The New York Academy of Sciences

ANNUAL REPORT:

FISCAL YEAR 2018

20,000+
ACTIVE ACADEMY MEMBERS ACROSS THE GLOBE

250+ PARTNERS IN THE GLOBAL STEM ALLIANCE

2 MILLION
PEOPLE REACHED BY THE ACADEMY'S PROGRAMMING AND PUBLISHING EACH YEAR

10,000+
MEMBERS OF THE ACADEMY ARE YOUNG, PROMISING SCIENTISTS. THEY ARE STUDENTS, TEACHERS, AND POSTDOCTORAL FELLOWS

1.5+ MILLION DOWNLOADS OF
ANNALS OF THE NEW YORK ACADEMY OF SCIENCES

500,000 HOURS
OF HIGH-QUALITY STEM INSTRUCTION DELIVERED TO STUDENTS IN 100+ COUNTRIES

100+
SCIENTIFIC EVENTS ANNUALLY

50,000+
SOCIAL MEDIA FOLLOWERS

The New York Academy of Sciences Steps Boldly into its Third Century

Every scientist of note knows the importance of taking risks, pursuing paths shunned or abandoned by others, and failing over and over again in order to at last succeed.

Throughout its history the New York Academy of Sciences has championed risk takers and innovators: game-changers who upend the research landscape and blaze new trails. Because we know that breakthroughs occur more frequently when brilliant people spark the creativity of other brilliant people.

Nowhere has the Academy's ability to connect innovators been more impactful than through our commitment to the United Nations Sustainable Development Goals (SDGs). The SDGs were born out of an initiative led by former UN Secretary General Kofi Annan and macroeconomist Jeffrey Sachs, who hatched the risky notion that seemingly intractable problems could be meaningfully ameliorated through concerted global effort, active partnership between developed and developing nations, and the scaling of available but underutilized science and technology applications.

The resulting Millennium Goals were regarded as hopelessly idealistic — until the astonishing results were borne out in proof-of-concept sites around the world. Decreases in poverty, child mortality, and loss of life from preventable illnesses.
A reduction in the prevalence of malaria, and the near eradication of some water-borne diseases. Increased rates of literacy and primary education enrollment. A dramatic upsurge in food production. The list goes on.

I relate this history because the success of the Millennium Goals, and the subsequent launch of the SDGs in 2016, inspired the Academy to add a new and truly exciting dimension to our mission.

HOW SO?

- Our work to catalyze public/private partnerships in support of the Goals led to the launch of a series of SDG-based science and technology challenges, supported by many of the world's Fortune 500 corporations. Such challenges have generated hundreds of innovative ideas that show great promise for further development.
- Our partnership with the Japan Agency for Medical Research and Development is promoting collaboration among the world's most promising young researchers, encouraging them to address grand challenges through innovative approaches that would not be attempted if left to individual researchers operating within their own silos.
- Support from prestigious medical research institutions and innovative bio-pharma companies has enabled us to convene leading researchers searching for cures to such devastating diseases as pediatric cancers, Alzheimer's, HIV, malnutrition and Sickle Cell.
- In 2018 we kicked off our first-ever Change Fashion Forum, engaging leaders from industry, academia, and non-profit organizations to develop a prioritized research agenda for sustainable fashion. While this may seem like a departure for the Academy, it is, in fact, spot on. Textiles make up approximately 40 percent of our landfills — waste that could be significantly reduced by rethinking the way garments are designed, manufactured, used and recycled.

In short, this year the Academy renewed its commitment to collective action in science and technology, and the SDGs provide an invaluable framework for these efforts.

And with an eye on future innovators, we've continued to expand our Global STEM Alliance, an unparalleled network of more than 250 organizations dedicated to growing the number and diversity of talented young people entering the STEM pipeline. We've also stayed true to our tradition of training early career scientists and engineers through the Science Alliance program, offering 2018 courses and workshops on leadership, communication skills, career-building, and the business of science. The thousands of motivated teenagers, undergraduates, and graduate students joining the Academy through these programs represent our own proof of concept.

They are already collaborating online to tackle SDG-based challenges, and are using these experiences to change their own communities in more than 100 countries around the world. Who knows where they will go next? No one can say what risks it will take to make the great discoveries that will transform our world in the next 100 years. But one thing is certain: New York Academy of Sciences Members will be at the forefront of these discoveries, and the Academy will be proud to have supported them.

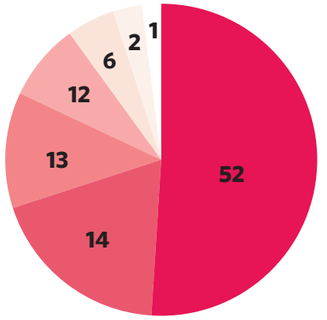
ELLIS RUBINSTEIN
President and CEO
The New York Academy of Sciences

In 2018 We Imagined Our Third Century!

1. Our 14th Annual Gala on November 6, 2017 marked the completion of our bicentennial year. With 400 supporters and Members of the World's Smartest Network®, we imagined what the next 100 years would look like with a keynote address from former NASA astronaut Dr. Mae C. Jemison, the first woman of color to travel to space.
2. On September 28, 2017 during the 199th Annual Meeting of the New York Academy of Sciences, James Patchett, President and CEO of New York City Economic Development Corporation, spoke about how to best translate the breakthroughs generated in New York's science and tech industry into jobs and economic development in NYC.
3. Dr. George Church visited the Academy on May 21, 2018 to take part in a panel discussion titled, "The Enhanced Human: Risks and Opportunities" that explored the opportunities and concerns that come with the potential to redesign ourselves.
4. In the final installment of the Nour Lecture series on February 7, 2018, Lucianne Walkowicz, PhD an astronomer at the Adler Planetarium and Baruch S. Blumberg NASA/Library of Congress Chair in Astrobiology in the John W. Kluge Center at the Library of Congress, joined a panel discussion to tackle the big question of existence.
5. During an evening discussion on June 28, 2018, Ira Flatow, host of *Science Friday*, moderated a panel of experts to discuss the social, cultural, behavioral, and economic roots of science denialism and how to best make the case for science.
6. Guests and Young Members attending the 2017 Gala imagine what discoveries and scientific advancements might be made in the next 100 years.

Academy Conference Participants

SECTOR



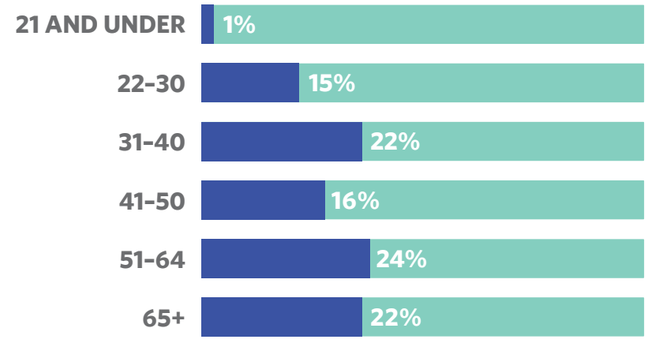
52%	ACADEMIA
14%	OTHER
13%	INDUSTRY
12%	HEALTHCARE
6%	NOT-FOR-PROFIT
2%	GOVERNMENT
1%	PRESS

GENDER

50% FEMALE

50% MALE

AGE



PARTICIPATION IMPACT

89% GAINED NEW KNOWLEDGE IN SCIENCE, TECHNOLOGY, ENGINEERING, OR MATH (STEM)

63% HAD A VALUABLE DISCUSSION WITH AT LEAST ONE NEW CONTACT

UNDERREPRESENTED MINORITIES (URMS)

12%

UNDERREPRESENTED MINORITIES*

**3.8% NATIONAL AVG. OF URMS IN ACADEMIA*

30%	HISPANIC
11%	AFRICAN AMERICAN
0%	NATIVE AMERICANS / ALASKAN NATIVES
2.5%	US PACIFIC ISLANDERS
1.5%	HAWAIIAN NATIVES
55%	OTHER

Data as of August 2018

Convening For Impact

Our 2017-2018 conference season reflected yet another year of robust participation, with more than 10,700 global investigators, from 62 countries, convening virtually and in person at 108 meetings. Groundbreaking new discoveries across topics as diverse as brain repair, cancer immunotherapy, machine learning, sustainable development, cosmology, and astrophysics served to accelerate scientific discovery, and we continued to explore the challenges women face when pursuing careers in STEM.

Building on the work performed in the inaugural Summit, the Academy convened the *Second Annual Summit on Science Enablement* for the *Sustainable Development Goals*. During this two-day event, thought leaders from academia, industry, NGOs, and research and policy-making institutions joined UN executives, including UN Assistant Secretary-General Thomas Gass, to identify a science and technology–based action plan, provide technical roadmaps, and define metrics for success to achieve the delivery of the UN's 2030 Agenda on Sustainable Development. Expert recommendations on implementation research and practice promoting early childhood development were featured in a special issue of *Annals of the New York Academy of Sciences*.

UN Assistant Secretary-General Thomas Gass delivered a call to action for scientists to connect science to policy, and stressed that "Finding a medium to communicate is what the integration of science and policy is about."

LEFT: *UN Assistant Secretary-General* ***Thomas Gass***.

In partnership with The Bill & Melinda Gates Foundation, the Academy also convened the event, *Long-Acting HIV Prevention Methods*, bringing scientists, policy makers, and community leaders together to address enduring economic, social, and cultural barriers to current HIV prevention strategies as well as long-acting therapies that present a promising path forward towards ending the HIV epidemic. Discussions centered on addressing key challenges, such as drug affordability and stability in Africa, where nearly half of all HIV infections exist and access to healthcare systems is limited. Promising new interventions with reduced manufacturing costs and improved heat resistance were reported, while the need for an effective HIV vaccine that could not only curb the virus at childbirth but also decrease the need for long-term treatment, was identified as a high research priority.

Another highlight was the evening panel, *The Enhanced Human: Risks and Opportunities*. Scientists, ethicists, futurists, and technologists gathered for a dialog centered on ethical and social questions arising from the use of technologies, such as CRISPR-based gene editing and brain-computer interfaces, to permanently overcome limitations of the human body and mind. "All the technology we will need to fundamentally transform our species already exists. Humans are made of code, and that code is writable, readable and hackable," said speaker Jamie Metzl, a technology futurist, geopolitical expert, and Senior Fellow of the Atlantic Council, an international affairs think tank.

BILL & MELINDA GATES *foundation*

RIGHT: *Select panelists, The Enhanced Human: (Left to right)* ***Josephine Johnston*** *(The Hastings Center),* ***Meredith Whittaker*** *(AI Institute at NYU), and* ***Glenda Greenwald*** *(Aspen Brain Institute).*

LANDMARK CONFERENCE

In a collaboration with The Sohn Conference Foundation, *Accelerating Translation of Pediatric Cancer Research* convened leading researchers, clinicians, pediatric cancer advocates, and industry and government stakeholders from around the globe in London to share cutting-edge research and discuss strategies to help close the gap between research discoveries and treatments for childhood cancers. Richard Gilbertson (University of Cambridge) and Mignon Lee-Cheun Loh (University of California, San Francisco) delivered keynote addresses on the need for cross-disciplinary collaborations and the use of personalized medicine to devise early detection methods and effective therapies for pediatric and adolescent cancer patients.

ABOVE: *Elsevier report Gender in the Global Research Landscape.*

Supporting Research in the Service of Humanity

THE SACKLER INSTITUTE FOR NUTRITION SCIENCE

The Sackler Institute for Nutrition Science hosted several meetings in 2018 on nutrition topics in line with its strategic orientation, beginning with an initiative to extend WHO's recommendation on the use of multiple micronutrient supplements during pregnancy. This effort entailed the convening of two closed-door technical consultations to build consensus among experts and to propose a framework for policy action. The Sackler Institute also created the Nutrition Modeling Consortium, to help decision makers in low and middle-income countries improve the effectiveness and efficiency of their nutrition policies and programs through the use of mathematical modeling and optimization tools. The Institute's Nutrition and Aging Working Group co-organized, with DSM and others, a public symposium on "Hidden Hunger in the Aging," in Washington, D.C. and released a White Paper on this topic. A series of meetings was also prepared to look into the development of antimicrobial resistance due to the use of antibiotics in animal food production. Activities related to this initiative began this year with a preliminary expert meeting that will lead a public scientific symposium at the New York Academy of Sciences.

This year, the **Sackler Institute Research Grants** focused on nutrition in adolescent girls and young women. Six grants were awarded to investigate, in various locations around the world, whether adolescent women's occupational status (at school, at home, at work) affect their nutrition. Another major research effort initiated this year is aimed at filling knowledge gaps associated with thiamine deficiency.

POLICY GROUP

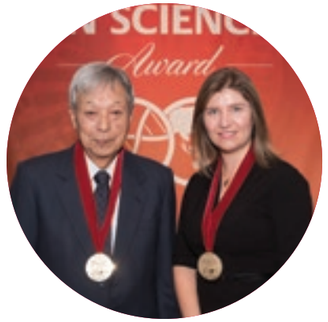
The Academy continues to serve in an advisory capacity for two clean energy proof-of-concept centers (POCCs) funded by the New York State Energy Research and Development Authority (NYSERDA), with the goal of helping inventors and scientists turn clean technology ideas into successful companies. The Academy also created a metrics and evaluation framework to demonstrate the impact of the POCCs over time.

Innovators in Science Award

In 2017 the Innovators in Science Award inaugural Honorees were announced. This global Award, sponsored by Takeda Pharmaceutical, recognizes a promising Early-Career Scientist and an outstanding Senior Scientist for their contributions to science in the areas of Neuroscience, Gastroenterology, Regenerative Medicine, and Oncology. In this first year, 400 institutions were invited to nominate their most promising and extraordinary scientists in the field of Neuroscience. An international Award Jury selected the Award Winners and Finalists from a pool of candidates nominated from five continents and over 20 countries.

THE 2017 HONOREES AND INAUGURAL AWARD CEREMONY

The Academy, in partnership with Takeda, was delighted to host an Award Ceremony recognizing the Honorees for the creativity and impact of their research. Scientific leadership from Takeda and luminaries from around the world welcomed the Honorees to the Academy's headquarters in New York City on November 28, 2017. Andrew Plump and Emiliangelo Ratti of Takeda presented each Winner with a prize of US$200,000 to support their commitment to innovative research. Esteemed guests enjoyed a ceremony painted by Japanese tradition, highlighting Takeda's global presence and history.



ABOVE: *Senior Scientist Winner:* ***Shigetada Nakanishi****, Suntory Foundation for Life Sciences (Left) and Early-Career Scientist Winner:* ***Viviana Gradinaru****, California Institute of Technology (Right).*

"Through efforts to support novel research in higher education, we strengthen hope and fuel the possibility that together we will discover and develop next-generation treatments for patients with unmet needs everywhere."

-Christophe Weber, President and CEO, Takeda

BELOW RIGHT: *Traditional Japanese musicians provided the evening's entertainment and were a tribute to Takeda's origins.*

"As we embrace innovative science and agile thinking within our organization at Takeda, we welcome and honor those who motivate us in this challenge no matter where in the world they call home."

–Andrew Plump, Chief Medical and Scientific Officer, Takeda

INNOVATORS IN SCIENCE AWARD SYMPOSIUM

Thought leaders from academia and industry came together for a day of discussion and collaboration that featured the Award Honorees' accomplishments in neuroscience and highlighted the work of distinguished speakers. Rudolph Tanzi and Don Cleveland illuminated the audience through a panel discussion on treatments for neurodegenerative disease, and Paola Arlotta and Daniel Geschwind delivered lectures evaluating the therapeutic landscape for neuropsychiatric disorders. Nobel Laureate and world-renowned neuroscientist Eric Kandel concluded with a keynote lecture entitled "The Biology of Memory and Age-Related Memory Loss."

In its second year, the Innovators in Science Award will recognize research excellence in the therapeutic area of Regenerative Medicine. Stay tuned for Award Winner announcements in January 2019 and another transformative scientific symposium that will take place in April 2019 at Shonan iPark in Japan.

Senior Scientist Finalist: ***Ben Barres****, Stanford University School of Medicine (1954-2017)*

Senior Scientist Finalist: ***David Julius****, UC San Francisco*

Early-Career Scientist Finalist: ***Michael Halassa****, Massachusetts Institute of Technology (nominated while at New York University)*

Early-Career Scientist Finalist: ***Kay Tye****, Massachusetts Institute of Technology*

BELOW: ***Eric Kandel****, Nobel Laureate and President's Council Member at the Academy (Left), and* ***Andrew Plump****, Chief Medical & Scientific Officer at Takeda (Right).*

Blavatnik Awards for Young Scientists

The Blavatnik Awards for Young Scientists *continued to grow with the successful expansion of the Awards to* ***Israel*** *and the* ***United Kingdom****. Since the Award's inception in 2007, over 2,900 scientists have been nominated from over 280 institutions. By the close of 2018, the Blavatnik Awards for Young Scientists will have awarded $6.7 million to 249 honorees in the US, Israel, and the UK.*

THE BLAVATNIK AWARDS IN THE UNITED KINGDOM

The inaugural Blavatnik Awards in the United Kingdom invited the 135 academic and research institutions across England, Scotland, Wales, and Northern Ireland, along with the Awards' UK Scientific Advisory Council, to nominate their most promising young scientists. From among the 124 nominations received, the Jury named three Laureates who each received US$100,000 in unrestricted funds: Andrew Goodwin (University of Oxford), M. Madan Babu (MRC Laboratory of Molecular Biology), and Henry Snaith (University of Oxford). Two nominees in each award category of Life Sciences, Physical Sciences and Engineering, and Chemistry were named Blavatnik Finalists, receiving US$30,000 each in unrestricted funds. This first cohort of UK honorees was celebrated at the inaugural Blavatnik Awards UK Ceremony held at London's Victoria and Albert Museum on March 7, 2018 with 200 guests in attendance and a Keynote address by Nobel Laureate and President of the Royal Society, Sir Venkatraman Ramakrishnan.

THE BLAVATNIK AWARDS IN ISRAEL

In Israel, the New York Academy of Sciences collaborates with the Israel Academy of Sciences and Humanities to administer the Blavatnik Awards in Israel, which in this their inaugural year received 47 nominations from eight universities and from the Awards' Scientific Advisory Council. A distinguished national Jury selected the three Laureates — Charles Diesendruck (Technion – Israel Institute of Technology), Oded Rechavi (Tel Aviv University), and Anat Levin (Technion - Israel Institute of Technology). To commemorate the launch of the Awards, Israel's President Reuven Rivlin and the First Lady of Israel hosted a reception for the inaugural Laureates at the President's Residence in Jerusalem on February 4, 2018. Later that evening, the inaugural ceremony for the Blavatnik Awards in Israel was held at the Israel Museum in Jerusalem with over 150 guests in attendance, including prominent leaders from Israel's academic, business, and philanthropic communities. The Laureates were each presented with medals and US$100,000 in unrestricted funds.

OPPOSITE: *Laureates* ***Andrew Goodwin*** *(Top) of the University of Oxford, and* ***Anat Levin*** *(Bottom) of the Technion - Israel Institute of Technology.*

ABOVE: *2017 Blavatnik National Laureate* ***Melanie Sanford****.*

RIGHT: *2017 Blavatnik National Awards ceremony at the American Museum of Natural History.*

BELOW LEFT: *2018 Blavatnik Awards in the United Kingdom Honorees. (Back from left to right)* ***M. Madan Babu****,* ***Timothy Behrens****,* ***Robert Hilton****,* ***Henry Snaith****,* ***Andrew Levan****,* ***Andrew Goodwin****.*
(Front from left to right) ***John Briggs****,* ***Claudia de Rham****,* ***Philipp Kukura.***

BELOW RIGHT: *Israel's President* ***Reuven Rivlin*** *(Front center) and the First Lady of Israel (Front from left) host a reception for* ***Nili Cohen*** *(Front from right), President of the Israel Academy of Sciences and Humanities, and the inaugural Blavatnik Awards in Israel Laureates. (Back row from left to right)* ***Ellis Rubinstein*** *of the New York Academy of Sciences, 2018 Blavatnik Laureates in Israel* ***Charles Diesendruck*** *and* ***Anat Levin****, accompanied by Awards' Founder* ***Len Blavatnik****, and Laureate* ***Oded Rechavi****.*

THE BLAVATNIK NATIONAL AWARDS CEREMONY

The 2017 Blavatnik National Awards Ceremony was held on September 24, 2017 at the American Museum of Natural History, where more than 200 guests from academia, business, and media honored 27 National Finalists and three National Laureates — Melanie S. Sanford (University of Michigan), Feng Zhang (Broad Institute of MIT and Harvard), and Yi Cui (Stanford University). The Laureates were each presented with medals and US$250,000 in unrestricted funds.

The 2018 Blavatnik National Awards received 286 nominations from 146 of the top academic and research institutions across the United States. The 31 Finalists were announced on May 30, 2018, and the three 2018 National Laureates — Neil K. Deveraj (University of California, San Diego), Janelle Ayres (Salk Institute for Biological Studies) and Sergei V. Kalinin (Oak Ridge National Laboratory) — were announced on June 27, 2018.

THE BLAVATNIK REGIONAL AWARDS

The 2017 Blavatnik Regional Awards received 161 postdoctoral nominations from 28 academic and research institutions across New York, New Jersey, and Connecticut. Three winners and six finalists were honored and presented with medals and a total of US$150,000 in unrestricted funds during the Academy's Annual Gala on November 6, 2017.

THE BLAVATNIK SCIENCE SYMPOSIUM

The Academy hosted the fourth annual Blavatnik Science Symposium on July 17 and 18, 2017. More than 80 members of the Blavatnik Science Scholars community were joined by other scientific luminaries and leaders from industry, including Harvard Business School's Blavatnik Fellows in Life Sciences Entrepreneurship and Harvard University's Blavatnik Biomedical Accelerator. Harvard Business School Professor and former business executive Vicki Sato delivered the Keynote address on the importance of building trust between business and science in order to drive society's scientific progress through economic growth.

Aligning Young Stars of Science to Tackle the World's Most Critical Medical Challenges.

ABOVE: *2017 Blavatnik Regional Award Winner* ***Chao Lu****.*

BELOW LEFT: *Academy CSO* ***Brooke Grindlinger****, with the 2017 Blavatnik Regional Award Winners (From left to right),* ***Chao Lu****,* ***Andrew Ilott****,* ***June Huh****) and* ***Peter Thorén*** *of the Blavatnik Family Foundation.*

BELOW RIGHT: *2016 and 2017 Blavatnik National Finalist* ***Pardis Sabeti*** *speaks about her research on fighting Zika and Ebola at the 2017 Blavatnik Science Symposium.*

Interstellar Initiative

The Interstellar Initiative, a program developed by the Japan Agency for Medical Research and Development (AMED) and the New York Academy of Sciences, aims to increase international and interdisciplinary collaboration between scientists early in their careers. The initiative brings together Early Career Investigators (ECIs) from around the world, selected via a competitive application process, and teams them with their peers in related but distinct disciplines. With the guidance of leading senior researchers, each team develops a grant proposal centered on a novel scientific research question — the different perspectives of their teammates allow them to think creatively, with the ultimate goal that through such teamwork we catalyze scientific advancement. The program launched its first round in 2017, and the second round began in 2018. The primary disciplines for the 2018-19 Interstellar Initiative are cancer and neuroscience, with an additional focus on artificial intelligence and its application to medicine.

High caliber mentors were recruited for both the 2017 and the 2018-19 Interstellar Initiatives, and all were highly engaged and enthusiastic about the program. All mentors and accepted ECIs were invited to participate in two workshops in each series that convene at the Academy, where they meet within groups and develop collaborative research proposals. In 2018, the number of applications we received for ECI placements almost doubled from the 2017 workshops — we received applications from 20 countries around the world, and 30 ECIs were ultimately accepted into the 2018-2019 program from Canada, Germany, Japan, Singapore, United Kingdom, and the United States. The first workshop in the 2018-2019 series was held in June 2018. It commenced with a keynote lecture from Yann LeCun, PhD, Chief AI Scientist at Facebook and Founding Director of the NYU Center for Data Science, on Power and Limits of AI Applications in Science and Society. The teams were then tasked with jointly formulating a research concept under the guidance of their mentors. At the end of the workshop, teams presented their ideas for additional feedback. The workshop also featured a presentation from representatives for the Human Frontier Science Program (HFSP), an international granting organization that seeks to fund cutting edge cross-disciplinary research, an excellent program for the teams to consider for longer-term funding.

Modest funding is provided to each team to continue their collaborations between the workshops, and they will submit progress reports for mentor review leading to the follow up workshop to be held in the beginning of 2019. At this next workshop, the teams will further refine their proposals, continue to receive direction from mentors, and present updates. Top teams receive a non-monetary award at each workshop. Following the second workshop, the teams are strongly encouraged to submit their proposals for funding.

The goal of the Interstellar Initiative is to accelerate the globalization of research and to help plant new seeds for medical innovation by nurturing promising young scientists. Feedback from our partners (AMED), the mentors, and the ECIs, was that the workshops are a truly beneficial experience for all. More than half of the teams from the 2017 round have already submitted their research proposals for funding and are awaiting feedback from the agencies they applied to, as of the last update survey. In addition, ECI feedback in the post-event surveys was highly positive, and many were enthusiastic about the new connections and partnerships they were able to forge — across geographies and disciplines — that they would not have made otherwise.

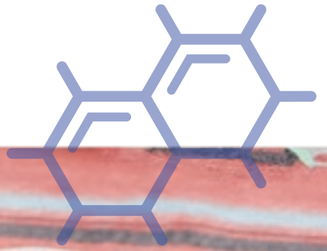
Broadening the STEM Pipeline

The Global STEM Alliance (GSA) is a worldwide talent identification and cultivation network made up of more than 250 partners and reaching participants in over 100 countries. Designed to inspire and prepare the next generation of innovators, GSA programs focus on mentorship from professional scientists and engineers, skills development, and the application of skills to real-world challenges. The GSA is committed to building a global network of more than 1,000,000 students in 100 countries by 2030.

In 2017, we reached nearly **18,000** students, scientists-in-training, educators, and STEM professionals around the globe, providing more than **500,000** hours of innovative STEM programming.

NOTABLE ACHIEVEMENTS INCLUDE:

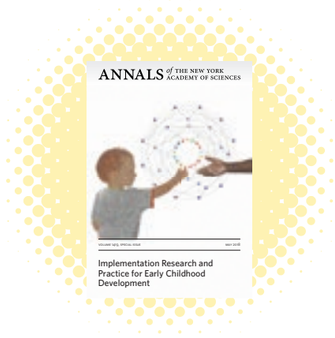
- With generous support from United Technologies Corporation, we launched **STEM U**, a multi-year initiative designed to extend many of the GSA's most impactful elements — mentoring, skill building, and challenge-based learning — to hundreds of thousands of students and educators around the globe.
- The **1000 Girls, 1000 Futures** program welcomed a third cohort of participants — including its 1,000th girl — to benefit from this transformative program designed to keep young women engaged in STEM.
- After receiving a record 5,000 applications, 500 of the world's most exceptional teens were selected to join the third cohort of the **Junior Academy**, an elite community of students and STEM professionals dedicated to solving global challenges.
- Using **Launchpad**, the Academy's proprietary collaboration platform, we ran four innovation challenges for Junior Academy students, as well as our first open innovation challenge, sponsored by PepsiCo, to design healthier snacks.
- Our in-person mentoring programs — the **Afterschool STEM Mentoring Program** and **Scientist-in-Residence** — expanded across the tri-state area to Syracuse and Utica, NY, Fairfield County, CT, Jersey City and Newark, NJ, in addition to our flagship partnership with the New York City Department of Youth and Community Development and the Department of Education.
- **Science Alliance** continued to broaden its reach to long-distance partner universities through virtual networking and webinar offerings.
- In the summer of 2017, we hosted the second annual **Global STEM Alliance Summit**, with more than 100 STEM-motivated students from 20 countries convening at the Academy's headquarters to engage in skill-building workshops and network with corporate leaders. They join the ranks of the World's Smartest Network by becoming the next generation of Academy Members.
- Following the launch of our **STEM Certification Program** at the end of 2016, the GSA certified learning materials from Discovery Education, Robomatter, and our own Junior Academy. Certification indicates that these materials align to the GSA STEM Education Framework — a research-based set of best practices — as determined by a team of independent evaluators.



Publications

ANNALS OF THE NEW YORK ACADEMY OF SCIENCES

The Academy's 193-year old multidisciplinary science journal is published bi-monthly as special issues in many areas of science, predominantly the biological sciences. Each of the 24 annual issues presents Original Research Articles and/or commissioned Review, Commentary, and Perspective Articles. In 2017, the latest rankings by Clarivate Analytics in 81 countries worldwide listed Ann NY Acad Sci 1,211 of the 12,271 journals.



RANKED 10TH OF 64 MULTIDISCIPLINARY JOURNALS WORLDWIDE

On Wiley's Online Library, *Ann NY Acad Sci* had 1.9M unique visitors (+5% over 2016), 1.5M full-text downloads (+6%), and 46,160 citations (+3.6%) in 2017. 6,035 institutions (+14%) offered access to the latest *Ann NY Acad Sci* content via either a Wiley License or a traditional (title-by-title) subscription. In addition, philanthropic initiatives extended low-cost or free access to 7,669 developing world institutions.

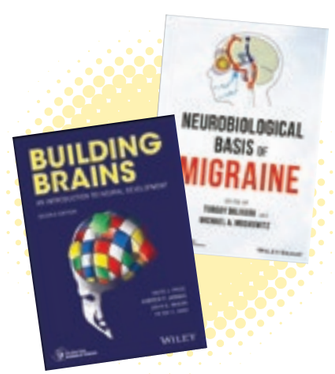
Total top-line revenue was $3.23M; bottom-line revenue was ~$1.72M (+5%).

4.277 IMPACT FACTOR

Journal Citation Reports® Science Edition (Clarivate Analytics, 2017)

ACADEMY AND JOHN WILEY & SONS BOOK SERIES

In 2015, the Academy and John Wiley & Sons began collaborating on a new book series covering topics in all areas of life and physical sciences, including professional/research books, educational textbooks, techniques book, and handbooks. Two titles have been published thus far; several others are in progress.



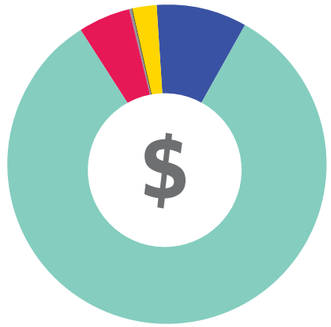
Neurobiological Basis of Migraine
Turgay Dalkara and Michael A. Moskowitz (ISBN: 978-1-118-96719)

Building Brains: An Introduction to Neural Development, 2nd Edition
David J. Price, Andrew P. Jarman, John O. Mason, Peter C. Kind
(ISBN: 978-1-119-29371-2)

Other books in progress include:

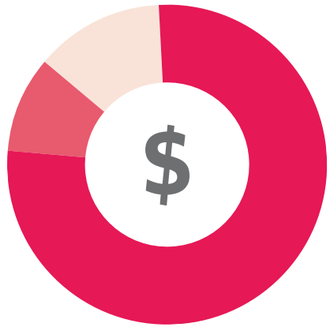
- ***Microscopy-Based Imaging in Pathology and Disease***
- ***Bacterial Molecular Genetics***
- ***Postharvest Biology and Nanotechnology of Fruits, Vegetables and Flowers***
- ***Glial Cell Biology***

Financial Statement



OPERATING SUPPORT AND REVENUE

Membership Fees	$666,285
Publication Sales And Advertising	$2,520,063
Grants And Contributions	$22,915,719
Registration And Meetings Fees	$1,414,548
Interest And Dividends	$71,872
Other Income	$20,047
Total Public Support And Revenue	**$27,608,534**



OPERATING EXPENSES

Program Expenses	$19,681,731
Fundraising	$2,507,709
General And Administrative	$3,259,396
Total Operating Expenses	**$25,448,836**

Change In Net Assets Before Depreciation	**$2,159,698**
Less: Depreciation Expense	$1,904,029
Change In Net Assets After Depreciation And Before Realized And Unrealized Gains On Investments	$255,669
Realized And Unrealized Gains On Investments	$206,373
Change In Net Assets	$462,042

The above data has been condensed from the consolidated financial statements as of June 30, 2018, audited by EisnerAmper LLP. Copies of the audited statements including the accountant's unmodified opinion are available from the Academy upon request.

Conferences, Discussion Groups, and Scientific Events

LIVESTREAMS AND WEBINARS

The Academy used the power of livestreaming, and archived video on demand, to put our ideas and events in front of audiences around the world. This year, more than 6,600 people watched an Academy event via Livestream or Webinar.

June 23–30, 2018
Science Denialism, Public Policy, and Global Health

June 27, 2018
Change Fashion Challenge Forum and Workshop

June 25 - June 26, 2018
Resolution of Inflammation, Infection and Tissue Regeneration

June 28th, 2018
The Interstellar Initiative

June 14, 2018
Psychiatric Symptoms in Alzheimer's Disease and Dementia

June 5, 2018
2018 Ross Prize in Molecular Medicine — Genetics of Neurodevelopmental Disorders

June 4 - August 12, 2018
Scientists Teaching Science Online Course

June 4, 2018
Genome Integrity Discussion Group

June 4, 2018
Lyceum Society June 2018

May 24, 2018
Cancer Metabolism and Signaling

May 23, 2018
Chemical Biology Discussion Group Year-End Symposium

May 22, 2018
Thinking Outside the ATP Box: New Ways to Target Kinases for Therapeutics

May 21, 2018
The Enhanced Human: Risks and Opportunities

May 15, 2018
Innovators in Science Award – Call for Nominations

May 7, 2018
Lyceum Society May 2018

April 28, 2018
Chronic Traumatic Encephalopathy: Neuropathology, Knowledge Gaps, and Clinical Translation

April 26 - April 27, 2018
Frontiers in Cancer Immunotherapy

April 17, 2018
Advances in Translational Models to Study Fibrosis

April 14, 2018
Hate Free Speech: A Workshop on the Politics of Language on College Campuses

April 10, 2018
Immigration Info Session for Advanced Degree Holders in STEM

April 9, 2018
Genome Integrity Discussion Group

April 2, 2018
Lyceum Society April 2018

March 27, 2018
Webinar: Beating the STEM Burnout

March 26, 2018
Is Extreme Inequality Inevitable?: What Archaeology Can Tell Us about the 99 Percent

March 23, 2018
Hidden Hunger: Solutions for America's Aging Population

March 19, 2018
Cell Death Pathways in Human Health and Disease

March 15, 2018
Improving Women's Health: HIV, Contraception, Cervical Cancer and Schistosomiasis

March 14, 2018
Stories Behind the CV: A Career Exploration Town Hall

March 9, 2018
12th Annual Machine Learning Symposium

March 5, 2018
Lyceum Society March 2018

March 1, 2018
WEBINAR: Using Informational Interviews to Find Your Dream Job

February 26, 2018
Passions for Interests: Water and Rural Political Belonging in America

February 26 - February 28, 2018
Sohn Conference: Accelerating Translation of Pediatric Cancer Research

February 24 - February 25, 2018
Introductory Coding for Researchers

February 20, 2018
Translational Approaches for Human Liver Disease

February 7, 2018
A Touch of Awe: Crafting Meaning from the Wonder of the Cosmos

February 5, 2018
Genome Integrity Discussion Group

February 5, 2018
Lyceum Society February 2018

January 29, 2018
Will Humans Survive our Assault on the Earth? A Message from Madagascar

January 27, 2018
Risky Business – The Future of Biopharmaceutical Innovation

January 18, 2018
The New York Structural Biology Discussion Group 13th Winter Meeting

January 8, 2018
Investigations of the Preclinical Stage of Alzheimer's Disease

January 8, 2018
Lyceum Society January 2018

December 20, 2017
The Future of Research: Talent & Technology

December 7, 2017
The Story of Life: Critical Insights from Evolutionary Biology

December 4, 2017
Genome Integrity Discussion Group

December 4, 2017
Lyceum Society Holiday Luncheon

November 30, 2017
Engaging with the Public: Why Scientists Need to Communicate Their Work

November 29, 2017
Transformative Research in Neurodegenerative Disease and Neuropsychiatric Disorders: 2017 Innovators in Science Award Symposium

November 17, 2017
Chemical Neuroscience

November 14, 2017
Antibody-Drug Conjugates: Oncology and Beyond

November 13, 2017
Are Racism, Violence, and Inequality Part of "Human Nature"? Why Understanding Human Evolution Matters

November 6, 2017
The New York Academy of Sciences 2017 Annual Gala

November 6, 2017
Lyceum Society November 2017

November 2, 2017
Planning for a Successful STEM Career

November 2, 2017
Mitochondria in Health and Disease

October 28 - December 9, 2017
SciPhD – The Business of Science Certificate Program

October 24, 2017
Towards Transformative Therapies for Sickle Cell Disease

October 23, 2017
Getting Talked into (and out of) Whiteness

October 17, 2017
Going for the Goals: New York Tech Innovates for Sustainability

October 17, 2017
Second Annual Summit on Science Enablement for the SDGs: The Symposium

October 16, 2017
Second Annual Summit on Science Enablement for the SDGs: The Workshops

October 10, 2017
The Power of Meaning: The Quest for an Existential Roadmap

October 3, 2017
Grantsmanship for Postdocs: Pathway to Independence Awards (K99/R00)

October 2, 2017
Genome Integrity Discussion Group

October 2, 2017
Lyceum Society October 2017

September 28, 2017
199th Annual Meeting of the New York Academy of Sciences

September 26, 2017
Targeting RNA Using Small Molecules

September 25, 2017
The Refugee as a Political Figure for our Time

September 22, 2017
Long Acting HIV Prevention Methods

September 14 - September 17, 2017
Science Alliance Leadership Training (SALT) 2017 - Atlanta

September 13, 2017
Mitochondria and Medicine: The 2017 Dr. Paul Janssen Award Symposium

September 7, 2017
Academia Challenges for Women in STEM: Training, Discrimination, and Policy

August 14-25, 2017
Intro to Coding Summer Camp

August 1-2, 2017
The Interstellar Initiative

July 21 - July 25, 2017
Pre-College Leadership Institute

July 17-18, 2017
2017 Blavatnik Science Symposium

July 7 - October 10, 2017
Clinical Research Management Online Course Summer 2017

July 6, 2017
Securing Seed Funding: Support for Biotech Entrepreneurs and Researchers

EBRIEFINGS

Multimedia recaps of Academy meetings designed to help a global audience stay informed about the latest research presented at Academy conferences and events.

Immigration Info Session for Advanced Degree Holders in STEM

Sohn Conference: Accelerating Translation of Pediatric Cancer Research

Improving Women's Health: HIV, Contraception, Cervical Cancer, and Schistosomiasis

Translational Approaches for Human Liver Disease

Hidden Hunger: Solutions for America's Aging Population

Mitochondria in Health and Disease

Towards Transformative Therapies for Sickle Cell Disease

Antibody-Drug Conjugates: Oncology and Beyond

Transformative Research in Neurodegenerative Disease and Neuropsychiatric Disorders: 2017 Innovators in Science Award Symposium

Mitochondria and Medicine: The 2017 Dr. Paul Janssen Award Symposium

Long-Acting HIV Prevention Methods

Academia Challenges for Women in STEM: Training, Discrimination, and Policy

Grantsmanship for Postdocs: Pathway to Independence Awards

Neuroplasticity, Neuroregeneration, and Brain Repair

The 2017 Blavatnik Science Symposium

The Need to Accelerate Therapeutic Development: Must Randomized Controlled Trials Give Way?

Gene Therapy for Rare Diseases
The Physics of Everything

Targeting Tau in Alzheimer's Disease and Related Disorders

Quantitative Approaches in Immuno-Oncology

Securing Seed Funding: Support for Biotech Entrepreneurs and Researchers

PODCASTS

Inform the public about important scientific topics in an easily digestible format; available on the Academy's website and on iTunes.

Deciphering Zika

Discovering New Liver Disease Treatments

Proof of Concept Centers: Changing Weather

Inspiring Stories from the Future of STEM

Rethinking Climate Change

Proof of Concept Centers: Small Materials Solving Big Problems Reevaluating Clinical Trial Design

Proof of Concept Centers: Tackling Industrial Waste

Working Together for People, Planet, and Prosperity

ANNALS OF THE NEW YORK ACADEMY OF SCIENCES

June 2018, Volume 1422
Special issue: **The Year in Evolutionary Biology**

June 2018, Volume 1421
Special Issue: **Annals Reports**

May 2018, Volume 1420
Special Issue: **The Year in Neurology and Psychiatry**

May 2018, Volume 1419
Special Issue: **Implementation Research and Practice for Early Childhood Development**

April 2018, Volume 1418
Special Issue: **Healthy Aging**

April 2018, Volume 1417
Special Issue: **The Year in Immunology**

March 2018, Volume 1416
Special Issue: **Adolescent Women's Nutritional Status**

March 2018, Volume 1415
Special Issue: **MARROW**

February 2018, Volume 1414
Special Issue: **Folate Status in Women and Neural Tube Defect Risk Reduction**

February 2018, Volume 1413
Special Issue: **Myasthenia Gravis and Related Disorders II**

January 2018, Volume 1412
Special Issue: **Myasthenia Gravis and Related Disorders I**

January 2018, Volume 1411
Special Issue: **The Year in Diabetes and Obesity**

December 2017, Volume 1410
Special Issue: **Musculoskeletal Repair and Regeneration II**

December 2017, Volume 1409
Special Issue: **Musculoskeletal Repair and Regeneration I**

November 2017, Volume 1408
Special Issue: **Annals Reports**

November 2017, Volume 1407
Special Issue: **Equivalence of Complex Drug Products: Scientific and Regulatory Challenges**

October 2017, Volume 1406
Special Issue: **Unlocking the Unconscious: Exploring the Undiscovered Self**

October 2017, Volume 1405
Special Issue: **Tight Junctions and their Proteins II**

September 2017, Volume 1404
Special Issue: **Annals Reports**

September 2017, Volume 1403
Special Issue: **Resveratrol and Health**

August 2017, Volume 1402
Special Issue: **MARROW**

August 2017, Volume 1401
Special Issue: **Phytochemicals in Medicine and Food II**

July 2017, Volume 1400
Special Issue: **Annals Reports**

July 2017, Volume 1399
Special Issue: **The Year in Ecology and Conservation Biology**

Supporters

MISSION PARTNERS LIFETIME
($1,000,000 +)

ARM Holdings plc

Bill & Melinda Gates Foundation

The Blavatnik Family Foundation

Cisco

Fancy Science Education Technology

Japan Agency for Medical Research and Development (AMED)

Johnson & Johnson

Estate of Herbert J. Kayden

Richard Lounsbery Foundation

Malaysian Industry-Government Group for High Technology

The National Science Foundation

New York City Department of Education

John Niblack

Estate of Richard E. Parr

PepsiCo

PepsiCo Foundation

Pfizer Inc.

Qatar Foundation for Education, Science and Community Development

The Dr. Mortimer D. Sackler Foundation

Jim and Marilyn Simons

Takeda Pharmaceutical Company Limited

United Technologies Corporation

Paul Walker and Jennifer Wheary

MISSION PARTNERS FY18
($1,000,000+)

Bill & Melinda Gates Foundation

The Blavatnik Family Foundation

The Dr. Mortimer D. Sackler Foundation

United Technologies Corporation

VISIONARY PARTNERS FY18
($250K - $999,999)

Elanco Animal Health

Fancy Science Education Technology

Japan Agency for Medical Research and Development (AMED)

Johnson & Johnson

Lockheed Martin Corporation

The Peter and Carmen Lucia Buck Foundation, Inc.

Ethel G. Romm

Takeda Pharmaceutical Company Limited

PREMIER PARTNERS FY18
($100K - $249,999)

Alfred P. Sloan Foundation

Bank of New York Mellon

The Carson Family Charitable Trust

Robert B. Catell

Education First

The Elsevier Foundation

The Feinstein Institute for Medical Research

Infosys Science Foundation

Janssen Research & Development, LLC

Pablo Legorreta, Royalty Pharma

Motorola Solutions Foundation

New York State Energy Research and Development Authority

PepsiCo

Pfizer Inc.

The Pinkerton Foundation

Regeneron Pharmaceuticals, Inc.

Jim and Marilyn Simons

The Sohn Conference Foundation

LEAD SUPPORTERS FY18
($50,000 - $99,999)

ARM Holdings plc

Aspen Brain Institute

The Chapman Perelman Foundation

DSM Nutritional Products

Envision

Goldman Sachs

IBM Corporation

Jacobs Engineering Group Inc.

Donna M. Milrod

Mushett Family Foundation

National Center for Civic Innovation

Nour Foundation

Oath

Pace University

TESARO, Inc.

Turner Foundation

SUPPORTERS FY18
($25,000 - $49,999)

Arconic Foundation

Boehringer Ingelheim Pharmaceuticals, Inc.

Captain Planet Foundation

Jacqueline Corbelli

Anthony B. Evnin

ExpandED

Gilead Sciences, Inc.

H. Lundbeck A/S

The Hastings Center

Medidata Solutions Foundation

David K. Mordecai and Samantha Kappagoda

New York University

Otsuka Pharmaceutical Development & Commercialization, Inc.

Thomas and Marean Pompidou

Roche Translational and Clinical Research Center (TCRC)

The Rockefeller Foundation

Rutgers Global Health Institute

Sanofi

Konstantin Shakhnovich

Standard and Poor's/S&P

UNAIDS

Paul Walker and Jennifer Wheary

Yale University

FRIENDS OF THE ACADEMY FY18
($1,000 - $24,999)

Anonymous

Abbvie Inc.

Acorda Therapeutics

Reuben Advani

Afimmune

Agilent Technologies

Agios Pharmaceuticals, Inc.

Alzheimer's Association

Ambiotis

American Chemical Society New York Section

American Express

American Physical Society

Arrakis Therapeutics

Avanti Polar Lipids, Inc.

BenefitPlan Manager

Benesse Corporation

BioBus

BioLife Solutions

Bloomberg L.P.

Hillary M. Blumberg and Alex Ginsburg

Michael & Mary Brabeck

Bristol-Myers Squibb Company

Brown & Brown of New York, Inc.

Karen Burke

Nancy Cantor and Steven Brechin

Capital One Financial

Eli Casdin

Cayman Chemical

Center for Policy Research and Development Solutions - CPRDS

Cisco

Barry S. Coller

Columbia University

Columbia University Irving Medical Center

Corbus Pharmaceuticals

Council for Responsible Nutrition

Margaret Crotty and Rory Riggs

CSL Behring

Cubist Systematic Strategies LLC

D.E. Shaw Research

Data Cubed, LLC

Dataminr

Depository Trust & Clearing Corporation

Disney Research

Mikael Dolsten

Nicholas Donofrio

Michael Dubno

Carol B. Einiger

EisnerAmper LLP

Eli Lilly and Company

MaryEllen Elia

Elsevier

Emulate, Inc.

FactSet Research Systems

FisherBroyles, LLP

Fresenius Kabi Deutschland GmbH

Frost Valley YMCA

Larry Gladney

Paul W. Glimcher

Global Blood Therapeutics

Global Organization for EPA and DHA Omega-3s / GOED

Diane Hallman

Herbert Irving Comprehensive Cancer Center

Paul M. Horn

Jerry M. Hultin

IBM Research

Inovio Pharmaceuticals, Inc.

Institute for Advanced Study (IAS)

Mae Jemison

David Joerg

Alex Kaczmarski

Mel Kantor

John E. Kelly

Seema Kumar

Jacqueline Leo

Lonza

Man Investments Inc.

Maresins Pharma, Inc.

J.Michael McQuade

Memorial Sloan Kettering Cancer Center

Richard and Ronay Menschel

Merck & Co., Inc.

Mersana Therapeutics

Metagenics, Inc.

Microsoft Research Lab

Mount Sinai Health System

Edith Neimark

New York Structural Biology Center

Northwell Health, Inc.

Nick Ogurtsov

Ono Pharmaceutical Co., Ltd.

Pace University

Kevin E. Parker

Prometheus Laboratories Inc.

The Rockefeller University

George Rodriguez

Alexander Roepers

Ellis and Joanna Rubinstein

Charles and Ann Ruble

Rutgers Graduate School - Newark

Sandooq Al Watan

Scholar Rock, Inc.

Donald Schupak

Second Genome, Inc.

Serendipity Foundation

SetPoint Medical

Laura T. Seydel

Silverstein Properties, Inc.

Jonah Sonnenborn

Standard Process

The State University of New York

Suntex International Inc.

Masaki Tan

Templeton World Charity Foundation

George E. Thibault

Craig B. Thompson

Peter Thorén

Tri-Institutional Therapeutics Discovery Institute

Two Sigma

Unilever

University of Maryland Baltimore County

Tielman T. Van Vleck

Verizon Foundation

Vertex Pharmaceuticals

Viacom Velocity

Jan and Marica Vilcek

William Wachtel

Waters Corporation

Weill Cornell Medicine

TC Westcott

Wiley Publishing, Inc.

Michael Zigman

Nancy L. Zimpher

Members of the New York Academy of Sciences 1817 Heritage Society

In recognition of Members who have named the Academy in their estate plans through a will, trust, life insurance policy or retirement plan, leaving a legacy to support the next generation of leaders in the scientific community.

Carolyn J. Foster

Jennifer Henry

Joel and Liora Kirman

Michael L. Korchynsky

Richard E. Parr

Ethel Romm

Academic, Government, Corporate, and Organizational Partners

ACADEMIC PARTNERS

ACORN Community High School
Agnes Scott College
Albany Medical College
Albert Einstein College of Medicine
American College of Neuropsychopharmacology
Annenberg Public Policy Center of the University of Pennsylvania
Bard College
Barnard College
Bay Path College
Beacon 45
Bennett College for Women
Brenau University
Bryn Mawr College
Burke-Cornell Medical Research Institute
Carlow University
Cedar Crest College
Center for Excellence Wireless and Information Technology at Stony Brook University
Center for K12 STEM Education, Polytechnic Institute of New York University
Chatham University
Cold Spring Harbor Laboratory
College of Saint Benedict
College of Saint Elizabeth
College of Saint Mary
Columbia College
Columbia University
Columbia University Irving Medical Center
Columbia University Graduate School of Arts & Science
Columbia University Lamont Doherty Earth Observatory
Columbia University Postdoctoral Society
Columbia University School of Medicine
Cottey College
CUNY Graduate Center
CUNY Service Corp
Dana-Farber Cancer Institute
Douglass Residential College, Rutgers University
Education Scotland
Edutech
Egyptian Young Academy of Sciences
Empire State College
Feinstein Institute for Medical Research
Fordham University Law School
Galxyz
Gaylen Moore Evaluation Services
GEMS America
Georgetown University Biomedical Graduate Education
Global Young Academy
Greenfield College
Grenada Hills Charter High School
Harbor School Foundation
Herbert Irving Comprehensive Cancer Center
Hofstra University
Hollins University
Horace Mann School
i2 Camps
iCarnegie Global Learning
Idea Center
Iggy.net
Institute for Advanced Study (IAS)
International Community High School
Johns Hopkins University
Lake Travis High School
Lindblom Math & Science Academy
Loughborough University
Mary Baldwin College
Mater Dei Academy
Mektebim Koleji
Memorial Sloan Kettering Cancer Center
Meredith College
Mills College
Morgan State University
Mount Holyoke College
Mount Sinai Health System
New York Medical College
New York University
Notre Dame of Maryland College
NYU Langone Medical Center
Pace University
Pearson Education
Pflugerville High School
Purchase College
Red Hook Initiative
Rowan University Graduate School of Biomedical Sciences
Royal Swedish Academy of Engineering Sciences (IVA)
Rutgers Graduate School - Newark
Rutgers, the State University of New Jersey
Saint John's University
Saint Joseph's College
Saint Mary-of-the-Woods College
Saint Mary's College
Salem College
School Without Walls
Schoology
Science Internship Program, UC Santa Cruz
Shanghai Jianping High School
Shanghai No. 3 Girls HS
Shanghai Science Association
Simmons College
SmartStart ESC
Smith College
Sollers College
South African Young Academy of Science
St. Catherine University
STEM Academy Hong Kong
Stephens College
Stevens Institute of Technology
Stony Brook University
SUNY College of Environmental Science and Forestry
SUNY Downstate Medical Center
SUNY Oswego
SUNY Polytechnic Institute
SUNY Research Foundation
Sweet Briar College
Syracuse University
Thai Young Scientists Academy
The City University of New York
The Gerstner Sloan-Kettering Graduate School
The Icahn School of Medicine at Mount Sinai
The Rockefeller University
The State University of New York (SUNY)
The Women's College of the University of Denver
Tri-Institutional Therapeutics Discovery Institute
Universiti Kebangsaan Malaysia
University of California, Berkeley
University of California, Davis
University of Connecticut
University of Maryland Center for Environmental Sciences
University of Maryland, Baltimore County
University of Pennsylvania
University of Warwick
Ursuline College
Villiers Park
Washington Latin Public Charter
Washington University in St. Louis
Weill Cornell Medicine
Wellesley College
Wesleyan College
Westlake High School
Wilson College
Yale University
Young Academy of Europe
Young Academy of Sweden

GOVERNMENT PARTNERS

Ajuntament de Barcelona
AMIDEAST
British Council
Centre de Recherches Interdisciplinaires
Corporation for National and Community Service
FELDA
Government of Benin
Government of Croatia
International Bureau of Education
International Telecommunications Union (ITU)
Japan Agency for Medical Research and Development (AMED)
Japan Science and Technology Agency
Joint United Nations Programme on HIV/AIDS (UNAIDS)
Malaysian Industry-Government Group for High Technology
Malaysian Ministry of Education
Medical Education Cooperation with Cuba
Ministry of Environment, Science, Technology & Innovation, Ghana
Movimiento STEM
National Center for Women in Technology
New York City Department of Education
New York City Department of Youth & Community Development
New York City STEM Education Collaborative
New York State Energy Research and Development Authority
Rwanda Ministry of Education
Thai Academy of Science and Technology
The United Nations Educational, Scientific and Cultural Organization
The White House Office of Science and Technology Policy
U.S. Department of State
Ugandan National Academy of Sciences
World Health Organization (WHO)

CORPORATE PARTNERS

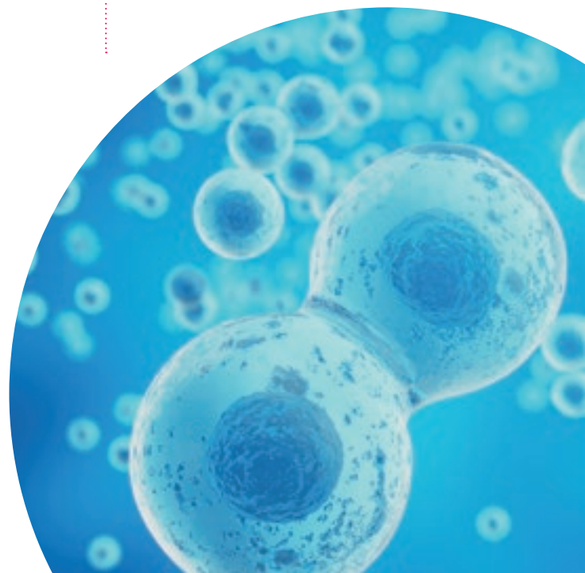
3D Leadership LLC
Abbvie Inc.
Accountnet
Acorda Therapeutics
Afimmune
Agilent Technologies
Agios Pharmaceuticals, Inc.
Amazon Smile
Ambiotis
American Express
ARM Holdings plc
Arrakis Therapeutics
AssayQuant Technologies, Inc.
Avanti Polar Lipids, Inc.
Bank of New York Mellon
BenefitPlan Manager
Benesse Corporation
BioLife Solutions
BioMed Central
Bloomberg L.P.
Boehringer Ingelheim Pharmaceuticals, Inc.
Bristol-Myers Squibb Company
Brown & Brown of New York, Inc.
Bruker Corporation
Campbell Soup Company
Capital One Financial
Catenion
Cayman Chemical
Cisco Systems, Inc.
Cognizant
Compass Group North America
Corbus Pharmaceuticals
CSL Behring
Cubist Systematic Strategies LLC
D.E. Shaw Research
Data Cubed, LLC
Dataminr
Depository Trust & Clearing Corporation
Disney Research
Dr. Paul Janssen Award for Biomedical Research
DSM Nutritional Products
EisnerAmper LLP
Elanco Animal Health
Eli Lilly and Company
Elsevier
Emulate, Inc.
EnCore
Envision
Everwise
FactSet Research Systems
Fancy Science Education Technology
FEI, part of Thermo Fisher Scientific
FisherBroyles, LLP
Fresenius Kabi Deutschland GmbH
GE Healthcare
Gilead Sciences, Inc.
Global Blood Therapeutics
Global Health Strategies
Goldman Sachs
H. Lundbeck A/S
Human Workflow
IBM Corporation
IBM Research
IEX, Inc.
Impaq International
iNet NYC
Infosys
Inovio Pharmaceuticals, Inc.
Intel Corporation
Itron
Jacobs Engineering Group Inc.
Janssen Global Services
Johnson & Johnson
Johnson & Johnson Innovation
Lockheed Martin Corporation
Lonza
Lynda.com
Man Investments Inc.
Maresins Pharma, Inc.
McKinsey & Co
Medidata Solutions
Merck & Co., Inc.
Mersana Therapeutics
Metagenics, Inc.
Microsoft Research Lab
MiTeGen
Molecular Dimensions
New England BioLabs
Northwell Health, Inc.
Oath
Ono Pharmaceutical Co., Ltd.
Otsuka Pharmaceutical Development & Commercialization, Inc.
PepsiCo
Pfizer Inc.
Prometheus Laboratories Inc.
Quartolio
Regeneron Pharmaceuticals, Inc.
Rigaku Corporation
Roche Translational and Clinical Research Center (TCRC)
Royalty Pharma
Sanofi
SAP Next-Gen
Scholar Rock, Inc.
Second Genome, Inc.
SetPoint Medical Corporation
Silverstein Properties, Inc.
Sqore
SRI International
Standard and Poor's/S&P
Standard Process
SUEZ North America
Suntex International Inc.
Takeda Pharmaceutical Company Limited
TATA Consultancy Services
TESARO, Inc.
Teva Pharmaceutical Industries
The D. E. Shaw Group
The Mayflower Hotel
Two Sigma
Unilever
United Technologies Corporation
Vertex Pharmaceuticals
Viacom Velocity
Waters Corporation
WeChat
Wiley Publishing, Inc.

ORGANIZATIONAL PARTNERS

100kin10
500 Women Scientists: NYC Pod
92nd Street YMCA
Alfred P. Sloan Foundation
Alzheimer's Association
Alzheimer's Drug Discovery Foundation (ADDF)
American Association for Cancer Research (AACR)
American Chemical Society New York Section
American Councils for International Education
American Museum of Natural History
American Neurological Association
American Physical Society
American Society for Cell Biology
American Society for Investigative Pathology
American Society of Clinical Oncology (ASCO)
Arconic Foundation
Asia Society
Aspen Brain Institute
Association for American University Women
Association of Women in Science - Metro NY
AVAC (Global Advocacy for HIV Prevention)
AWIS Metro New York Chapter
Bill & Melinda Gates Foundation

BioBus
Bodman Foundation
Boys and Girls Club
Brain & Behavior Research Foundation
BrainNY
BraiNY
Brooklyn Robot Foundry
Cancer Research Institute
Cancer Research UK
Captain Planet Foundation
Center for Policy Research and Development Solutions - CPRDS
Chapman Perelman Foundation
Charina Endowment Fund
Chemistry Conferences
Children's Brain Tumour Drug Delivery Consortium
Children's Oncology Group
Children's Aid Society
Climate Science Legal Defense Fund
Clinical Directors Network, Inc.
Clinton Global Initiative
Columbia Data Science Society
COMPASS Science Communication, Inc.
CompTIA
Council for Responsible Nutrition
Council on Competitiveness
Damon Runyon Cancer Research Foundation
Dana Foundation
Danish House of Science
Dodge YMCA
Doris Duke Charitable Foundation
Education First
Eicosanoid Research Foundation
Elsevier Publications
Equals Global Partnership
Españoles Científicos en USA - NY Chapter
European Association for the Study of the Liver
ExpandED
FHI 360
Fordham Street Foundation
Fred J. Brotherton Charitable Foundation
frog
Frost Valley YMCA
GAVI (The Vaccine Alliance)
Girl Scouts of the USA
Girls Who Code
Global HIV Vaccine Enterprise
Global Organization for EPA and DHA Omega-3s / GOED
Global Partnerships Forum
Global Thinkers Forum
Goldman Sachs Gives
Good Shepherd Services
Guerilla Science
Human Vaccines Project
International AIDS Vaccine Initiative (IAVI)
IEEE Engineering in Medicine and Biology Society (EMBS)
Infosys Science Foundation
Infosys USA Foundation
Innovative Therapies for Children with Cancer
International Neuroethics Society
International Psychogeriatric Association
International Research Institute for Climate and Society
International Society on Thrombosis and Haemostasis
Intrepid Air, Sea and Space Museum
ISTAART/Alzheimer's Association
Jack Kent Cooke Foundation
Jacobs Foundation
John Templeton Foundation
Julia Robinson Mathematics Festival
LEAP Africa
Ludwig Institute for Cancer Research
March for Science
Mawhiba Foundation
Medidata Solutions Foundation
Million Women Mentors
Minority Graduate Student Network
Mitochondria Interest Group
Motorola Solutions Foundation
Museum of the City of New York
Mushett Family Foundation
National Academy of Young Scientists, Pakistan
National Center for Civic Innovation
National Organization for Rare Disorders
National Science Foundation
Nature Publishing Group
NCD Alliance
Network of African Science Academies
New York Genome Center
New York Hall of Science
New York Moves Millennial Forum
New York Neuropsychology Group
New York Public Radio - WNYC
New York Structural Biology Center
New York Women in STEM
Nigerian Young Academy
NIH Fibrosis Scientific Interest Group
Northeast Big Data Innovation Hub
Nour Foundation
NYC Women in Machine Learning & Data Science Meetup
Oath Foundation
Oppi Learning Festival
Partnership for Afterschool Education (PASE)
PepsiCo Foundation
PERMATA Foundation
The Peter and Carmen Lucia Buck Foundation, Inc.
Qatar Foundation for Education, Science and Community Development
Qatar Foundation International
Richard Lounsbery Foundation
RNA Society
Rutgers Global Health Institute
Sabin Center for Climate Change Law
Sandooq Al Watan
Science & Education Policy Association
Science Beijing Network
Science Cheerleaders
Science for Society (S4S)
SciIQ
Serendipity Foundation
Sickle Cell Advisory Consortium of New York
Sickle Cell Community Consortium
Simons Foundation
Sister Cities International
Society for Science & The Public - Intel Science Fair
Software Carpentry
Sony Global Education
STEM Fellowship
STEMConnector
STEMpire
Tammy and Jay Levine Foundation
Templeton World Charity Foundation
Texas Girls Collaborative
The American Physiology Society
The Blavatnik Family Foundation
The Brain Trauma Foundation
The Carson Family Charitable Trust
The Dr. Mortimer D. Sackler Foundation
The Elsevier Foundation
The European Society for Paediatric Oncology
The Gerontological Society of America
The Hastings Center
The Heimbold Foundation
The Kavli Institute for Brain Science
The National Center for Advancing Translational Sciences (NCATS)
The New York Aquarium
The New York Community Trust
The Pinkerton Foundation
The Population Council
The Rita Allen Foundation
The Rockefeller Foundation
The Sickle Cell Cure Foundation
The Sohn Conference Foundation
The William E. Proudford Sickle Cell Fund
The William Randolph Hearst Foundation
The World Academy of Sciences
To the Best of Our Knowledge
Toyota Foundation
Turner Foundation
U.S.-Mexico Foundation
Verizon Foundation
Victor Cruz Foundation
Vilcek Foundation
Wenner-Gren Foundation
West Side YMCA
WNYC
WomenSphere
World Learning

Board of Governors 2018-2019



President's Council

Peter Agre, Nobel Laureate; Univ. Prof. and Director, Johns Hopkins Malaria Research Inst., Dept. Molecular Microbiology and Immunology, Bloomberg School of Public Health

Richard Axel, Nobel Laureate; University Professor, Columbia Univ.; Investigator, HHMI

David Baltimore, Nobel Laureate; President Emeritus, Caltech

Etienne-Emile Baulieu, Former President, French Academy of Sciences

Paul Berg, Nobel Laureate; Professor Emeritus, Dept. of Biochemistry, Stanford University

Len Blavatnik, Chairman, Access Industries, Inc.

Irina Bokova, Former Director General, United Nations Educational, Scientific and Cultural Organization (UNESCO)

Sydney Brenner, Nobel Laureate; Distinguished Prof., Salk Inst.

Michael S. Brown, Nobel Laureate; Prof. of Molecular Genetics, Univ. of Texas Southwestern Medical Center

Linda Buck, Nobel Laureate; Investigator for HHMI; Member of the Fred Hutchinson Cancer Research Center

Karen E. Burke, Dermatologist & Research Scientist; Honorary Life Governor, The New York Academy of Sciences

Thomas R. Cech, Nobel Laureate; Distinguished Prof., University of Colorado, Boulder

Martin Chalfie, Nobel Laureate; University Professor of Biological Sciences, Columbia University

Steven Chu, Nobel Laureate; William R. Kenan, Jr. Prof. of Physics, Prof. of Molecular and Cellular Physiology, Stanford University; Former U.S. Secretary of Energy

Aaron J. Ciechanover, Nobel Laureate; Distinguished Research Professor, Tumor and Vascular Biology Research Center, Faculty of Medicine, Technion-Israel Inst. of Tech., Haifa, Israel

Kenneth L. Davis, President and CEO of the Mount Sinai Health System in New York City

Peter Doherty, Nobel Laureate; Researcher, St. Jude Children's Research Hospital, Memphis, Tennessee; Univ. of Melbourne, Australia

Mikael Dolsten, President, Worldwide Research and Development; Senior Vice President, Pfizer Inc.

Jan Eliasson, Former Deputy Secretary-General to the United Nations

Edmond H. Fischer, Nobel Laureate; Professor Emeritus, Department of Biochemistry, University of Washington

Joachim Frank, Nobel Laureate; Director, Frank Lab, Columbia University

Jerome I. Friedman, Nobel Laureate; Institute Professor and Professor of Physics, Emeritus, Massachusetts Institute of Technology

Joseph Goldstein, Nobel Laureate; Chairman, Molecular Genetics, Univ. of Texas Southwestern Medical Center

S. "Kris" Gopalakrishnan, Chairman, Axilor Ventures; Co-Founder, Infosys

Paul Greengard, Nobel Laureate; Prof. of Molecular & Cellular Neuroscience, The Rockefeller University

Glenda Greenwald, President, Aspen Brain Institute

David Gross, Nobel Laureate; Chancellor's Chair Professor of Theoretical Physics, Kavli Institute for Theoretical Physics, UCSB

William A. Haseltine, Chairman and President, ACCESS Health International, Inc.

Hon. Jerry MacArthur Hultin, Senior Presidential Fellow, New York University; President Emeritus, Polytechnic Institute of NYU; former Under Secretary of the Navy

Eric Kandel, Nobel Laureate; Prof., Physiology & Cell Biology, Columbia University

Mehmood Kahn, Vice Chairman and Chief Scientific Officer of Global Research and Development, PepsiCo

Kiyoshi Kurokawa, Former Science Advisor to the Prime Minister of Japan; Professor, National Graduate Institute for Policy Studies (GRIPS)

Leon Lederman, Nobel Laureate; Pritzker Prof. of Science, Illinois Inst. of Tech.; Resident Scholar, Illinois Math & Science Academy

Roderick MacKinnon, Nobel Laureate; John D. Rockefeller, Jr. Prof., The Rockefeller University; Investigator, HHMI

Richard Menschel,Senior Director, Goldman Sachs

Ronay Menschel, Chairman of the Board, Phipps Houses; Board of Overseers, Weill Cornell Medical College

Ferid Murad, Nobel Laureate; Director, IMM Center for Cell Signaling, The University of Texas at Houston

John F. Niblack, Former President, Pfizer Global Research & Development; Honorary Life Governor, The New York Academy of Sciences

Paul Nurse, Nobel Laureate; Former President, The Rockefeller University; Former President, The Royal Society, London; Chief Executive, The Francis Crick Institute

Yoshinori Ohsumi, Nobel Laureate; Professor, Institute of Innovative Research, Tokyo Institute of Technology (IIR)

John O'Keefe, Nobel Laureate; Wellcome Trust Principal Research Fellow and Prof. of Cognitive Neuroscience, Sainsbury Wellcome Centre, University College London

Venkatraman Ramakrishnan, Nobel Laureate; President, The Royal Society

Richard Roberts, Nobel Laureate; Chief Scientific Officer, New England Biolabs

James E. Rothman, Nobel Laureate; Yale University School of Medicine, Fergus F. Wallace Professor of Cell Biology and Professor of Chemistry; Chairman, Department of Cell Biology; Director, Nanobiology Institute

Jeffrey D. Sachs, Special Advisor to the UN Secretary General on the Sustainable Development Goals and Director of Center for Sustainable Development, Columbia University

Bengt Samuelsson, Nobel Laureate; Prof., Medical & Physiological Chem., Karolinska Inst.; Former Chairman, The Nobel Foundation

Ismail Serageldin, Emeritus Librarian of the Bibliotheca Alexandrina and member of the Board of Trustees of the library of Alexandria

Phillip A. Sharp, Nobel Laureate; Director, The McGovern Institute, MIT Center for Cancer Research

Feike Sijbesma, CEO/Chairman of the Managing Board, Royal DSM

Paul Stoffels, Vice Chair of the Executive Committee and Chief Scientific Officer, Johnson & Johnson

Jack W. Szostak, Nobel Laureate; Investigator, Howard Hughes Medical Institute; Professor of Genetics, Harvard Medical School; Professor of Chemistry and Chemical Biology, Harvard University; Alex. A. Rich Distinguished Investigator, Department of Molecular Biology, Massachusetts General Hospital

Diana Taylor, Vice-Chair, Solera Capital LLC

Marc Tessier-Lavigne, President, Stanford University

Craig B. Thompson, President and CEO, Memorial Sloan Kettering Cancer Center

Shirley Tilghman, President Emerita/ Professor of Molecular Biology, Princeton University

Rainer Weiss, Nobel Laureate; Professor of Physics, Emeritus Massachusettes Institute of Technology

George Whitesides, Woodford L. & Ann A. Flowers University Professor, Harvard University

Torsten N. Wiesel, Nobel Laureate; Chairman Emeritus, The New York Academy of Sciences; Former Secretary General, Human Frontier Science Program Organization; President Emeritus, The Rockefeller Univ.

Frank Wilczek, Nobel Laureate; Herman Feshbach Professor of Physics, Massachusetts Institute of Technology

Ernst-Ludwig Winnacker, Secretary General, Human Frontier Science Program Organization; Former Secretary General, European Research Council; Former President, Deutsche Forschungsgemeinschaft, Germany

Andrew Witty, Chancellor, University of Nottingham UK; Former Chief Executive Officer, GlaxoSmithKline

Michael W. Young, Nobel Laureate; Richard and Jeanne Fisher Professor/ Vice President for Academic Affairs, The Rockefeller University

Tan Sri Zakri Abdul Hamid, Science Adviser to the Prime Minister of Malaysia

Elias Zerhouni, President, Global Research & Development, Sanofi-aventis

Guangzhao Zhou, Former Chairman, Chinese Association of Science & Technology

THE WORLD'S SMARTEST NETWORK™

The New York Academy of Sciences is an independent, not-for-profit organization that, since 1817, has been driving innovative solutions to society's challenges by advancing scientific research, education, and policy. With more than 20,000 Members in 100 countries, the Academy is creating a global community of science for the benefit of humanity.

Please visit us online at **www.nyas.org** and follow us on Twitter at **@NYASciences**.

THE NEW YORK ACADEMY OF SCIENCES
7 World Trade Center
250 Greenwich Street, 40th floor
New York, NY 10007-2157