RMSC's Newest Exhibit -
Genome: Unlocking Life's Code

It is in every living thing on Earth. It is the complete set of instructions that is needed for every living thing to grow and function. It is the genome. At the members-only opening of Genome: Unlocking Life’s Code, over 400 members enjoyed a first glimpse of the cutting edge exhibit. Both adults and children got hands-on to extract DNA from wheat germ and then explored how specimens in the Rochester Museum & Science Center (RMSC) collections are providing the DNA scientists need to study the extinct passenger pigeon.

RMSC has four new leopard geckos that are included in the exhibit to demonstrate how genetics determine a gecko’s color and pattern. To watch our live gecko cam, visit RMSC.org/genome. In addition, RMSC is pleased to announce the University of Rochester Medical Center (URMC) Wilmot Cancer Institute as the exhibit’s presenting sponsor.

In addition to providing valuable financial support, URMC is assisting the Museum with exhibit content and related programming: In early March, the Medical Center will unveil an exhibit within the exhibit that explores genetic research being done right here in Rochester; and throughout the exhibit run URMC doctors and staff will discuss their work at various RMSC events. Please watch RMSC.org for details.

Genome: Unlocking Life’s Code runs through April 29, 2018 in the Riedman Gallery, located on the 3rd floor.

RMSC Collections Spotlight

If you are a fan of the popular Travel Channel show, Mysteries at the Museum, you probably saw RMSC featured in October. The show’s producers asked our Collections Department to present the story of Rochester entrepreneur Martha Matilda Harper — along with artifacts illustrating her innovative Harper Method — and Collections Manager Sarah LeCount appeared in an episode. Sarah described Harper’s hair and skin products, her design for the first reclining shampoo chair, and her significance as one of the first business owners to successfully create a franchise. Intrigued? Visit www.travelchannel.com/shows/mysteries-at-the-museum and find Season 16, Episode 11.

Women’s Council Donations to RMSC Reach $100,000 in 2017!

The Women’s Council, a volunteer service organization that supports the RMSC, presented $100,000 to RMSC CEO Kate Bennett on December 12, 2017. The gift was the culmination of a year of fundraising events that included a geranium sale (May 19-20), the 8th annual Garden Tour (July 15), the Fantastic Findings Garage Sale (September 21–23) and the 47th annual Holiday Bazaar Arts & Crafts Sale (November 17-19).

Since its inception 76 years ago, the Women’s Council has donated more than $2 million in support of the RMSC, and helped the institution remain an innovative force for inspiration and hands-on education in the Rochester community. For more information about the Women’s Council or to join, visit RMSC.org or e-mail womens_council@rmsc.org.
Dear Friends,

A new year gives us a chance to look back and also presents new opportunities, and 2018 is no exception for RMSC. In January, we opened Genome: Unlocking Life’s Code, a hands-on exhibit that helps us all to unravel the mysteries behind the human genome.

We’re especially proud to showcase items from our own collections in the exhibit’s Genome Discovery Center, where you can get hands-on with the experiment of the day, learn how our collections have played a part in scientific research, and visit with our four new geckos (whom you can also keep tabs on through the gecko-cam on our website, RMSC.org). In May, we’ll open Science + You—our first summertime exhibit—an immersive experience that lets young scientists ages 2–10 play, explore, and experiment to learn about human health, nutrition, and more. We’re particularly excited that the labels in this exhibit are in both Spanish and English, reflecting the diversity in our community and schools.

Looking back, our Strasenburgh Planetarium opened 50 years ago this September and we’re in the midst of planning our celebration (please watch our website for details). The Planetarium means many things to many people and we’re excited to hear your stories—as well as your hopes for the next 50 years of this iconic institution.

Yes, we have much to look forward to this year, and I invite you to be a part of it!

Kate
Kate Bennett, RMSC CEO

RMSC TEAM MEMBERS EARN HONORS AND AWARDS FOR THEIR COMMUNITY IMPACT

Kate Bennett
Rochester Business Journal ICON Honors Award
ICON Honors recognize Rochester business leaders over the age of 60 for their notable success and demonstration of strong leadership within and outside their fields. Honorees have moved their businesses and Rochester forward by growing jobs and making a difference in the community. Kate was one of only 20 inaugural year honorees.

Kathryn Murano-Santos
Rochester Business Journal 40 Under 40 Award
Kathryn’s leadership as Sr. Director of Collections and Exhibits and as Board Chair of Friends of Ganondagan earned her this award. With nominations from the community and selections by a committee of business leaders, the Forty Under 40 awards recognize 40 men and women under the age of 40 who have achieved professional success and made significant civic contributions to our community.

Hannah Barry
VisitRochester’s Visitor Industry Council (VIC), Hats Off Award
Hats off for Hannah’s leadership on the VIC’s social media committee, including guiding the committee to a very successful educational event for members, even after losing a staff liaison.

INTERN SPOTLIGHT – PAIGE BAKER

According to the New York State Department of Environmental Conservation, urban stormwater runoff is responsible for “37% of all waterbodies assessed as impaired in New York State.” This is because water that runs off impervious surfaces like parking lots and roads carries pollutants—such as automotive fluids and fertilizers—that affect the quality of our water and the ecosystems that depend on it.

In 2012, the Stormwater Coalition of Monroe County advised RMSC of Green Infrastructure Grant Program (GIGP) monies offered by New York State, and proposed that the Museum apply for this funding to transform its campus into a Regional Green Infrastructure Showcase (RGIS). In 2013 and 2015, the NYS Environmental Facilities Corp. awarded RMSC a total of $1.2 million for the RGIS project. A component of the grant application included collaboration with a local college to assist with monitoring the green infrastructure operation and effectiveness over time. Based upon the Rochester Institute of Technology’s reputation in environmental instruction and their involvement with the H2O Hero Program, they were asked to partner with RMSC on this project. Paige Baker, a student, shares her account:

“Green infrastructure is a relatively new field, so educating people became a main project goal. Other aspects of the program included long-term monitoring of the quality and quantity of the runoff that enters storm drains—particularly after heavy rainfall—and how the green infrastructure holds up over time. My capstone group installed the monitoring equipment on the RMSC campus and took water samples to compare the traditional versus green infrastructure and how it affects runoff.

During the spring of 2017, my senior capstone group began work on a manual for monitoring the health of the green infrastructure. I was granted an internship at the RMSC to continue this work over the summer.

The RMSC is actually a working experiment for green infrastructure that achieves two purposes: 1) to study the runoff after a large rainfall; and 2) to measure the success of the green infrastructure in reducing runoff—which could contain pollutants—that ends up in the surrounding Rochester waterways.

I began collecting water samples for nutrient analysis, inspecting the monitoring equipment daily, and downloading the data from various locations throughout the RMSC campus. Fortunately, we had plenty of rainfall this summer.

The grounds, maintenance, and security staff reviewed the manual for ease of use and understandability. This manual will help the next group become familiar with the project and make their own decisions for how to move forward.”

Paige Baker

Water collection sites around the RMSC campus.
SIXTH ANNUAL HAUDENOSAUNEE DAYS CELEBRATED LAST FALL

A celebration of Haudenosaunee (Iroquois) culture that featured native artists, musicians, and storytellers, the 2017 Haudenosaunee Days event was an opportunity for public and school audiences to meet native artisans and learn right from the source.

Throughout the event, trained docent educators led tours of exhibit halls featuring Haudenosaunee art, culture, and history, while collections staff and volunteers interacted with visitors and displayed artifacts from the Works Progress Administration Indian Arts Project. Traditions represented by artists and performers included woodwork, quillwork, basket making, language, music, corn-husk doll making, silversmithing, and sharing Haudenosaunee stories in both traditional and contemporary styles.

Sponsored by the New York State Council for the Arts, the Haudenosaunee Days event has grown each year, but the goal has remained the same—to showcase the vibrant and active Haudenosaunee culture. The event’s two weekend days are open to the general public, and during the week the event is specifically geared to support the fourth-grade school curriculum.

Keep an eye on the RMSC calendar for the next Haudenosaunee Days in November 2018. We hope to see you all there! Niaweh. (Thank you)

OPTIMAX PROMOTES STEM CAREERS THROUGH COMMUNITY SUPPORT, ACCREDITED APPRENTICESHIP PROGRAM

Rick Plympton, CEO of Optimax, Inc., the largest prototype optics manufacturing company in the United States, is excited about the future of photonics. "The 21st century is really the century of the photon," remarks Plympton. "How we manage light is going to drastically change how we live our daily lives. There’s so much opportunity."

Optimax, founded in 1991 and located in Ontario, NY, has been at the forefront of a number of these new opportunities in optics. Optimax has provided lenses for a high-tech new laser eye surgery currently being developed at the University of Rochester Medical Center, which Plympton enthusiastically describes as “like something straight out of Star Trek.” Optimax technology has also been present in all three Mars Rovers as well as the New Horizon spacecraft, which provided breathtaking and informative imagery of Jupiter in 2007 and Pluto in 2015.

In order to maintain their place at the leading edge of the industry, Optimax recognizes the need for a skilled workforce in the fields of optics and photonics. To prepare potential technicians for a rewarding, long-term career in precision optics manufacturing, Optimax has implemented a Precision Optics Manufacturing (POM) Apprenticeship program to upskill their workforce. The POM Apprenticeship is a three-year on-the-job training program providing employees with experience in all departments at Optimax to build highly effective optical technicians.

Optimax also does its part to get people interested in careers in optics and photonics through community involvement. In 2010, Optimax helped the Rochester Museum celebrate the International Year of Light and has supported the Illumination: The World of Light and Optics exhibition since its creation. Guests can also find Optimax imagery of Mars, Jupiter and Pluto in the RMSC’s Science on a Sphere.

“Your initial reaction in some of these exhibits might be ‘wow, look how cool that is!’ but I invite you to be curious,” says Plympton. “Think about why things are happening the way they are... Try to understand the principles behind these exhibits.”

The RMSC is grateful to Optimax for their support and their help in inspiring our next generation of innovators.

WELCOME MARIE D’ALESSANDRO!

As our new VP, Finance & Resource Administration, Marie joins RMSC to lead several essential processes: financial planning and reporting, co-developing and structuring business planning, and leading growth phases of our multifaceted institution. Prior to joining RMSC, Marie served as Director of Finance for Lifespan of Greater Rochester, Inc. and Business Office Director for the Rochester Market of Bryant & Stratton College.

REMEMBERING JACK HAYWARD

It is with heavy heart that we pass on the news that Jack Hayward, one of RMSC’s very brilliant Technical Advisory Group (TAG) volunteers, has passed away. As a valued TAG member, he dedicated substantial volunteer hours to our mission, and his approach to exhibit prototyping, maintenance, and science education made him an amazing teammate. At 91 years old, Jack continued to have a passion for science, and his hope for RMSC’s future success was realized even in his obituary by honoring us with a donation request.

SAVING OUR PAST FOR THE FUTURE

What do a birch bark canoe, a rare wax cylinder jukebox, a quilt made by Susan B. Anthony, and a painting of franchise innovator Martha Matilda Harper all have in common? RMSC will be able to share them with you through exhibits and programs planned for the next five years thanks to a recent $500,000 grant award from the Institute of Museum and Library Services.

"People travel from all over to visit the Rochester Museum & Science Center, which we are blessed to have in our community," said Congresswoman Louise Slaughter. "This museum is doing wonderful things under the leadership of CEO, Kate Bennett. Museums like this are a major driver for tourism in our region, which contributes $1 billion locally to our economy every year. This major award from the Institute of Museum and Library Services will help ensure that RMSC's collections will inspire and inform for many years to come."

The RMSC will use the award to help reorganize and rehouse its cultural heritage collections in upgraded facilities to improve long-term preservation and access. The museum will purchase and install archival quality, high-density storage equipment to safely house tens of thousands of ethnology objects, industrial technology objects, household textiles, and paintings unique to our region. The project addresses the museum’s most critical collections stewardship challenge—lack of high-quality storage—and builds on several recent collections-care improvement initiatives.

"Our collections help the more than 350,000 people who visit the RMSC every year uncover the wonders of the world around them," said Bennett. "This funding will help us use the latest sustainable technology to preserve our collections so they can continue inspiring the many visitors to our exhibits and our website."

Imagine what we’ll be able to learn from these primary sources generations from now!...
Every effort has been made to assure the accuracy of this list. Please contact the Development Office for any corrections. 585.997.1938

“Deceased”

Results from the study show that the passenger pigeons’ large population size appears to have been stable over a long period of time. This led to a high rate of adaptive evolution that focused on being stable over a long period of time. This led to a high rate of adaptive evolution that focused on passenger pigeon bones excavated from an archaeological site in California to examine changes in the passenger pigeon genome over time.

WHAT EVER HAPPENED TO THE PASSENGER PIGEON?

Director of Collections, George C. McIntosh, Ph.D., has compiled the RMSC passenger pigeon collection for more than 30 years. McIntosh, along with Senior Director for Collections and Exhibits Kathryn Murano Santos, are listed as co-authors of “Natural Selection Shaped the Rise and Fall of Passenger Pigeon Genomic Diversity,” recently published in the peer-reviewed journal, Science. The RMSC staff supplied researchers at the Ancient DNA Lab in Santa Cruz with 3,900-year-old passenger pigeon bones excavated from an archaeological site in California to examine changes in the passenger pigeon genome over time.