Epic Journey*, in a discussion of what is at stake for the red knot sandpiper and the millions of other shorebirds threatened by the effects of climate change.

Lecture and Book Signing. Free with museum admission. **HMNH**

Saturday, September 19, 2:00 pm

Haller Hall, enter at 26 Oxford St.

## ANCIENT ECLIPSES, ROMAN FISH TANKS, AND THE ENIGMA OF GLOBAL SEA LEVEL RISE

Jerry Mitrovica, Professor of Geophysics, Department of Earth and Planetary Sciences,  
Harvard University

Conjecture about the causes, magnitude, and dramatic geographic variability of global sea level change over the past century has provoked contention within the scientific community and misinformation in the general public. Jerry Mitrovica will provide an overview of the many datasets, including archaeological evidence, geological observations, and satellite-based measurements that have confirmed both the anomalous nature of recent sea level change and its inexorable acceleration. He will demonstrate how the geographic variability in sea level can be used not only to estimate the average sea level change worldwide, but also to “fingerprint” the sources of this change.

Lecture. Free and open to the public. **HMNH**

Monday, September 21, 6:00 pm

Geological Lecture Hall, 24 Oxford St.



## SOUVENIR, ART, OR ANTHROPOLOGY?

David Odo, Director of Student Programs and Research Curator of University Collections Initiatives, Harvard Art Museums

When is a photograph a souvenir? A work of art? Anthropological data? How can tourist photographs, produced to appeal to foreign visitors of “exotic” lands, become scientific data? Based on his studies of the Peabody Museum’s collection of early photographs of Japan, David Odo, author of *The Journey of “A Good Type”: From Artistry to Ethnography in Early Japanese Photographs* (Peabody Museum Press, 2015), will discuss this complicated terrain. The collection—composed of highly aesthetic photos colored by hand in the nineteenth century—is a fascinating example of how “art” and “science” can intersect in a museum.

Lecture and Book Signing. Free and open to the public. **PMAE**

Thursday, September 24, 6:00 pm

Geological Lecture Hall, 24 Oxford St.

Presented in collaboration with the Harvard University Asia Center and the Reischauer Institute of Japanese Studies, Harvard University



Visit *From Artistry to Ethnography in Early Japanese Photographs*, on view through Sunday, September 27, at the Center for Government and International Studies, Harvard University, 1730 Cambridge St., Cambridge

## BIOLOGY OF CULTURE

### Bridging Art and Science

Brian D. Farrell, Professor of Organismic and Evolutionary Biology  
 Director of the David Rockefeller Center for Latin American Studies, Harvard University



Can the reconciliation of the arts and sciences inform our understanding of nature and our place in it? Drawing on neurobiological, paleontological, and genetics research, philosophical studies of music and other arts, and our current understanding of the influence of nature on human health, Brian Farrell will suggest an evolutionary framework for integrating these fields, offering new perspectives on human culture and humanity's role in fostering a productive and sustainable future.

Lecture. Free and open to the public. **HMNH**  
 Tuesday, September 29, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St.

## YOUR OBEDIENT SERVANT

### The Unlikely History of the Handheld Navigational Device

Joyce E. Chaplin, James Duncan Phillips Professor of Early American History and Chair, Program in American Studies, Harvard University



Handheld devices that can provide an exact location with a click, tap, or swipe have become ubiquitous. The brand and cost of these devices often contribute to the owner's perceived social standing and the ultimate status symbols are increasingly devices that are worn, not held, such as Google Glass® and the Apple Watch®. There is historical precedent for this: In the past, only low-ranking people held instruments in their hands. Highborn individuals and navigators would have other people carry their instruments unless they could attach them to their bodies, as with eyeglasses or wristwatches. Joyce Chaplin will discuss the historical connections between handheld devices and social status and the impact of people becoming the self-navigating holders of their own devices.

Lecture. Free and open to the public. **CHSI**  
 Thursday, October 1, 6:00 pm  
 Visit website for location: [www.hmsc.harvard.edu](http://www.hmsc.harvard.edu)   
*Finding Our Way: An Exploration of Human Navigation*, an exhibition at the Collection of Historical Scientific Instruments, will be open following the lecture until 9:00 pm.

## AMAZING ARCHAEOLOGY FAIR AT HARVARD

Greetings from our field sites! Activities take place among the world-famous collections of North American, Maya, and Ancient Near Eastern archaeology held by the Peabody Museum of Archaeology & Ethnology and the Harvard Semitic Museum. Meet NeferKITTY the cat mummy, talk to archaeologists, explore behind-the-scenes treasures, visit the exhibit *From the Nile to the Euphrates*, dig deeply into colonial history with a new mobile phone guide, try out stone tools, throw a spear with the World Atlatl Association, and enjoy hands-on activities for all ages. Visit website for full program: [www.peabody.harvard.edu/events](http://www.peabody.harvard.edu/events)

Family Event. Regular museum admission rates apply. **PMAE HSM**  
 Saturday, October 3, 12:00-4:00 pm  
 Peabody Museum of Archaeology & Ethnology  
 11 Divinity Ave.  
 Harvard Semitic Museum, 6 Divinity Ave.



## ZOOARCHAEOLOGY LABORATORY OPEN HOUSE

Enjoy a behind-the-scenes visit to a major museum lab that helps archaeologists identify excavated animal bones. Are the bones from an ancient human occupation site or last year's picnic? The bones from archaeological digs can reveal what people ate, what animals they hunted, and what animals lived around them. Find out how experts work with archaeologists to identify animal bones from excavations all over the world. Researchers will demonstrate techniques using skeletons of modern animals. If you have found a bone in your backyard, bring it with you and have it identified! This is a popular annual event for school-age children.

Family Event. Regular museum admission rates apply. **PMAE**  
 Saturday, October 3, 12:30-4:30 pm  
 Peabody Museum of Archaeology & Ethnology, 11 Divinity Ave.



## How Does the Environment Affect Our Health?


John D. Spengler, Director, Center for Health and the Global Environment and Akira Yamaguchi Professor of Environmental Health and Human Habitation, Harvard T.H. Chan School of Public Health

Joseph Allen, Program Leader, Healthy Buildings, Center for Health and the Global Environment and Assistant Professor of Exposure Assessment Science, Harvard T.H. Chan School of Public Health

Julia Africa, Program Leader, Nature, Health & the Built Environment Center for Health and the Global Environment, Harvard T.H. Chan School of Public Health



The world is becoming increasingly urban. Factors such as overcrowding, air pollution, excessive noise, and lack of access to nature contribute to the emotional and physical stress of urban life. As cities continue to grow, there is a pressing need to design buildings, neighborhoods, and common spaces to foster a vital connection with nature and promote human health and the health of the planet. The speakers will share current research about environmental impacts on health and discuss new technologies, initiatives, and policies designed to promote human well-being.

Panel Discussion. Free and open to the public. **HMNH**  
 Monday, October 5, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St.   
 Presented in collaboration with the Center for Health and the Global Environment, Harvard T.H. Chan School of Public Health

## Your Brain on Art

### How Does Light Influence Our Perception and Creation of Images?

Margaret Livingstone, Professor of Neurobiology, Harvard Medical School

Sharon Harper, Professor of Visual Art, Department of Visual and Environmental Studies Harvard University

How does light help and inspire artists to create visual stories about places, moments, or experiences? What happens inside people's brains when they admire art? Do all people perceive the same thing when they look at a painting or a photograph? Neurobiologist Margaret Livingstone and photographer Sharon Harper will explore these questions and illuminate the science and art behind seeing, perceiving, and creating images.



*What's Light Got to Do with It?* Lecture Series


Free and open to the public. Registration required. Visit [www.hmsc.harvard.edu](http://www.hmsc.harvard.edu) **HMSC**  
 Wednesday, October 7, 6:00 pm

Menschel Hall, Lower Level, Harvard Art Museums, 32 Quincy St. (use Broadway St. entrance), Cambridge  
 Complimentary parking: Broadway Garage, 7 Felton St. 

Series presented in partnership with the Harvard Brain Science Initiative and the Harvard Art Museums as part of HUBweek 2015

## Film Screening: Sneak Preview of NOVA's Making North America

Attend a preview of the new NOVA-WGBH series, *Making North America*, an eye-opening adventure through our continent's three-billion-year geological history. Filled with panoramic vistas and immersive animation, *Making North America* explores the colossal geological forces at work beneath our feet that have shaped this continent.

Film Screening (45 min.). Free with museum admission. **HMNH**  
 Saturday, October 10, 2:00 pm  
 Haller Hall, enter at 26 Oxford St.   
 Presented in collaboration with NOVA; produced for PBS by WGBH Boston

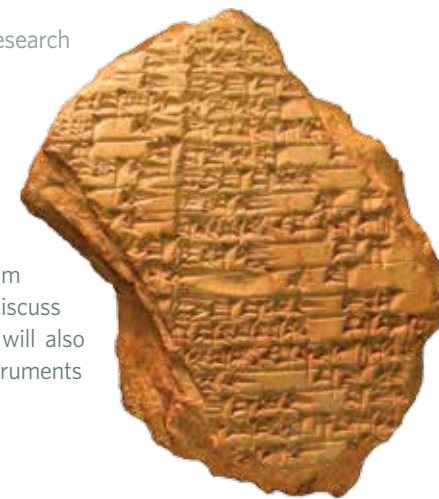



## Ancient Mesopotamian Music

Richard Dumbrill, Professor Emeritus, Institute of Musical Research School of Advanced Study, University of London

Irving Finkel, Assistant Keeper, The British Museum

Some of the earliest known examples of musical notation have been found in the region of modern-day Syria and Iraq and date back almost four thousand years. These early compositions—recorded in cuneiform script on clay tablets—have become better understood in recent years. This program will trace the history of early musical composition and discuss advances in the theory of its interpretation. The speakers will also demonstrate the sound of this music using reconstructed instruments and show how these were built and played in the Bronze Age.




Special Event. Free and open to the public. **HSM**  
 Wednesday, October 14, 6:00 pm  
 Visit website for location: [www.hmsc.harvard.edu](http://www.hmsc.harvard.edu)   
 Presented in collaboration with the Harvard University Department of Music

## Ancient Mesopotamian Cuisine

Experience a culinary journey to ancient Mesopotamia. This special event will present a curated selection of foods and beverages based on the earliest recorded recipes from the Ancient Near East. For a multisensory experience, attend the special event on ancient Mesopotamian music prior to this reception.



Reception. Advance tickets required.  
 Tickets available online September 1: \$40 members/\$50 nonmembers  
[www.hmsc.harvard.edu](http://www.hmsc.harvard.edu) **HSM**  
 Wednesday, October 14, 7:30 pm  
 Harvard Semitic Museum, 6 Divinity Ave. 

## THE HISTORY OF AN ADOBE WALL

### Society, Politics, and Burial in the Andes

Gary Urton, Dumbarton Oaks Professor of Pre-Columbian Studies, Harvard University



The mythological origin place of the Incas was the source of academic controversy for some time. In the early twentieth century, Machu Picchu was thought to be the place where Manco Capac, the first Inca king, originated. However, other evidence indicates that Manco Capac came from the Andean town of Pacariqtambo. Gary Urton will discuss these different perspectives, focusing on how an ancient adobe wall at the center of Pacariqtambo links its history with Machu Picchu's, and how its study can inform our understanding of larger-scale adobe buildings, from the time of the Incas into the deep pre-Columbian past.

Lecture. Free and open to the public. **PMAE**  
 Thursday, October 15, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St.

## QUEEN NEFERTITI IN BERLIN

### Anti-Semitism and the Spoils of War

Thomas Gertzen, Research Associate, Moses Mendelssohn Center for European-Jewish Studies, Potsdam, Germany

The iconic bust of Egyptian Queen Nefertiti was discovered in the ancient city of Amarna in 1912 by German Egyptologist Ludwig Borchardt and was subsequently donated to the Egyptian Museum in Berlin by James Simon, the German businessman who financed Borchardt's excavations. Later, during the Third Reich, Borchardt and Simon's accomplishments were denied in Germany, due at least in part to their Jewish heritage. Using the famous bust of Nefertiti as a central focal point, Gertzen will discuss the turbulent history of German Egyptology in the early twentieth century, highlighting the politics and ethnic prejudices that affected the field and discredited some of its key players.

Lecture. Free and open to the public. **HSM**  
 Wednesday, October 21, 6:00 pm  
 Yenching Auditorium, 2 Divinity Ave.

From the Nile to the Euphrates: Creating the Harvard Semitic Museum, an exhibition at the Harvard Semitic Museum, will be open following the lecture until 9:00 pm.



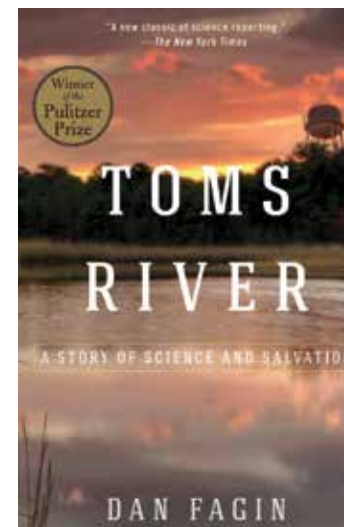
## CONNECTING THE DOTS IN TOMS RIVER AND BEYOND

Dan Fagin, Associate Professor of Journalism  
 Director of the Science, Health and Environmental Reporting Program  
 Carter Institute of Journalism, New York University

What information can be drawn from the study of cancer clusters? Dan Fagin, author of the Pulitzer Prize-winning book *Toms River: A Story of Science and Salvation*, will discuss why the story of this small New Jersey town, ravaged by industrial pollution, is not merely a cautionary tale of dumping, deceit, and denial, but is also a saga of deep science and compelling history, with roots extending around the world and across the centuries, from ancient Greece to modern-day China.

"[A] new classic of science reporting... This is, after all, no fairy tale, but a sober story of probability and compromise, laid out with the care and precision that characterizes both good science and great journalism in a territory where both are often reduced to their worst."  
 — Abigail Zuger, M.D., *New York Times*

Lecture and Book Signing. Free and open to the public. **HMNH**  
 Thursday, October 22, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St.



## FILM SCREENING: TRACING ROOTS

*Tracing Roots* is a glimpse into the world of Haida elder and master weaver Delores Churchill. The film follows Churchill on her journey to uncover the origins of a spruce root hat discovered with Kwäday Dän Ts'ínchi—the "Long Ago Person Found"—in a retreating glacier in Canada. Her search to understand the making of the woven hat crosses cultures and borders and involves artists, scholars, and scientists. The documentary is a story of connection to where people live, the art they make, and the people they teach.

Film Screening (35 min.). A discussion with Delores Churchill will follow the screening. Free with museum admission. **PMAE**  
 Saturday, October 24, 2:00 pm  
 Visit website for location: [www.peabody.harvard.edu](http://www.peabody.harvard.edu)   
 Presented in collaboration with the Harvard University Native American Program



## THE POWER OF TANGIBLE THINGS

Laurel Thatcher Ulrich, 300th Anniversary University Professor  
Department of History, Harvard University

Sarah Anne Carter, Curator and Director of Research, The Chipstone Foundation

Ivan Gaskell, Professor of Cultural History and Museum Studies  
Bard Graduate Center: Decorative Arts, Design History, Material Culture

Sara Schechner, David P. Wheatland Curator  
Collection of Historical Scientific Instruments, Harvard University

Samantha van Gerbig, Photographer and Designer  
Collection of Historical Scientific Instruments, Harvard University



In a world obsessed with the virtual, tangible things continue to mesmerize. In this program, the authors of *Tangible Things: Making History through Objects* will conduct a lively conversation about Harvard “stuff”: the books, manuscripts, artwork, scientific specimens, ethnographic artifacts, and historical relics found in the University’s world-class collections. The speakers will share perspectives on some of Harvard’s collected items and challenge people to discover new ways of looking at, organizing, and interpreting the tangible things in our environment.

Lecture and Book Signing. Free and open to the public. **HMSC**  
Monday, October 26, 6:00 pm  
Geological Lecture Hall, 24 Oxford St.

## TUTANKHATEN, PRINCE AND KING

Marianne Eaton-Krauss, Egyptologist and Author



The “boy king” Tutankhamun is known the world over, but what of Tutankhaten, as he was originally called and was known for a time, even after his accession to the throne of Egypt? Specialists dispute not only the identity of his parents, but also the very meaning of the name he was given at birth. This lecture will explore the identity of Tutankhaten, the objects that document his life, the significance of the decision to alter his name to Tutankhamun, and the political and religious ramifications of this event.

Lecture. Free and open to the public. **HSM**  
Wednesday, October 28, 6:00 pm  
Yenching Auditorium, 2 Divinity Ave.   
*From the Nile to the Euphrates: Creating the Harvard Semitic Museum*, an exhibition at the Harvard Semitic Museum, will be open following the lecture until 9:00 pm.

## DÍA DE LOS MUERTOS/DAY OF THE DEAD

Events will be held at the Peabody Museum of Archaeology & Ethnology, 11 Divinity Ave. Co-sponsored by the Consulate General of Mexico in Boston and the Mexico, Central America, and Caribbean Program at the David Rockefeller Center for Latin American Studies, Harvard University. For details, visit: [www.peabody.harvard.edu](http://www.peabody.harvard.edu)

### EVENING CELEBRATION

Celebrate Day of the Dead with a festive evening of music, food, and community. Remember departed loved ones in front of this year’s Día de los Muertos altar, savor traditional Mexican food, and enjoy lively Mexican music.

Special Event. Advance tickets required. Tickets available online.  
October 14: \$20 members/\$25 nonmembers. **PMAE**  
Friday, October 30, 6:00–9:00 pm

### FAMILY EVENT

Mexican folk dance and live mariachi music help make this a joyful, festive event, designed to remember and welcome back the spirits of loved ones. Decorate a sugar skull, make *papel picado* (cut-paper banners) and other artwork, and write a message to place upon the Día de los Muertos altar. View contemporary carved and painted folk art from Oaxaca by Ventura and Norberto Fabian.

Family Event. No advance tickets required. **PMAE**  
Snacks and activities free with museum admission  
Skull decorating fee: \$5 per skull  
Sunday, November 1, 12:00–4:00 pm



## FILM SCREENING: DAUGHTERS OF ANATOLIA

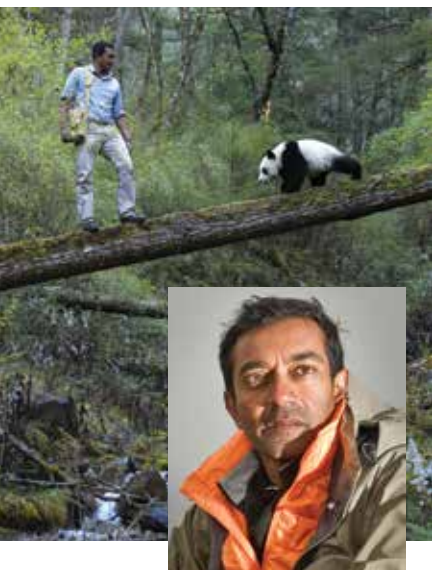
*Daughters of Anatolia* follows a Turkish family of nomadic goat herders as they travel ancient seasonal migration routes with their 350 animals, alternating between winters on the Mediterranean and summers in the Taurus Mountains. Producer/director Halé Sofia Schatz documents a lifestyle in transition—one that has roots in traditions dating to the twelfth century, but that now faces challenges from an increasingly urbanized world.

Film Screening (56 min.). A discussion with the film director will follow. Free and open to the public. **PMAE**  
Wednesday, November 4, 6:00 pm  
Visit website for location: [www.hmsc.harvard.edu](http://www.hmsc.harvard.edu)   
Presented in collaboration with the Harvard Center for Middle Eastern Studies



## HOW NATURE CAN SAVE US

M. Sanjayan, Executive Vice President and Senior Scientist, Conservation International



We live in the Anthropocene, the age of humans, and not since cyanobacteria transformed Earth's early atmosphere has one species—*Homo sapiens*—had such an outsized influence on the diversity of life on the planet. Saving nature in the human age is a challenging proposition, but perhaps a more relevant question might be how nature can save humankind. In an epic journey across 24 countries (accompanied by a film crew from PBS and National Geographic), Sanjayan compiled awe-inspiring stories that illuminate the inextricable link between the environment and human beings. In this program, he will discuss his journey and the basic truth it revealed: that saving nature is really about saving ourselves.

Presentation and Interview. Free and open to the public. **HMNH**  
 Thursday, November 5, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St.   
 Presented in collaboration with the  
 Harvard College Conservation Society

## IN AND OUT OF SYNC

### How Does Light Impact Health?

Dragana Rogulja, Assistant Professor in Neurobiology, Harvard Medical School

Holly W. Samuelson, Assistant Professor of Architecture, Harvard Graduate School of Design

Natural light stimulates people's circadian clocks, keeping activities synchronized with the day-night cycle. How can building design satisfy occupants' biological and psychological need for natural light, while also balancing issues of glare, thermal comfort, and energy savings? Dragana Rogulja and Holly Samuelson will discuss the importance of light in both daily life and built environments, as well as its impact on overall well-being.

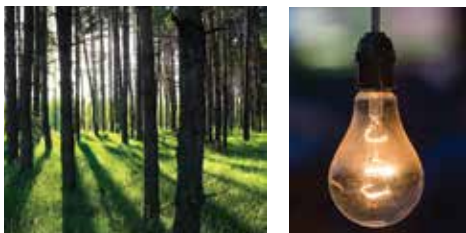
*What's Light Got to Do with It?* Lecture Series

Free and open to the public. **HMSC**

Saturday, November 7, 2:00 pm

Visit website for location: [www.hmsc.harvard.edu](http://www.hmsc.harvard.edu)

Series presented in partnership with the Harvard Brain Science Initiative and the Harvard Art Museums



## EHECATL

### The Mythic and Cultural Origins of a Mesoamerican Wind God

Karl A. Taube, Professor, Department of Anthropology, University of California at Riverside

One of the most striking and curious deities of the Aztec pantheon is Ehecatl, a duck-billed deity embodying ethereal concepts such as rain-bringing wind and the breath of life. In jarring contrast, Quetzalcoatl—a better-known Aztec deity who also embodies the same concepts of wind—is represented as a quetzal-plumed rattlesnake. Through epigraphic and iconographic studies of the Olmec, the Maya, and the cultures of Central Mexico, Karl Taube will trace the origin of Ehecatl in eastern Mesoamerica and its subsequent introduction into Central Mexico, highlighting its relevance and associations with Quetzalcoatl.

2015 Tatiana Proskouriakoff Lecture and Reception

Free and open to the public. **PMAE**

Tuesday, November 10, 6:00 pm

Geological Lecture Hall, 24 Oxford St.



## RAREST OF THE RARE

### Behind the Treasures at the Harvard Museum of Natural History

James Hanken, Professor of Biology, Department of Organismic and Evolutionary Biology; Curator in Herpetology; Alexander Agassiz Professor of Zoology; and Director, Museum of Comparative Zoology, Harvard University

Nancy Pick, Science Writer and Editor

Donald Pfister, Asa Gray Professor of Systematic Botany and Curator of the Farlow Library and Herbarium, Harvard University

Raquel Alonso Perez, Curator, Harvard Mineralogical & Geological Museum

In the words of biologist Edward O. Wilson, the Harvard Museum of Natural History stands as both "cabinet of wonder and temple of science." Its rich and unlikely history involves literary figures, creationists, millionaires, and visionary scientists, from Asa Gray to Stephen Jay Gould. First published in 2004, *Rarest of the Rare* tells fascinating stories about the vast and diverse collections of animals, minerals, and plants housed at the museum. To celebrate the book's reissue, a panel will discuss the relevance of the museum's scientific collections in the twenty-first century and the value of knowing the history of these great treasures.

Panel Discussion and Book Signing. Free and open to the public. **HMNH**

Thursday, November 12, 6:00 pm


Geological Lecture Hall, 24 Oxford St.



## NEW ENGLAND ROCKS!



Explore rocks and minerals found here in New England and across North America. Learn how North America was formed and has changed over the past 600 million years through hands-on activities and segments from the new NOVA-WGBH series, *Making North America*. Bring your own rock or mineral specimen to be identified by members of the Boston Mineral Club and learn how to create a collection of your own.

Family Event. Regular museum admission rates apply. **HMNH**  
 Sunday, November 15, 1:00–4:00 pm  
 Harvard Museum of Natural History, 26 Oxford St.   
 Presented in collaboration with the Mineralogical & Geological Museum at Harvard University, the Boston Mineral Club, and NOVA, produced for PBS by WGBH Boston


## OCEAN EXPLORATION TECHNOLOGIES

### Past, Present, and Future

Robert D. Ballard, Founder and Director of the Center for Ocean Exploration, Graduate School of Oceanography, University of Rhode Island; Founder and President of the Ocean Exploration Trust and Senior Scientist Emeritus, Woods Hole Oceanographic Institution



What does the future of ocean exploration look like? Deep-sea explorer Robert D. Ballard, famous for the discovery of hydrothermal vents, “black smokers,” and the RMS *Titanic*, will discuss the history and future of ocean exploration technologies. From the earliest manned deep-diving submarines to the latest remotely operated vehicle (ROV) systems that use satellite technology to transmit data in real time, technology has increasingly made interactive ocean exploration a reality. Ballard will highlight past scientific achievements in ocean exploration and outline the opportunities ahead for using advanced telepresence technologies.

Lecture. Free and open to the public. **HMNH**  
 Wednesday, November 18, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St. 

## THREE WAYS TO LIVE THE HIGH LIFE

### Andean, Tibetan, and East African

Cynthia Beall, Distinguished University Professor and Sarah Idell Pyle Professor of Anthropology, Case Western Reserve University

Roughly 83 million indigenous people live on Tibetan, Andean, and East African plateaus—high-altitude environments where oxygen is scarce. How do they survive in such harsh places? Physical anthropologist Cynthia Beall will discuss her groundbreaking research on the genetic and physiological adaptations that each of these populations has developed in order to live in thin-air environments and what this tells us about the current, ongoing evolution of our species.


Lecture. Free and open to the public. **PMAE**  
 Wednesday, December 2, 6:00 pm  
 Geological Lecture Hall, 24 Oxford St. 



## SCIENCE OF THE MAGICAL

Matt Kaplan, Author and Science Correspondent, *The Economist*

Can bird migrations foretell the future? Do phases of the moon hold sway over our lives? Are there sacred springs with curative powers? What is the best way to brew a love potion? In this interdisciplinary talk filled with tales of adventure, science journalist Matt Kaplan, author of *The Science of Monsters* and *Science of the Magical*, will explore the rich, lively, and surprising reality behind some of the magical objects, places, and ideas that infuse ancient and modern myths.

Lecture and Book Signing. Free with museum admission. **PMAE HMNH**  
 Saturday, December 5, 2:00 pm  
 Haller Hall, enter at 26 Oxford St. 



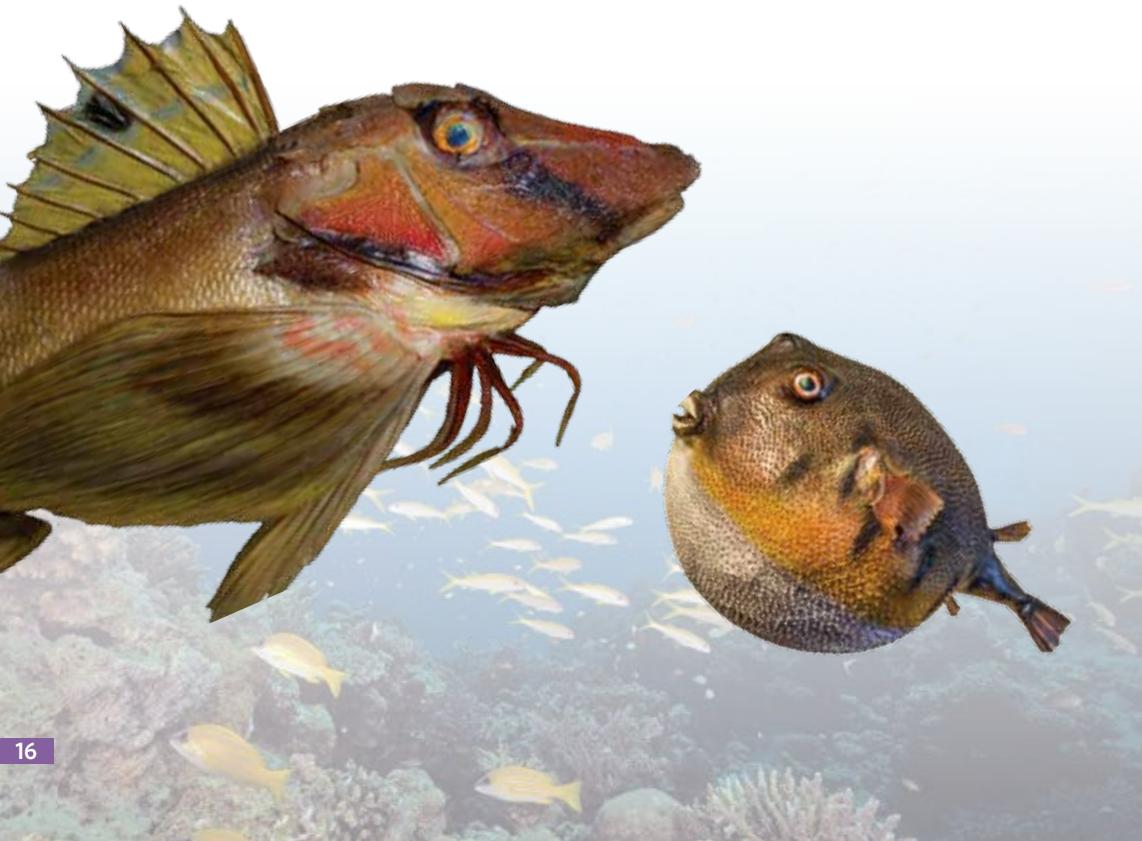
# UPCOMING

## MARINE LIFE IN THE PUTNAM FAMILY GALLERY

OPENING SATURDAY, NOVEMBER 21. HARVARD MUSEUM OF NATURAL HISTORY

The centerpiece of the new *Marine Life* exhibition—a floor-to-ceiling recreation of life in New England’s coastal waters—will immerse visitors in the astounding diversity and dynamic interplay among animals in marine communities just off local shores. As models of glowing jellies, a giant sea turtle, and other sea animals appear to swim above their heads, museumgoers will learn about new research and explore displays of real fishes, mollusks, crustaceans, corals, and other marine organisms selected from the world-renowned collections of Harvard’s Museum of Comparative Zoology. A special interactive display will introduce visitors of all ages to the amazing world of jellyfish, and the ocean exploration theater will take them on a multimedia journey of discovery into the surface and deep oceans of the world, guided by Harvard biologists.

This exhibit is made possible by a generous gift from George Putnam III, AB '73, JD '77, MBA '77, and Kathy Putnam.



# EXHIBITS

## OCARINAS OF THE AMERICAS

Music Made in Clay

OPENING SATURDAY, OCTOBER 3. PEABODY MUSEUM OF ARCHAEOLOGY & ETHNOLOGY



This exhibit will feature over 100 spectacular examples of ocarinas from the Peabody Museum’s vast collection. Uncovered at archaeological sites in Central America and Mexico, these musical instruments were crafted from local low-fired clay and carefully fashioned, incised, and painted into a variety of human and animal forms. Visitors to this multisensory exhibit will hear soundscapes that feature the varied tones and melodies produced by ocarinas, from the whimsical to the deeply haunting. *Ocarinas of the Americas: Music Made in Clay* will explore the history and cultural significance of these extraordinary works of art and sound that have inspired invention and captured the modern imagination.

## COMING THIS SPRING: GRAND REOPENING OF HARVARD’S GLASS FLOWERS EXHIBITION

CLOSING NOVEMBER 9; REOPENING MAY 21.  
HARVARD MUSEUM OF NATURAL HISTORY

The internationally acclaimed Ware Collection of Blaschka Glass Models of Plants, the “Glass Flowers,” was commissioned in 1886 by Harvard University from the German glass artists Leopold and Rudolf Blaschka. This father-son collaboration produced thousands of one-of-a-kind botanical masterpieces. This fall, the current Glass Flowers gallery will close for extensive model and case restoration, space renovation, and the installation of state-of-the-art lighting and display features that will combine to create a stunning new exhibition showcasing the unique history, unparalleled artistry, and ongoing scientific relevance of the Glass Flowers. During this major renovation, the most expansive in the models’ history, a small exhibit of selected models will be on temporary display.

This exhibition is supported by a generous gift in memory of Melvin R. Seiden AB '52, LLB '55 and a grant provided by the Massachusetts Cultural Facilities Fund, a program of the Commonwealth of Massachusetts administered through a collaborative arrangement between MassDevelopment and the Massachusetts Cultural Council.



## KIDS' DRAWING CLASSES

These classes offer kids the chance to learn drawing techniques and examine the museum's collections more closely. Taught by educator and artist Erica Beade.

### CAPTURING SKELETONS WITH PENCIL AND PAPER (AGES 9-13)

Saturday, October 24, 2:00-3:30 pm  
\$25 members/\$35 nonmembers **HMNH**

### CAPTURING BIRDS OF PREY WITH PAPER AND PENCIL (AGES 9-13)

Saturday, November 7, 2:00-3:30 pm  
\$25 members/\$35 nonmembers **HMNH**

### CAPTURING FUR, FEATHERS, AND SCALES WITH PENCIL AND PAPER (AGES 9-13)

Saturday, December 5, 2:00-3:30 pm  
\$25 members/\$35 nonmembers **HMNH**

## ADULT CLASSES

All skills levels are welcome!

### DRAWING THE ANIMALS: A FOUR-WEEK COURSE

Erica Beade, Educator and Artist  
Four Saturdays: October 17, 24, 31 and November 7; 9:30-11:30 am  
\$110 members/\$130 nonmembers **HMNH**

### WHAT MAKES A SNAKE A SNAKE?

Joe Martinez, Instructor  
Saturday, November 14, 9:30 am-12:00 pm  
\$40 members/\$50 nonmembers **HMNH**

### THE ART OF DRAWING BIRDS

Erica Beade, Educator and Artist  
Saturday, January 30, 9:30 am-12:00 pm  
\$40 members/\$50 nonmembers **HMNH**

## FAMILY CLASSES

A learning experience for adults and children (grades K-5) to share. Taught by HMNH science educator Amy Gunzelmann. Fees are per person.

### EXPLORING SCIENCE TOGETHER OWLS!

Saturday, September 19, 10:30 am-12:00 pm  
\$10 members/\$20 nonmembers **HMNH**

### EXPLORING SCIENCE TOGETHER THE ICE AGE

Saturday, November 14, 10:30 am-12:00 pm  
\$10 members/\$20 nonmembers **HMNH**

### EXPLORING SCIENCE TOGETHER DINOSAURS!

Saturday, January 23, 10:30 am-12:00 pm  
\$10 members/\$20 nonmembers **HMNH**

All classes are held at 26 Oxford Street unless otherwise indicated. Advance registration is required. For easy online registration, visit: [www.hmsc.harvard.edu/education](http://www.hmsc.harvard.edu/education)

Visit the HMNH website for additional learning opportunities at the museum, including an extensive selection of educational videos: [www.hmnh.harvard.edu](http://www.hmnh.harvard.edu)

## LEARNING MORE ABOUT THE MUSEUMS

The Harvard Museums of Science & Culture offer opportunities for visitors to learn more about current exhibitions, the thousands of artifacts and specimens on display, and the Harvard collections from which they draw. Sign up for a museum/gallery tour or take advantage of one of HMSC's self-guided tours.



## GUIDED TOURS

### Glass Flowers Tours

Groups can reserve docent-led tours of the famous Blaschka *Glass Flowers* and *Sea Creatures in Glass* exhibits on Tuesday and Thursday afternoons. Please note that the Glass Flowers gallery will be closed from November 9, 2015 until May 21, 2016, as it undergoes a major renovation. Advance registration is required. Select "Groups" on the "Visit" page at: [www.hmnh.harvard.edu](http://www.hmnh.harvard.edu) for registration, capacity, and fee information.

### Harvard Semitic Museum Tours

The museum offers free half-hour lunchtime tours each month; individualized group tours can also be scheduled. Go to the "Visit" page at [www.semiticmuseum.fas.harvard.edu](http://www.semiticmuseum.fas.harvard.edu) for more information.

### Peabody Museum Highlights Tours (beginning September 26, 2015)

The Peabody Museum offers drop-in tours designed for adult visitors, led by Harvard student guides three days/week during the academic year. Private group tours may also be scheduled. See website for schedule and reservation information: [www.peabody.harvard.edu/visit](http://www.peabody.harvard.edu/visit).

## SELF-GUIDED TOURS

### Mobile Gallery Guides

Enhance your visit with additional multimedia for your cell phone or tablet.

*Finding Our Way: An Exploration of Human Navigation*  
Through December 11, 2015 **CHSI**

*Islands: Evolving in Isolation* **HMNH**

*Digging Veritas: Archaeology and History of the Indian College and Student Life at Colonial Harvard* **PMAE**





## One Membership. Four Museums.

### MEMBER EVENT *Stay Tuned!*

Members' Night at the Harvard Museum of Natural History  
Early December, registration details to follow

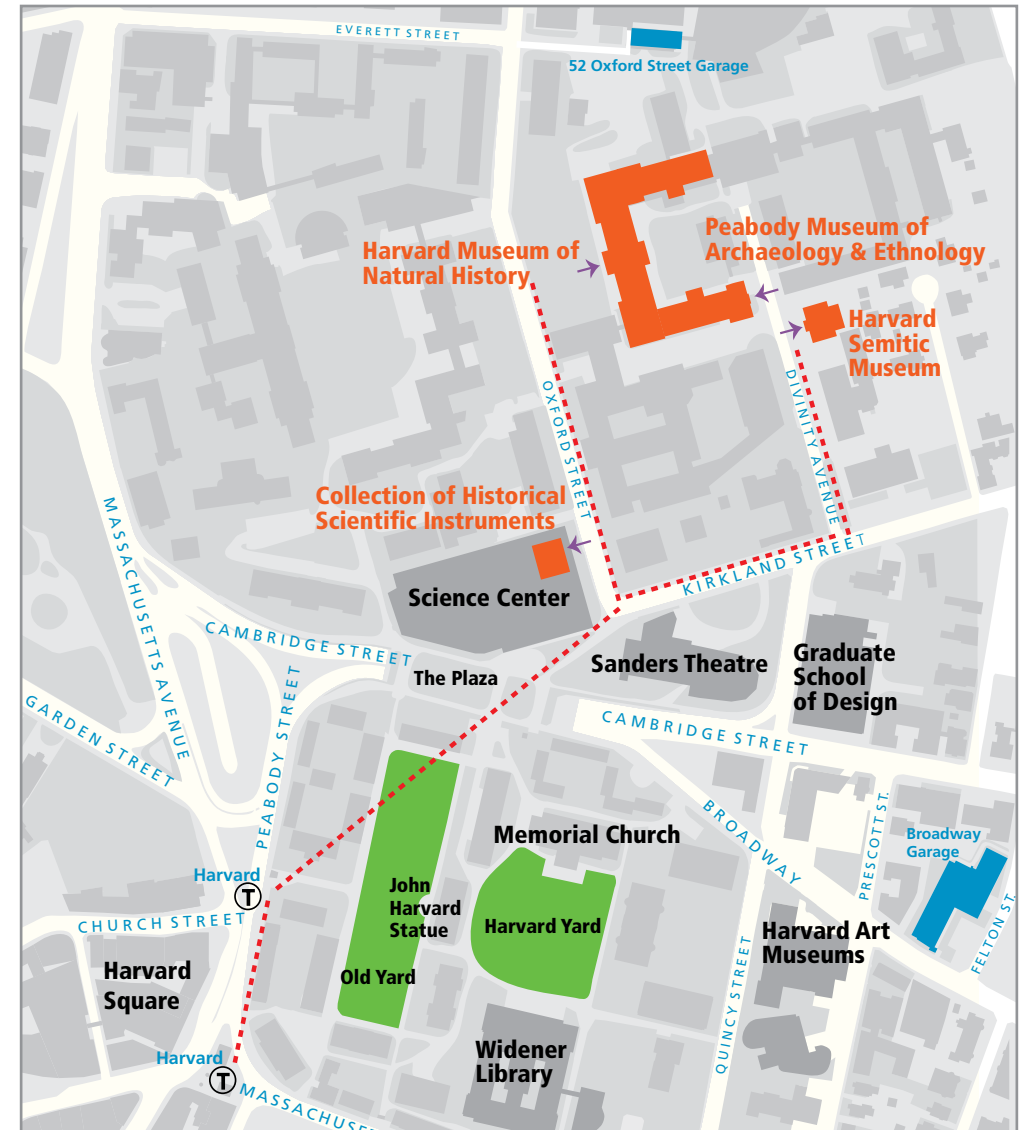
Join fellow members for a behind-the-scenes glimpse into the Museum of Comparative Zoology's Herpetology Department (home to some of the specimens featured in HMNH's recent *Islands: Evolving in Isolation* exhibit), and take advantage of a special 25% member discount for holiday shopping at the museum shop. Also enjoy extended exhibit hours at this always-popular annual event.

### Membership

All members enjoy free admission to the museums, invitations to special events, behind-the-scenes tours, and discounts on museum classes and museum shop purchases. Become a member today!

To join or renew, return the form included in this program guide or join online at: [www.hmsc.harvard.edu/membership](http://www.hmsc.harvard.edu/membership)

Contact the Membership/Development office for more information: [members@hmsc.harvard.edu](mailto:members@hmsc.harvard.edu) or 617.496.6972



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**HMSC**

**HARVARD MUSEUMS OF SCIENCE & CULTURE**

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