



## HISTORY

The Maryland Academy of Sciences, the parent organization of the Maryland Science Center, is Maryland's oldest scientific institution and one of the oldest such institutions in the entire nation.

The Academy was founded in 1797 as an amateur scientific society; members met to discuss papers on astronomy, botany, zoology, and other subjects then known as the "natural sciences". Rembrandt and Raphael Peale, sons of painter and scientist Charles Wilson Peale, were among the distinguished early members. The Academy also operated the Museum of Natural History, where for the admission price of 25 cents, visitors could examine a live rattlesnake, stuffed birds, wax figures of famous people and an assortment of sea life like coral and seahorses. A tragic fire in the late 19th Century destroyed much of the library, collections, and records from that period.

Members of the Academy in the 19th Century included members

of some of the most distinguished families of Baltimore: Gilmor, Howard, Hayden, Maulsby, Ellicott, Poultney, Pattison, Fisher, Donaldson, Tyson, and Pennington. In notes taken from old records are the names of Declaration of Independence signer Charles Carroll of Carrollton ("Our honored member and advisor") and J.H.B. Latrobe, son of the famous architect.

The early years of the 20th century saw an unprecedented expansion in scientific and technical knowledge; the Academy responded to this by adopting the role of interpreter of science and technology to the public. Less emphasis was placed on static collections; instead, working exhibits were designed to illustrate fundamental scientific principles or industrial processes. An observatory and a weekly lecture series were added, and membership substantially expanded. The Academy moved first to Franklin Street and later to North Charles Street.

Near the end of World War II, the Academy relocated to the third floor of the Enoch Pratt Library; but space limitations were severe. The long-time dream of the Board of Trustees and staff was realized with the June 1976 opening of the Maryland Science Center on the south shore of Baltimore's Inner Harbor. The new museum, designed by internationally-known architect Edward Durrell Stone was the first attraction built as part of Baltimore's famed renaissance. The new museum, a windowless structure with the main entrance facing Key Highway, featured interactive exhibits and the state-of-the-art Davis Planetarium.

A decade later, the Maryland Science Center reoriented its visitor profile with the addition of a new atrium lobby in 1986. The 400-seat IMAX Theater opened in 1987.

Construction for the Maryland Science Center's 40,000 square foot, \$35 million expansion began in 2002.

## MISSION AND VISION

The Mission of the Maryland Science Center is to create awareness in everyone of the importance of science in our lives by engaging them with exciting educational experiences. It is also to motivate our youth to pursue careers in science and technology through community collaboration with academia, government, and industry.

The vision of the Maryland Science Center is to create interest in young people in science by engaging and entertaining them. As one of the most unique and important educational institutions in the region, the Science Center makes science fun; entertainment is the means and education is the end. And because

of its well-earned reputation for exhibition excellence and innovative programming, the Maryland Science Center is a national model for "turning on" children to science.

## DINOSAUR MYSTERIES

**Location:** Level One and Level Two Balcony Earth Science and Dinosaur Hall  
**Area:** 15,000 square feet

**Exhibit Goal:** Dinosaur Mysteries engages visitors in the process of scientific discovery in an exploration of the forces that have shaped our planet. The fascination with dinosaurs is the focal point for understanding topics such as evolution, anatomy, and climate change. By attempting to answer a series of questions – mysteries – about how dinosaurs lived and died, visitors will appreciate the processes common to all scientific discoveries.

Because interest in dinosaurs is universal, Dinosaur Mysteries captivates all visitors and reinforces the message that science is interesting, engaging, thought-provoking, challenging, and fun.

**Exhibit Description:** Unlike most museum dinosaur displays, Dinosaur Mysteries is almost entirely hands-on. Visitors are able to touch full-size dinosaurs, pick up artifacts and fossils, and simulate the sounds that dinosaurs may have made. Dinosaur Mysteries includes 13 full-scale dinosaurs made from fossils and casts of actual specimens recovered in the field. The largest display is a 45 foot long, 15 foot tall articulation of one of the largest known dinosaurs, a giganotosaurus. This skeletal model is mounted on

a platform so that visitors can walk underneath, inspecting the feet and belly of the prehistoric creature.

Visitors participate in more than two-dozen interactive activities that simulate a paleontological dig and the discovery process. These activities are placed under tent-like structures to create the feel of working “in the field.” A 24 foot (in diameter) translucent globe in the center of the Hall is a dynamic graphic showing layers of life and change on the planet.

The “mysteries” in the exhibit were carefully selected after extensive front-end evaluation and a thorough review of existing earth science/dinosaur exhibits in science centers and natural history museums throughout the world. The questions posed in Dinosaur Mysteries reflect the concerns of both scientists and visitors – what they want to know about.

### The core experiences in the Dinosaur Mysteries Exhibit include:

- A 40 foot long Tyrannosaurus Rex is suspended in the museum’s front window. This model is the first in the country to feature the lower rib cage.
- A dramatic setting depicts the Maryland state dinosaur, *astrodon johnstoni*, being attacked by a smaller *acrocantosaur*. This 67 foot long and 29 foot tall recreation of these two dinosaurs is based on

fossil evidence found in southern Texas and Maryland.

- Visitors can touch a 100 million year-old *cryolophosaurus* skull found in Antarctica, as well as actual dinosaur bones and teeth.
- A 100 million year old dinosaur egg will be on view; the egg was excavated in China.
- In the field lab area, interactive activities in the exhibit include assembling bones and skeletons and uncovering artifacts using aircscribe tools.
- Children can sit inside a 7 foot, re-created dinosaur nest.
- A recreated rock wall with sediment layers is imbedded with family-oriented activities; visitors can observe ammonite patterns, measure the size of dinosaur bones, and see teeth under a magnifying glass
- Large monitors depict Pangea and continental drift over time, and eight computer stations enable visitors to create and color their own dinosaurs, and hear dinosaur sounds
- Tanks filled with live lizards, salamanders, and frogs introduce visitors to how prehistoric dinosaurs evolved into current creatures
- A display on the exhibit’s second floor balcony shows the evolution from dinosaurs to birds, and features emu and other bird skeletons, as well as feathered dinosaurs.



## TERRALINK

**Location:** Level One Earth Science and Dinosaur Hall

**Area:** 2,000 square feet

**Exhibit Goal:** TerraLink is a high tech, high touch, multi-dimensional environment where visitors learn how diverse systems – the environment, sea, land – work together to affect change throughout the Earth.

**Exhibit Description:** Constantly changing to highlight the latest news, TerraLink is staffed at all times by museum education professionals and

provides relevant and current Earth system science interpretation. Content advisors and contributors from NASA, NOAA, Smithsonian Environmental Research Center, the Chesapeake Bay Foundation and other scientific institutions provide assurance that the information presented is relevant, current and accurate.

### The core experiences in the TerraLink Exhibit include:

- Dramatic sculptures by Macarthur fellow Ned Kahn simulate Earth

events including volcanic eruptions, and aeolian winds that shape sand dunes; visitors can walk through a six-foot piece simulating a tornado.

- Display screens depict the interaction of the global systems and their impact on each other.
- At interactive stations, visitors can locate their houses by zooming in from space using satellite imagery and global positioning tools.
- The path of a hurricane is tracked using real time data downloaded to a 16 inch globe.

## YOUR BODY: THE INSIDE STORY

**Location:** Level Two

**Area:** 7,000 square feet

**Exhibit Goal:** In every ordinary day, extraordinary things happen inside the human body. In Your Body: The Inside Story, visitors will journey through a typical day and explore how many different organs and systems work together in ordinary activities. The exhibit focuses on disease prevention and the promotion of healthy lifestyles, and explores the process of renewal and change that our bodies experience over time.

**Exhibit Description:** Visitors can explore how different organs and systems work together – and how the brain controls everything –in the human body to perform such ordinary activities as waking up, exercising, eating, and reacting to stressful situations. By exploring their own

working bodies, seeing extraordinary footage taken inside the human body, and learning about nutrition and germs, visitors are able to connect their daily activities to healthy habits.

### The core experiences in the TerraLink Exhibit include:

- A 30 foot long tunnel is filled with dreamlike sounds, dramatic images and vivid smells recreating the experience of your senses moving from sleep to waking.
- Visitors are surrounded by the sounds and vivid imagery of blood flowing through a beating heart, and vibrations in the Heart and Lung room.
- A cacophony of talking, coughing and sneezing in the walk-in bus stop introduces the micro-invaders that face us each day and what we can do to protect ourselves.

- Senses are tested as visitors lie on a bed with thousands of nails without experiencing pain, and compare cool and warm touches.
- By squeezing objects through a tube, hearing the sounds the body makes and guessing the disgusting digestive noise, the digestive system is made easy to understand.
- Visitors explore the nature of being visually jolted from an otherwise peaceful environment and ways to handle each situation.
- The unique aspects of each person's body are evident as visitors take their own fingerprints, examine their skin, and answer questions that predict their body's age according to their health habits.



## BODYLINK

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**Location:** Your Body: The Inside Story exhibition Level Two

**Area:** 2,000 square feet

**Exhibit Goal:** BodyLink, the health sciences update center, makes medical and health news clear and relevant, demonstrating to visitors how advances in medical science impact their daily lives. The exhibit focus is on health, genetics and biotechnology

**Exhibit Description:** Like the other "link" centers at the Maryland Science

Center, BodyLink provides the latest updates and developments on the world of medicine and medical technology. Visitors can discover and appreciate the wonders of cutting-edge medical research through interactive activities, stunning imagery, and facilitated demonstrations.

**The core experiences in the BodyLink Exhibit include:**

- In the WetLab, visitors don lab coats and goggles as they perform science experiments about bacteria.

- Information on medical research for the treatment of diseases, and new technology like silicon wafers that detect the presence of bacteria, and tiny "pill cameras" that explore inside the human body.
- Stations for learning about genetic research
- Displays that showcase the negative effects of cholesterol on the blood vessels.

## NEWTON'S ALLEY

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**Location:** Level One

**Area:** 2000 square feet

**Exhibit Goal:** The best way to learn is by doing; in Newton's Alley dozens of new, hands-on activities allows visitors to probe sight, sound, magnetism, light and mechanics.

**Exhibit Description:** Working alone or in small groups, visitors turn, move, crank and pull stand-alone, self directed components that replicate the

phenomena behind basic cause and effect activities.

**The core experiences in Newton's Alley include:**

- Adjust the direction and angles of balls to demonstrate motion and the predictable nature of applied force.
- Manipulate knobs and levers to send balls down a whimsical device with bells, drums and chimes -- showing basic laws of physics and kinetic energy.

- Run hands through a large pool of slowly undulating fog to alter the currents, evocative of clouds on Jupiter and Venus, and fog on Mars.
- Play the computer driven laser beams replacing the strings of a harp and change sounds at the push of a button.
- Drop coins in the Gravity Well orbit and see how they change speeds, just as planets orbit and change speed in relation to their distance from the sun.

## FOLLOW THE BLUE CRAB

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**Location:** Level Three

**Area:** 2,000 square feet

**Exhibit Goal:** Follow the Blue Crab introduces children to the diverse ecosystem of the Chesapeake Bay. Using the life span of the Maryland Blue Crab as a time line, Follow the Blue Crab explores the many different habitats and dangers crabs face in the Chesapeake Bay.

**Exhibit Description:** Designed for the Maryland Science Center younger

visitors, this exhibit incorporates many questions and opportunities for discovery.

Content partners for this exhibit include the Smithsonian Environmental Research Coalition, the Chesapeake Bay Foundation, and the Center of Marine Biotechnology.

**The core experiences in Follow the Blue Crab include:**

- A 20' x 20' aerial photograph placed on the floor lets children explore the

- geography of the Chesapeake Bay and its wetlands by walking on it.
- The educational game, "Perils of the Crab Survivor," challenges visitors to help a young crab escape from predators and survive to adulthood.
- Aquariums are stocked with inhabitants of the Bay, including live turtles, fish, crabs, and seahorses.
- The Maryland Science Center's famous mechanical crab returns – in an environmentally appropriate setting.



## MARYLAND SCIENCE CENTER EXISTING EXHIBITS AND PROGRAMS

**Davis Planetarium:** With hundreds of special effects and a Minolta MS-15 Star Projector capable of showing 8,500 stars, the world-famous Davis Planetarium showcases 20 minute, original presentations of 300-500 images. The theater accommodates 144 visitors.

**IMAX Theater:** This revolutionary motion picture system projects spectacular images with great clarity and impact. The slightly concave screen is five stories tall and is suited for 3D and classic large-format films. The theater opened in 1987 and can accommodate 400 visitors. The theater has a 38 speakers, six channel sound system with 11,000 watts of sound, and a 15,000 watt projector lamp.

**Our Place in Space:** This exhibit, developed in 2000, is the official Hubble Space Telescope National Visitors Center. Through the latest images from Hubble, visitors can witness the birth

and death of stars, explore distant galaxies as they form, and see planets of the solar system up close.

**SpaceLink:** Within Our Place in Space, the state of the art update center utilizes live "links" to space and major space-related institutions to inform visitors of the latest in space science development.

**Kids Room:** This 5,000 square foot area was specifically designed for newborns through children up to age eight to explore their world through hands on activities and personal interaction with their accompanying adults. Dozens of components include: a water table in which children manipulate the flow of water, a "kids harbor" with a fishing pier, and a dedicated infant/toddler room.

**Learning Lab and Resource Center:** This unique Center, located in the Kids Room, offers both directed programs and drop in browsing for parents and

educators. They have access to research and information on child development, and parenting and teaching techniques; Science Center staff provide support and effective strategies for promoting lifelong learning

**Cells: The Universe inside Us:** Zoom into your own body to see the different cells that make up your heart, brain and bones. These trillions of cells are communicating with each other every moment of our lives.

**Crosby Ramsey Memorial Observatory:** The rooftop observatory was completely refurbished in 1999 and features a computer controlled telescope.

**SciZones:** An all new environment enables school groups to choose among educational offerings that enhance and deepen their understanding of the Maryland Science Center's core exhibits.

## EDUCATIONAL PROGRAMS

**Enrichment Experiences:** Hands on science programs provide grade-appropriate content in physical science, life science and earth science. Skills such as problem solving, analyzing data, observations and measurement are highlighted. Classes are led by the Science Center's education department staff.

**Traveling Science Program:** Staff lead hands-on activities at schools and civic organizations in biology, chemistry, physics and mathematics. STARLAB portable planetarium shows are also

offered. Auditorium style programs are available for large audiences, outdoor events, summer programs, and other large gatherings

**Camp-Ins:** In 2009, more than 12,000 children participated in the Camp-In program, in which they spend the night at the Science Center. Overnight activities include workshops, dinner and breakfast, and exploration of the exhibits.

**Explainers:** Visitors engage in informal conversations and demonstrations in

small groups on the exhibit floors in activities related to exhibit content.

**Demonstrations:** Twenty-minute demonstrations introduce a science phenomenon, idea or content on the Demonstration Stage located on Level Two.

**Planetarium Shows:** The Davis Planetarium offers original productions on the dome of the world famous star theater. Davis Planetarium programs have been exhibited in planetariums around the world.



## VISITING THE MARYLAND SCIENCE CENTER

A visit to the Maryland Science Center is a fun and unique experience for parents to share with children of all ages, or for adults to enjoy on their own.

### With toddlers...

Parents and children can play and learn in the *Kids Room*, which features more than 50 interactive and innovative age-appropriate activities that encourage children to play and discover.

Science-related storytime, music and games, and activities are examples of programming for young Maryland Science Center visitors. *Follow the Blue Crab* explores the life cycle of the creatures of Chesapeake Bay and features aquariums stocked with live turtles, fish, crabs, and seahores. And, *Beakers*, the Maryland Science Center's café, is open during all operating hours so parents don't have to worry about scheduling a visit around a lunch schedule.

### With elementary school children...

The best way to learn is by doing; in *Newton's Alley* dozens of, hands-on

activities allows visitors to probe sight, sound, magnetism, light and mechanics. Elementary school-aged children love pulling themselves to the ceiling using the mechanical advantage of the "pulley chair." Other activities, like the laser harp and the floating magnet, explore other principles of physical science in ways that are just plain fun. The activities in *Dino Mysteries* let visitors dig in and get their hands dirty—literally. Children can dig for fossils just like a working paleontologist to answer questions about prehistoric creatures amongst more than a dozen full size dinosaurs!

### With high school kids...

The Maryland Science Center isn't just for small children. Older children can learn more about the human body by walking inside the human heart, taking a lie-detector test, or squeezing simulated organs to learn about digestion in *Your Body: The Inside Story*. The high-tech update centers, *TerraLink*, *BodyLink*, and *SpaceLink*, have all of the cool gadgets, experiments,

and computer activities to engage and educate high school visitors with up-to-the-minute news about earth, health, and space science.

### Without children...

Adults without children can also have a great experience at the Maryland Science Center. The core exhibits such as *Dino Mysteries*, *Your Body: The Inside Story*, and the *Link* update centers, each contain appealing and informative content for adults. *Titanic: The Artifact Exhibition*, the blockbuster traveling exhibit showcases more than 250 artifacts recovered from the wreckage of the famous ocean liner and is a must-see for science and history buffs alike. Take a moment to view take in a film in the *MIE Properties IMAX Theater* or visit *Davis Planetarium* to make your experience at the Maryland Science Center truly out-of-this-world.

## FACT SHEET

### Maryland Science Center Mission:

The Mission of the Maryland Science Center is to create awareness of the importance of science to our lives and to stimulate people, especially children, to learn science by creating exciting educational experiences.

### Maryland Science Center Vision:

The vision of the Maryland Science Center is to create interest in young people in science by engaging and entertaining them. As one of the most unique and important educational institutions in the region, the Science Center makes science fun; entertainment is the means and

education is the end. And because of its well-earned reputation for exhibition excellence and innovative programming, the Maryland Science Center is a national model for "turning on" children to science.

### Building Information:

- Original building opened in June 1976; designed by Edward Durrell Stone
- IMAX Theater added in 1987
- Current renovation and expansion opened May 28, 2004
- Total public exhibition space: 172,000 s.f.

### Institution Information:

- 501 (c) 3 status
- Founded in 1797 as the Maryland Academy of Sciences (Maryland's oldest scientific institution)
- 224 full and part time employees
- 201 active volunteers
- President and CEO: Van Reiner
- Chairman of the Board: Edward St. John
- Annual Operating Budget: \$14 million
- Average current attendance: 500,000



## PRESS GUIDELINES

The following are guidelines for publications or organizations that wish to include the Maryland Science Center in new stories, commentary, announcements, invitations, forms, notices, calendar listings, or other printed material.

### Name:

- Full Name: the Maryland Science Center
- When referring to the Maryland Science Center, do not capitalize the "t" in "the"
- Abbreviation: MSC
- Do not use the following: the Science Center, the Center

### Address:

Maryland Science Center  
601 Light Street  
Inner Harbor  
Baltimore, Maryland 21230  
(410) 685-5225

### Descriptions of the Maryland Science Center:

(20 word description)

The Maryland Science Center features full-size dinosaurs, dozens of hands-on activities and experiments, national touring exhibits, IMAX Theater, Kids Room and planetarium.

(40 word description)

The Maryland Science Center features 14 full-size dinosaurs, an exploration of the day in the life of the human body, dozens of interactive experiments, national touring exhibits, and the five story IMAX Theater. Other attractions include The Kids Room and Davis Planetarium.

(60 word description)

The Maryland Science Center features 14 full-size dinosaurs in *Dinosaur Mysteries*, an exploration of the day in the life of the human body in *Your Body: The Inside Story*, *Newton's Alley*, with dozens of interactive activities, a national touring exhibit, and the five story IMAX Theater. Other popular attractions include The Kids Room and the world-famous Davis Planetarium.