DESIGN TO DISCOVER

MAKE TO CREATE

PLAY TO ENGAGE
NYSCI is a unique institution. We are New York City’s premier science center — a place where questions are important, where children are encouraged to explore, imagine and build things, and where it’s safe to experiment and fail and try again. We’re also a research center, carrying out investigations that enrich our exhibitions and programs, and contribute to the field of STEM learning.

Through our research, we grow the collective understanding of how people learn, and build effective and equitable ways to engage learners in STEM experiences driven by their questions and curiosities. Our distinctive approach to learning — which we call Design, Make, Play — enables learners to marry their interests with tools and opportunities for experimentation. We want today’s young people to become tomorrow’s problem-solvers.

From improving human health, to building more resilient communities, to shaping the future workforce, the most urgent challenges society faces require evidence-based solutions. The work that NYSCI does to inspire young people to be scientific thinkers could not be more important. This year’s annual report features four examples of ways NYSCI is developing an evidence base for STEM learning: in the museum, with youth, in our community, and around the world.

Thank you for your support.

Margaret Honey, President & CEO
In Design Lab — NYSCI’s 10,000-square-foot design and engineering space — we are working to systematically investigate factors that influence girls’ engagement and participation in science, technology, engineering and math. In a National Science Foundation-supported research study, we set out to understand whether and how narrative elements incorporated into engineering design activities can positively influence how girls engage with engineering. This research builds evidence-based guidance for the development of exhibits, activities and programs that support learning for girls in STEM — and contributes to our goal of helping other institutions create equitable and effective STEM learning experiences that engage all children.
“By seeing how she plays, I can see what she’s interested in. She showed me around the museum and I asked her to tell me about things — she felt good about that; she knew all about it, and that’s a good feeling.”

— Caregiver, on the benefits of maker programs at NYSCI
NYSCI is working to create and support an innovative and inclusive engineering profession. In Formation of Engineers, a research project supported by the National Science Foundation, a cohort of high school and college-aged youth from diverse backgrounds participate in an after-school engineering program. In this program, they contribute to the design and facilitation of engineering-focused events and activities for museum visitors. Empowering youth to help draw connections between engineering and their own lives is one way that NYSCI positions engineering as relevant and inclusive.
“Everyone is capable of being an engineer, regardless of their field. Engineers include scientists, students, artists and even UX designers, to name just a few. If anything, engineering is an equalizer, as it demonstrates the need for collaboration within and across fields.”

— College student participating in Formation of Engineers research program
NYSCI is designing ways to bring computational thinking into the classroom. With support from the Robin Hood Foundation’s Learning + Technology Fund, NYSCI formed a two-year partnership with P.S. 13, a nearby elementary school. Through this partnership, NYSCI educators are coaching teachers to integrate the principles of computational thinking into lessons across subject areas. We will also create a guide to share learnings from this project. In the project’s first year, there was a significant increase in the math test scores of students who received the computational thinking lessons, as compared to scores in previous years.
“I see many of my students using computational thinking already. They see that when they think about a problem by applying computational thinking, they understand it more and are able to confidently get to a correct solution.”

— Fifth grade teacher, P.S. 13
NYSCI uses research to develop experiences and activities that inspire students with active STEM learning. Playground Physics, one of NYSCI’s award-winning digital Noticing Tools™, was developed with support from the Sara Lee Schupf Center for Play, Science and Technology Learning. Students learn physics by recording videos of their own play to investigate the concepts of motion, force and energy. In a randomized control trial study conducted by the American Institutes of Research, students using Playground Physics performed significantly better than peers who did not. In 2019, NYSCI was awarded a subsequent grant of $2.8 million to develop more teacher supports and bring Playground Physics into 50 schools across New York state.
“A lot of people think if a student isn’t reading a book or writing about it, they’re not learning, and that’s not necessarily true. With Playground Physics, they are playing but they are also asking questions. Part of learning is to question why and how.”

— Middle school science teacher in New York City
Special events and activities throughout the year provide a platform for NYSCI to serve as a leader on critical issues around STEM education and learning within the cultural landscape of New York.

NYSCI’s annual Evening of Science and Inspiration celebrates our exhibits, research and programs while raising crucial funds to support this work. More than 650 of New York’s top business and community leaders gathered at Cipriani Wall Street to honor Tim Tynan, CEO of Bank of America Merchant Services, Joan Fallon, D.C., founder and CEO of Curemark, and Mimi Valdés, chief creative officer of i am OTHER.

In other President’s Council events, members gained insights from business leaders Ivan Seidenberg and Ted Dintersmith, met virtually with a group of women entrepreneurs in Gaza, and participated in a private tour and workshop in the heart of Times Square in collaboration with NYCxDESIGN.

The President’s Council showcases diverse perspectives from top experts at the cutting edge of STEM and education. NYSCI’s annual Spring for STEM offered a deep dive into the revolution of bioengineering and genetics being made possible with CRISPR gene editing technology. A panel of experts guided participants through the policy and ethical implications of CRISPR on personal and global health.
Thank you to all who support NYSCI.

**Fiscal Year 2019 (July 1, 2018 to June 30, 2019) grants and gifts including multi-year awards:**

- $50,000,000+:
  - Coca-Cola
  - United States Department of Education

- $100,000 – 499,999:
  - Microsoft Corp.
  - NJM Insurance Group
  - PPL Energy Solutions
  - Society of Children’s Book Writers & Illustrators

- $40,000 – 99,999:
  - Aetna Foundation
  - The Barker Welfare Foundation

- $30,000 – 39,999:
  - Allegro Foundation

- $20,000 – 49,999:
  - The Fawcett Foundation
  - The Heinz Endowment

- $10,000 – 19,999:
  - The Charles Schwab Foundation

- $5,000 – 9,999:
  - The Ford Foundation

- $1,000 – 4,999:
  - The John D. and Catherine T. MacArthur Foundation

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NYSCI’s President’s Council is a diverse and dynamic group of individuals who are passionate about STEM. Members care deeply about NYSCI’s mission and provide crucial support through annual membership. This sustains the core work of the institution and enables NYSCI to deliver transformative educational programs, develop groundbreaking exhibitions and experiences, and provide youth programming and mentoring that inspires the next generation to be STEM leaders.

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Michael Zigman

NYSCI President’s Council
### Statement of Financial Position  
**June 30, 2019**  
(with comparative amounts at June 30, 2018)

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$271,355</td>
<td>$156,061</td>
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<tr>
<td>Grants, contributions and pledges receivable, net</td>
<td>4,410,378</td>
<td>3,515,531</td>
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<tr>
<td>Prepaid expenses and other assets</td>
<td>581,516</td>
<td>675,095</td>
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<tr>
<td>Investments</td>
<td>6,401,589</td>
<td>5,066,799</td>
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<tr>
<td>Property and equipment, net</td>
<td>43,095,897</td>
<td>43,195,344</td>
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</table>

<table>
<thead>
<tr>
<th>Total Assets</th>
<th>$55,418,715</th>
<th>$59,623,770</th>
</tr>
</thead>
</table>

### LIABILITIES AND NET ASSETS

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$3,565,970</td>
<td>$1,982,103</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>268,310</td>
<td>200,473</td>
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</table>

<table>
<thead>
<tr>
<th>Total Liabilities</th>
<th>3,834,280</th>
<th>1,982,476</th>
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<tbody>
<tr>
<td>Net Assets</td>
<td>51,584,435</td>
<td>57,641,294</td>
</tr>
<tr>
<td>Without donor restrictions</td>
<td>46,793,527</td>
<td>51,145,474</td>
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<tr>
<td>With donor restrictions</td>
<td>7,790,908</td>
<td>6,495,820</td>
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</table>

<table>
<thead>
<tr>
<th>Total Net Assets</th>
<th>53,374,443</th>
<th>57,641,294</th>
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</table>

<table>
<thead>
<tr>
<th>Total Liabilities and Net Assets</th>
<th>$55,418,715</th>
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</thead>
</table>

### NET ASSETS

<table>
<thead>
<tr>
<th>Net Assets</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning of year</td>
<td>47,864,120</td>
<td>52,407,324</td>
</tr>
<tr>
<td>End of year</td>
<td>$43,571,654</td>
<td>$45,357,835</td>
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</tbody>
</table>

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### Statement of Activities  
**Year Ended June 30, 2019**  
(with summarised totals for the year ended June 30, 2018)

<table>
<thead>
<tr>
<th>OPERATING INCOME</th>
<th>Without Donor Restrictions</th>
<th>With Donor Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undesignated</td>
<td>Board</td>
<td>Designated</td>
</tr>
<tr>
<td>Contributions and grants</td>
<td>$6,172,850</td>
<td>$1,924,833</td>
</tr>
<tr>
<td>In-kind contributions</td>
<td>1,141,938</td>
<td>—</td>
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<tr>
<td>Appropriations from the City of New York</td>
<td>1,491,530</td>
<td>—</td>
</tr>
<tr>
<td>Admissions, workshops, memberships and exhibit fees</td>
<td>3,991,437</td>
<td>—</td>
</tr>
<tr>
<td>Use of facilities and other income</td>
<td>735,906</td>
<td>—</td>
</tr>
<tr>
<td>Investment return</td>
<td>372,728</td>
<td>—</td>
</tr>
<tr>
<td>Auxiliary activities</td>
<td>346,885</td>
<td>—</td>
</tr>
<tr>
<td>Subtotal</td>
<td>14,685,316</td>
<td>1,924,833</td>
</tr>
<tr>
<td>Use of designated funds</td>
<td>285,519</td>
<td>(286,519)</td>
</tr>
<tr>
<td>Net assets released from restrictions</td>
<td>5,557,020</td>
<td>—</td>
</tr>
<tr>
<td>Total Operating Income</td>
<td>19,688,861</td>
<td>1,009,354</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPERATING EXPENSES</th>
<th>Without Donor Restrictions</th>
<th>With Donor Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Services</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Museum experiences</td>
<td>6,522,529</td>
<td>—</td>
</tr>
<tr>
<td>Research and development</td>
<td>4,003,594</td>
<td>—</td>
</tr>
<tr>
<td>Youth development</td>
<td>2,401,705</td>
<td>—</td>
</tr>
<tr>
<td>Total Program Services</td>
<td>15,557,318</td>
<td>—</td>
</tr>
<tr>
<td>Supporting Services</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Fundraising</td>
<td>1,466,510</td>
<td>—</td>
</tr>
<tr>
<td>Marketing and communications</td>
<td>261,066</td>
<td>—</td>
</tr>
<tr>
<td>Total Supporting Services</td>
<td>4,371,446</td>
<td>—</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>19,919,264</td>
<td>—</td>
</tr>
<tr>
<td>Excess (Deficiency) of Operating Income Over Operating Expenses</td>
<td>(460,373)</td>
<td>1,009,354</td>
</tr>
</tbody>
</table>

### NON-OPERATING ACTIVITIES

<table>
<thead>
<tr>
<th>NON-OPERATING ACTIVITIES</th>
<th>Without Donor Restrictions</th>
<th>With Donor Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment return</td>
<td>—</td>
<td>154,275</td>
</tr>
<tr>
<td>Contributions for property and equipment — appropriations from the City of New York</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net assets released from restrictions for capital expenditures</td>
<td>765,371</td>
<td>—</td>
</tr>
<tr>
<td>Use of designated funds for capital</td>
<td>75,120</td>
<td>(75,120)</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>(5,084,190)</td>
<td>—</td>
</tr>
<tr>
<td>Change in Net Assets</td>
<td>(4,440,448)</td>
<td>1,008,479</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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| Total Liabilities and Net Assets | $55,418,715 | $59,623,770 |
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Notes

1. This material is based upon work supported by the National Science Foundation under Grant No. 1712805.

2. This material is based upon work supported by the National Science Foundation under Grant No. 1763917.

3. Robin Hood, Overdeck Family Foundation, and Siegel Family Endowment established the Learning + Technology Fund to shift teaching and learning so all students are prepared to succeed in a rapidly changing world.

4. Playground Physics was developed in the Sara Lee Schupf Family Center for Play, Science, and Technology Learning with support from the Sara Lee Schupf Family Foundation, the National Science Foundation, The John D. and Catherine T. MacArthur Foundation, BNY Mellon, and Motorola Solutions Foundation. The current scale-up is supported under a grant from the U.S. Department of Education, Education Innovation and Research (EIR) Program.