



SUMMER CAMPS AND PROGRAMS



2014

SLOAN LONGWAY

Camp Alpha Omega for Girls

STEM in the Garden

June 23 – 27, 9:00am – 12:00pm

Girls entering 3rd – 6th Grades

@ Longway Planetarium

FEE: \$85 PER PERSON

Join Longway Planetarium as we partner with some of Genesee County's best teachers! Guest teachers from the Alpha Omega Chapter of Delta Kappa Gamma Society will be on hand as we explore the basics of botany. Enjoy hands on science investigations while learning what plants need to survive and grow. Dissect a flower and explore a plant's life cycle, collect pollen and observe it under a microscope, and taste some edible plant parts. Guest speaker Erin Caudell will discuss life on an urban farm. Participants will walk to Applewood and Mott Community College for activities. *Limited scholarship funds are available thanks to Alpha Omega. Call for details.*

Kinderscience Camp

Jr. Science Lab

June 23 – 25, 1:00 – 4:00pm

Kids ages 4 and 5 years old

@ Longway Planetarium

FEE: \$60 PER PERSON

Build a science tool kit to take home while using tools to measure, pour, mix, and drop! Use your most important science tools - your 5 senses! Use beakers, measuring cups, and tablespoons to measure ingredients while making your own ice cream recipe. Use droppers to mix up colorful liquids. Separate a mixture of beans using sieves and other kitchen tools. This camp will provide opportunities for free exploration and independent play as well as structured hands-on science and math activities. *Grown-ups are welcome to stay and play!*

CAMPS



Level 1 STEM Camp

July 7 – 11, 9:00am – 12:00pm

(Morning Session) or

July 21 – 25, 1:00 – 4:00pm

(Afternoon Session)

Kids entering 1st – 3rd Grades

@ Longway Planetarium

FEE: \$85 PER PERSON

Energy – Explore sound and light as you make a honking tube, a roaring cup, and a xylophone. Engineer the best design for a cup and string telephone. Catch a rainbow on a piece of paper, play with shadows, and use mirrors to redirect the path of light.

Water Wise – Where does your drinking water come from? Where does it go when you wash it down the sink? Design a filtration system to clean dirty water. Construct a groundwater model with a working well.

Animal Lives – See how adaptations help animals survive in their environments while camouflaging a snake and designing a model habitat. Explore animal life cycles.

Forces in Motion – Design and test a ramp for a toy truck and build a marble coaster while investigating gravity and friction.

STEM Through History Camp

July 14 – 16, 9:00am – 12:00pm

Kids entering 4th–6th Grades

@ Sloan Museum

FEE: \$60 PER PERSON

Tour the museum and discover how technology has helped to shape Flint. Discuss the different technologies used during different eras and then find a solution to a design challenge for that era.

Save time! Register Online at SloanLongway.org

Level 2 STEM Camp

July 21 – 25, 9:00am – 12:00pm
Kids entering 4th – 6th Grades
@ Longway Planetarium
FEE: \$85 PER PERSON

Biomes – Explore the earth's biomes while designing and constructing model habitats for animals.

Make it Move – Build catapults, spool racers, and ramps while investigating forces and motion.

Rocket Science – Continue your investigation of forces and motion while building and launching a model rocket.

Wild Weather – Construct a rain gauge, an anemometer, and a barometer while exploring Michigan's wild weather.

Level 3 STEM Camp

July 28 – 30, 9:00am – 12:00pm
Kids entering 6th – 8th Grades
@ Sloan Museum
FEE: \$60 PER PERSON

Microscopic Investigations

Learn how to use a microscope while preparing slides to observe. Mount and stain onion skin to see plant cells. Look at a drop of pond water to see the tiny organisms inside.

Rat Dissection – Explore body systems while working with a small group to dissect a rat.

Chemisry Lab – Investigate physical and chemical changes with fast-paced and fun activities and demonstrations.



Save time! Register Online
at SloanLongway.org

Grandma's Bag

June 25, 9:00 – 10:30am
@ Sloan Museum
FEE: \$6

Listen to *What's in Grandma's Bag* by Hui-Mei Pan to discover all of the colorful foods that Grandma has brought home from the grocery store. Enjoy a snack from her shopping list and play in our grocery store.

Magnets

July 1, 1:00 – 2:30pm
@ Longway Planetarium
FEE: \$6

Predict and test! What will your magnet attract? What will it repel? Make a magnet mystery bottle to take home. Use your magnet to create a piece of art. Play with magnetic marbles and chips.

Going Buggy!

July 8, 1:00 – 2:30pm
@ Longway Planetarium
FEE: \$6

Visit with Longway Planetarium's resident pets: Madagascar Hissing Roaches! Use paint to make beautiful blotter bug art, go for a bug hunt in the Planetarium Garden, make a butterfly life cycle project and visit with a live worm.

Wind and Weather

July 10, 9:00 – 10:30am
@ Longway Planetarium
FEE: \$6

Make a weather mobile while investigating the sun, clouds, rain, and thunderstorms. See the wind move wind socks and air spinners that you build. Use the sun to change something from a solid to a liquid and explore the weather of the seasons.

4-5 YEAR OLD PROGRAMS



Seasons

July 15, 1:00 – 2:30pm
@Longway Planetarium
FEE: \$6

Spring, summer, winter, and fall! What's the weather like? Where do the leaves go? How do animals survive the long, cold winter? See how our environment changes throughout the year.

Science Tools

July 24, 1:00 – 2:30pm
@ Longway Planetarium
FEE: \$6

Beakers, droppers, tubes, and magnifiers. Measure, mix, and pour with activities that use science tools of the trade. Leave with a few tools to keep doing science at home!

Story Time

July 29, 9:00 – 10:30am
@ Sloan Museum
FEE: \$6

Bring your favorite stuffed animal and join us to listen to a fun story in our Wisner's Whizbang Emporium reading area, have a snack, and make a craft that goes along with the book!

Seeds and Sprouts

August 4, 1:00 – 2:30pm
@ Longway Planetarium
FEE: \$6

Get a close up look at plants, from the roots to the blooms! See how and why seeds travel and plant some seeds to take home. Investigate a plants life cycle and learn what a plant needs to survive and grow.

Save time! Register Online
at SloanLongway.org

1ST - 3RD GRADE PROGRAMS



Michigan Lighthouses

June 26, 9:00 – 11:00am
@ Sloan Museum
FEE: \$8

Michigan has the most coastline of any of our 50 states. Discover the different types of lighthouses, why they are designed in specific patterns, and why they are so important to the freighters on the Great Lakes. Build and decorate your own lighthouse to take home.

Kites, Copters, Planes, and Rockets

July 2, 9:00 – 11:00am
@ Longway Planetarium
FEE: \$6

It's all flight! Build and fly some simple kites and copters, Challenge your new friends with your best paper airplane design (or borrow one of ours!) and make a film canister rocket.



Float the Boat

July 7, 1:00 – 3:00pm
@ Longway Planetarium
FEE: \$8

Investigate density while building an aluminum foil boat that carries cargo. Predict and test which objects will float in water. Make an oil and water density bottle and float some crushed chalk on water to make a beautiful piece of art.

Eggs-citing Egg-speriments

July 10, 1:00 – 3:00pm
@ Longway Planetarium
FEE: \$8

They're great for breakfast and perfect for growing baby chicks (and alligators!). Investigate amazing eggs! See how strong egg shells really are. Dissect a chicken egg while learning about the role eggs play in life cycles. Camouflage an egg to hide it in a nest made of rocks.



Landforms

July 16, 1:00 – 3:00pm
@ Longway Planetarium
FEE: \$8

Mountains, valleys, lakes, and volcanoes! Build a model volcano and watch it erupt. Use modeling clay to sculpt landforms while exploring how geological forces shape the Earth. Make a landform layers book.

Michigan State Symbols

July 17, 9:00 – 11:00am
@ Sloan Museum
FEE: \$8

Michigan has a beautiful collection of State Symbols. Learn about the State Tree, State Bird, State Stone, and State Reptile. Polish a Petoskey stone and paint a turtle shell to take home with you!

Slimy Science

July 23, 9:00 – 11:00am
@ Longway Planetarium
FEE: \$8

Measure and pour, mix and squeeze! Make and take 3 different types of slime.

Save time! Register Online
at SloanLongway.org

Solids, Liquids, and Gases

July 28, 9:00 – 11:00am
@ Longway Planetarium
FEE: \$8

Freezing and melting, evaporation and condensation; see how you can change matter! Experiment with viscosity as you blow paint around to make a picture, and use a super cold liquid to freeze some ice cream to taste.

Space

July 31, 1:00 – 4:00pm
@ Longway Planetarium
FEE: \$10

Take a tour through the Solar System while exploring planets, moons, and the sun. Make a glow-in-the-dark moon phase project. Use an old compact disc to make a model of Saturn and see a Star Show in the Planetarium Theater.

Plant Parts

August 6, 1:00 – 3:00pm
@ Longway Planetarium
FEE: \$8

Go on a garden scavenger hunt! See how each part of the plant helps it survive and which parts are good to eat! Design a flower model while exploring seeds and make a piece of leaf art.

Take Apart

June 23, 1:00 – 3:00pm
@ Longway Planetarium

FEE: \$8

Ever wonder what the inside of a toaster looks like? Grab a screwdriver and investigate the insides of small appliances and electronic devices.

Electricity

June 30, 9:00 – 11:00am
@ Longway Planetarium

FEE: \$8

Use household items to build circuits and switches. Test objects to determine whether they insulate or conduct electricity. Make a circuit folder game.

Fossils

July 9, 1:00 – 4:00pm
@ Longway Planetarium

FEE: \$10

Add specimens to your fossil collection while investigating the formation of these clues to past life. Dig through some fossil-rich sediment to find your own real fossils. Explore how fossilization takes place and make a plaster fossil model.

Active Earth

July 17, 1:00 – 3:00pm
@ Longway Planetarium

FEE: \$8

Explore the processes that shape the Earth. Build and erupt a model volcano while seeing how the earth's crust is in motion. Investigate how Earth processes change rock and build a model cave.

Baskets and Blankets

July 28, 1:00 – 3:00pm
@ Sloan Museum

FEE: \$10

People have relied on weaving for baskets and blankets for generations. Try your hand at weaving a placemat on a cardboard loom and weave a colorful basket.

4TH-6TH GRADE PROGRAMS



Chemical Investigations

July 29, 1:00 – 3:00pm
@ Longway Planetarium

FEE: \$12

Explore energy with endothermic and exothermic reactions. Make your own smelly acid / base indicator, and investigate materials science with these fun, fast-paced demonstrations and hands-on activities.

Log Cabin Living

July 31, 9:00 – 11:00am
@ Sloan Museum

FEE: \$8

Learn about the pioneer days and how families lived. Try your hand at butter making, wool carding, and tin punching. Design and build a log cabin to take home!

Weeds and Seeds

August 5, 1:00 – 3:00pm
@ Longway Planetarium

FEE: \$8

Explore the Planetarium Garden while dissecting a plant and creating a small garden ornament.



Save time! Register Online
at SloanLongway.org

5TH-8TH GRADE PROGRAMS



Map It!

June 25, 1:00 – 4:00pm

@ Sloan Museum

FEE: \$10

Michigan's landscape varies from shallow streams to deep lakes; flat plains to steep mountains. As a team, help design a wall sized topographical map of Michigan to be displayed in the Sloan Museum classroom!

Bridges

The Mighty Mac is Back

July 21 & 22, 1:00 – 3:00pm

@ Sloan Museum

FEE: \$10

Learn about the bridge structures we use every day. Try building a truss bridge, a suspension and a draw bridge. It's all about design and engineering.

A-MAZE-ing

July 23, 1:00 – 4:00pm

@ Sloan Museum

FEE: \$10

Tour the American Adventure 1607 Maze exhibit and see if you can survive the year. Design your own marble maze and give it a test run. Does it make it? If not, redesign and make it work!

Rockets (Two Days)

August 4 – 5, 9:00 – 11:00am

@ Longway Planetarium

FEE: \$22

Build and fly your own model rockets! On Day 1 we'll construct "Alpha" and "Viking" rockets. On Day 2 we'll launch our rockets; first with a smaller test engine, and then if everything checks out, we'll launch with a more powerful engine.

Science or Bust!

August 7, 1:00 – 4:00pm

@ Longway Planetarium

FEE: \$12

Ever see a cool science project online but when you try it out it doesn't work? Come test the Mountain Dew glow bottle, time bomb soda, and more! Can you change a failure into a success? We will find out.



Save time! Register Online
at SloanLongway.org

REGISTRATION FORM

Name(s) _____

Address _____ City _____

State _____ Zip _____

Parent Name _____ Home Phone _____

Work Phone _____ E-mail _____

Please make checks payable to: Sloan*Longway

Mail to: Longway Planetarium, 1310 E. Kearsley St., Flint, MI 48503. Please indicate number of participants for each session. Please write name of each child if registering for more than one child. Deadline is 1 week prior to activity.

SCIENCE CAMPS:

- ☐ Camp Alpha Omega STEM in the Garden, June 23-27, 9am-12pm, \$85 per person
- ☐ Kinderscience Camp Jr. Science Lab, June 23-25, 1-4pm, \$60
- ☐ Level 1 STEM Camp, July 7-11, 9am-12pm, \$85
- ☐ Level 1 STEM Camp, July 21-25, 1-4pm, \$85
- ☐ STEM Through History Camp, July 14-16, 9am-12pm, \$60
- ☐ Level 2 STEM Camp, July 21-25, 9am-12pm, \$85
- ☐ Level 3 STEM Camp, July 28-30, 9am-12pm, \$60

PROGRAMS:

4 & 5 YEAR OLDS

- ☐ Grandma's Bag, June 25, 9-10:30am, \$6
- ☐ Magnets, July 1, 1-2:30pm, \$6
- ☐ Going Buggy!, July 8, 1-2:30pm, \$6
- ☐ Wind and Weather, July 10, 9-10:30am, \$6
- ☐ Seasons, July 15, 1-2:30pm, \$6
- ☐ Science Tools, July 24, 1-2:30pm, \$6
- ☐ Story Time, July 29, 9-10:30am, \$6
- ☐ Seeds and Sprouts, August 4, 1-2:30pm, \$6

1ST – 3RD GRADE

- ☐ Michigan Lighthouses, June 26, 9-11am, \$8
- ☐ Kites, Copters, Planes, and Rockets, July 2, 9-11am, \$8
- ☐ Float the Boat, July 7, 1-3pm, \$8
- ☐ Eggs-citing Egg-speriments, July 10, 1-3pm, \$8
- ☐ Landforms, July 16, 1-3pm, \$8
- ☐ Michigan State Symbols, July 17, 9-11am, \$8
- ☐ Slimy Science, July 23, 9-11am, \$8

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- ☐ Plant Parts, August 6, 1-3pm, \$8

4TH – 6TH GRADE

- ☐ Take Apart, June 23, 1-3pm, \$8
- ☐ Electricity, June 30, 9-11am, \$8
- ☐ Fossils, July 9, 1-4pm, \$10
- ☐ Active Earth, July 17, 1-3pm, \$8
- ☐ Baskets and Blankets, July 28, 1-3pm, \$10
- ☐ Chemical Investigations, July 29, 1-3pm, \$8
- ☐ Log Cabin Living, July 31, 9-11am, \$8
- ☐ Weeds and Seeds, August 5, 1-3pm, \$8

5TH – 8TH GRADE

- ☐ Map It!, June 25, 1-4pm, \$10
- ☐ Bridges-The Mighty Mac is Back!, July 21 & 22, 1-3pm, \$10
- ☐ A-MAZE-ing, July 23, 1-4pm, \$10
- ☐ Rockets (2 days), August 4 & 5, 9-11am, \$22
- ☐ Science or Bust!, August 7, 1-4pm, \$10

TOTAL DUE:

Please note: If you have missed the registration deadline, please call Pam at 810.237.3409 to check availability.

APHC Members get \$1 off Programs and \$5 off Camps.

Save time! Register Online
at SloanLongway.org

June 30-August 31, 2014 SUMMER SHOWS

Skeeter Scarecrow's Starry sky

Daily at 12:30pm

Our narrator is a scarecrow named Skeeter. He tells us how the motion of the Earth causes day and night as we watch the Sun set. Skeeter shows us how to use the Big Dipper to find the North Star for directions, then takes us on a tour of the major constellations of each season. *Suitable for children 6 years and older.*

The Planets

Daily at 2:00pm

Narrated by Kate Mulgrew; Captain Janeway of "Star Trek: Voyager". We take a tour of the planets of our Solar System to learn what is currently known about them. Includes stunning visualizations and some of the latest images from our robotic explorers. *Recommended for adults and children 10 and up.*

Spirit of America Laser Show

Saturday & Sunday only
at 3:30pm

Enjoy this fun family-friendly salute to Independence Day that features patriotic songs and entertaining laser graphics. *Recommended for all ages.*

Made Possible By:



SLOAN LONGWAY

1221 E. Kearsley Street, Flint, MI 48503

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