

FUNDING APPLICATION

GENERAL INFORMATION

Organization Information

Legal Name: Science Mill		Federal Tax ID#: 46-0600789		501(c)(3) Public Charity 509 (a)(2)	
Address: PO Box 38		City: Johnson City		State: Texas	
				Zip Code: 78636	
Website: www.sciencemill.org		Fax: (612) 201-4134		United Way Funded: No	

Head Of Organization

Name: Bonnie Baskin		Title: President	
E-Mail Address: bonnie.baskin@sciencemill.org		Phone: (512) 660-4245	

Application Contact

Name: Holly Barton		Title: Director of Strategic Alignment		E-Mail Address: holly.barton@sciencemill.org		Phone: (512) 660-4245	
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Previous Najim Funding

Year	Funding \$
2017	\$12,500
2018	\$21,000
Total	\$33,500

Has the organization applied to the Najim Family Foundation in the past and been declined?
No

Grant Amount Requested \$:	Total Project Budget \$:	Organization's Annual budget \$:
\$45,000	\$600,000	\$1,361,360

Mission Statement:
To inspire all students and give them the confidence, tools, and support needed to reach their full potential as skilled members in the 21st century STEM workforce.

PROJECT INFORMATION

Program / Project Title:
To support Science Mill's expansion to reach more students in need of STEM enrichment programs.

PROJECT TIMELINE

Start Date	End Date
11/01/2019	10/31/2020

Harvey E. Najim Family Foundation Priorities:
Education

Education Priorities:

Program / Project Description:

The Science Mill is a highly interactive, hands-on science museum focused on students who have traditionally been underrepresented in STEM careers. Utilizing the museum as a testbed for creating new strategies for student engagement in STEM and STEM careers, we have created a roadmap for how we, as a museum-based center for out-of-school learning, play an important role in growing the number of students in Texas that will be entrepreneurial and critical thinkers in a future skilled workforce.

In Texas last school year, 60.6% of students were identified as economically disadvantaged. Throughout Texas there is a significant disparity in academic performance measured by test results that strongly correlates with family income; economically disadvantaged kids have lower academic performance.

Although this disparity is a complex, multifactorial problem, we believe a lack of immersive out-of-school STEM programming plays a significant role in a low-income student's interest in STEM subjects and overall academic performance. These students are often unable to envision themselves in a STEM career for a variety of reasons- lack of access to programs which support and build interest and self confidence in STEM, little exposure to individuals from similar backgrounds in STEM careers, and limited knowledge of future STEM career opportunities. Students struggle to see the connection between their in-school education and the relevancy of their courses to both their life and potential careers. This is a significant part of the reason that economically disadvantaged students are less likely to graduate from high school or enter college.

Research shows that lacking access to out-of-school programs can be responsible for almost 80% of the academic achievement gap by the time students end middle school. Our program is focused on giving economically disadvantaged students access to out-of-school STEM programming, that is located in their community and taught by their local science teachers with local high school students as teacher aids. Students learn, through hands-on experiences, the excitement of "doing science" and imagining themselves as future STEM entrepreneurs. The curriculum is scaffolded by grade level beginning in 3rd grade and continuing through 9th grade. Cohorts of 30 students will attend one week of interactive summer STEM camps, followed by twice monthly (14) afterschool STEM Discovery clubs during the school year (14 club meetings).

Student activities consist of team challenges, project-based design and building, and hands-on engagement through inquiry-based learning. Students are introduced to different STEM careers throughout the week-long camp program (i.e., coding and programming, engineering, chemistry, life science, robotics), all with an emphasis on STEM entrepreneurship. All curricula are created by our STEM educators.

Over the last 5 years, we have enrolled over 1670 students, 1200 of which were economically disadvantaged. Five-year cumulative impact data show that following a week of camp greater than 85% of low-income students leave with a strong interest in STEM and STEM careers, are confident in their ability to succeed, and want to learn more about STEM fields. These results are comparable to their more affluent peers enrolled in our program.

This year-long approach of an immersive summer camp experience followed by afterschool STEM clubs throughout the school year will maintain and grow student interest in STEM careers, as well as reinforce an excitement in STEM learning and create an environment of bonding among the students. This sense of bonding is the basis for feeling part of a community, and not a solo outlier (which otherwise is prone to occur in communities where there is not a critical mass of like-minded students). Research has shown that the more times underserved students can experience STEM enrichment activities, the more likely they are to self-identify with STEM and build confidence in their abilities to succeed in STEM education and future careers.

We are requesting funding to support expanding our program to reach more kids in need of STEM enrichment programs throughout central and south Texas. Through our new 5-in-5 Initiative, our goal in 5 years (2025) is to annually enroll 13,500 students in our program. This represents 5% of the total number of economically disadvantaged students throughout Texas in a given grade level. In 2020, the kick-off year of our program, we anticipate having 40 unique programs (30 students/program) enrolling 1200 students. We focus on bringing our program to communities throughout central and south Texas that are most in need of STEM enrichment programs. Communities are chosen based on reviewing factors that include demographics, family income, student access to STEM programs and academic ratings of their schools.

Funding would support one year of STEM programming for students in grades 3-8 in 2 unique, underserved communities. The program consists of a week-long summer camp and 14 afterschool club meetings for 3 cohorts of 30 students in each community; a total of 180 students. Communities we are targeting are typical of Texas rural communities with large low-income, minority populations and substandard academic performance:

oGuadalupe County (Seguin ISD): student enrollment is 7,500 of which 67% are economically disadvantaged with minority populations of 70% Hispanic and 4.6% African American

oKerr County (Kerrville ISD): student enrollment 5,000 of which 55% are economically disadvantaged with minority populations of 46% Hispanic and 1.9% African American

While students do not pay a fee, our expenses for a week of summer camp followed by 14 afterschool clubs are \$500 per student. Learning is broader than schooling, and out-of-school STEM enrichment programs play a crucial role in exciting, engaging and building self confidence in all students.

Evaluation Plan:

We will evaluate student growth and program impact at several points during the year. Outcome data will be collected during the summer through pre-, post-, and daily participant surveys, measuring student baseline and growth in areas such as self-efficacy, engagement, STEM interest and identity, and gains in knowledge and awareness of STEM careers. As these students transition to clubs, we will collect similar pre- and post-surveys, along with end-of-unit surveys (every 3 to 4 club meetings) to monitor program effectiveness and student performance. Additionally, we will assess student improvement in factors such as attendance, behavior, academic performance, classroom participation and leadership, etc., through survey evaluations done by their classroom teachers. Finally, as students reach the end of the program year, success will be measured through evaluating student interest and determination in enrolling in further STEM opportunities such as STEM extracurricular activities, choosing STEM electives, or STEM courses in the future.

Plans to sustain project beyond the term of this request:

Funding sources are critical in providing economically disadvantaged students STEM equity programs. Historically, funding of our program has been from individuals, private and corporate foundations, and revenue from museum admissions. Each year we are growing our portfolio of supporters to include additional foundations, individuals, state and federal grants, and most recently funding directly from low performing school districts. As we move forward expanding the number of programs offered, we will be able to follow students through the program and collect longitudinal data on student outcomes. We believe that with this data and continuing strong outcomes, we will be able to grow financial support through an increasing number of diverse funding channels.

Children Impacted:

How many unduplicated children will the TOTAL PROJECT INITIATIVE impact?	How many unduplicated children will NFF REQUESTED FUNDS impact?
1,200	120

Please provide the percentage of each group below that will be served by the project in which funds are being requested. Do not leave any area blank. If that specific group will not be served, include zero. The percentage should total 100%.

A. Population Served Age	B. Population Served Ethnicity
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Infants (0-5)	0%	African American	3%
Children (6-13)	100%	Asian American	1%
Young Adults (14-18)	0%	Caucasian	36%
TOTAL:	100%	Hispanic/Latino	58%
		Native American	0%
		Other and Define	2%
		TOTAL:	100%

City Council District for Which Children are Being Served:

Outside San Antonio

Counties applicant is in:

Guadalupe, Kerr

Line item Budget:

Line Item Description	Total Project Funds Allocation	Najim Funds Allocation
Staffing: Training & Teaching	\$298,000	\$26,510
Technology & Equipment	\$63,000	\$8,000
Supplies	\$78,000	\$6,460
Logistics Support	\$57,000	\$1,580
Curriculum Development	\$26,000	\$650
Registration & Parent Communications	\$25,000	\$1,000
Evaluation	\$33,000	\$500
Overhead/Insurance	\$20,000	\$300
TOTAL:	\$600,000	\$45,000

OTHER FUNDING RESOURCES

For Project being Requested: Funding sources and amounts, pending and committed.

PROJECT - PENDING

Funder Name	Amount Requested
Kozmetsky Foundation	\$160,000
Central Texas Learning Hub	\$60,000
Edaren Foundation	\$60,000
William Knox Holt Foundation	\$37,500
CAST Network	\$25,000
The Jacob and Terese Hershey Foundation	\$20,000
Broadway Bank	\$10,000
Ray & Beck Shea Head	\$10,000
Winkler Family Foundation	\$10,000
Manor ISD	\$10,000
Lynnell Burkett	\$10,000
Smothers Foundation	\$5,000

TOTAL:	\$417,500
PROJECT - COMMITTED	
Funder Name	Amount Requested
AshBritt Foundation	\$60,000
Institute of Museum and Library Services	\$49,686
Texas Parks & Wildlife	\$48,631
Edgewood ISD	\$42,360
Beverly Dale	\$20,000
Silicon Labs	\$15,000
Uvalde ISD	\$15,000
Ladd Family Foundation	\$10,500
TOTAL:	\$261,177
Other funding sources and amounts, pending and committed not specific to this request.	
ALL OTHER ORGANIZATION REQUESTS - PENDING	
Funder Name	Amount Requested
Museum Earned Income Estimated (8/1/19-12/31/19)	\$183,700
Annual Benefit & Individual Donors	\$200,000
Fondren Foundation	\$100,000
HEB	\$28,000
Whataburger	\$20,000
Marble Falls Rotary Club	\$7,500
Don and Julie Holden Foundation	\$5,000
Shell Oil Company	\$5,000
Highland Lakes Service League	\$3,500
TOTAL:	\$552,700
ALL OTHER ORGANIZATION REQUESTS - COMMITTED	
Funder Name	Amount Requested
Museum earned revenue (1/1/19-7/31/19)	\$336,471
Baskin Family Foundation	\$300,000
Favrot Fund	\$100,000
Jastrow Foundation	\$5,000
WAC Lighting	\$4,000
IBM	\$2,000
Individuals & Community Donations (less than \$1500 each)	\$17,633
TOTAL:	\$765,104
BOARD OF DIRECTORS	
What percentage of your board contributes financially to the organization?	
100%	

If Board giving is not at 100%, please explain why?**How are board members expected to participate in your organization?**

Board members are expected to perform duties in compliance with best practices, including but not limited to: actively participating in organizational planning and decision-making to make sound and informed judgments; ensure the organization complies with all applicable federal, state, and local laws and regulations; remains committed to its mission; acts in a fiduciary role by maintaining oversight of the finances which includes evaluating financial policies, approving annual budgets, and reviewing periodic financial reports to ensure that the organization has the necessary resources to carry out its mission and remains accountable to its donors and the general public. Beyond attendance and participation, it is expected that members use their personal and professional connections to expand the network of support for the Mill, contribute knowledge or ideas that will advance the, provide introductions to organizations with whom collaborations may be synergistic, and the board is required to make an annual financial gift.

LIST OF BOARD DIRECTORS

Name & Office Held	Corporate Affiliation
Bonita L. Baskin, Chairman of the Board	Science Mill
Lynnell Burkett, Member	San Antonio Express-News (retired)
Gerardo Castillo, Member	AIE Energy & Infrastructure
Eric Corndorf, Member	Medtronic, Inc.
Beverly Dale, Member	n/a
Gary Cobb, Member	Travis County Assistant District Attorney (Former)
Sandy Dochen, Member	IBM
Robert P. Elde, Secretary of the Board	Science Mill
Nels Elde, Member	University of Utah Medical School
Susan Heard, Member	Cinnabar Art Gallery
Tom Henricks, Member	NASA (Former)
Christy Muse, Member	Shield Ranch
Nancy May, Member	San Antonio Humane Society
Tom Pannell, Member	Silicon Labs
Dan Patterson, Treasurer of the Board	PMFocus
Barbara Anne Stephens, Member	n/a
Peter Vancorenland, Member	WAC Lighting
Hedy Walls, Member	YMCA of the Greater Twin Cities
Staci Almager, Member	Hill Country Family Services
Ron Carter, Member	n/a
Bob Oliver, Member	Metano Energy

Signature

Bonnie Baskin