NATIONAL SCIENCE & TECHNOLOGY MEDALS FOUNDATION

THE NATIONAL SCIENCE AND TECHNOLOGY MEDALS FOUNDATION

is a D.C.-based 501c3 public charity whose mission is to champion the work and lives of America's greatest scientists and technologists and connect these extraordinary individuals to the next generation. The NSTMF collaborates with the men, women, and companies who have received America's highest honor in science and technology: the National Medal of Science (NMS) and the National Medal of Technology and Innovation (NMTI). Their passion for knowledge has taken us beyond our own planet, to the bottom of our seas, and deep within the neural pathways of the human brain. Today, we advocate for inclusive and diverse STEM communities and the tangible benefits they have on scientific and technological progress. Through our programming, the NSTMF is creating vibrant, inclusive STEM communities across the country that reflect the fabric of society.

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To our community

Several years ago, in the absence of a new class of National Medal of Science and National Medal of Technology and Innovation Laureates, the NSTMF was faced with the following question: "How do we, as an organization, become a positive change-agent for future generations of discoverers and innovators?" It took us many years to get here, but I am proud to announce that through numerous brainstorms, the launch of our Unscripted Series, the development of our inSTEM mentorship program, the expansion of our student network to over 25,000 undergraduates, and our expert network to over 65 STEM leaders, we were able to uncover our authentic responsibility: building future STEM communities that are truly representative of the diverse fabric of this country.

Around the time we realized this new charge, I found myself at dinner with National Medal of Science Laureate and Rensselaer Polytechnic Institute President, Dr. Shirley Ann Jackson. Dr. Jackson had just participated in an engaging Science Unscripted event at Howard University that featured an exploration of her experience as a black woman in STEM and her predictions for the future of academia. As many of you know, our Unscripted Series has always been about providing an unprecedented level of access to this nation's foremost STEM leaders, discoverers, and innovators. That evening, I had my own "Unscripted" moment.

As we conversed, Dr. Jackson named a concept that has now become an integral part of all NSTMF programs, and in doing so, crystallized a worldview. She said that in order to bring about the effective and lasting change we aim to evoke, we must be intentional in every choice we make. I knew just what she meant: the NSTMF must commit to the deliberate choice of equity; in hiring processes, management styles, speaker and audience selection methods, partnership building, fundraising, and everything in between. Furthermore, our efforts to address inequities must be consistent, empathetic, ever-present, and a constant reminder of the road ahead.

Admittedly, I was a bit embarrassed that I had struggled to put words around this effort that seemed so innate in the work that we do, but by naming this conviction: intentionality, we expanded the Foundation's future dramatically. This year, the NSTMF pledged to be steadfast in its commitment to building a more inclusive, equitable, and diverse future in STEM. We recognized that in order to elicit positive change in a community historically dominated by cisgender white men, we must be honest in recognizing the problem and make a deliberate and tireless effort to change the equation.

2019 for the National Science and Technology Medals Foundation was about finding clarity in the direction of our impact, being intentional in our efforts, and laying the ground work for a necessary revolution as we navigate through our third decade. Thank you to all of our supporters, contributors, advocates, experts, and students. It is your commitment, support, donations, and feedback that allow us to take big leaps.

Sincerely,

ANDY RATHMANN-NOONAN
Executive Director

Programming for impact

What we have learned over the past years is that through our Unscripted program, we have an opportunity to expand the universe of stories being shared on our stage. Moreover, many of the students in our audiences, especially those from underrepresented groups, do not always see themselves reflected at the highest levels of STEM.

We took these lessons to heart as we planned and launched our 2019 season. The numbers speak for themselves. **83 percent of Unscripted speakers and 79 percent of attendees were from underrepresented communities in STEM.** In the past three years, **we have welcomed more than 2,060 in-person attendees and more than 20,000 online views.** The Unscripted series has landed at 16 colleges and university, featuring 47 Laureates and experts in intimate settings with students and members of the public.

Members of the audience at Richard Tapia event

Student asking a question at our AI summit

NSTMF LAB

continues to grow in popularity especially among middle school science classes, where it helps young students grasp the concepts of gravity and orbit.

In 2019, nearly 1.5 million users played and learned in the NSTMF lab, marking a more than 300% growth over last year.

Audience at Unscripted event

In Profile

This year we brought you closer to the men and women making us safer and smarter through science. We brought you a series of 12 profiles on our website bringing you closer to the people and motivations behind a coming wave of innovation.

Richard Tapia

Meet **Dean Sicking** who is tackling the problem of concussions in football the same way he approached fatal NASCAR crashes.

No Grand Plans, follows **Richard Tapia's** journey from the barrios of Los Angeles to receiving the National Medal of Science in mathematics.

Get to know **Esther Takeuchi** and her team who are tackling the fundamental science of making batteries bigger than they have ever been made before.

A profile on **Robert Langer** who's work on long-acting and self-injecting pills will soon change the way we think about and take medicine.

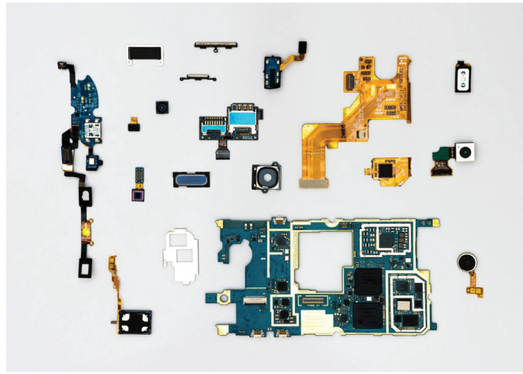
A conversation with **May Barenbaum**, a life-long advocate for science, who has given animated discourses on bee biology in museums, living rooms, and in front of the House Committee on Agriculture over her career.

Why The Best Scientists Fail, Again and Again, a look at the intrinsic role of failure in science and technology.

Dive into more great stories at nationalmedals.org/stories

"The realization has hit hard that the entire scientific enterprise rests on the goodwill of the public, mostly because of how much of our research is supported by the federal government. So in a way, outreach and education is something that's really owed to the general public."

MAY BERENBAUM
National Medal Laureate



May Berenbaum

"If everything goes the way you want, so be it. That's beautiful. But if it doesn't, don't stop – adapt."

RICHARD TAPIA
National Medal Laureate

Shirley Ann Jackson speaks at a Science Unscripted event Howard University

Unscripted

For the past three years, the Unscripted series served as our most visible expression of our mission. The program has allowed us to uncover the personal stories behind monumental scientific and technological breakthroughs. Each event has corroborated our belief that these stories of triumph and travail are not just STEM stories, though they resonate most clearly in that community, but rather human stories of perseverance, failure, relationships, and community that anyone can identify with. As the program has become more successful we have been able to shape it to align with our values and priorities. Featuring more voices from women, BIPOC, and other marginalized groups was an easy step in honoring our vision for the foundation and the impact we hope to have.

Stephen Lippard and **Ted Love** joined us for an unscripted event at Haverford College.

We brought **Richard Tapia** to the University of Texas at Arlington for a full day of Unscripted programming, including brown bag lunches, sessions with faculty, and an on-stage conversation with **Minerva Cordero**.

Shirley Ann Jackson spoke to the Howard University community about her career as a leader in science, policy, and academia.

Geri Richmond sat down for an Unscripted event at the University of Portland to talk about mentorship and advocating for yourself.

We brought you "Screens behind the Scenes," a panel discussion with special effects specialists from **Industrial Light and Magic**.

Our "Origins of the Internet" event at The George Washington university featured **Vint Cerf**, **Steve Crocker**, and **Radia Perlman**.

Closing out the year, we hosted a two-day AI summit at University of Maryland, Baltimore County. These two days brought together academic and industry experts to discuss social and legal impacts of artificial intelligence.

"In whatever community you are a part of, lead in the best way you can. And don't be afraid to stand in the wind - easy to say, hard to do. But we have to stand in the wind and keep a cool head."

SHIRLEY ANN JACKSON
National Medal Laureate
President of RPI

Student asking a question at an Unscripted event at Spelman College

"Mentorship is how you survive this journey. All careers have peaks and valleys and a mentor can be key in navigating that."

RYAN SMITH
Industrial Light and Magic

inSTEM mentorship

Students are leaving STEM majors at an alarmingly fast rate. Less than half of first-year students who enter in STEM majors will go on to graduate with a STEM degree.[1] Students from underrepresented communities are even less likely to graduate with their STEM degrees.

The high attrition rate of first-year STEM students, especially those from underrepresented groups, perpetuates a representation problem in collegiate and post-collegiate communities. We believe that intervention at this point in a student's journey is critical. Any young person who dreams of being a scientist or inventor should receive the education, mentoring, and inspiration to help that dream bear fruit. This year we have created a new program, to launch in 2020, that address the needs of students as they relate to mentorship and community building. We are proud to announce inSTEM, a holistic student enrichment program emphasizing community building and emotional resilience.

This program is designed to provide support for students on the margins of STEM communities to help make a measurable difference in the retention and propulsion of students from underrepresented communities in STEM majors. We know that support comes in many different forms and looks different for each student. We are deeply committed to making sure each member of the inSTEM cohort is able to thrive.

Student asking a question at an Unscripted event at Spelman College

1. The Journal of Science Education and Technology.

Members of the audience at Richard Tapia event

Expert Connect Program

For nearly thirty years, our foundation has stewarded the Laureate community: honoring them as they received their presidential medals and increasing public appreciation for all they have contributed to society. We hold up this group as role models for the next generation of scientists and technologists. However, young students, especially those from underrepresented groups, do not always see themselves reflected back in their number.

Seven hundred thirty-three medals have been awarded to individuals, teams, and companies since 1962; but only sixty-one of these awards have gone to women and fewer than forty have gone to people of color.

We are inspired to take action on these statistics and continue to broaden the universe of experts we feature on our platforms and in our programing. We have designed a community engagement program to create a network of STEM experts who share our vision for a more equitable future in STEM and who share lived experiences with the students we are trying to reach through our programs. The Expert Connect program is focused on meeting the experts where they are and providing them fulfilling opportunities to inspire, engage, and inform the next generation of vibrant and diverse STEM experts.

The "Expert Connect Program" will welcome its first members in 2020.

Our Donors

A few words of gratitude to each and every one of our donors. Your belief in and support of our work ensures that the NSTMF can continue to deliver on our vision of creating vibrant STEM communities, rising to meet the social imperatives for progress and equality in these spaces. Thank you, thank you, thank you.

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Industrial Light and Magic panel at Spelman College

2019 Financials

The NSTMF raised $1,139,804 in 2019, a high water mark for the foundation. A strong financial position allowed us to allocate 70% of our budget to program-related expenses, spending more than $700,000 on efforts to build community and connections between current and future STEM leaders..

Thanks to successful fundraising efforts, we closed the year with a five percent growth in net assets over 2018.

The financial snapshot shown here is derived from a Septermber 22, 2020 audit of our 2019 financials. This audit received an unmodified opinion from the auditor. The Foundation's complete, audited financial statements can be obtained by emailing contact@nationalmedals.org.

Foundation Expenses // 2019

70% program services

22% development

8% administration

Fundraising Sources // 2019

44% foundations & corporations

36% individuals

20% public funding

STATEMENT OF ACTIVITIES

for fiscal years ending on December 31, 2019 & 2018

	WITHOUT DONOR RESTRICTIONS	WITH DONOR RESTRICTIONS	2019	2018
REVENUE				
Contributions and grants	491,426	300,000	791,426	275,000
Sponsorship income	105,000	-	105,000	145,032
Federal contracts	243,364	-	243,364	175,016
Dividend & interest income	14	-	14	37
Miscellaneous income	-	-	-	821
TOTAL REVENUE	**839,804**	**300,000**	**1,139,804**	**595,906**
EXPENSES				
Program Services Expenses:				
National Medals Event	39,281	-	39,281	11,378
Unscripted	587,649	-	587,649	374,445
Laureate E-Museum	92,062	-	92,062	28,446
Total program services expenses	**718,992**	-	**718,992**	**414,269**
Support Services Expenses:				
General administration	81,642	-	81,642	178,645
Development	222,934	-	222,934	138,776
Total support services expenses	**304,576**	-	**304,576**	**317,420**
TOTAL EXPENSES	**1,023,568**	-	**1,023,568**	**731,689**
CHANGE IN NET ASSETS	(183,764)	300,000	116,236	(135,783)
Beginning net assets	1,567,393	-	1,567,393	1,703,176
Prior period adjustment	(32,363)	-	(32,363)	-
NET ASSETS, END OF YEAR	**300,000**	**300,000**	**1,651,266**	**1,567,393**

STATEMENT OF FINANCIAL POSITION

as of December 31, 2019 & 2018

ASSETS	2018	2019
CURRENT ASSETS		
Cash and cash equivalents	91,706	59,778
Contributions receivable	16,500	301,500
Prepaid expenses	12,469	-
Refundable deposit	1,025	1,025
Total current assets	**121,700**	**362,303**
INTANGIBLE ASSETS		
E-Museum	935,518	935,518
NSTMF Lab	542,380	542,380
Total intangible assets	**1,477,898**	**1,477,898**
Less: Amortization	-	(98,527)
Total intangible assets, net	**1,477,898**	**1,379,371**
TOTAL ASSETS	**1,599,598**	**1,741,674**
LIABILITIES AND NET ASSETS		
LIABILITIES		
Accounts payable	32,205	12,503
Payroll taxes payable	-	405
Accrued wages	-	37,500
Deferred revenue	-	40,000
Total liabilities	**32,205**	**90,408**
NET ASSETS		
Without donor restrictions	1,567,393	1,351,266
With donor restrictions - time purpose	-	300,000
Total net assets	**1,567,393**	**1,651,266**
TOTAL LIABILITIES & NET ASSETS	**1,599,598**	**1,741,674**

A commitment to the next generation of STEM

We are grateful for all our forward-thinking donors and supporters who share our vision for STEM communities. Your support ensures that the NSTMF can continue to eliminate barriers for students to access the top minds in STEM.

nationalmedals.org/donate | kate@nationalmedals.org | (202) 556-0258

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Creating inclusive and diverse STEM communities and the tangible benefits they have on scientific and technological progress. Through our programming, the NSTMF is creating vibrant, inclusive STEM communities across the country that reflect the fabric of society.

To learn more about the NSTMF's work visit **nationalmedals.org**.