



“This is the best experience for grandkids and adults alike. I had as much fun as my grandson.” - June C.

“Getting the membership has been one of the best things we’ve gotten for our boys. They’re 12 & 3, so it’s generally impossible to find something that will excite both!”

- Chantel N., New Baltimore

“It’s one thing to watch a movie; it’s another to experience it. The Michigan Science Center’s IMAX[®] *Dome Theatre* offers visitors a truly captivating experience.”

– *HOUR Detroit*

“The Michigan Science Center is a great place to feed the curious mind. ”

- Joe G., Romulus

“Had the best visit ever. Thank you for all your efforts and coordination for our group. Everyone at the Science Center was pleasant and helpful. You have a great team. We will visit again with our fifth graders next year as well.”

- Dena G., 5th Grade Teacher, South Arbor Academy

“I was very impressed by our class field trip experience to the Michigan Science Center. My first grade students had an enriching and fun experience. The staff was helpful and the “wandering scientists” provided a very personal, engaging touch.”

- Velaine N. (3/28/2014)



Letter to our Community

Dear Friends,

This has been an extraordinary first 18 months for the Michigan Science Center (MiSci). After some heavy lifting and significant input from friends at the local, regional and national level, MiSci was incorporated in April 2012. Then we began the difficult work of reclaiming a space for STEM learning and hands-on inquiry in downtown Detroit that would ultimately serve the entire state of Michigan.

The work of MiSci could not be done – could not have begun – without the outpouring of support from our community. We are grateful for the strong financial, volunteer and community partner support we received leading to our grand opening in December 2012. During that fall, volunteers were critical to our ability to claim and clean our wonderful space in Midtown. We received dedicated and generous support from a diverse group of individuals, organizations, corporations and foundations. Everything from an army of volunteers from General Motors who completed large-scale painting and landscaping projects in one weekend to the single volunteers who helped set up back office systems to the brave souls who trained to be our first cohort of docents and facilitated STEM experiences for students and families on the floor of MiSci. The Detroit Public Library and several community festival hosts partnered with MiSci to present our programs before we had a physical space ready to house programming – and those partnerships continue today. Throughout this period and beyond, generous individuals and organizations who believed in our mission contributed funds to help finance start-up costs and the creation of a stable financial foundation for MiSci.

In our first season of operation, we touched more than 200,000 lives in 37 counties across Michigan! So we are also grateful to the many families, students, teachers and life-long learners who visited our space on John R Street or invited our Traveling Science van to their community. We are driven by our impact, and we are excited that stakeholders in greater Detroit and all over the state of Michigan have welcomed us. We are encouraged that so many used MiSci programming and professional development tools to create STEMspiration! in their schools and communities. We are also humbled and elated that organizations like the Mandell L. and Madeleine H. Berman Foundation and Comerica Bank have worked with us to create access programming that supports disadvantaged and under-resourced members of our community – because we believe all children need to be exposed to the possibility of careers and lives immersed in science.

The Michigan Science Center is compelled to become a powerful force and partner in the creation of the next generation of STEM professionals and critically thinking, scientifically literate young people who will impact the world through innovation, invention and creativity. In this first year – with strong support – we have laid the foundation to do just that. We are grateful to the many supporters who have helped us arrive at this milestone.

This first annual report is not only a snap shot of what we've achieved, but it is also a "thank you" to those who helped us achieve it.

Tonya M. Matthews, Ph.D.
President and CEO

Thomas G. Stephens, P.E.
Chair, Board of Directors

What is **STEM** anyway?

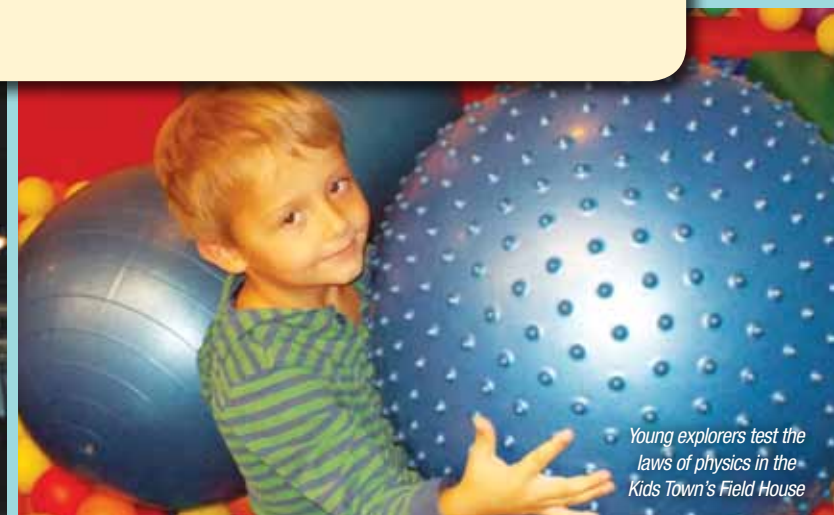
STEM is an acronym for science, technology, engineering and math – but STEM is more than just the sum of its parts! STEM is the integrated and thought-provoking interplay between these disciplines that create critical-thinking students who are essential for supporting a dynamic economy and a thriving population. Traditionally, science, technology, engineering and math are taught in isolation, but modern approaches to education show that integrating concepts builds depth of learning, and problem-solving skills that make STEM studies more relevant and STEM careers more attractive to young learners – and it also helps them better understand the real world! In the real world, scientists use technology and math to evaluate theories and use engineering and technology to test these theories. In the real world, engineering is the creative application of what we know from math and science combined with the use of technology to solve problems. At MiSci, we don't think of STEM as an acronym.

At MiSci, we think of STEM as a call to get creative with scientific inquiry and hands-on learning across all of the science-based disciplines.

From microbiology to architecture to chemistry and whether inspiring a future astronaut, accountant or automotive engineer, STEM learning is an experience that sparks interest, inspires confidence and supports critical thinking for budding, young STEM professionals and for all of us as we use STEM in our daily lives.



Lifting 1,000 lbs. is easy in our Motion Gallery



Young explorers test the laws of physics in the Kids Town's Field House

2013 **IMPACT** by the numbers

236,191

Student, child and lifelong learner moments of STEMspiration!
in our building, through our programs and out in our communities

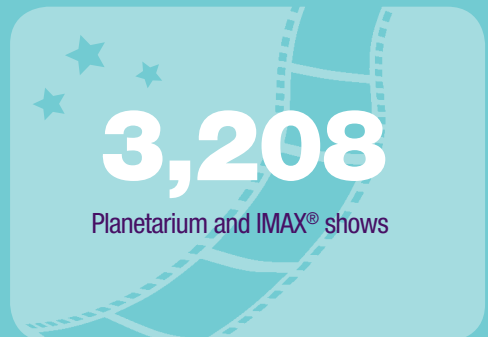


1,121

schools visited MiSci bringing

52,648

students and teachers



48,956

touched through outreach and Traveling Science experiences



the spark

igniting interest that burns bright enough to drive achievement



From the First Steps...

The completion of the first year of operations for the Michigan Science Center was a moment of celebration and reflection. As the team behind MiSci, including community supporters, lit the birthday cake candle, there was an obvious metaphor. A light was once again burning bright for STEM in downtown Detroit.

Building an institution around science, technology, engineering and math is hard work – but it's also as engaging and dynamic as the lessons MiSci teaches. Step into the space in Midtown and that dynamism greets you immediately.

The open-air front atrium design hints at the open-minds stepping into the space ready to explore. Just past the entrance you may be drawn to the widgets, robots and big machine interactive exhibits on your right or you may be lured by what's new in the changing open exhibit gallery on your left.

A few steps further and you reach a kid-friendly scale Mackinac Bridge overlooking a science stage that could feature smoke rings launched from a cannon, explosions bottled in a test tube, or even a human gyroscope at any minute. Raise your eyes from the stage and you have a bird's eye view – or perhaps architect's eye view – of nearly 90,000 square feet of STEM-packed wow. And you haven't even been to the IMAX® theatre or planetarium yet.

The exhibits at MiSci are designed to not only wow visitors with STEM, but also to give young visitors confidence in their abilities to achieve in STEM. MiSci programs are designed to do the same.

Science Center Opens Eyes to STEM Careers

A key goal of MiSci programming has been to introduce children to STEM careers using hands-on, real-life experiences. Collaborating with companies that employ STEM professionals is an effective way to create these experiences that light up young minds to opportunities in STEM careers. Last year, BASF's support of MiSci programming was a great example of the power of these partnerships.

The BASF Kids' Lab is a global, interactive program developed to amplify appreciation and admiration for chemistry in safe learning environments. The BASF Kids' Lab program provided MiSci with learning tools, kits and supplies and a \$50,000 grant to support implementation of a series of 45-minute Kids' Lab workshops.

Give kids a lab apron and a small bag of scientific swag, and they are good and ready to explore life as a chemist at MiSci.

In the skillful hands of MiSci staff, BASF Kids' Lab program was implemented across a wide age range, modified appropriately for different groups. "If we have a large group of 5-6 year olds and we are making slime, we talk to them about 'chains' and 'links,'" Julie Johnson, Director of Education explained. "For older students, we progress the language using terms like polymers and bonds – but for all students, it's a hands-on experience with authentic STEM concepts."

Tailoring the language and engaging learners in activities through real world uses of chemistry turned students on to the possibility of becoming a chemist – or any of the other STEM professions that incorporate chemistry, such as the medical and environmental professions.



*A favorite for everyone:
Learning how to make slime!*



*Dr. Matthews
welcomes guests at
MiSci's 1st Birthday party.*

...to the First Birthday Candle

The themes of creating inspired and motivating experiences in STEM for inquiring minds of all ages, creating access for the broad community, and leaning on community partners to get it all done culminated in the blowout birthday celebration on December 26.

Science fun and math games ruled the day as the science center celebrated a full year of operation with a giant birthday card, cake, confetti and 1,000+ friends – including the Comerica Bank team. Comerica Bank partnered with MiSci to turn its first birthday into a true community celebration, sponsoring free admission, providing piggy banks for early guests, and sending a team of volunteers to welcome guests.

The day's activities highlighted the M in STEM, with a big focus on numbers and measurements that matter! Visitors charted ingredients and calories in their favorite foods for health, learned cool math mind tricks and even worked with numbers bigger than many ever thought existed. In KidsTown, MiSci's early childhood learning space, the youngest visitors used pattern blocks to explore the themes of the day.

After touching more than 230,000 lives since its opening, boosting science education throughout metro Detroit, escalating STEM awareness throughout Michigan – and doing it all while debt-free – MiSci's first birthday arrived with plenty to celebrate and plenty to build upon for birthdays to come.

Kidstruction Zone and Changing Exhibits Engineer Ideas

Hands-on, interactive exhibits that engage, teach and inspire future STEM professionals don't happen overnight. They happen using the same methods the Michigan Science Center teaches visitors to use: conceive, test, design, build – test again – redesign, and build a little more. Moreover, when the idea is to create a dynamic, changing, and malleable workspace for young architects, engineers and inventors, ingenuity is also mandatory. The Michigan Science Center's *Kidstruction Zone*, which opened in November 2013, is spot-on.

Kidstruction Zone is a concept brought to life using the in-house creative genius of the MiSci education team. Six months of collaborative planning and experimentation resulted in 10 different build areas for children that include the opportunity to construct and deconstruct structures with giant LEGO® bricks, create detailed buildings with Keva planks, and invent futuristic vehicles with K'Nex. In this space, young explorers continuously engage in the work of engineers and architects with a myriad of *Kidstruction* building supplies – combining them into designs and inventions.

"It's geared for kids to create or design and then implement their design or creation to do something," said Julie Johnson, MiSci's Director of Education. "For example, when they construct a tower they have to learn about foundations and what makes the building strong in order to survive an earthquake table. With every activity, we help them think about a process."

Multiple spaces within the science center provide flexible display areas, allowing MiSci to create special experiences for visitors as well as bringing in traveling exhibits to offer museum visitors a variety of one-of-a-kind STEM learning experiences.

In late December 2012, when MiSci opened to the public, the *Bodies Human: Anatomy in Motion* exhibition was the featured attraction. Through extraordinary displays of anatomy and biological design, the exhibit showcased more than

100 human specimens, including preserved whole bodies. *The Human Body*, an IMAX® film, complemented the exhibit along with guided tours led by museum docents, as well as by medical professionals and medical students from Wayne State University. The *Bodies Human* experience at MiSci was designed to help visitors connect health and wellness concepts to their STEM roots in medicine, biology and chemistry by examining how lifestyle choices affect the body's internal organs.

From June through the close of the year, *The Science of Rock 'n' Roll* exhibit was the museum's main traveling exhibit – and there was much more to it than strumming a guitar. The exhibition emphasized the connection between technology and music, using seven interactive galleries to show how technological innovation has impacted music from the 1950s to present day. Programs designed to support *The Science of Rock 'n' Roll* helped emphasize how STEM appears in visitors' everyday lives – even where they least expect it! The exhibit was used to launch the museum's summer concert series featuring marching bands and other school groups performing on the Chrysler Science Stage.



Making your own music was a unique discovery in MiSci's summer exhibit.



Kids invented Kidstruction masterpieces with recycled material from Arts & Scraps.



MIS Heritage Cup trophy, adorned by the Greek goddess of victory, and \$40,000 check to MiSci unveiled to cheers and smiles of University Prep Science and Math middle school students.

Strong Support Helps MiSci Race Ahead With STEM!

Ford Racing's Joey Logano did the driving and won the race, but the Michigan Science Center also became a champion when Logano crossed the finish line in the inaugural Pure Michigan 400 at the Michigan International Speedway (MIS) in August.

The MIS and its race's contenders – Ford, Chevrolet and Toyota – each committed \$10,000 to be given to a youth-focused Michigan charity dedicated to STEM. As the victor, Ford Racing was given the honor of designating the charity to receive the \$40,000 donation – and they chose MiSci!

During the award presentation, dozens of students from Detroit's University Prep Science and Math school were fascinated to learn how Newton's Laws of Physics related to NASCAR racing during hands-on demonstrations that kicked off the November award presentation. They "oohed and ahed" when the three-foot Heritage Trophy was unveiled as MIS, Ford and Toyota officials presented their gift to MiSci.

Throughout its first year of operation, MiSci was a driving force in STEM inspiration, rewiring up science education throughout the state. With more than 250 exhibits related to STEM, it's hard to dispute MiSci as the champion choice.

For every action, there is an equal (in size) and opposite (in direction) reaction. Action-reaction force pairs make it possible for race cars to move along a track surface.

-MiSci applies Newton's Third Law of Motion to NASCAR.

Astronomy Provides Up-close, Personal Encounters for all Ages

The opening of the 21st century retired the space shuttles and launched astronomical new dreams! Inventors and innovators from across the globe are building a successor to the Hubble telescope, imagining technology that will get humans to Mars, creating applications of “space engineering” that make life better on earth – and they require a new generation of explorers that understands the sky is not the limit. The Michigan Science Center is committed to supporting this challenge.

On April 20, in conjunction with the Ford Amateur Astronomy Club, MiSci ushered visitors through a special day of observing stars – it was Astronomy Day, a worldwide celebration of cosmic enthusiasts leading efforts to increase excitement and knowledge about the sky and our universe. At MiSci, visitors got personal with planets and galaxies in the Dassault Systèmes Planetarium, studied craters and the vacuum of space on the Chrysler Science Stage, and mixed science and art in the Centennial Lab to create solar system bracelets.

The night and daytime skies provide STEM inspiration all year round, and in September, MiSci headed west to Kensington Metropark for the 17th annual “Astronomy at the Beach” event, co-hosted by the park and the Great Lakes Association of Astronomy Clubs. MiSci was able to give families up-close encounters with the sky’s night gems through the portable technology of its STARLAB. Many of the 1,000 plus event visitors came from areas where pollution prevents them from

being able to see constellations clearly with the naked eye – allowing MiSci to engage in conversations about astronomy and the environment, highlighting the interdisciplinary nature of STEM.

MiSci even found a way to give grown-ups their moment to engage with the stars by bringing an astronomical superstar to Detroit! MiSci’s 2013 Annual Gala featured keynote speaker retired Navy captain and astronaut Gene Cernan. Captain Cernan riveted the audience with detailed descriptions of his view of the planet from the stars and his insights into humanity’s future relationship with the stars. He also garnered his own “oohs” and “aahs” as he revealed his belt buckle contained a moon rock!

Wendy Lesnick of Dearborn and her astronomy-enthusiast son, Karol, 7, are members of MiSci and visit often, in particular, events related to astronomy, space or being an astronaut or aero-engineer. Though they come to MiSci nearly once a month, Karol is never ready to leave. He gets many questions answered during his museum visits, but he always leaves with the same one: “When are we going back?”

When MiSci guests have the opportunity to cozy up with a telescope to view a virtual universe, “oohs” and “aahs” are expected and curiosity is engaged. They become stargazers and astronauts – with the museum as their spaceship, the Dassault Systèmes Planetarium as the cockpit and MiSci educators steering as co-pilots. And all of this is by design.

Professional Development Designed with Principals, Teachers in Mind

Talk of changes to science education and STEM standards in Michigan have bombarded school leaders with a deluge of information. In an effort to help them make sense of it, the Michigan Science Center designed a special program – just for principals.

The MiSci signature program *Principal2Principal* is a series of three-hour seminars that provide networking, best-practice sharing opportunities and access to various STEM education policy and standards experts. This program was created in response to principals' and science coordinators' need for consolidated, easy-to-understand information about changing science standards and curriculum supports.

"Principals have very limited time for professional development, so we create programs for them that are focused and tailored to their specific needs. Three hours is not a lot of time – so we plan strategically, connecting them with vital content, other colleagues and science center supports," said Melissa Wilson, Manager of Events and Group Sales. "We do make time for a tour of the museum – a huge hit for principals to understand first-hand what their teachers experience when they come to MiSci."

Principal2Principal is a prime example of the directed professional development support available at MiSci for educators, particularly those who teach STEM-related subjects or are incorporating project- and problem-based learning into their curriculum. MiSci's goal is to be a resource to the community for best practices and current content in STEM education. Regular professional development special events – such as last summer's "Educator Open House" which included a guest speaker from Google showing educators how to use Google Docs to edit their students' papers and create collaborative learning environments – are designed with educators in mind.

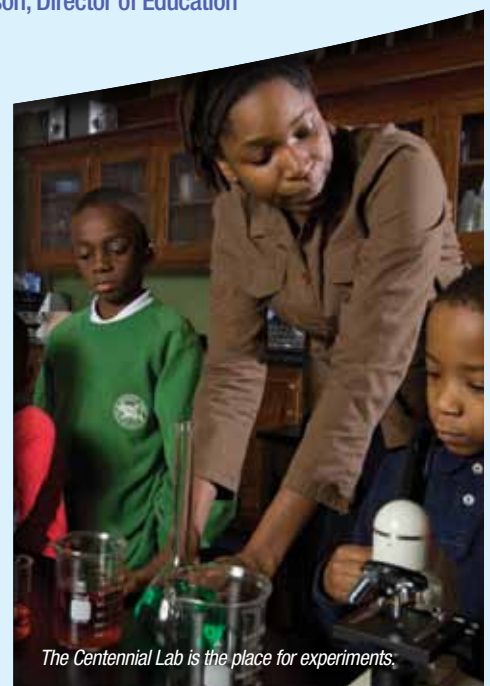
Beyond seminars and workshops, MiSci's website is a growing resource for teachers. It includes educator guides for every major exhibit area and IMAX® showing, as well as notice of upcoming seminars. Through the website and social media channels, MiSci also regularly posts interviews with former and current STEM professionals and links to interesting science facts and opportunities that can be used to engage students.

"We invite teachers here so they can explore how exhibits connect, test things out, see the size of the space and figure out how their students can use the science center to their best advantage."

-Julie Johnson, Director of Education



Crater demonstration on Astronomy Day



The Centennial Lab is the place for experiments.



MiSci Makes MEAP Hands-on

Students, parents and teachers have one challenge in common: Where do you go to make standardized testing fun and relevant? The Michigan Science Center is working to be the answer – both in its Midtown location and at a school near you.

The Michigan Educational Assessment Program (MEAP) test for fifth and eighth graders is one of many daunting standardized tests used for assessment of Michigan's students. In 2013, MiSci served more than 9,000 students from schools in Wayne, Oakland and Macomb County who visited the science center and participated in custom-made MEAP ME! field trips that focused on activities in chemistry, math, space, earth, life and physical sciences – with specific emphasis on knowledge needed to perform well on the MEAP test.

As part of its growing outreach efforts, during September and October, MiSci also incorporated MEAP-supporting activities into its Traveling Science program. “MEAP scores are so important in our state,” said Charles Gibson, Outreach Coordinator. “We bring the right programming – like SciencePalooza and MEAP ME! Challenge Trivia – to schools at the right time with the right emphasis. We bring materials teachers don’t have access to, reinforcing things students have learned and inspiring interest in subjects they have yet to master.”

Weekend STEM Workshops Help Scouts Climb the Ranks

Girl Scouts and Boy Scouts were awarded 178 merit badges and pins in the STEM family through the Michigan Science Center’s “Scout it Out” workshops.

The weekend workshops and overnights with MiSci were a favorite of scouts and scout leaders because of the hands-on, engaging and informative way activities are designed at MiSci – each created to help scouts climb the ranks within their respective organizations. Topics included astronomy, engineering, electricity and beyond. Scout STEM adventures included constructing working electrical circuits, designing and building bridges, and building catapults, as well as interviewing real-life STEM professionals.

Some **STEM** to Think About

STEM occupations are projected to grow at more than double the rate of the overall U.S. workforce, creating a demand for a projected **15.68 million STEM jobs by 2018**.

The state of Michigan is projected to have a demand for **879,000 STEM jobs** – from construction to cardiology to computer engineering – by 2018.

In the last quarter of 2013, **7 out of the top 20 jobs** in demand in **Detroit and Southeast Michigan** were **STEM-related**.

Those who were interested in having a STEM career at age 13, compared to those with other career interests, were two times more likely to have graduated with a degree in the life sciences and three times **more likely to have a degree** in the physical sciences or engineering.

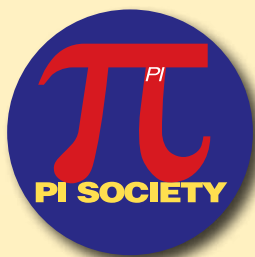
Nearly **one-third of students with STEM major** or career interest **will be the first** in their families to attend college.

Studies have shown that out-of-classroom, **free-choice learning** – such as in science centers – create complementary learning opportunities and **has major positive impact** on child development, learning and educational achievement. **There is a particularly powerful correlation in STEM.**

Sources: U.S. Bureau of Labor Statistics Report (2011), Falk and Dierking (2012), STEM Connector Report (2012), Workforce Intelligence Network-Southeast Michigan (2013)



We don't do this alone!



In 2013, volunteers donated more than 3,000 hours of service to MiSci.

Keep Calm...The Volunteers are Here

Volunteers don't serve just because they have time – they serve because they have heart.

Michigan Science Center floor docent (teaching volunteer) Dr. Alvin Saperstein, retired Physics Professor, has donned his “white coat” uniform and engaged visiting families and students once a week since the day MiSci opened.

“I’ve been teaching for many, many years, and although my primary job was university professor, I had my own kids once upon a time. So, kids don’t scare me,” said Dr. Saperstein. “I don’t like being retired. I was brought up to feel useful, and at MiSci, they tell me that I am – and that feels good.”

MiSci regularly tells Dr. Saperstein that he is “useful” because he is – in fact, he, and volunteers like him, are essential.

Dr. Saperstein is a member of the Pi Society, the MiSci volunteer corps comprised of individuals with STEM backgrounds who support MiSci STEM education programs.

The Pi Society, along with the Newton Society and the Galileo Society, is a core volunteer group at MiSci. Volunteers support MiSci at every level of operation – from administrative duties to development support to teaching and engagement of MiSci visitors. Volunteers are even incorporated into MiSci’s growing outreach programs, traveling with MiSci as it supports community events such as *River Days* in Detroit or *Arts, Beats and Eats* in Royal Oak.

In addition to these three societies, MiSci regularly uses organizational group volunteers for major events and special projects – from managing the details of spring cleaning to handling the crush of visitors during Spring Break!


Strength in numbers allows volunteers to carry out big projects and to provide support for special events. For example, General Motors sent a team of helpers to paint and organize interior spaces for MiSci in preparation for its grand opening, while Hollingsworth Logistics volunteers rolled up their sleeves to help with landscaping, spreading mulch and cleaning up plants on MiSci’s walkway in the spring. Organizations from across southeast Michigan, including Wayne State University and Jewish Vocational Services, have also lent their time and networks to create a volunteer pipeline for MiSci’s various special projects and day-to-day STEM education efforts.



the neighbor



engaged, welcoming partner in conversations and collaborations that matter



“We want people to feel welcome. We are taking a sense of pride in being a good neighbor and embracing our connection to the rest of the state and making Detroit the center of Michigan again.”

- President and CEO Dr. Tonya Matthews

Taking Science on the Road

From plastic to tie-dye, there's a science to everything – and there is science everywhere. Students and families, teachers and education providers across the state are hungry for engaging, exciting STEM experiences. Perhaps that is why Michigan Science Center's Traveling Science program is one of its fastest growing programs.

Originally conceived to support classrooms that were challenged to fit off-site field trips into their curriculum, MiSci's outreach programming has expanded to include serving schools at great distances from MiSci, schools that want to treat their classes to a full-day STEM experience, community centers and community groups that need support in creating science fair-type experiences, as well as assuming MiSci's role at community events and festivals.

"Everything we do has good science behind it – sometimes it's simple, a lot of the times it explodes, but it always teaches and gets kids really excited about science," said Charles Gibson, the museum's outreach coordinator.

Throughout the year, MiSci's outreach programs served over 48,000 people! The Traveling Science van could be seen as near as local Detroit schools and as far as Traverse City. The boldly decorated and easily identifiable MiSci van is a virtual science center on wheels, capable of delivering high-quality, engaging STEM activities to any location.

A STEM fan favorite demo of MiSci's Traveling Science program is the wind turbine activity that uses polyvinyl chloride (PVC) plastic and a generator. Station visitors build their own blades and test their turbines by measuring the electrical output. Another popular activity, equally hands-on, uses tie-dyeing to teach chromatography. MiSci education staff also uses the interdisciplinary nature of STEM to create activities that support outreach partner themes. For example, at last year's annual *Arts, Beats and Eats* in Royal Oak, MiSci added to the event with rumbling earthquake displays and PVC pipes to mimic and teach about seismic activity – STEM's own version of rock 'n' roll.



Museum Rolls Out Welcome Mat for In-House Community Events

Part of earning the role as an "anchor cultural and educational institution" is being welcoming and relevant to every visitor of every background. Often the first step is an invitation. The Michigan Science Center uses community partnerships to make sure that the full community feels invited and welcome at MiSci.

In November, MiSci collaborated with the Salvation Army and Clear Channel for the Salvation Army's 31st Annual Coats for Kids 2013 Radiothon. The event benefits metro Detroit children in need of a helping hand and a warm coat – an especially critical item during Michigan's coldest winter on record. This unique partnership brought 1,000+ visitors into the science center to be part of a 12-hour live broadcast featuring popular musical recording artists. Many of the event's visitors were teenagers and, in between "selfies," they explored exhibits and created their own STEM-inspired soundscapes throughout the evening.

Later that winter, MiSci opened its doors for the return of Noel Night – Midtown Detroit's signature event. Along with more than 70 other organizations in Midtown, MiSci was part of the annual winter spectacular that draws thousands of people to Detroit to visit as many cultural institutions as they can in one night. As one of the premier family-friendly venues, about 8,500 attendees visited MiSci experienced winter-themed STEM activities, from glacial science to dry ice magic to the IMAX® film, *To the Arctic*.

Throughout the year, MiSci was found at various events – from Astronomy at the Beach to Maker Faire to Michigan School Expo – providing moments to engage with STEM for broad audiences. Participating in and taking the lead on community events – in-house and out-of-house is a key strategy MiSci uses to support its full community and to create a more accessible space for STEM learning in greater Detroit and all of Michigan.

Museum Partners with Libraries to Stir Up Excitement about Summer Program

It can be a struggle to get kids to power down their electronics in favor of playing in the dirt. Through a partnership with the Detroit Public Library, the Michigan Science Center's *Dig into Science* program did just that.

The program focused on geology and natural science with activities that included experiments, incorporated crafts, promoted reading and used a lot of digging, of course! Participants learned about volcanoes, caves, and fossils, among other topics. Of particular interest were the sessions on animals that live underground – snakes, insects, and earthworms always generate a good amount of scientific poking and observation.

The *Dig into Science* program is one of many programs MiSci promotes to help combat the “summer slide” – that three-month period when children begin to lose knowledge learned during the school year. This is especially crucial in STEM-related subjects because the sciences and math tend to build heavily upon previous knowledge. Libraries share similar concerns because reading is also a skill that declines in early learners when not practiced. This shared challenge make libraries and MiSci great partners.

The program has expanded to include additional library systems, helping further MiSci's goal of statewide support of STEM learning. The program has evolved to include components that encourage repeat exploration of both MiSci and partner libraries, such as *Dig into Science* bookmarks that promote reading and science center visits and museum passes that libraries can give away.

The program also included strategies to get participants outside to explore the environment on their own, using resources like their own backyards and neighborhood parks. On Wednesdays in June and July, *Dig into Science*'s “golden shovel” contest hid a shovel at local parks and then announced the location's coordinates on social media. The first person to locate the shovel each week received a family pass to the museum for the entire summer! Even though the goal of *Dig into Science* was to get kids outside and teach them to explore the real world around them, MiSci admits that this contest did help to grow the science center's Facebook fan page!



Digging into Science at Summer Camp



MiSci's Traveling Science takes to the streets with STEM inspiration.

Corporate, Foundation and Agency Support

The Michigan Science Center is grateful for corporate and foundation support of our mission and programs at all levels. This listing recognizes cumulative giving over \$250 (contributed, pledged, and in-kind) of Foundation and Corporate Donors from the incorporation of the Michigan Science Center on April 19, 2012 to December 31, 2013.

\$1M and above

DTE Energy Foundation
General Motors Foundation

\$500,000 - \$999,999

William Davidson Foundation
ITC Holdings Corporation
Nissan North America, Inc.

\$250,000 - \$499,999

Dana Holding Corporation
Denso International America, Inc.
Ford Motor Company
Lear Corporation
Alex & Marie Manoogian Foundation
Penske Corporation
Toyota Motor Engineering & Manufacturing, N.A., Inc.

\$200,000 - \$249,999

Autoliv
BorgWarner and the BorgWarner Foundation
The Delphi Foundation
NASA
Matilda R. Wilson Fund

\$100,000 - \$199,000

Aisin World Corp. of America
The Chrysler Foundation
Eisbrenner Public Relations
The Kresge Foundation
McGregor Fund
Uptown Entertainment, Inc.

\$50,000 - \$99,999

American Axle & Manufacturing
Axalta Coating Systems
BASF Corporation
The Mandell and Madeleine Berman Foundation
Community Foundation for Southeast Michigan
Continental Automotive
PVS Chemicals, Inc.
Quicken Loans
Takata/TK Holdings
ZF Group North American Operations

\$25,000 - \$49,999

Alcoa Foundation
AVL North America
Dassault Systèmes
The Fred A. and Barbara M. Erb Family Foundation
Gentherm
The Piston Group
Ralph L. and Winifred E. Polk Foundation

\$15,000 - \$24,999

DURA Automotive Systems, LLC
Michigan Council for Arts and Cultural Affairs

\$10,000 - \$14,999

Castaing Family Foundation
Comerica Bank
Mort & Brigitte Harris Foundation
Hudson-Webber Foundation
JTEKT North America
Michigan International Speedway
Robert Bosch LLC
Rush Trucking Corporation
Team Detroit
Walbridge
Yazaki North America, Inc.

\$5,000 - \$9,999

Automotive Industry Action Group
The Boston Consulting Group
Bridgestone Americas
Cooper Standard
Deloitte
Eaton Corporation
EMC Corporation

Honda R & D Americas, Inc.
KUKA
Magna International, Inc.
MSX International
Platinum Equity LLC
Plex Systems
Roush
Siemens PLM Software
Tata Technologies
Visteon Corporation

\$2,000 - \$4,999

SAE Detroit Section
TI Automotive

\$1,000 - \$1,999

Assurant, Inc Foundation
Clark Hill PLC
Dynetics, Inc.
Hella Corporate Center USA, Inc.
Liberty Mutual Foundation
Michigan First Foundation

\$250 - \$999

Apparatus Solutions, Inc.
Autobeat Group LLC
The Fulkerson Group
Michigan Association of Public School Academies
P3 North America
The Elmira L. Rhein Family Foundation
Shiloh Industries, Inc.
University Prep Science & Math Schools



We're the Midtown Detroit neighbor with solar panels and a rocket extending through our roof!

Individual Donors

The Michigan Science Center is grateful for the support received from all of its individual donors. This listing recognizes cumulative giving over \$250 (contributed, pledged, and in-kind) of Individual Donors from the incorporation of the Michigan Science Center on April 19, 2012 to December 31, 2013.

\$100,000 and above

James B. and Ann Nicholson
Roger S. Penske
Ambassador Ron Weiser and
the Honorable Eileen Weiser

\$10,000 - \$99,999

Orlando and Veronne Bustos
Raj and Wendy Nair
Thomas G. and Kathleen J. Stephens

\$5,000 - \$9,999

Bob and Cathy Anthony
Tom and Valerie MacFarlane
Tim and Liz Manganello
Joe and Diane Walsh

\$2,500 - \$4,999

John and Katrina Calabrese
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Chris and Patrice Theodore

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Gail Alpert
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Dr. and Mrs. Thomas Asmus
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Gregory and Stavroula Ioanidis

James and Lori Issner
Dana M. Locniskar and Christine A. Beck
Don Marvel
Eugene and Lois Miller
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John Quattrone
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\$250 - \$499

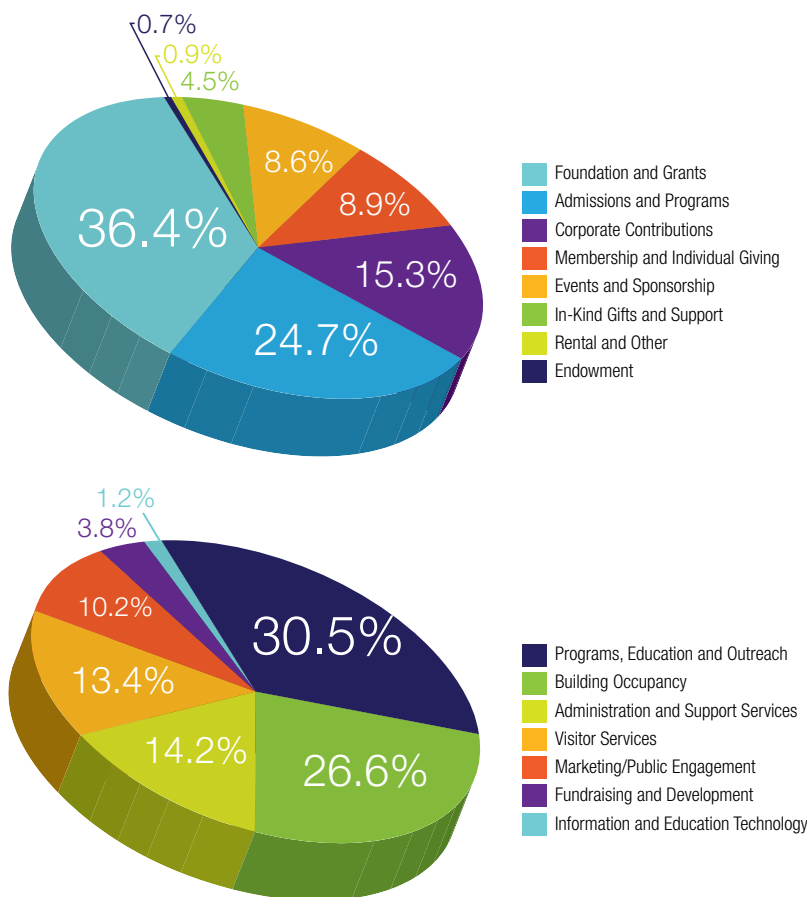
John M. Dankovich
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Educator Anthony Farris teaches kids how to make hanging recyclable gardens.

Revenue and Expenditures

for January 1, 2013 to December 31, 2013 (unaudited)



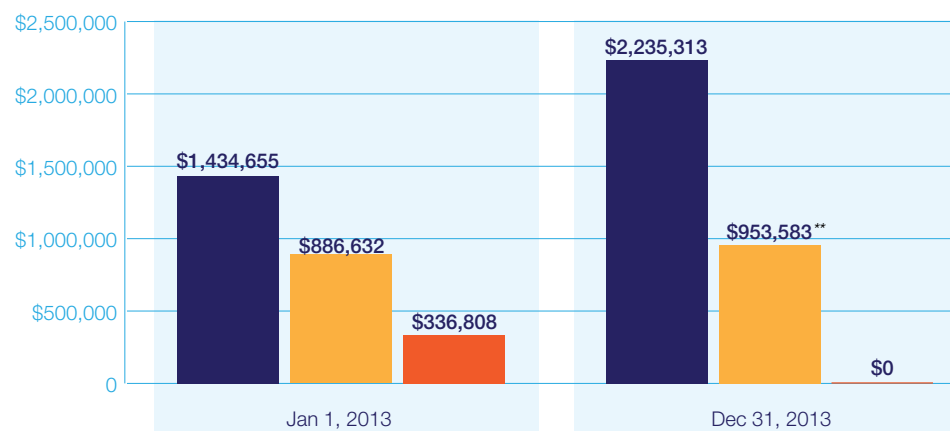
Revenue*

Foundation and Grants	\$ 2,030,840
Admissions and Programs	\$ 1,374,523
Corporate Contributions	\$ 853,933
Membership and Individual Giving	\$ 494,556
Events and Sponsorship	\$ 478,314
In-Kind Gifts and Support	\$ 252,327
Rental and Other	\$ 50,627
Endowment	\$ 40,566
Total revenue	\$ 5,575,686

Expenditures

Programs, Education and Outreach	\$ 1,257,644
Building Occupancy	\$ 1,097,382
Administration and Support Services	\$ 584,971
Visitor Services	\$ 553,809
Marketing/Public Engagement	\$ 420,039
Fundraising and Development	\$ 158,426
Information and Education Technology	\$ 48,708
Total Expense	\$ 4,120,979

*Foundation, Grant and Contributions revenue includes restricted and unrestricted funds.



**Endowment market value June 30, 2013 (MSci endowment approved June 12, 2013)

Operating Capital, Endowment and Debt Report

for January 1, 2013 to December 31, 2013 (unaudited)

■ Operating Capital
■ Endowment
■ Debt

Board of Directors

As of December 31, 2013

Thomas G. Stephens
Tonya M. Matthews, President and CEO
Larry Shoup, Secretary
Orlando Bustos, Treasurer

John Calabrese	Tom MacFarlane	David Ruud
J. Patrick Conroy	Jeff Makarewicz	Marianne Schrode
Jacqueline Dedo	Tim Manganello	Mark Snyder
Cameron Hosner	Don Manvel	Chris Theodore
Gregory Ioanidis	Frederick C. Nahm	Joseph Walsh
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Our Mission:

The mission of the Michigan Science Center is to inspire children and their families to discover, explore and appreciate science, technology, engineering and math (STEM) in a creative, dynamic learning environment.

Our Profile:

The Michigan Science Center (MiSci) is a unique and fun hands-on STEM learning and exploration center featuring over 250 exhibits and interactive experiences located in Detroit, Michigan. Our inquiry-based exhibitions are complemented by five STEM theater and performance spaces – the Chrysler IMAX® Dome Theatre; Dassault Systèmes Planetarium; Toyota Engineering Theater; DTE Energy Sparks Theater; Chrysler Science Stage – along with two science labs, a discovery kitchen, and multiple mini-demonstration experiences throughout our facility. MiSci also has an extensive Traveling Science program that visits schools, community centers and festivals throughout Michigan and our neighboring states and provinces. Through an interactive approach to STEM with engaging exhibits, shows and activities, MiSci strives to help launch the next generation of Michigan's engineers, scientists and innovators, and significantly impact the cultural and economic renewal of Detroit and Michigan.