

THE FOUNDRY

A CROSSROADS FOR FORGING NEW STEAM OPPORTUNITIES

Response to a Request for Proposals for the
Foundry at 101 Rogers Street, Cambridge, MA

Lemelson-MIT Program on
behalf of the Foundry Consortium
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Photo courtesy of Olin College student, Lauren Gulland

Welcome

Under this roof, we envision lively, hands-on community experiences for all at the intersection of Science, Technology, Engineering,





Arts and Mathematics. Let's build
the Foundry together.

*Lemelson-MIT Program on
behalf of the Foundry Consortium*

EXIT

Letter of Interest

**THE FOUNDRY:
A CROSSROADS FOR
FORGING NEW STEAM
OPPORTUNITIES**

March 8, 2018

Mr. Thomas Evans, Executive Director

Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

Dear Mr. Evans,

The Lemelson-MIT Program is pleased to submit a response to the Cambridge Redevelopment Authority's Request for Proposals for an Operator for the Foundry Building. Our proposal recognizes the unique opportunity the Foundry provides to transform the historic property into a vibrant civic center that will offer a unique blend of arts, education and economic ventures that are responsive to the needs of the surrounding community while being fully sustainable.

The Foundry Project will be accomplished under the administration of the Lemelson-MIT Program in collaboration with the Foundry Consortium, a multi-disciplinary collaborative of interested partners that have a stake in creating a robust future in the Cambridge region. It is our intent to initiate nonprofit status for the Foundry Consortium shortly after the doors open to visitors so that the Consortium would be the entity that would be considered for the renewal of the Operator role.

Thank you for the opportunity to present our vision and plan for the Foundry Project. We look forward to your thoughtful review of our proposal.

Sincerely,



Stephanie Couch, PhD
Executive Director
Lemelson-MIT Program

TABLE OF CONTENTS

CORRESPONDING EVALUATION CRITERIA

1.0	PROGRAMMATIC VISION: CREATIVITY AND INNOVATION AS THE FOUNDATION FOR AN INCLUSIVE, COLLABORATIVE PROGRAM (Criteria 1)	8
2.0	COMMUNITY ENGAGEMENT (Criteria 2)	10
2.1	Community Experiences Shaping our Management and Operations Plan	10
2.2	Commitment to Engaging the Community to Align with Residents' Needs and Desires	11
3.0	EXPERTISE OF THE FOUNDRY OPERATIONS 'CORE' TEAM (Criteria 3)	12
4.0	PROGRAMMING MIX AND ALLOCATION (Criteria 3 and 6)	18
4.1	Decision-Making Process for Prioritization of Programs and Space Allocation	22
4.2	Alignment with Program Objectives	22
4.3	Proposed Schedule of Program Offerings	31
5.0	APPROACH TO FULFILLING OPERATOR ROLES AND RESPONSIBILITIES (Criteria 7)	32
5.1	Program Management and Outreach	32
5.2	Property Management	33
5.3	Subtenant Recruitment Selection and Participation (Criteria 5)	33
5.4	Other Program and Property Management Functions (Criteria 4 and 5)	33
5.5	Strategy for Managing Risk at the Foundry (Criteria 4)	35
5.6	Shared Use and Hours of Operation (Criteria 4)	35
5.7	Creating a Welcoming Environment of Shared Use	35
5.8	Space Needs for Operator Programmatic Functions (Criteria 5)	36
5.9	Anticipated Concerns and Strategies to Address Unfunded Needs	36
6.0	TIMELINE (Criteria 7)	36
7.0	STAFFING AND ORGANIZATIONAL PLAN (Criteria 7)	38-41
8.0	BUSINESS MODEL (Criteria 8)	42
8.1	Chart of Uses and/or Tenants by Floor Area	43
8.2.	Rents and Other Revenue Sources	43
8.3.	Building Operations Costs	44
8.4	Payments into the Capital Reserve Fund	44
8.5.	Assumptions about Rents and Other Calculations	44
9.0	PERFORMANCE MEASURES AND REPORTING STRATEGIES (Criteria 9)	45
10.0	SUPPORT LETTERS AND ONLINE SURVEY RESULTS	46
11.0	APPENDICES	50
11.1	Reference Letters for Stephanie Couch	
11.2	Roles for Foundry Operations Team and Related Strategies for Success	
11.3	Detailed Cash Flow	
11.4	Forms	

1.0

PROGRAMMATIC VISION: CREATIVITY AND INNOVATION AS THE FOUNDATION FOR AN INCLUSIVE, COLLABORATIVE PROGRAM (Evaluation Criteria 1)

The Foundry Building offers an opportunity to create a nationally recognized vibrant center and partnership hub that benefits Cambridge residents while serving as a model for other communities across the United States. New connections between individuals, families, community organizations and business leaders can be forged to increase access to:

- Science, Technology, Engineering, Arts and Mathematics (STEAM) knowledge and skills needed for success in school or college, access to high-wage jobs, and preparation for career advancement;
- Opportunities for artistic expression and for the enjoyment of the arts through a partnership with Lesley University for arts programming;
- Assistance needed to start new businesses, develop new products or services, and to make a living wage from one's talents or creations; and
- Collaborative problem-solving teams that allow individuals to have a positive social impact while gaining critical work-based skills sought by local employers.

East Cambridge and neighboring Kendall Square have grown rapidly in recent years with many new high density residential buildings that complement single and multi-family homes in established neighborhoods. The Foundry creates a community space in which long-time residents and new neighbors can get to know one another while enjoying food and entertainment options,

sharing tools and spaces needed for making/creating, and through participation in workshops, classes and other events supporting personal and professional growth. Interactions between people who would not otherwise get to know one another, and the development of friendships through work and play at the Foundry, will create new opportunities for individuals as well as for organizations and the city as a whole.

East Cambridge and neighboring Kendall Square are also an Innovation Economy that is home to numerous companies, non-profit organizations, and individuals who are national and international STEAM leaders. Many of these leaders have long expressed a sincere desire to share their knowledge and skills with youth and adults in Cambridge but have difficulty with knowing who to connect with and how to best connect. An excerpt from a support letter received from Gihan Amarasiriwardena, Co-founder and President of Ministry of Supply, describes the current challenges and new possibilities created by the Foundry.

The perspective Gihan shares aligns with our notion of the Foundry as a crossroad in which people from diverse walks of life are brought together intentionally to engage with one another in STEAM activities. He wrote:

“I’m one of the founders of Ministry of Supply, a performance professional apparel start-up born out of MIT. We’re seeking to reinvent how wear-to-work clothing is designed and made, and imbuing it with the technology through fabric, wearable and manufacturing innovation...”

The maker-space in the Foundry, will unlock a critical resource for tinkerers, and build a sense of curiosity at a young age in a non-academic setting. Moreover, the workshops at the space will pair resources with skills to empower young engineers and artists to translate concepts into tangible prototypes and artwork. Additionally, the Black Box offers a performance space that could include fashion shows of the creations.

The Ministry of Supply Team would like to extend our support through a variety of resources, but particularly through developing and offering workshops around product design and development, and in the past we’ve offered programs around wearable technology development, which we find captures the interest of artists and engineers alike.

Personally, as a Cambridge resident for nearly ten of my formative years – I’ve realized how important this community is and the impact programs like this can have on aspiring engineers and artists.”

Gihan Amarasiriwardena
Co-founder and President of Ministry of Supply

2.0 COMMUNITY ENGAGEMENT (Evaluation Criteria 2)

2.1 Community Experiences Shaping our Management and Operations Plan

The Foundry Project will initially be guided by an informal Foundry Consortium comprised of partners that have been brought together by the Lemelson-MIT Program to respond to the request for proposals (RFP) for an Operator for the Foundry. The consortium is committed to stewarding the public's investment in the building in ways that ensure that the space and programmatic offerings are welcoming to the public (i.e. accessible and inclusive) and responsive to the needs and desires of residents in East Cambridge and its surrounding neighborhoods. Initial partners include:

- Cora Beth Abel, President & CEO, Massachusetts State Science & Engineering Fair
- Sam Aquillano, Executive Director, Design Museum Foundation
- Stephanie Couch, Executive Director, Lemelson-MIT Program
- Martha McKenna and Sue Cusack, Lesley University, Creativity Commons and Lesley STEAM Learning Lab
- Michael K. Dawson, Co-Founder & CEO, Innovators for Purpose
- Michael Delia, President and CEO, East End House
- Peter DiMuro, Executive Artistic Director, The Dance Complex
- Jeanne DuBois, Principal, J DuBois Consulting Associates
- Leigh Estabrooks, Invention Education Officer, Lemelson-MIT Program
- Stephen Gardiner, CenterPoint and Cambridge Resident
- Jeff Goldenson, Director, Olin College Library
- Daniel Koff, Director of New Initiatives, Jean Appolon Expressions
- Ron Mallis, Executive Director, BostonAPP/Lab
- Mark Somerville, Professor, Olin College of Engineering
- Joan Squeri, Principal, HCC Consulting Associates
- Daniel Wilson, Director, Project Zero, Harvard Graduate School of Education

The Lemelson-MIT Program is serving as the staff and fiduciary lead for the initial Foundry Consortium. Dr. Stephanie Couch will serve as the main point of contact for communications with the Cambridge Redevelopment Authority (CRA). Partners will work toward the establishment of the Foundry Consortium as an independent self-sustaining non-profit entity after completing the work to open the Foundry. It is our intent that the Foundry Consortium would be in a position to be “the Operator” when the contract for the Operator is renewed in year five (if not sooner). This proposal emerged from ongoing local efforts by many consortium partners to strengthen STEAM education and workforce development “pathways” in Cambridge. The outcome of these efforts is for students from low-income families and diverse backgrounds to graduate from high school, complete a college certificate or degree program, and then enter Cambridge’s thriving Innovation Economy with the STEAM knowledge and skills needed to obtain and succeed in high-wage jobs.

“Your proposal to create a new Foundry Consortium that will help with making decisions about the building’s use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise.”

Robin Harris, Principal, Fletcher Maynard Academy

We have learned through our prior work that two of the nation’s top 20 zip codes for venture capital are in Cambridge. Our city struggles, in spite of its fiscal success, to ensure that all residents benefit from the prosperity of the new economy. The Cambridge Community Foundation estimates that close to 2,000 children and youth live in poverty, 15% of all young people in Cambridge (total population 110,651). Poverty cuts across all race and ethnicity groups, but is highest among African-American/black and Hispanic/Latino residents. Twenty-six percent of both groups are affected by poverty.

We envision that the Foundry will create a bridge between the wealth and success of Kendall Square and those who are not yet benefitting from the region’s Innovation Economy, serving school aged children, as well as adults. The work of the Foundry Consortium will connect to and bolster ongoing efforts by the City of Cambridge’s STEAM Advisory Committee, STEAM Initiative and the work of Agenda for Children which, to date, has concentrated on needs in preschool through grade 8. Integration with these existing efforts will ensure that young people’s needs and STEAM college/career pathways are stewarded from cradle to career.

“We are excited about the vision this proposal offers to use STEAM knowledge and skills to tackle income inequality, enable youth to be more competitive in the innovation economy, promote wealth creation opportunities for community entrepreneurs, and use the arts to foster Cambridge’s creative gene.”

Geeta Pradhan, President, Cambridge Community Foundation

Local investigations into methods for advancing STEAM education led to a focus on the City of Cambridge’s investment in afterschool programs (ASPs) at youth centers in low-income neighborhoods and its summer youth programs. It is the Foundry Consortium’s intent, therefore, that the Foundry serve as a crossroads in which STEAM professionals and

community partners are brought together to work with ASP leaders, educators, artists and others in support of STEAM program development and implementation – not only at the Foundry but also in community centers/ programs across Cambridge. Engagement of leaders of other community spaces across the city in opportunities for shared programming and/or joint offerings will enable residents to benefit by visiting the Foundry itself or through visits to other community spaces offering programs that originate in and are stewarded by the Foundry operations team. The multiple approaches to engagement (residents, college students, leaders of community spaces and programs, and the private sector) provide a solid foundation for ensuring that residents of all ages and stages of development come to know the Foundry as their ideal place to play, learn and grow personally and professionally.

2.2 Commitment to Engaging the Community to Align with Residents’ Needs and Desires

Foundry Consortium partners have already taken steps to engage the community in the development of this proposal. Copies of support letters and online survey results appear at the end of this proposal.

Residents of Cambridge are our top priority, with an emphasis on youth and seniors, and a particular focus on under-represented, lower

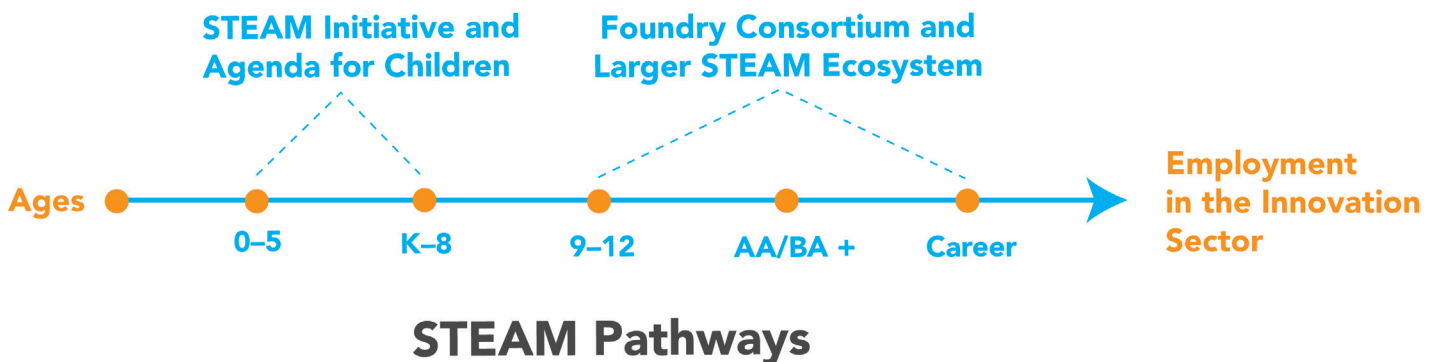


Figure 1

income households. Neighborhood listening sessions planned at the outset of the operations effort will ensure that the needs of residents are fully realized and taken into account from the very beginning. Listening sessions will be repeated periodically to ensure that the operator is aware of and responsive to the changing needs in the community. The Foundry Consortium will also sponsor a Foundry Neighborhood Advisory Group that will meet twice a year to provide independent input. The needs of neighbors and residents may, at times, conflict with the needs and desires of market-rate tenants whose support will be key to the financial model for the Foundry. Good communications and transparent processes and procedures will be important to ensure productive cooperation and collaboration.

Responsiveness to residents' needs will be enhanced through engagement involving creative placemaking – a collaborative shaping of “place” that pays attention to the physical, cultural, and social identities that define a place. Engagement with residents in the community will contribute to the initial design, development and ongoing programming efforts at the Foundry.

“We are excited about the new possibilities the Foundry creates for people who live in and/or work in the city.”

Michael V. Ananis, Ed.D., Executive Director,
Rindge School of Technical Arts

3.0 EXPERTISE OF THE FOUNDRY OPERATIONS 'CORE' TEAM (EVALUATION CRITERIA 3)

Foundry Consortium partners recognize the need for the collective effort to be staffed by a Core Team. The Core Team includes a yet to be determined building management firm that will be selected through a subsequent RFP process, Lesley University who will assist with arts programming, and the Lemelson-MIT (LMIT)

Program who will assist with STEM programming. LMIT will also serve as the lead entity for the overall effort until the consortium transitions to independent non-profit status.

LMIT brings a 24-year history of working with prominent inventors in Cambridge and across the U.S., including scientists, technologists, engineers, and mathematicians, that have applied their knowledge and skills to the creation of inventions and the formation of companies. Staff have also worked with more than 228 high schools across the nation over the last 15 years, and with college level student inventors/prize winners. Many student prize winners have gone on to start or hold prominent roles in companies in Cambridge and in the Greater Boston area. Local examples include:

- 2007 Lemelson-MIT Student Prize winner Nate Ball is an inventor, entrepreneur, TV host of a PBS Kids show, speaker, children's book author, and mechanical engineer. He is CEO of Atlas Devices, LLC, that provides patented rescue devices to the military and first responders. He seeks to bring engineers and technicians from his company to do STEM outreach at the Foundry as well as his children to participate in events and programming.
- 2013 Lemelson-MIT Student Prize winner Eduardo Torrealba from University of Illinois at Urbana/Champaign invented PlantLink, an internet connected soil moisture monitoring platform for gardeners that was acquired by Scotts Miracle-Gro. Torrealba now lives in East Cambridge next door to the Foundry and leads engineering for Somerville-based Formlabs for next generation 3D printing. He desires to offer educational outreach programs at the Foundry with Formlabs employees.

Initial Foundry Consortium members selected the Lemelson-MIT Program as the lead applicant based on five factors:

1. Inventing is part of the City of Cambridge's history and DNA and is a powerful theme for attracting youth to STEAM learning opportunities.

Inventing offers opportunities for teamwork and the development of competencies needed by employers. The consortium wishes to include inventing as a theme for STEAM learning. Inventing, given its focus on both things (i.e., a technological solution to a problem) and helping people (i.e., social impact), appeals to a broader group of young people than those interested in the individual disciplines of science, technology, engineering, and mathematics. Findings from an ongoing ethnographic study suggest that invention-oriented approaches to STEM may be particularly effective for engaging women and underrepresented students in STEM. Findings from the case study are supplemented by annual program evaluation surveys which indicate that young women and underrepresented students consistently agree and/or strongly agree that their invention education experiences taught them to learn from failure, persistence, and helped to develop self-confidence in their ability to solve problems – all of which are part of the “mindset” of leading inventors and innovators.

2. LMIT Executive Director Dr. Stephanie Couch is highly regarded for her work in building STEAM networks, ecosystems and coalitions in local communities in support of greater diversity in STEM fields.

Couch's efforts to develop multi-stakeholder 'collective impact' networks began in the early days of the STEM education movement when she was hired to develop the statewide California STEM Learning Network. She went on to launch the Institute for STEM Education at California State University (CSU), East

Bay and to develop and run the Gateways Easy Bay STEM Network which spanned the Alameda and Contra Costa counties with a combined population of 2.6 million. Her regional STEM work received many awards including being chosen as one of San Francisco Business Times' Most Influential



STEPHANIE COUCH
Couch was interviewed for the cover story in the January 2018 issue of Inventors Digest on the topic of women in the innovation field.

Women in Bay Area Business for 2016; she was inducted into the Alameda County Women's Hall of Fame in the education category in 2016; and received the 2015 Biotechnology Educator of the Year Award from the California Life Sciences Association. She went on to consult with CSU Channel Islands on the development of their regional Ventura County STEM Network. All of these network development initiatives have involved significant community engagement/organizing, research, policy work, and fundraising efforts, which Couch has done her entire career. References from individuals attesting to her strengths in these areas are available in Appendix 11.1. References include the East Bay Economic Development Alliance, the Gateways East Bay STEM Network and the Ventura County STEM

Network. Couch is also a passionate advocate and spokeswoman for building pathways to support women and the underrepresented in today's innovation economy. Her advocacy for greater diversity is shown in the January 2018 edition of Inventors Magazine available online at <https://www.inventorsdigest.com/articles/strong-voice-diversity/>.

3. LMIT's Proven Commitment to STEAM in the Cambridge Community:

The Lemelson-MIT Program has celebrated inventors and worked to inspire young people to pursue creative and inventive lives for the past 24 years. Over the last 15 years, LMIT has worked closely with many STEAM



High school students build their designs for the EurekaFest Museum of Science design challenge

professionals and educators in Cambridge, Boston and nationally. Examples of LMIT's local offerings include, but not limited to:

Museum of Science Boston EurekaFest Design Challenges: LMIT partnered with the Museum of Science (MOS) Boston for seven years to bring the museum community and the LMIT InvenTeams community together for design challenges every June. Each year, 300 high school students participated; 100 students were from local communities and affiliated with programs sponsored by MOS.

Development of an Inventor's Studio at Fletcher Maynard Academy: LMIT co-developed an Inventor's Studio at Fletcher Maynard Academy (FMA) in Cambridge and worked with students after providing professional development for an administrator and staff members. Activities took place at FMA and on MIT's campus in conjunction with the senior mechanical engineering team building experience for the popular MIT class, Product Engineering Processes, with FMA 3rd – 5th graders cheering the college students on. One LMIT staff member is on the FMA leadership team.



Fletcher Maynard Academy 3rd-5th grade students with their Balloon Challenge September 2017

Organization and sponsorship of Innoskate at the Lynch Family Skatepark in October 2016: Innoskate was a unique and successful collaboration between the Lemelson Center for the Study of Invention and Innovation at the National Museum of American History at the Smithsonian, the Lemelson-MIT Program, and the skateboard community. Invention and innovation take place everywhere including in skate parks; skateboarders are inventors of tricks, moves, and equipment. Innoskate celebrated invention and creativity by sharing the skate culture's innovative spirit and history with diverse public audiences in



INNOSKATE

Public Festival

SATURDAY, OCTOBER 29 11AM – 4PM
LYNCH FAMILY SKATEPARK IN CAMBRIDGE

The Smithsonian's Innoskate program travels the country celebrating inventive creativity in skate culture. In collaboration with the Lemelson-MIT Program, Innoskate comes to the Lynch Family Skatepark in Cambridge to spark the imagination of skaters and non-skaters alike of all ages through skate demonstrations, discussions with skaters and inventors, hands-on invention educational activities, and other fun activities. Learn about invention and creativity in skateboarding with skaters, historians, inventors and scientists from the Smithsonian and MIT. Meet legendary skateboarders **Rodney Mullen**, **Christian Hosoi**, and other pioneers of skateboarding history.

Other activities include:
Skate Clinic
Skate Demos
Best Trick Contest
Hands-on Activities
Food Trucks & More

For event schedule and more information please visit:
<http://lemelson.mit.edu/events/>

IN COLLABORATION WITH:
UNITED STATES PATENT AND TRADEMARK OFFICE **uspto** **VANS 50 YEARS**

COMMUNITY PARTNERS:
Charles River Conservancy
Formlabs
Lynch Family Skatepark
MIT Edgerton Center
Tech Imaging



(Top left) Renata von Tscharnher of Charles River Conservancy staffs table at Innoskate

(Top right) Skateboard legend, Rodney Mullen autographs a skateboard



(Bottom) Skateboarders of all ages at the Lynch Family Skatepark for Innoskate

Cambridge. Legendary skater, Rodney Mullen, and other well-known skateboarders; Vans' Steve Van Doren; the U.S. Patent and Trademark Office; filmmaker and inventor, Steven Sebring; MIT faculty; community partners, the Lynch Family Foundation; Charles River Conservancy; Formlabs, an innovative manufacturer of 3D printers located on the Cambridge/Somerville line; Tech Imaging Services, a premier distributor of digital high speed imaging systems located in Saugus; local skateshop owners; skateboarders of all ages; and families attended the day long event. STEAM hands-on projects for middle school youth that encouraged inventive thinking around skating, manufacturing, and imaging were available. Students for the Community Charter School of Cambridge participated as hosts. The event was staffed and managed by the Lemelson-MIT Program including educational opportunities; contracts; and arrangements for security, food trucks, and sanitation.



Students present their shoe sole designs at the MIT Museum an Inventor's Day

Inventor's Day in Cambridge: The Lemelson-MIT Program brings groups of young inventors together to celebrate the creative and inventive work that they do across the U.S. Local teams of inventors from Massachusetts have come together in our community to attend the

Cambridge Science Festival, visit laboratories and centers at MIT, and present their work to the public at the MIT Museum. The programming, logistics, transportation, and food have been managed by the program.

4. Acknowledgement of Transitional Role as the Foundry Consortium Develops

The prospect of MIT having undue influence on the management of the Foundry has been raised in relation to the Lemelson-MIT Program's service as the operator and lead entity. The establishment of the Foundry Consortium, and plans to transition the consortium to an independent non-profit organization as soon as possible ensure that the Lemelson-MIT Program is only one of many partners steering the Foundry operations to success.

5. Capacity to Manage Fiduciary Responsibilities and Health and Safety Concerns

Foundry Consortium members recognize the tremendous liability that accompanies the administration of a public building, especially a facility that will encompass the types of spaces and activities proposed in this application. The Consortium has also considered the importance of actively working to ensure compliance with financial audit requirements and health and safety codes. The Lemelson-MIT Program's link to MIT and its ability to call upon the campus for assistance with these compliance issues will be a huge benefit to the operation of the Foundry by the consortium.

Lesley University, another member of the Core Team, brings tremendous expertise and a long history of involvement in Cambridge in the arts and STEAM. Professors Martha McKenna and Sue Cusack are Lesley University's lead representatives. McKenna brings experience in integrating the arts across the STEM disciplines in her teaching in the Creative Arts in Learning program at Lesley and her leadership of the

Creativity Commons to support innovation in teaching and learning across the university. She oversees the Cambridge Creativity Commons (CCC), a collaborative project of the Cambridge Arts Council, Cambridge Community Foundation (CCF), the Cambridge Public Schools and Lesley



Summer Compass Program at Lesley University

University which provides arts-based teaching and learning to engage teachers and students in the exploration of meaningful ideas using creative processes in arts and science-based experiential projects both in school and out-of-school. She has also played a leadership role in the Cambridge STEAM initiative as a member of the CCF advisory board, including presenting on "STEM + Art = STEAM" at the Cambridge City STEM Forum, Cambridge, April 2016.

We bring "the expertise of our Lesley STEAM Learning Lab, where we have deep experience working with educators and their students creating learning opportunities that are hands-on, authentic, and culturally responsive."

Martha McKenna and Sue Cusack, Professors and Directors, Lesley University

Cusack brings experience in creating inclusive opportunities for learning in STEAM through hands-on, authentic, and culturally responsive maker activities. As faculty in the Graduate School's STEM Division and Director of

the Lesley STEAM Learning Lab, she helps to facilitate maker learning experiences for educators and their students in Cambridge and other urban school districts in the area.

Much of her work, and the work of her team was born out of a partnership with the Kennedy-Longfellow Elementary School (KLO) in East Cambridge. At KLO, her team helped to launch the district's first school-based makerspace. Through this effort, she quickly learned that a makerspace was not only a fertile space for student learning, but it was also a way of knowing what was new and often inaccessible to teachers. It was that awareness that led her to build a makerspace at Lesley's Graduate School of Education to help influence students' experience with a divergent learning ecology that leans into the 21st-century competencies.

Cusack's work at the center has quickly expanded to include providing direct support and consultation with Cambridge's Tobin Montessori School where her team helped launch the maker mindset at all grade levels. This work also included supporting their upper elementary teachers to enrich their science curriculum.

For the last three years, her team has provided maker workshops to CPSD's Summer Compass Program and provided all of their students with a field trip opportunity to Lesley University for hands-on STEM-related maker experiences that would have been a challenge for the summer program to provide. This program is a long-standing partnership with the university designed to support Cambridge students that are at risk of regression or need remediation.

Her team also actively supports the Cambridge STEAM initiative through STEAM Nights at different schools across the city. Cusack has been part of the STEAM Initiative in the City of Cambridge since it was launched by then Mayor Henrietta Davis. She now sits on the STEAM Advisory Committee by invitation of City Manager DePasquale and Superintendent Salim.



Image Source: <http://steam.lesley.edu/what-does-sound-feel-like-what-does-sound-look-like/#more-2466>



Image Source: <http://steam.lesley.edu/summer-compass-students-join-the-maker-olympics/>

4.0 PROGRAMMING MIX AND ALLOCATION (EVALUATION CRITERIA 3 AND 6)

The space and portfolio of program offerings co-existing within the Foundry will support activities that are multi-generational and multicultural. Programs will also address a range of disciplines and fields of study including the visual and performing arts, technology, entrepreneurship, and career pathways for particular industry sectors. Figure 2 illustrates the many types of programming that can be offered.

We have not actively recruited in this area given the desire for a more transparent process of matching providers with community needs that will surface through additional input sessions. Table 1 offers a sampling of those who have

expressed interest in providing programs and/or space in the Foundry. This input was gathered during efforts to develop the initial Foundry Consortium, secure support letters for this proposal, and through an online survey of ways supporters want to be involved.

Given initial responses, we anticipate a large demand for the limited space in the Foundry. Decisions around programming and space utilization will be made jointly by the Core Team, with input from Foundry Consortium members, and informed by neighborhood listening sessions and conversations with stakeholders participating in action groups/committees chaired by members of the Foundry Consortium and staffed by the Core Team. Every effort will be made to ensure that Foundry offerings provide residents, especially underrepresented

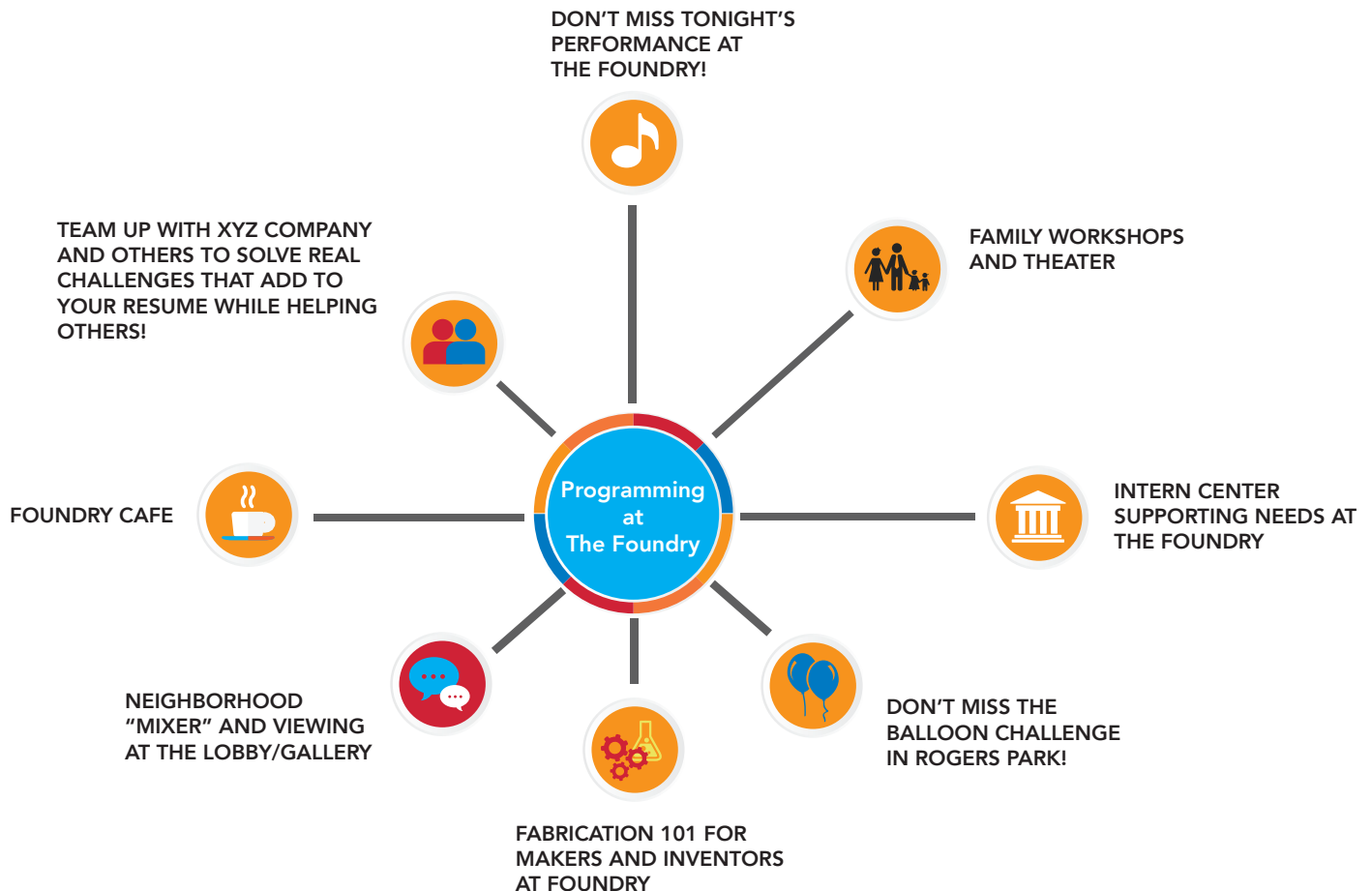


Figure 2

Table 1: Potential Program Providers and Tenants Expressing Interest in Space at the Foundry

Entity, Key Contacts and Core Expertise	Programming Role(s)	Space Needed
Cambridge Art and Frame	Geometry and measurement in art and framing	1,000 square feet market rate office
Cambridge Redevelopment Authority Thomas Evans	N/A	2,500 square feet market rate office
Charles River Conservancy Renata von Tscherner	TBD	2,000-3,000 square feet for office operations plus shared space
Design Museum Sam Aquillano	Workforce development, community center, and performing and visual arts	Up to 2,000 square feet non-profit office space Potential use of large community room, classroom space and workshop with tools
Foundry Consortium TBD	Operate the Building	1,200 square feet market rate office
Innovators for Purpose Michael Dawson	Residency programs for youth within the Foundry	Substantial use of classroom and workshop spaces as a fee for service shared space
Jean Appolon Expressions (JAE) Jean Appolon, Director	Haitian dance and other dance related programs within the Foundry	Potential heavy use of the community space, classroom space, and the Black Box theater
Stephanie Couch Lemelson-MIT Program	Invention education offerings for teachers and students	3,000 square feet of market rate office Potential user of classrooms, workshop space, Black Box Theater and the community room
Project Zero, Harvard Graduate School of Education Daniel Wilson	Workforce development	Workshop offerings for 50-200 educators, students and organizational leaders to learn about STEAM topics and pedagogy
Woodrow Wilson Academy of Teaching and Learning	Graduate education offerings	Potential need of market rate office space
The Dance Complex	Dancing making for all ages Set and prop creation	Potential user of classrooms, workshop space, Black Box Theater and the community room
East End House	STEAM and parent education	Up to 2,000 square feet non-profit office space and use of classroom for STEAM and parent education

communities and adjacent neighborhoods, with access to the dynamic working and learning environment of Kendall Square. Sixty percent (60%) of the Foundry space will be dedicated to

uses for the community and the public, and forty percent (40%) of the space will accommodate market-rate tenants in order to support long-term financial sustainability of the Foundry. Priority will

be given to market-rate tenants whose business and work products complement and contribute to the Foundry’s program offerings. Mixed uses will highlight the work of community-based non-profit organizations as well as interdisciplinary partnerships.

The Foundry Consortium came to the conclusion that program offerings must extend beyond the space in the Foundry building itself given the limited amount of physical space available within the Foundry building in comparison to the potential uses that have already surfaced. Plans published by the Cambridge Redevelopment Authority indicate that the net floor area will be 38,500 square feet. Foundry Consortium members will advise the Core Team on programming decisions and priorities as space conflicts arise. Members, through their active participation on action groups, will also assist with developing relations and partnerships with community organizations and individuals in which all parties work together to take advantage of the opportunity to coordinate space use,

programming, and fund development efforts within other community facilities that exist in neighborhoods across the City of Cambridge. The Foundry Consortium, and community stakeholders’ engagement with one another in action groups, create the crossroad or ‘networking space’ in which learning exchanges happen and partnerships develop. Staff support will nurture new partnerships in ways that allow them to flourish within the Foundry and across the city in other spaces.

Awareness of the potential to connect efforts generated within the Foundry to partners in other spaces was enhanced by a CRA report which indicates that there are 11 sites across the city that assist residents with workforce development, 33 sites (29 physical spaces) that are dedicated to the performing and visual arts, and 15 community centers. We also identified 13 co-working facilities. Cambridge residents also benefit from a number of other education and workforce development program providers (including but not limited to Cambridge Public Schools, Enroot

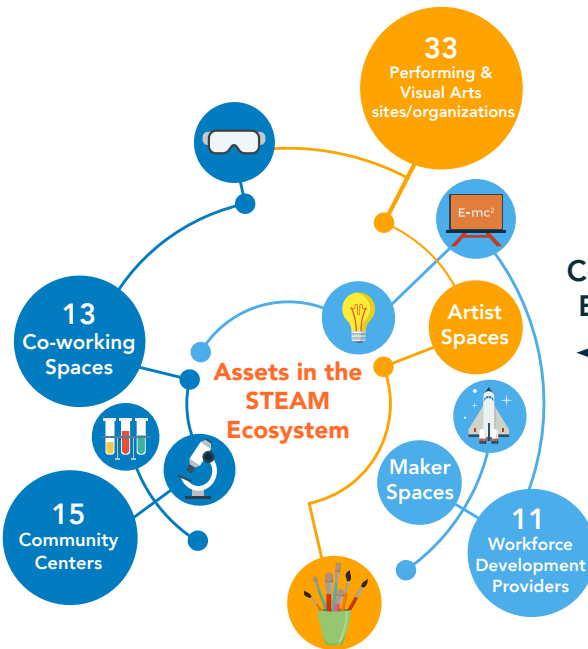


Figure 3

Connecting STEAM Ecosystem Assets
 ↔



Figure 4

and nearby Bunker Hill Community College). The existing spaces and programs, depicted as assets that are part of the STEAM ecosystem in Figure 3, provide important learning opportunities and resources to the community. Many could achieve greater potential if they could access additional revenue, materials, equipment and tools, and volunteers with STEAM expertise. We envision partnering, rather than duplicating efforts and competing with these existing community resources. Collaborations between the Foundry Consortium and managers of the other sites and programs offer new possibilities for the expansion of dynamic, responsive and highly engaging experiences that enrich and improve Cambridge residents' lives.

The Foundry Consortium's vision for collective efforts of partners in the STEAM ecosystem will be realized by creating an informal STEAM

Roundtable that will meet as needed to explore opportunities for collaboration and joint efforts. As shown in Figure 4, convening's of action groups representing each type of asset in the STEAM ecosystem will help link opportunities and sites to maximize the impact or benefit of potential opportunities.

Partners also recognize the importance of the City of Cambridge's and the Cambridge Public Schools' relatively new science, technology, engineering, arts and mathematics (STEAM) initiative. It was created by the city and the school district, aimed at expanding STEAM program offerings after-school and during the summer for area youth. The ways in which the Foundry Consortium fits into the broader STEAM ecosystem and the existing efforts is depicted in Figure 5.

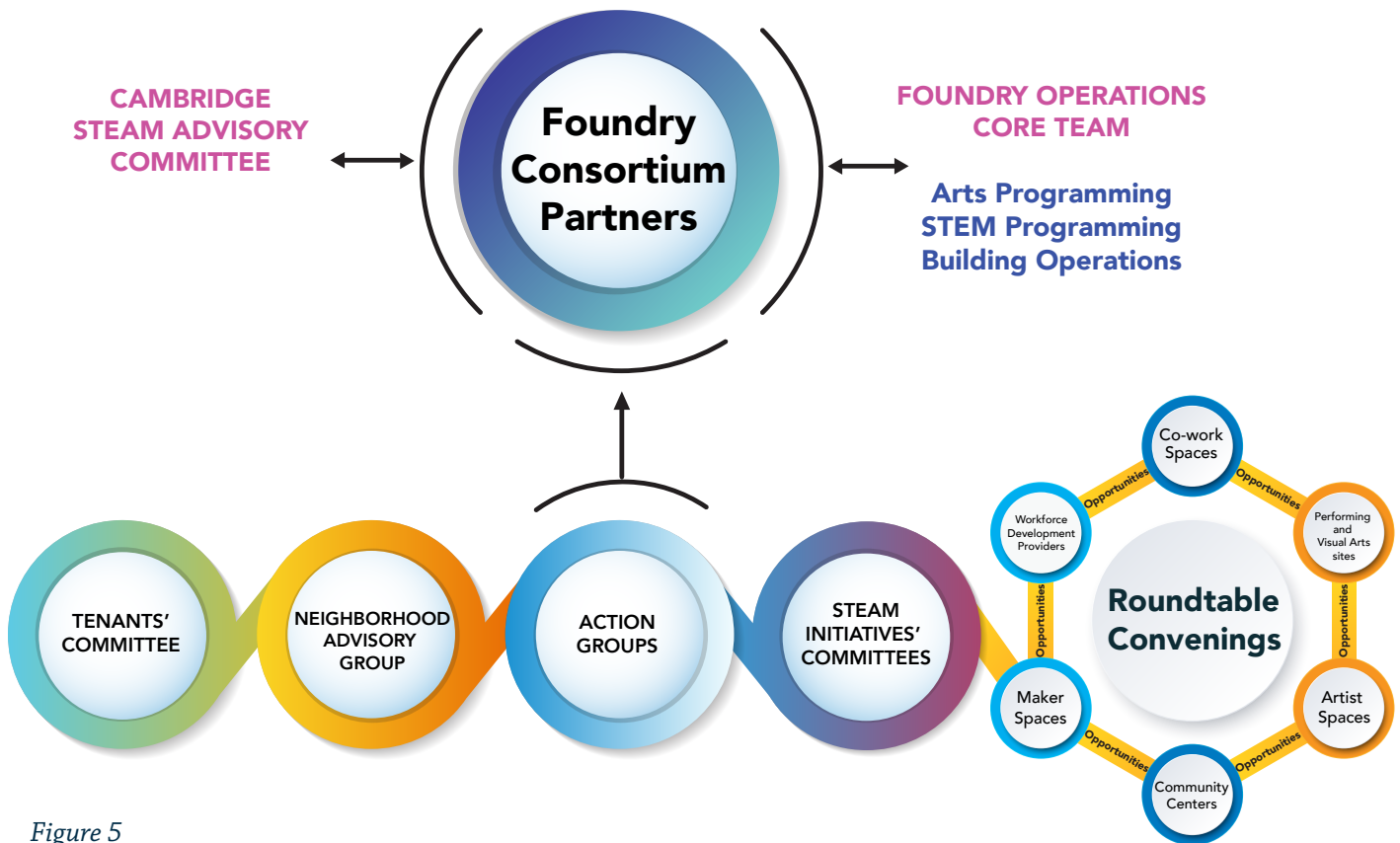


Figure 5

4.1 Decision-Making Process for Prioritization of Programs and Space Allocation

LMIT's Executive Director and Foundry Consortium partners will actively pursue funding opportunities and will facilitate the conversations among sites and organizations engaging at the STEAM Roundtable (Figure 4) meetings and in Foundry Consortium's themed action groups. Action groups will examine research and data and will develop and implement strategies for enhancing learning opportunities in college/career 'pathways.' Five pathways that align well with the Foundry space and the needs of the Kendall Square business community and the Greater Metro Boston area are: 1) arts, media and entertainment; 2) IT; 3) biotechnology; 4) innovation (i.e. inventing and entrepreneurship); and 5) advanced manufacturing. These topic areas will be explored following initial community input sessions. Discussions at STEAM Roundtable convening's and work within the action groups will be managed in ways that ensure that:

- Use of the limited space at the Foundry fulfills unique niches and needs that are not already being met by the existing sites;
- Foundry offerings benefit from the diverse knowledge, skills and cultural capital available at sites in other neighborhoods, while contributing knowledge skills and cultural capital from East Cambridge and Kendall Square;
- Space available in other sites continues to be recognized, supported, and fully utilized in ways that advance our collective vision for opportunities for residents; and
- Conflicts in event dates intended for the same audiences and participants are minimized; and
- The work of the Foundry consortium aligns with and bolsters existing efforts of the City

of Cambridge's STEAM Advisory Committee, STEAM Initiative and the work of Agenda for Children which, to date, has concentrated on needs in preschool through grade 8.

4.2 Alignment with Program Objectives

The four objectives published on page four of the RFP, along with considerations of what people from diverse audiences might want or need from the Foundry, served as our guide for developing Tables 2 - 5. The first column in the tables offers specific approaches for meeting each objective. They provide a more granular sketch of ways of using the space available within the Foundry to achieve each objective. The benefits and reasons why people may want to engage in each activity listed in column one is shown in columns 2-5, with each column representing a distinct audience (i.e. seniors, middle-age adults, young adults and youth). The RFP specifies an emphasis on youth and seniors, with a particular focus on under-represented lower income households. We have worked to honor this prioritization through the uses identified, however, the ideas for space usage will be refined over the next several months through community engagement sessions.

“We are all creative – we all have ideas, dreams and ways to see and interpret our world. But we have to learn – through every stage of life - how to have faith in our ideas and dreams and how to act on them and develop them through interaction with others.”

Samuel J. Petuchowski, Ph.D., J.D., Partner
Sustein Kann Murphy & Timbers LLP

Table 2: Programming to Address Needs of Diverse Audiences, and Space Utilization

Objective #1

Foster a center of creativity and innovation through the shared use of space populated with complimentary uses that are accessible to all.

Objectives & Space(s) To Be Used

Benefits to Diverse Audiences (emphasis on youth and senior engagement, with a particular focus on under-represented, lower income households)

	Seniors	Middle-Age	Young Adult	Youth
<p>a. Sharing STEAM Talents: Provide a venue for individuals and groups to share their STEAM talents and be recognized for their accomplishments. Ex: Performances, poetry readings, talks</p> <p>Where: Black Box, Classroom, Lobby/Gallery, Community Room</p>	Personal enjoyment, recognition, and ongoing development	Personal enjoyment, recognition, and ongoing development	Personal enjoyment, recognition, and ongoing development	Personal enjoyment, recognition, and ongoing development
<p>b. Creating: Provide physical spaces and equipment for new creations involving: 1) materials (paint, wood, metal, clay) 2) music/sound 3) technology</p>	<p>Access new knowledge and skills</p> <p>Give back by informing others</p> <p>Socialization</p>	<p>Access new knowledge and skills</p> <p>Give back by informing others</p>	<p>Access new knowledge and skills</p> <p>Give back by informing others</p>	<p>Access new knowledge and skills</p>
<p>Curate program offerings and facilitate the development of new offerings that connect residents with innovators in the private/public sectors</p> <p>Where: Workshop, Classrooms, Community Room, Café, Artist Studios</p>	multicultural exchanges			
<p>c. Problem Solving: Build connections among residents with others in the community who have the expertise needed to design/build/create solutions to community problems identified by residents</p> <p>Bring people together with STEAM professionals to solve problems identified by a business that lend themselves to a technological solution</p> <p>Where: Community Room, Workshop, Classrooms, Market Rate Offices</p>	<p>Bring problems to solve</p> <p>Give back by informing & resourcing (if possible) the work of teams</p> <p>Intergenerational Exchange of ideas and ambitions</p>	<p>Develop leadership skills through participation</p> <p>Give back by informing & resourcing (if possible) the work of teams</p>	<p>Develop confidence in their ability to solve problems, learn from failure, and get interested in STEAM college and career pathways.</p>	<p>Develop inventiveness, creativity, teamwork, collaboration and leadership skills.</p>
<p>d. Entrepreneurship: Connect those who create and/or develop solutions to problems with resources needed to patent or to launch new products, businesses, or services.</p> <p>Where: Classroom, Community Room, Black Box</p>	<p>Find a new career</p> <p>Contribute to a start-up; provide advice and experienced feedback</p>	<p>Find a new career</p> <p>Contribute to a start-up</p>	<p>Launch new careers</p> <p>Contribute to a start-up</p>	<p>Launch new careers</p> <p>Contribute to a start-up</p>

Table 3: Programming to Address Needs of Diverse Audiences, and Space Utilization

Objective #2

Create mentorship, internship, apprenticeship, workforce training, and educational programs for Cambridge residents that can directly benefit and engage the surrounding community

Objectives & Space(s) To Be Used

Benefits to Diverse Audiences (emphasis on youth and senior engagement, with a particular focus on under-represented, lower income households)

	Seniors	Middle-Age	Young Adult	Youth
<p>a. Workforce Pathways: Offer short courses and college and career workshops to illuminate options for individuals. Make connections to further training or education providers for those who get inspired by their experiences at the Foundry</p> <p>Offer courses and internships onsite for skills and knowledge needed for Foundry operations, services needed by Foundry program providers & help with connections to area employers. Ex. Arts, Media & Entertainment</p> <p>Where: Workshop, Classroom, Community Room, Black Box, Café, Lobby</p>	<p>Learn new things</p> <p>Training for younger participants through intergenerational Workshop projects</p> <p>Launch a second career (PT or FT)</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>
<p>b. Internships and Day-to-Day Needs of the Community: Offer a fee for service design & marketing studio (with paid internships) to address needs at the Foundry and beyond. At least one other for-profit retail business to draw residents in neighborhood that will also offer internships</p> <p>Where: Non-Profit and Market Rate Offices</p>	<p>Buy items or services needed</p>	<p>Buy items or services needed</p>	<p>Buy items or services needed</p> <p>Workplace based learning opportunity</p>	<p>Buy items or services needed</p> <p>Workplace based learning opportunity</p>

“Our foundation believes that there is much to gain by expanding the technology resources available to all people in Cambridge. The city has world class colleges and cutting edge employers, so projects like the Foundry are logical to connect more individuals to the local prosperity created by STEAM topics.”

Carl Whittaker and Jill Jacobs, Directors
Herb and Maxine Jacobs Foundation

“Unlike my childhood memories of woodworking in my neighbor’s basement shop & fixing old cars with my uncle in his garage, hands-on technical experiences are not necessarily accessible realities for Cambridge kids. City kids (including my own) don’t have as many opportunities to get their hands dirty in their pursuit of curiosity & creativity!.... I am very excited about the new possibilities the Foundry creates for our community’s students, adult residents & local workforce.”

Christian Blanc, Cambridge dad,
Cambridge resident since 1998

Table 4: Programming to Address Needs of Diverse Audiences, and Space Utilization

Objective #3

Include significant training opportunities in the areas of science, technology, engineering, arts and math (STEAM) fields that can effectively introduce and prepare Cambridge residents for the existing and growing professional fields that have emerged in the Kendall Square area over the past several years.

Objectives & Space(s) To Be Used

Benefits to Diverse Audiences (emphasis on youth and senior engagement, with a particular focus on under-represented, lower income households)

	Seniors	Middle-Age	Young Adult	Youth
<p>a. STEAM Talent Development: Provide a venue where experienced artists and individuals with expertise in STEAM can support the development of novices through collaboration</p> <p>Where: Workshop, Community Room, Classroom, Black Box, Artist Studios</p>	<p>Personal enjoyment</p> <p>Learn new things</p> <p>Give back by informing others</p> <p>Living legacy</p>	<p>Personal enjoyment</p> <p>Learn new things</p> <p>Give back by informing others</p>	<p>Personal enjoyment</p> <p>Learn new things</p> <p>Give back by informing others</p>	<p>Personal enjoyment</p> <p>Learn new things</p>
<p>b. STEAM Workforce Pathways: Offer short courses and college and career workshops to illuminate options for individuals. Make connections to further training or education providers for those who get inspired by their experiences at the Foundry</p> <p>Offer courses and internships onsite for skills and knowledge needed for Foundry operations, services needed by Foundry program providers & help with connections to area employers. Ex. Arts, Media & Entertainment</p> <p>Where: Workshop, Classroom, Community Room, Black Box, Cafe</p>	<p>Learn new things</p> <p>Share life experiences and skills</p> <p>Next Career Step</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>	<p>Learn new things</p> <p>Advance career goals</p> <p>Work experience</p>
<p>c. STEAM Recruitment by Tending to Neighbors' Day-to-Day Needs: Offer a fee for service design & marketing studio (with internships) to address needs at the Foundry and beyond. At least one other for-profit retail business to draw residents in from the surrounding neighborhood where they can discover STEAM opportunities of interest.</p> <p>Where: Market Rate Office</p>	<p>Buy items or services needed</p>	<p>Buy items or services needed</p>	<p>Buy items or services needed</p> <p>Workplace based learning opportunity</p>	<p>Buy items or services needed</p> <p>Workplace based learning opportunity</p>

“Bunker Hill Community College is a leader in the provision of workforce development and educational opportunities. Our offerings extend to high school students in our Early College High School programs. The Foundry offers many possibilities for new partnerships and new approaches to serving Cambridge residents.”

Pam Y. Eddinger, Ph.D.
President, Bunker Hill Community College

Table 5: Programming to Address Needs of Diverse Audiences, and Space Utilization

Objective #4

Capitalize on the commercial success of Kendall Square’s redevelopment to create a unique collaborative environment as a citywide resource, with a diverse mix of cultural, educational, and commercial uses emphasizing youth and senior engagement, with a particular focus on under-represented, lower income households.

Objectives & Space(s) To Be Used

Benefits to Diverse Audiences

Note: This objective will also be accomplished through the array of offerings for diverse audiences that meet Objectives 1-3 as described above.

	Seniors	Middle-Age	Young Adult	Youth
<p>a. Social Connections & Networking: Offer special events that help residents get to know others who reside in different neighborhoods and/or work in Kendall Square</p> <p>Where: Community Room, Black Box, Lobby/Gallery, Classrooms</p>	<p>Gain new insights</p> <p>Meaning and purpose in life</p>	<p>Gain new insights</p> <p>Build social networks & capital</p>	<p>Gain new insights</p> <p>Build social networks & capital</p>	<p>Gain new insights</p> <p>Build social networks & capital</p>
<p>b. Feature Neighborhood Strengths in the Foundry: Offer special events for residents and employees in Kendall Square that raise the visibility of the strengths of different neighborhoods and the community assets that reside within them</p> <p>Where: Community Room, Black Box, Lobby/Gallery, Classrooms</p>	<p>Find new places of enjoyment</p> <p>New connections</p> <p>Support local entities and residents</p>	<p>Find new places of enjoyment</p> <p>New connections</p> <p>Support local entities and residents</p>	<p>Find new places of enjoyment</p> <p>New connections</p> <p>Support local entities and residents</p>	<p>Find new places of enjoyment</p> <p>New connections</p> <p>Develop new understandings</p>
<p>c. Neighborhood support: Cultivate opportunities for the Foundry to support and strengthen programming and offerings in venues located in Cambridge neighborhoods. Encourage participation and support from those who work in Kendall Square but may not live in Cambridge</p> <p>Where: Technology available in all spaces for distributed programming in partnership with other community sites/programs. Ongoing community engagement/outreach efforts</p>	<p>Personal enjoyment</p> <p>Make a difference</p> <p>Give back by helping others</p> <p>Living legacy</p>	<p>Personal enjoyment</p> <p>Make a difference</p> <p>Give back by helping others</p> <p>Living legacy</p>	<p>Personal enjoyment</p> <p>Make a difference</p> <p>Give back by helping others</p> <p>Learn new things</p>	<p>N/A</p>

A summary of the objectives that can be realized within each type of space envisioned in the Foundry are shown in Table 6. Table 6 also includes ideas surrounding ways the costs of each type of space may be covered. Objective 4, is listed as a focus of the office space available for non-profit and market rate tenants, but we also believe that it needs to be addressed by every space in the building.

Table 6: Objectives met in each space and potential revenues to cover costs

Type of Space	Objectives to be Prioritized in the Space	Revenue Sources for Operations
<p>Black Box with support 3,000 square feet</p>	<ol style="list-style-type: none"> 1. Center of creativity and innovation <ol style="list-style-type: none"> (a) Sharing STEAM talents (d) Entrepreneurship: Making connections with investors 2. Create mentorships, internships, apprenticeships, workforce training, and educational programs <ol style="list-style-type: none"> (a) Workforce pathways 3. Training opportunities in STEAM <ol style="list-style-type: none"> (a) STEAM talent development (b) STEAM workforce pathways 4. Capitalize on commercial success of Kendall Square’s redevelopment <ol style="list-style-type: none"> (a) Social connections and networking (b) Feature neighborhood strengths in the Foundry <p>Note: This space would be available to multiple providers on a fee for service basis. Rates charged would be based on a sliding scale with the highest rates charged during peak demand. Rooms would be equipped with technologies and IT support.</p>	<p>Naming rights Grants and donations Use of space fees Fundraising events</p>
<p>Community Room 3,000 square feet</p>	<ol style="list-style-type: none"> 1. Center of creativity and innovation <ol style="list-style-type: none"> (a) Sharing STEAM talents (c) Bringing people together to design, build/create solutions to problems (d) Entrepreneurship: Making connections with resources needed to patent, or to launch new businesses or services 2. Create mentorships, internships, apprenticeships, workforce training, and educational programs <ol style="list-style-type: none"> (a) Workforce pathways 3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) <ol style="list-style-type: none"> (a) STEAM talent development (b) STEAM workforce pathways 4. Capitalize on commercial success of Kendall Square’s redevelopment <ol style="list-style-type: none"> (a) Social connections and networking (b) Feature neighborhood strengths in the Foundry 	<p>Naming rights Grants and donations Use of space fees</p>

	<p>Note: Hours would be set aside for Foundry Consortium sponsored (i.e. free) 'mixers' that allow community members to get to know each other and available resources in the community</p> <p>The remaining hours in this space would be available on a fee for service basis</p> <p>Fees would be based on a sliding scale with the highest rates during hours of peak demand. We estimate that the space could be used as one large room or divided with moveable partitions into two smaller rooms</p>	
<p>Café/Kitchen 1,000 square feet</p>	<ol style="list-style-type: none"> 1. Center of creativity and innovation (b) Creating. Physical spaces and equipment for creating 2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (a) Workforce pathways 3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) (b) STEAM workforce pathways 	<p>Food cart rents Use of space fees Fundraising events</p>
<p>Workshop 3,000 square feet</p>	<ol style="list-style-type: none"> 1. Center of creativity and innovation (b) Creating. Physical spaces with additive (3D printers) and subtractive tools, equipment and materials for creating (c) Bringing people together to design, build/create solutions to problems 2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (a) Workforce pathways 3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) (a) STEAM talent development (b) STEAM workforce pathways <p>Note: This space would be available to multiple providers on a fee for service basis Rates charged would be based on a sliding scale with highest rates charged during peak demand</p> <p>Rooms would be equipped with equipment/ tools, technologies and IT support. The space would be equipped for hands on work needed to invent, build and fabricate</p>	<p>Naming rights Use of space fees Grants</p>
<p>Lobby & Gallery 1,000 square feet</p>	<ol style="list-style-type: none"> 1. Center of creativity and innovation (a) Sharing STEAM talents 	<p>Naming rights Use of space fees Fundraising events</p>

	<p>2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (a) Workforce pathways</p> <p>4. Capitalize on commercial success of Kendall Square's redevelopment (a) Social connections and networking (b) Feature neighborhood strengths in the Foundry</p> <p>Note: We estimate that this space could be supported by use of space fees and fundraising events</p>	
<p>Classrooms 4,000 square feet</p>	<p>1. Center of creativity and innovation (a) Sharing STEAM talents (c) Bringing people together to design, build/create solutions to problems (d) Entrepreneurship: Making connections with resources needed to patent, or to launch new businesses or services</p> <p>2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (a) Workforce pathways</p> <p>3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) (a) STEAM talent development (b) STEAM workforce pathways</p> <p>4. Capitalize on commercial success of Kendall Square's redevelopment (a) Social connections and networking (b) Feature neighborhood strengths in the Foundry</p> <p>Note: This space would be available to multiple providers on a fee for service basis. Rates charged would be based on a sliding scale for non- profits and for-profits Rooms would be equipped with technologies and IT support. We estimate that 3-4 classrooms would be possible</p>	<p>Naming rights Use of space fees</p>
<p>Artist Studios 3,000 square feet</p>	<p>1. Center of creativity and innovation (b) Creating. Physical spaces and equipment for creating</p> <p>3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) (a) STEAM talent development</p> <p>Note: We estimate up to six one-two year short-term rentals</p>	<p>Short-term rentals below market rate</p>

Office-Non-Profit 5,000 square feet	2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (b) Internships and Day-to-Day Needs of the Community	Below market leases
Office-Market Rates 15,500 square feet	<p>1. Center of creativity and innovation (c) Bringing people together to design, build/create solutions to problems</p> <p>2. Create mentorships, internships, apprenticeships, workforce training, and educational programs (b) Internships and Day-to-Day Needs of the Community</p> <p>3. Training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) (c) STEAM Recruitment by Tending to Neighbors' Day-to-Day Needs (retail)</p> <p>Note: We estimate that the Cambridge Redevelopment Authority will occupy up to 2,000 square feet The Lemelson-MIT Program staff will occupy 3,000 sf. Both constitute 'anchor tenants' and long-term rentals We estimate up to five additional long-term rentals Possibilities include retail that would bring residents into the building and/or office space for STEAM oriented businesses committed to being a part of Foundry offerings, studio space for industry sponsored externships that afford opportunities for mentorship, apprenticeship and workforce training as well as training opportunities in the areas of science, technology, engineering, arts, and math (STEAM), and/or co-working space</p>	Short and long-term leases at market rate
Total Net Space 38,500 square feet (net floor area)	Note: Costs of fee for service space rentals will be incorporated into grant proposals and fundraising efforts undertaken by Foundry operations staff for programmatic efforts that address the needs of community residents and area businesses	
Shared Spaces	33% of gross square footage	
Total Gross	50,000 square feet	

4.2 Proposed Schedule of Program Offerings

We have created a hypothetical daily schedule during a school vacation week to demonstrate the types of offerings the Foundry Consortium envisions as being aligned with the uses and needs of diverse audiences as described above.

Monday	Tuesday	Wednesday	Thursday	Friday
8:30 – 10:30 am Drumming, Rhythm and Math play for parents and preschoolers <i>Classroom</i>	10:00 – 2:00 Session 1: Weekly coding class <i>Classroom</i>	9:00 – 5:00 Teacher professional development <i>Classroom</i>	9:00 – 5:00 Nonprofit annual off-site strategy meeting <i>Classrooms</i>	10:00 – 12:00 Painting 101 <i>Shared studio space</i>
9:00 – 4:00 School vacation camp for young makers and inventors <i>Workshop</i>	9:00 – 4:00 School vacation camp for young makers and inventors <i>Workshop</i>	9:00 – 4:00 School vacation camp for young makers and inventors <i>Workshop</i>	9:00 – 4:00 School vacation camp for young makers and inventors <i>Workshop</i>	9:00 – 4:00 School vacation camp for young makers and inventors <i>Workshop</i>
6:00 – 8:00 Town Hall Meeting with elected representative <i>Black Box Theater</i>	6:00 – 10:00 Workshop Walk-In (open maker time) <i>Workshop</i>	6:00 – 8:00 Community garden planning group <i>Community Room</i>	6:00 – 9:00 Chemistry of Cooking <i>Cafe</i>	5:30 – 8:30 Foundry Fundraiser <i>Lobby Gallery</i>
Saturday	Sunday			
10:00 – 4:00 STEAM Hackathon for kids 8-12 <i>Workshop</i>	10:00 – 4:00 Foundry Flea Market (including Foundry artists and makers) <i>Roger Street, Courtyard, and Lobby</i>	<p><i>“I begin to imagine what happens when minds and bodies of all ages learn and grow in new ways when introduced to the technologies and creative processes of a STEAM mentality...”</i></p> <p>Peter DiMuro, Executive Artistic Director, The Dance Complex</p>		
6:00 – 8:00 Film on climate change, local documentarian <i>Black Box Theater</i>	4:00–6:00 Seniors Sunday: Story Crafting through Images <i>Community Room</i>			

A Day in the Life of the Foundry

Morning at the Foundry: As people arrive for work in the Foundry, they stop off at the coffee cart in the café and linger for the weekly morning meet-up, where they can get to know their Foundry colleagues better and learn about upcoming activities throughout the space (including performances, lectures, volunteer and mentoring opportunities, and classes). As they head up to their work spaces, they may pass the

Community Room, where a neighborhood group is meeting to plan for an upcoming fundraiser; or a classroom, where youth workers, volunteers from local companies, and college students are planning a week-long camp for students from the high school extension program.

Afternoon arrives: Hungry workers head down to the café, where they can choose from three food carts from local restaurants. There’s a buzz, because it’s the first day in the Foundry for one of

the carts and people are excited to try the ramen they've been hearing so much about. People find seats in the café where they meet their work neighbors and make business connections, or make their way to the community room where a talk has been scheduled on lifelong learning techniques. An event coordinator is busy setting up a classroom for a local non-profit, whose board is convening for their biannual meeting. Next door, another coordinator is getting another classroom ready for a class that will help artists learn how to make a living from their creations being offered later that afternoon by Bunker Hill Community College.

Down in the workshop space, Nate Ball is setting up to film an upcoming episode of Design Squad. High school interns assisting Nate earn credit and learn about production tech. Middle school students from a neighborhood school will soon arrive to be filmed as they build prototypes for the design challenge. Once the episode is done shooting and everything's cleaned up, another group of students will arrive for their regular after school program, in which they work to invent a solution to a local community problem.

Evening sets in: Some workers linger in the lobby gallery before heading home, to see the newly unveiled art and technology project debuted by the artist-in-residence. Members of the public arrive, and soon there's a line at the pop-up bar and a fascinated crowd is walking through the installation, getting a glimpse of the possibilities for creative collaboration.

In the Black Box theater, there's a rehearsal going on for a dance piece that will debut next week. The artistic director is in the workshop with interns from local engineering colleges, who are supervising high school students on one side of the room as they build elements of the set for the dance performance. On the other side, employees from local company, Ministry of Supply, are guiding students to create costumes for the dancers with electronic textiles.



5.0 APPROACH TO FULFILLING OPERATOR ROLES AND RESPONSIBILITIES (EVALUATION CRITERIA 7)

The Foundry vision outlined above will be realized through the actions of members in the Foundry Consortium and the Core Team. Contractors will help to ensure the full-range of knowledge and expertise needed for these three roles:

5.1 Program Management and Outreach

The program management role within the Foundry Consortium will be filled by two co-leads: Lesley University and the Lemelson-MIT (LMIT) Program. Lesley University will lead programming and the rental of Foundry space most conducive to the arts (i.e. the gallery, artist studios and Black Box/performing arts space). LMIT will lead programming and the rental of space most conducive to STEAM and workforce development (i.e. the workshop, classrooms,

the community room, and the cafe). All entities are highly aware of the exciting programming opportunities that exist in the interstices of STEAM as well as other fields and disciplines, and that interdisciplinary efforts have unrealized potential. Therefore, they will work together to secure grants and sponsorships and will intentionally facilitate new program development that fosters integrated approaches to learning and to the creation of new products, services, and/or artistic creations.

5.2 Property Management

An experienced property management firm will be selected through a subsequent RFP process to support the day-to-day running of the Foundry. Extra points will be awarded to firms willing to participate in local employment engagement efforts.

5.3 Subtenant Recruitment, Selection and Participation (Evaluation Criteria 5)

Initial tenants/subtenants who will lease office space include the Cambridge Redevelopment Authority (CRA), the Lemelson-MIT Program and the Foundry Consortium staff once the independent 501 (c) (3) is established. A subset of the initial Foundation Consortium members will use shared spaces for a fee. Additional subtenants and groups who will use shared spaces on a fee for service basis will be identified and recruited by the Foundation Consortium based on their ability to fulfill needs for Foundry programming that align with residents' interests/needs. After initial occupancy, vacancies will be filled in a similar manner. Formal processes will be developed by the Core Team, with input from initial Foundry Consortium members, for prioritizing use of shared spaces (i.e. all spaces except for non-profit and market-rate offices) on a fee for service basis. The Foundry Consortium will recruit tenants for the office leases based on their potential to contribute to programming

in the building desired by residents and their fiscal viability (i.e. ability to ensure the financial sustainability of the Foundry Consortium). The leases will be between the entity and the CRA, and the CRA will be compensated for any staff time spent executing the leases. Tenant recruitment materials will lay out the mission and values of the Foundry and expectations for Foundry tenants beyond their financial obligations. STEAM Roundtable members and those on a mailing list of residents who participated in Foundry offerings will be notified when vacancies arise in the leased spaces. Applications from prospective tenants will be reviewed and ranked by the Core Team in accordance with a publicly available rubric consisting of criteria that measures the suitability of applicants to the Foundry mission. This approach will ensure that space in the Foundry is used in ways that add value to the STEAM and the invention/innovation ecosystem supporting young people and their families with learning and workforce development needs. The CRA will be invited to designate a participant to represent the city's interests, or regular reports could be provided about the tenant vetting process to ensure that the agency and the city are fully informed.

5.4 Other Program and Property Management Functions (Evaluation Criteria 4 and 5)

The Lemelson-MIT Program will serve as the lead entity for the Core Team managing the Foundry in concert with the Foundry Consortium, and will be responsible and accountable for outcomes in all three areas: program management and outreach, property management, and subtenant recruitment and selection. As the lead, the Lemelson-MIT Program will have the prime responsibility and will be held accountable for all deliverables to the CRA.

The planned distribution of roles across identified areas of responsibility are summarized in Table 7.

Table 7: Foundry Consortium Core Management Team Roles and Responsibilities

Management Team Roles	Distribution of Responsibilities
Program Management and Outreach: Lesley University & LMIT	<ol style="list-style-type: none"> 1. Programming recruitment and/or program development through partnerships for spaces rented on an hourly basis 2. Fundraising and grants management to resource program opportunities at the Foundry 3. Master scheduling and the selection process for determining what is offered when and by whom in spaces available on an hourly basis 4. Support the Foundry Consortium’s outreach with neighborhood residents, Kendall Square and others to identify needs, opportunities and to develop community partnerships
Property Management: TBD contractor hired through a competitive process	<ol style="list-style-type: none"> 5. Tenant contracting in accordance with provisions specified by the lead entity 6. Building management, including security, cleaning, repairs and maintenance
Subtenant Recruitment and Selection: LMIT and Foundry Consortium	<ol style="list-style-type: none"> 7. Tenant recruitment (in tandem with the Foundry Consortium) for the non-profit and market rate office space (and possibly the café) in accordance with the designated uses, goals and objectives
Crosscutting: LMIT with input from the Foundry Consortium	<ol style="list-style-type: none"> 8. Marketing and communications for the Foundry, the Foundry Consortium, and the STEAM Roundtable. Contract for support with community engagement 9. Maintenance of the master calendar of what is being offered in the spaces available on an hourly basis 10. Determining fee structures for spaces in the building that will allow for fiscal sustainability after offsets available from fundraising and grants 11. Internal coordination with Foundry tenants, program providers & the CRA/City, and the Foundry Consortium, and external facilitation of and coordination with STEAM Roundtable partners 12. IT support for tenants and those renting space for programs or events 13. Fiscal accounting and reporting related to building operations, fees collected for services and events, and fundraising/grant revenues 14. Data collection, analysis and reporting in accordance with agreements with the Cambridge Redevelopment Agency and the City of Cambridge for the space lease as well as to those who lease/rent space and those who provide financial support for programming and/or operations 15. Volunteer or intern recruitment and management 16. Payroll and benefits 17. Contract management 18. Insurance certifications 19. Health and safety procedures/certifications

Strategies identified for each of the areas of responsibility are shown in Appendix 11.2.

5.5 Strategy for Managing Risk at the Foundry (Evaluation Criteria 4)

There will be numerous risks posed by Foundry operations, given the number of uses for the space, as well as the broad range of users. An analysis must be performed for each sub-space, with an assessment of the potential risks, how to prevent them and minimize liability, and how to deal with any adverse events that may arise in order to limit loss/damage/injury. Depending on the uses of individual spaces, potential hazards may include:

- Machine/tool/materials misuse and malfunction
- Chemical/ventilation hazards or gas leaks
- Circuit overload
- Fires
- Accidents arising from poorly designed/managed facilities, e.g., bad lighting or wet floors
- Nuisance, noise, and pollution
- Unwanted physical interactions from adults coming into contact with youth under 18
- Natural disasters
- Overcrowding – beyond occupancy limits

After identifying all possible risks, a well-rounded risk plan will be created by LMIT and the property management company that addresses training and certification levels needed for staff managing space, equipment, and/or programs, safety policies, practices and/or evidence of background checks required of space users, user training, regular assessment of tool/equipment/systems functionality, and emergency response policies and practices.

5.6 Shared Use and Hours of Operation (Evaluation Criteria 4)

Table 6 lists the spaces that will be available in the Foundry and the possibilities for shared use.

We anticipate that the building will be open for regular business seven days a week between the hours of 8:00 a.m. to 9:00 p.m. However, until we know more about demand for special events programming and related revenue possibilities, we will remain flexible. Strategies will ensure that we can maximize the use of the space, access for residents, and cost recovery.

5.7 Creating a Welcoming Environment of Shared Use

Our goal is to create a physical space in which staff and visitors experience a sense of opportunity and belonging. We envision warm and welcoming staff who also ensure safety within the building at each entrance. We will work with the architects and space planners to consider needs for day-to-day transitions between uses of the space that facilitate a positive climate for all. It will be very important to design the space so that there are clearly defined boundaries among areas with different purposes. For instance, tenant office/kitchen/bathroom space will have different access points than public areas used for the arts or education.

Tenants must be able to work in relative quiet and security. Similarly, it will be very important to create clear policies for all the different use spaces so that users, no matter who they are, have a clear understanding of expectations for their use of the space and can be held accountable for failing to meet those expectations.

The Foundry will execute its vision by creating cohesion among diverse stakeholders. This vision will be balanced between the larger community needs and the individual requirements of its tenants. Scheduling the use of common/public spaces will be overseen by the Foundry Core Team. Foundry space and time will be divided fairly among revenue-raising opportunities for the Foundry, time for tenants to execute their business/programs, and activities that serve as a broader community resource. It may be that

some of the space will be common only to those who work in the building, while some will be available to all stakeholders based on specific use and timing rules. Shared calendars will allow for different viewing and editing privileges, depending on the user, with the Foundry operations team having general oversight.

5.8 Space Needs for Operator Programmatic Functions (Evaluation Criteria 5)

We anticipate that the Foundry Consortium will have staff in place in year one of the Foundry operations in accordance with the Operator role that they will take over pursuant to this proposal. We estimate that the consortium will need roughly 1,200 square feet and that its facilities cost will be paid through fees received from building operations. In addition, the Lemelson-MIT Program will require 3,000 square feet as a long-term lease if it is to be housed in the building, but expects to pay market rent for its use of Foundry space, paid from separate revenue streams. Lemelson-MIT will also be one of the many programs renting classroom, workshop and other spaces for its programs.

5.9 Anticipated Concerns and Strategies to Address Unfunded Needs

The Core Team must support: 1) the Foundry as a community resource; 2) the needs of tenants and those using shared space on a fee basis; and 3) the integrated efforts and accomplishments of the STEAM Roundtable and the Foundry Consortium action groups. It must also be a champion that increases the investments needed by partners in the STEAM ecosystem to succeed in efforts that help young people and their families. Finally, the Foundry project must build a reputation as a model for civic engagement and reputation as a national center of excellence which others can visit and from which they can learn.

Fiscal projections support our model in which rents, fees and fundraising efforts sustain Foundry operations. However, the programmatic desires of residents and program providers cannot be supported by rents alone. There is a risk, therefore, that the desires and expectations of residents who are concerned about programs versus space cannot be met. The entities serving on the Core Team will endeavor to raise dollars for program needs. Pre-occupancy fundraising could include, but is not limited to, the following:

- Developing a core group of supporters and champions that have the capacity to become sustaining donors
- Raising sponsorships, which could include naming rights within the building
- Holding fundraising events, including community-based gatherings to raise awareness and build buy-in
- Establishing a seed/capital fund from local business and foundation donations
- Soliciting grants from foundations and businesses for specific aspects of Foundry programming
- Creating connections and raising awareness of the Foundry opportunities

The Foundry Consortium and Core Team will address the conditions of funders and supporters and will make commitments to the entities who are contributing funds that support programming needs. This work will depend on timely and transparent communications among all parties. This work also will ensure that the timing of the building's availability for occupancy and the timing of programmatic commitments are fully aligned with one another.

6.0 Timeline (Evaluation Criteria 7)

We anticipate a building occupancy date of January 2021 if not sooner, with a celebratory opening day in February 2021, and the goal of

full occupancy by tenants and those renting space by March 2021. Working backwards from this date, we anticipate the schedule and key milestones shown in Table 8.

Table 8: Preliminary Timeline for Foundry Operations and Management

Date	Milestone
Year 3	
April 2021 (or earlier if possible)	Foundry Consortium begins its transition to an independent non-profit and self-sustaining entity
March 2021	Full occupancy at the Foundry & fully operational Foundry Consortium
February 2021	Opening Day celebration
January 2021	Building available for occupancy
Months 7-12	Ongoing engagement of STEAM Roundtable & Action Groups Orientation of new Foundry Consortium partners and new Foundry tenants
Months 4-6	Assessment of progress of STEAM Roundtable & Action Groups in relation to input from the neighborhood listening sessions Reassessment of Foundry programming in relation to initial Foundry Consortium partners. Plans for ensuring alignment of offerings with need/demand
Month 1-3 (April – June, 2020)	Ongoing Engagement of STEAM Roundtable & Action Groups to develop and implement strategies for filling gaps in programming Neighborhood listening sessions to check-in on current needs and alignment with planned Foundry offerings and strategies (including but not limited to East Cambridge) Ongoing consultation with Foundry tenants
Year 2	
Months 7-12	Engagement of STEAM Roundtable & Action Groups in identifying strategies for filling gaps in STEAM programming Engagement of initial Foundry Consortium partners in identifying and recruiting new tenants, renters and potential funders who fill gaps in what is needed but not yet present in the Foundry
Months 4-6	Engagement of STEAM Roundtable & Action Groups in identifying gaps in STEAM programming Engagement of initial Foundry Consortium partners (including tenants) surrounding program offerings and ways of addressing community needs
Month 1-3 (April – June, 2019)	Initial formation of the STEAM Roundtable & Action Groups Neighborhood listening sessions to identify needs and alignment with initial Foundry Consortium partner offerings (including but not limited to East Cambridge) Engagement of initial Foundry Consortium partners (including tenants) surrounding logistics of Foundry space operations & schedule management
Year 1	
Months 6-12	Engagement of STEAM Roundtable & Action Groups in mapping assets and considering residents' input Outreach to an East Cambridge neighborhood advisory group Engagement of initial Foundry Consortium partners (including tenants) in review and planning for work at the Foundry to address residents' input

Months 4-5	Initial formation of the STEAM Roundtable & Action Groups Neighborhood listening sessions & work with design firm (including but not limited to East Cambridge)
Months 2-3	Agreements in place with Foundry Consortium partners RFP process to secure the services of an established property management company to support building management functions at The Foundry Data collection agreements and systems established for reporting purposes
Month 1	Agreements in place with CRA and orientation
April 2018	Operator announcement

7.0 Staffing and Organizational Plan (Evaluation Criteria 7)

Executing on the mission of the Foundry is paramount. The Foundry Consortium has developed a staffing and organizational plan that brings a wide range of expertise and skills to the effort. Members of the proposed Core Team, consistent with the organizational structure described earlier and depicted in Figure 5, consist of representatives from Lesley University, the Lemelson-MIT Program and the Property Management firm. Their respective areas of responsibility are shown in Table 7 and summarized in Table 9. We then list other staff that will need to be hired to support the Core Team. Given the plan to make heavy use of college students from area colleges and universities, other volunteers, and interns, we have included a position that will help with coordination of these individuals. Proposed contractors, that will do work subject to an RFP process in which they would have to recuse themselves from voting as members of the Foundry Consortium, are shown in Table 10.

We anticipate that the staffing needed to operate the physical building will be part of a building management contract selected via an RFP process as noted earlier. We envision that the contracted property management services summarized in Table 9 would include:

- Leasing
- Site manager for general oversight of the building space and security
- Augmentation of security as needed, or outsourced for special events where it is warranted
- Financial coordination/management –payroll for building operations staff, tenant billing, accounts receivable/payable for leases and rents, monthly/annual reconciliation and reporting
- Human resource management for building operations
- Custodial services
- General maintenance
- Contracting for larger maintenance projects

Qualifications for the selection of the property manager specified in the RFP would include elements such as:

- Must have a track record of building management
- Must be reputable as a building operator in Cambridge
- Must be 'bankable' (financial capacity)

Highly desirable qualifications for potential operators with the above skills and experience are women and /or minority owned and/or operated business enterprises. Examples of the entities we would seek proposals from include, but are not limited to, Jones Lang and LaSalle, Maloney Properties, United Housing Management, and Winn Companies.

Table 9: Foundry Operations Core Team

Entity, Key Contacts and Core Expertise	Areas of Responsibility
<p>Lesley University Martha McKenna Sue Cusack</p> <p>Management of arts programming, partnerships and grants</p>	<ul style="list-style-type: none"> - Programming recruitment and/or program development for spaces rented on an hourly basis most conducive to the arts (Black Box, lobby/gallery, and artist studios) - Fundraising and grants management to resource program opportunities at the Foundry - Master scheduling and the selection process for determining what is offered when and by whom in spaces available on an hourly basis, most conducive to the arts (Black Box, lobby/gallery, and artist studios) - Tenant recruitment (in tandem with the Foundry Consortium) for the non-profit and market rate office space in accordance with the designated uses, goals and objectives
<p>Lemelson-MIT Program</p> <p>Stephanie Couch Betsy Boyle Michael Cima Leigh Estabrooks</p> <p>STEM Programming, STEAM partnerships, education and workforce development</p>	<ul style="list-style-type: none"> - Programming recruitment and/or program development for spaces rented on an hourly basis most conducive to STEM (community room, café/kitchen, workshop, classrooms) - Fundraising and grants management to resource program opportunities at the Foundry and at other sites participating in the STEAM Roundtable - Master scheduling and the selection process for determining what is offered when and by whom in spaces available on an hourly basis most conducive to STEM (community room, café/kitchen, workshop, classrooms) - Tenant recruitment (in tandem with the Foundry Consortium) for the non-profit and market rate office space in accordance with the designated uses, goals and objectives
<p>Lead responsibility (accountable to the CRA) for operations and management functions</p>	<ul style="list-style-type: none"> - Outreach with neighborhood residents, Kendall Square and others to identify needs, opportunities and to develop community partnerships - Marketing and communications for the Foundry, its partners, and the STEAM Roundtable - Maintenance of the master calendar of what is being offered in the spaces available on an hourly basis - Determining fee structures for spaces in the building that will allow for fiscal sustainability after offsets available from fundraising and grants - Internal coordination with Foundry tenants, program providers & the CRA/City of Cambridge, and external facilitation of and coordination with Action Groups and STEAM Roundtable partners - IT support for tenants and those renting space for programs or events - Fiscal accounting and reporting related to building operations, fees collected for services and events, and fundraising/grant revenues - Data collection, analysis and reporting in accordance with agreements with the CRA and the City of Cambridge for the building lease as well as to those who lease/rent space and those who provide financial support for programming and/or operations - Volunteer or intern recruitment and management - Payroll and benefits - Contract management - Insurance certifications - Health and safety procedures/certifications
<p>TBD Building Manager (Selected via an RFP process)</p>	<ul style="list-style-type: none"> - Tenant contracting in accordance with provisions specified by the lead entity - Building management, including security, cleaning, repairs and maintenance, etc.

Positions to be filled by LMIT on behalf of, and in consultation with, the Foundry Consortium to further support building and program operations (preferably with hires from the local community) include:

- Interim Foundry Consortium Director who would handle all aspects of the Foundry (1 FTE) *
- Interim Foundry Consortium Associate Director who would staff the action groups and manage data collection, analysis, and reporting (1 FTE) *
- Administrative Assistant to serve as receptionist/concierge for shared office

space, coordinate scheduling for rentable Foundry spaces, and support Director and Assistant Director

- Financial manager for AP, AR, grants, payroll (1 FTE)
- Event Coordinators (1.2 FTE) – Provide logistical coordination for rentable space

** Costs of Associate Director and Director positions to be offset by grants as proposals for new programmatic efforts are funded.*

Other positions to be filled pursuant to a contract for services are shown in Table 10.

**Table 10: Other Potential Contracted Support for the Foundry Operations Team
CONTINGENT ON RFP PROCESS**

Entity, Key Contacts and Core Expertise	Role(s)
Grant Writer	Assist with proposal development for funders
IT Company	IT support for tenants and those renting space for programs or events
Marketing and Communications Firm TBD	Assist with communications about Foundry offerings, space rental/lease and its successes
Management of Workshop Space*	Ensure use of tools and materials complies with health and safety requirements, and that users have proper training and support
Community Engagement**	Conduct neighborhood engagement efforts in the initial planning stages and on a periodic basis to ensure that the initial offerings are responsive to residents' needs and logistics surrounding the ability to take advantage of offerings Assist with staffing the STEAM Action Groups

* Potential contractors include the Fab Foundation, Parts and Crafts, or an educational entity such as Bunker Hill Community College District

**Potential contractors include Ron Mallis, Boston AppLab, Joan Squeri, Healthy Communities Capital Consulting, and Jeane DuBois, JA DuBois Consulting Associates

Staffing Experience and Qualifications

The initial Foundry Consortium partners bring a wealth of experience and insights to the conceptualization and launch of operations at the Foundry. We briefly describe in Table 11 which members specialize in the five areas referenced in the CRA RFP (p.12).

Contracted support for the Foundry Operations Team will bring additional expertise in the areas of property management, IT, marketing and communications, management of the workshop space in accordance with health and safety concerns, grant writing, and community engagement.

Table 11: Summary of Expertise on the Foundry Consortium in Areas Referenced in the CRA RFP

1. Creation of Programs with innovative operating models and tenaning strategies, including the incorporation of uses providing a public benefit and/or a mix of market and non-market rate tenants

Dr. Couch's prior experience as a legislative advocate in California specializing in school finance and her experiences as Education Consultant for two Speakers of the State Assembly have given her keen insights into innovative operating models for public/private partnerships. Additional expertise will be added to the core team through its contract with a property management firm with in-house leasing expertise.

2. Creation of programs focusing on arts, science, technology, engineering, mathematics and/or workforce development

Dr. Couch has received numerous awards for her work in establishing and facilitating a multi-stakeholder regional STEAM education 'network' across two Bay Area counties in California. She has shared her approach to creating cross-sector community partnerships with other regions of California and has been active with the STEAM partners in Cambridge since arriving a year ago as a new resident of Cambridge. She also brings expertise in teaching and learning with technology, experience working with youth oriented community technology centers and all levels of education (K12, community colleges, state colleges/universities), and research expertise as an ethnographer (help with documenting Foundry impact on people's lives).

Dr. Estabrooks brings experience in the private sector in product research and development, and deep expertise in teaching young people and educators how to invent solutions to problems they find in their local communities. She has helped more than 600 teachers across the U.S. learn to teach middle and high school students to invent technological solutions for real world problems.

Dr. Cima brings valuable insights to the STEAM programming envisioned within the Foundry as an inventor, a professor in the School of Engineering at MIT for 31 years, and a co-founder of numerous companies.

Dr. McKenna brings experience in integrating the arts across the STEM disciplines in her teaching in the Creative Arts in Learning program at Lesley and her leadership of the Creativity Commons to support innovation in teaching and learning across the university.

Dr. Cusack brings experience in creating inclusive opportunities for learning in STEAM through hands-on, authentic, and culturally responsive maker activities.

3. Negotiation of successful partnerships, including partnerships with property managers and operators, and public entities

Both Dr. Estabrooks and Dr. Couch have been heavily involved in the design and construction of new schools and school renovations where multiple voices must be heard and addressed. Couch was an elected member of a school board in Calif. that built a new elementary school and passed a large bond measure to renovate the 82 existing schools.

Dr. Cima is an inventor/co-inventor on more than 80 patents including MIT's three-dimensional printing process, co-founder of numerous drug delivery and medical diagnostic companies, and senior consultant and management team member for other companies. He has served as Faculty Director and has managed the Lemelson-MIT Program for over 8 years.

Dr. Couch is a former partner in a contract lobbying firm where she worked closely with numerous for-profit and non-profit organizations to advance their missions while supporting their operations and fiscal viability. She also served as interim Associate Vice President for Research at a college in California in which she was responsible for contracts and grants management, and compliance with numerous regulatory requirements.

Ms. Boyle has 25 years of non-profit management experience. She specializes in managing operations, including finances, administration, information technology and databases, physical plant, and events. In addition, she has managed annual fund campaigns, and collaborated on grant proposals and corporate sponsorship campaigns. Previously, Ms. Boyle managed programs focusing on green building and energy efficiency. This included bringing together diverse stakeholders to achieve common goals, creating frameworks to guide organizations in sustainability efforts, and building greater awareness of climate change as it relates to our built environment. She has served on the Cambridge Climate Protection Action Committee for over ten years.

4. Negotiation of subleases with tenants and users similar to those proposed for the Foundry Building

Ms. Boyle has managed relocations of offices and tenant fit-outs/renovations, including design collaboration. Her expertise will be supplemented by the property management company selected through a RFP process.

5. Evidence of their ability to secure tenants including any existing relationships, partnerships or collaborations, past projects, or proposed strategies

As noted above, LMIT has been able to generate interest in space rental and leases from a number of entities during efforts to secure support for this proposal. Those who have documented their interest in their support letter or in our online survey include ADD. Focused outreach efforts will be conducted once there is more information about the types of programming desired by neighborhood residents.

8.0 BUSINESS MODEL (EVALUATION CRITERIA 8)

8.1 Chart of Uses and/or Tenants by Floor Area

Uses of the building by floor area and key assumptions are shown in Table 12. Our proposal assumes that the 5,000 square feet non-profit office space and 15,500 square feet market rate

office space will mainly be long-term leases, with the possibility of a co-working/private office hybrid. The remaining space in the building will be shared by numerous program providers and other uses on a fee-for-service basis. The initial groups expressing interest in leasing or using space for program offerings appears earlier in

Table 12: Uses and/or tenants by floor area

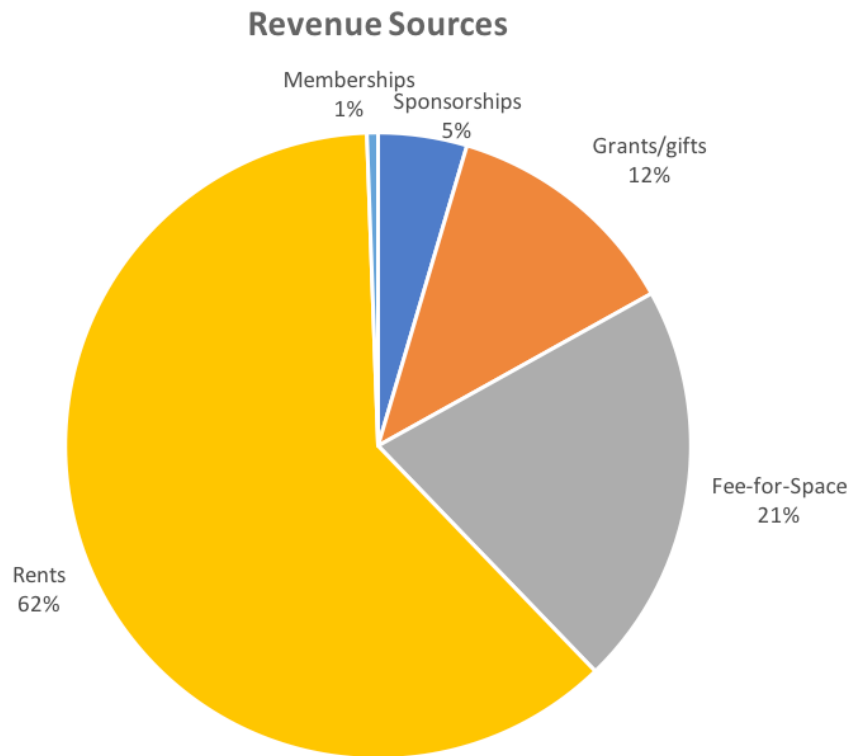
Program Element & Floor Area (net square feet)	Use of Space & Tenant Assumptions
Large Community Room 3,000 square feet	Meetings, events, regular community programming Foundry staff will manage scheduling for the Community Room There will be multiple entities using the space; some may have regularly scheduled use (e.g., every Wednesday 10:00 - 12:00); most will be one-time use Potential users: Community members, NGOs, For-Profits, Tenants (for discounted additional fee)
Classrooms/Multi-purpose rooms 4,000 square feet	Operator will oversee scheduling for classrooms, coordinating with STEM and Arts Operators There will be multiple entities using the space; some may have regularly scheduled use (e.g., every Wednesday 10:00 - 12:00); most will be one-time use Potential users: Community members, Educational/Training Institutions, other NGOs, For-Profits, Tenants (for discounted additional fee)
Black Box Theater 3,000 square feet	Performance, private events, community events Arts Operator will manage scheduling for theater space There will be multiple entities using the space; some will have short-term leases (e.g., one month afternoons/evenings for a specific production), others will use one-time only Potential regular users: Jean Appolon Dance
Workshop / Maker Space 3,000 square feet	Hands-on STEAM activities Maker Operator will manage scheduling for the workshop/maker space There will be multiple entities using the space; some will have short-term use agreements (e.g., a certain number of afternoons during school year, or full days during school vacations); others will use for one-off sessions; and there will be open use time for individuals and small groups Potential regular users: Cambridge schools, NGOs, community colleges, community members
3,000 square feet total assumes: 15 10x10 individual artist studios and 4 20x20 shared artist/class studios	Individual artists will be able to rent their own studio space, and some larger studios may be rented by multiple artists to share, or be used as community art spaces for classes or open arts time
Kitchen / Café 1,000 square feet	Four carts will offer food and drink, with open space for seating Assumes minimal food prep, so basic kitchen amenities for carts -- refrigeration, water, waste, basic prep/cooking space Assumes carts operate M-F during normal business hours, and that off-hours the space will be available for private functions Assume cart rental terms will vary, with change-over potentially running from one day to a year (e.g., a coffee cart). Allows variety of cuisines and businesses to run in the space. Off-hours users may be tenants, community members, NGOs, for-profits

Gallery 1,000 square feet	Gallery space may be used by artist studio renters, Foundry arts programmers, community members, other tenants, and the maker space Assumes normal use is walls only, leaving space for events and gatherings Space use fees for tenants, community members, NGOs, for-profits
Non-profit Office 5,000 square feet	A hybrid private office/co-working space, with shared resources such as kitchen and meeting rooms Non-profit: Assumes mix of 1-3 small/medium NGOs, who may need private/shared offices, but who could share common resources For-Profit: Assumes 1-2 tenants
Market Rate Office 5,500 square feet	

8.2 Rents and Other Revenue Sources According to Use

Table 1.
As noted earlier, revenue sources will include:

- Sponsorships of individual spaces in the Foundry, with naming rights for varying time periods (e.g., four-year naming for the Black Box Theater)
- Grant funding to support programming in various spaces
- Fees for use of space for all areas except office space. Fees charged will vary for non-profits and for-profits, with free use or nominal fees by community members
- Memberships for open use time in the workshop
- Gifts/donations as part of annual fund
- Rents for office space and café carts



The mix of revenues will vary for each space within the Foundry. Projecting over ten years, we expect average annual revenues to be \$1.7M.

8.3 Building Operations Costs

The following operational costs have been included in the business plan, based on rates per square foot:

- Cleaning
- Repairs and maintenance
- Utilities
- Landscaping
- Security
- Administrative
- Management fee
- Taxes
- Insurance

In addition, contracted work is included for the following services:

- IT
- Community Engagement
- Grants writing
- Marketing
- Workshop space management

Note that the Lemelson-MIT Program has included a management fee for the first year of operation, as operations are transitioned to Foundry Consortium staff.

8.4 Payments into the Capital Reserve Fund

Included in the budget is an assumption that \$200,000 per year will be paid into a Capital Reserve Fund to cover building updates every 10-12 years, with a \$2M+ pool available for such needs at the end of the first period.

- We assume that rents will escalate \$1/year/square foot
- In the first year, as a contingency we have included a 30% vacancy rate, though we expect to be fully leased before Foundry

operations commence. In each year thereafter, we calculated a 10% vacancy rate. This is for office space only.

- Inflation is assumed at 2% each year.

8.5 Assumptions about Rents and Other Calculations

The approaches described above result in revenues of \$1.54M in Year 1 and \$1.62M in Year 2, with steady growth thereafter as depicted in Table 13. This compares with expenses of \$1.57M in Year 1 and \$1.52M in Year 2, with growth in all subsequent years. A chart with detailed revenue and expenses appears in Appendix 11.3. The budget for building operations is balanced, but does not address the need for funds for program development and community engagement during the next three years (i.e. the development phase). We would like to explore the possibility of using some of the one million (\$1,000,000), earmarked for pre-occupancy tenant recruitment and program ramp-up in the first year, earlier in the pre-operational years. This would assist with costs related to community engagement in the planning and development. We will also be working to secure third-party donations for this purpose.

Table 13: Summary of Ten-Year Cash Flow (see Appendix 11.3 for detailed cash flow)

SOURCES	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Sponsorships	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000
Grants/gifts	\$ 175,000	\$ 187,500	\$ 193,750	\$ 200,625	\$ 208,188	\$ 216,506	\$ 225,657	\$ 235,723	\$ 246,795	\$ 258,974
Fee-for-Space	\$ 352,348	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848
Net Rents	\$ 782,900	\$ 1,037,550	\$ 1,054,800	\$ 1,072,050	\$ 1,089,300	\$ 1,106,550	\$ 1,123,800	\$ 1,141,050	\$ 1,158,300	\$ 1,175,550
Membership	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Total Sources	\$ 1,390,248	\$ 1,669,898	\$ 1,693,398	\$ 1,717,523	\$ 1,742,336	\$ 1,767,904	\$ 1,794,305	\$ 1,821,621	\$ 1,849,943	\$ 1,879,372
USES*										
Foundry staffing	\$ 415,736	\$ 428,208	\$ 441,054	\$ 454,286	\$ 467,915	\$ 481,952	\$ 496,411	\$ 511,303	\$ 526,642	\$ 542,441
Building operations	\$ 748,408	\$ 759,062	\$ 765,633	\$ 774,363	\$ 783,260	\$ 792,326	\$ 801,566	\$ 810,982	\$ 820,578	\$ 830,359
Contractors	\$ 316,078	\$ 235,783	\$ 240,499	\$ 245,309	\$ 250,215	\$ 255,219	\$ 260,324	\$ 265,530	\$ 270,841	\$ 276,258
Capital reserve	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Total Uses	\$ 1,680,222	\$ 1,623,053	\$ 1,647,186	\$ 1,673,958	\$ 1,701,389	\$ 1,729,498	\$ 1,758,300	\$ 1,787,815	\$ 1,818,061	\$ 1,849,057
NET	\$ (289,974)	\$ 46,845	\$ 46,212	\$ 43,565	\$ 40,946	\$ 38,407	\$ 36,005	\$ 33,805	\$ 31,882	\$ 30,315

9.0 PERFORMANCE MEASURES AND REPORTING STRATEGIES (EVALUATION CRITERIA 9)

Measures of success for meeting objectives that have been set for the Foundry are shown in Table 14. Measures that go above and beyond the RFP will be considered at a later date for tracking outcomes from the Foundry Consortium action groups/STEAM Roundtable.

The quantitative data will be supplemented by ethnographic studies documenting how and

in what ways positive outcomes for individuals are brought about as a result of the work of the Foundry Consortium. The studies will, among other things, develop new knowledge of what supports and constrains the efforts to advance educational and economic opportunities for underrepresented youth, families and seniors (our primary audience).

Table 14: Foundry Consortium Objectives and Measurements of Success for Foundry Operations

Overarching Goal: Create a “self-sustaining center for creativity and collaboration for the Cambridge community” in East Cambridge

Objectives for Foundry Operations	Foundry Performance Measures
1) Foster a center of creativity and innovation through the shared use of space populated with complementary uses that are accessible to all	a) Revenue generation and financial sustainability of the Foundry b) Number of Foundry tenant program offerings, number of participants in those offerings, and outcome data c) Frequency of Foundry tenant participation in committees, fundraising efforts, or other program management structures d) Experience surveys of residents who visited the Foundry in the prior year, including new partnerships arising from participation in offerings
2) Create mentorship, internship, apprenticeship, workforce training, and educational programs for Cambridge residents that can directly benefit and engage the surrounding community	a) Number of offerings and attendance at hosted events, workshops, and classes (# educators, # attendees, repeat participation, survey data and qualitative studies of outcomes from participation for educators and attendees) b) Number of offerings and participation in internships, apprenticeships and workforce training (# educators, # attendees, repeat participation, survey data and qualitative studies of outcomes from participation for both educators and attendees) c) Documented instances of Cambridge residents gaining access to employment or education attributable to Foundry tenants, program offerings at the Foundry, and/or program offerings by partners in the Roundtable

<p>3) Include significant training opportunities in the areas of science, technology, engineering, arts, and math (STEAM) fields that can effectively introduce and prepare Cambridge residents for the existing and growing professional fields that have emerged in the Kendall Square area over the past several years</p>	<p>a) Number of offerings and attendance at hosted events, workshops, and classes (# educators, # beneficiaries, repeat participation, survey data and qualitative studies of outcomes from participation for both types of participants) b) Documented instances of Cambridge residents gaining access to employment or education attributable to Foundry tenants, program offerings at the Foundry, and/or program offerings by partners in the Roundtable</p>
<p>4) Capitalize on the commercial success of Kendall Square’s redevelopment to create a unique collaborative environment as a citywide resource, with a diverse mix of cultural, educational, and commercial uses emphasizing youth and senior engagement, with a particular focus on under-represented, lower income households</p>	<p>a) Length of tenancy of both for- and non-profit tenants in relation to Foundry specifications on lengths of stay b) Demographics of those in attendance at hosted events, workshops, and classes (coupled with other forms of data shown for objective 2 and 3) c) Annual survey of Foundry tenants to determine ways the Foundry Operations team have added value to their efforts and/or new partnerships attributable to the Foundry d) Media/social media hits on ongoing Foundry programs</p>

Reporting Strategies: Data collection methods will be designed and implemented by the Foundation Consortium during the initial months of operation. The LMIT Program will provide a mid-year report to the Foundry Consortium and will work with partners to address any needs for mid-year corrections to ensure the success of Foundry operations. Annual reports will be provided to the CRA, with copies to the City of Cambridge and the Cambridge Public Schools’ STEAM Advisory Committee.

10.0 LETTERS OF SUPPORT AND ONLINE SURVEY RESPONSES

Those submitting support letters are:

1. Abigail Norman, The Eliot School of Fine & Applied Arts
2. Michael V. Ananis, Rindge School of Technical Arts
3. Ron Mallis, BostonAPP/Lab
4. Carl Whittaker and Jill Jacobs, Herb and Maxine Jacobs Foundation
5. Renata von Tscherner, Charles River Conservancy
6. Caleb Hurst-Hiller, Community Charter School of Cambridge (CCSC)
7. Robin Harris, Fletcher Maynard Academy
8. Geeta Pradhan, Cambridge Community Foundation
9. Peter Laipson, Woodrow Wilson Academy of Teaching and Learning
10. Gihan Amarasiriwardena, Ministry of Supply
11. Cora Beth Abel, Massachusetts State Science & Engineering Fair and Curious Minds Initiative
12. Michael K. Dawson, Innovators for Purpose
13. Stanton E.F. Wortham, Boston College, Carolyn A. and Peter S. Lynch School of Education
14. Marvin Vilma, The Business of Doing Good
15. Martha McKenna and Sue Cusack, Lesley University, Creativity Commons and Lesley STEAM Learning Lab
16. Sarah Toulouse, Bayer USA Foundation
17. Rachel Thibault, SOAR Early College High School Teacher
18. Gretchen Fougere, The Possible Project
19. Ryan Souliotis, Cambridge Public Schools, High School Extension Program
20. Nate Ball, Atlas Devices, LLC and PBS’s Design Squad
21. Katelyn Sweeney, MIT Student
22. Christian Blanc, Cambridge Resident and Dad, Dassault Systèmes SolidWorks Corp.
23. Eduardo Torrealba, Formlabs
24. Vincent P. Manno, Sc.D., Provost and Dean of Faculty, Professor of Engineering at Olin College of Engineering
25. Andrew Montone, Owner, Cambridge Art & Frame
26. Sam Petuchowski, Sunstein Kann Murphy & Timbers LLP
27. John Van Amsterdam, InvenTeam parent, IP Lawyer in Biotech
28. Peter DiMuro, The Dance Complex
29. Joseph V. Singh, Columbia/GraceOne Advisors
30. G. Marie Planchard, SOLIDWORKS
31. Pam Y. Eddinger, Bunker Hill Community College
32. Daniel Koff and Jean Appolon, JAE, Jean Appolon Expressions
33. Jonathan Hernandez, Student UC San Diego Student and former 2014 SOAR High School InvenTeam Student
34. Abigail Dreher, Stanley Black & Decker
35. Jeanne DuBois and Joan Squeri, J Dubois Consulting & Associates and Healthy Communities Capital Consulting
36. Michael Delia, President and CEO, East End House
37. Jason Alves, Executive Director, East Cambridge Business Association

Summary of Quotes from Letters

“Your proposal would no doubt enhance our offerings and provide myriad opportunities for our students and families, the largest subset of whom call Cambridge home...CCSF has benefitted from ongoing interactions with your program over the past five years...I am thrilled to imagine even greater ways in which we can work together through the Foundry on behalf of our deserving students and families.”

Caleb Hurst-Hiller, Head of School
Community Charter School of Cambridge

“The vision of the Foundry that includes educational opportunities for young people to gain skills and knowledge required to become professionals in Kendall Square and beyond is directly aligned with iFp’s mission... Innovators for Purpose is providing our support, because we believe you are the right person to drive the change the Foundry hopes to catalyze. We believe your success in building networks, cultivating relationships and securing financial resources will be instrumental during the most critical pre-launch period.”

Michael K. Dawson, Co-Founder & CEO
Innovators for Purpose

“When I reflect on my experience as a student and a woman in engineering, I recognize many extracurricular art and science programs that helped shape me as a person and professional. I want that same sense of empowerment for all students, and the proposed program at the Foundry is a huge step in the right direction.”

Katelyn Sweeney
Department of Mechanical Engineering
Massachusetts Institute of Technology, Class of 2018

“As a graduate school of education located in East Cambridge that is preparing the next generation of STEM educators, we look forward to opportunities to use the Foundry and to collaborate with others who share our goals.”

Peter Laipson, Chief Administrative Officer
Woodrow Wilson Academy of Teaching and Learning

“In the Cambridge ecosystem, IP is so important to economic growth and creation of jobs and opportunities. IP is an important pillar of the success of the renowned universities and the vibrant biotechnology and computer industries in Cambridge. But having a greater understanding of IP also can be important to understanding rights and responsibilities with respect to inventions, creative works of art or music, and trademarks. LMIT can be a catalyst for increasing understanding of IP by offering programs that educate the various constituencies that will utilize the Foundry.”

John Van Amsterdam
Patent Attorney

“We have enjoyed and benefitted from our ongoing joint work building invention curricula and providing professional development for teachers in local schools. We would welcome the opportunity to collaborate further on projects with teachers, students and community members in Cambridge that could be sponsored by the Foundry.”

Stanton E. F. Wortham, Charles F. Donovan, S.J., Dean
Boston College

“At Olin we believe in collaboration, developing people, and experimentation. I see strong alignment between our core values and your proposed vision for the Foundry. I was pleased to learn about the engagement our faculty, staff, and students who participated in exploratory activities of the past few weeks as well as their personal passion for your project goals. At their own initiative, some of our students have even set up a web site, atthefoundry.org, to illustrate their approach to collaborative design and share their imaginative ideas for what the Foundry could become.”

Vincent P. Manno, Sc.D.
Provost and Dean of Faculty
Professor of Engineering

“For five decades, our research has examined ways in human potentials – such as creativity, thinking and learning – can flourish in individuals and communities. We are excited about the possible ways in which the Foundry can create a developmental space for all people who live and work in Cambridge.”

Danial G. Wilson, Ph.D., Director Project Zero
Harvard Graduate School of Education

“We believe that the Lemelson-MIT Program has the capacity to bring together a range of users who together will foster educational synergy between STEAM fields in science, engineering and the arts. We embrace your idea of the building as a crossroads where people can come together to engage in creative thinking, making, teaching and learning.”

Abigail Norman, Director
Eliot School of Fine and Applied Arts

“The Foundry is a singular opportunity, and I do believe that your consortium framework will provide the right sets of mechanisms with which to respond to that opportunity.”

Ron Mallis, Executive Director
Boston APP/Lab

“We believe that the proposed use for the Foundry is the highest and best use, and we are eager to be part of a partnership that will serve as a crossroad in which people from diverse walks of life are brought together intentionally to engage creatively with one another in STEAM.”

Cora Beth Abel, President & CEO
Massachusetts State Science & Engineering Fair

“I am excited by the possibilities for our students and the unique opportunities to provide them with a range of hands-on, real world experiences that could support their academic, college readiness, and career needs in science, technology, engineering, arts, and mathematics.”

Ryan Souliotis, Principal
High School Extension Program
Cambridge Public School



CHARLES RIVER

conservancy

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CAMBRIDGE MASSACHUSETTS
0 2 1 4 1

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crc@thecharles.org
www.thecharles.org

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Nancy Schön
Bruce Schwoegler
Amy Segal
John Shields
Lisa Stone
Paul Walker
Ania Wieckowski
John T. Williams
Michelle Wu

February 25,6, 2018

Dear Dr. Couch,

I am writing on behalf of the Charles River Conservancy (CRC) to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live in and/or work in the city.

The CRC had the pleasure to being part of Lemelson's Innoskate symposium that took place both at MIT and at the skatepark the CRC developed and then gifted to the state. Innoskate celebrated the 1st anniversary of that world-class skatepark where innovation and collaboration were key ingredients of the success.

And now the CRC is building a swim park, which will require once again bright brains to come up with ideas how to implement America's first urban river swim park.

The CRC also might be interested in renting space in the Foundry for our own office operation. Our needs are in the range of 2,000 to 3,000 sq ft plus shared space.

Sincerely,

Renata von Tscharnher

Renata von Tscharnher

Founder and President



February 28, 2018

Stephanie Couch, Ph.D.
Executive Director
Lemelson-MIT Program
222 Third Street, Suite 0300
Cambridge, MA 02142

Dear Stephanie:

I am writing on behalf of the Bayer USA Foundation to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live and/or work in the City.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a "crossroads" or place that people can come together to engage in new ways around science, technology, engineering, the arts and mathematics.

We hope you and those submitting this proposal are successful in your bid.

Yours very truly,

A handwritten signature in cursive script that reads "Sarah Toulouse".

Sarah Toulouse
Executive Director
Bayer USA Foundation

c/o Bayer Corporation
100 Bayer Road
Pittsburgh, PA 15205-9741

Phone 800 422-9374
bayerusafoundation@bayer.com
www.BayerUS.com

Christian P. Blanc
454 Windsor St, #1
Cambridge, MA 02141

March 1, 2018

Stephanie Couch, PhD
Lemelson-MIT Program
222 Third Street., Suite 0300
Cambridge, MA 02142

Dear Dr. Couch,

I am writing as a 20-year Cambridge resident, father of two active scholars in the Cambridge Public School system, high-tech professional & passionate advocate of STEM experiences, access & education. I strongly support your proposal to manage the programs & physical space at the Foundry in East Cambridge.

Unlike my childhood memories of woodworking in my neighbor's basement shop & fixing old cars with my uncle in his garage, hands-on technical experiences are not necessarily accessible realities for Cambridge kids. City kids (including my own) don't have as many opportunities to get their hands dirty in their pursuit of curiosity & creativity! My childhood tinkering experiences opened me up to a fulfilling career in mechanical engineering. I fear the impending national drought of technically-inclined workers needed to support our new electromechanical & digital reality. Who will fill all the jobs that neighboring MIT will create?

Through the many years of partnership between Lemelson-MIT (LMIT) & my employer, SOLIDWORKS, the #1 technical design tool in the engineering world, I have a firsthand appreciation of the impact of your STEM outreach programs. Your InvenTeams initiatives & grants have positively impacted our environment, our community's quality of life & the career trajectories for countless students. I couldn't imagine a better fit for Operator of our neighborhood Foundry Consortium than LMIT.

For future generations of Cambridge students, afterschool options might soon be less about kickball & cooking class, and more about gears, grease, electrical circuit design & 3d printing!

I am very excited about the new possibilities the Foundry creates for our community's students, adult residents & local workforce. Knowing your track record as well as our civic need, I wholeheartedly support your vision as Operator for the new Foundry Consortium.

Best wishes for a successful bid. You have all my support!

Sincerely,



Christian Blanc
Cambridge dad
Cambridge resident since 1998
Senior Manager, Dassault Systèmes SolidWorks Corp.



CAMBRIDGE

Community Foundation

February 26, 2018

Mr. Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

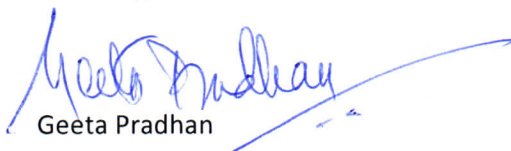
Dear Mr. Evans,

I am writing to express the Cambridge Community Foundation's strong support for the proposal submitted by the Foundry Consortium, with the Lemelson-MIT Program as the lead entity. The proposal reflects conversations and ideas discussed by many different organizations that the Foundation brought together during the past year, to increase science, technology, engineering, arts and mathematics (STEAM) learning opportunities for Cambridge youth. We are delighted that those at the table have joined together as "The Foundry Consortium" to create a place for forging partnerships that will not only animate the Foundry building but also become the hub for ideas and action for change to serve all of Cambridge. We are excited about the vision this proposal offers to use STEAM knowledge and skills to tackle income inequality, enable youth to be more competitive in the innovation economy, promote wealth creation opportunities for community entrepreneurs, and use the arts to foster Cambridge's creative gene.

Dr. Stephanie Couch, Executive Director of the Lemelson-MIT Program, is serving as the lead for the group given her extensive work with developing STEAM networks in California. We have appreciated her fresh ideas regarding ways of bringing groups and individuals with different strengths and assets together to support youth, their teachers and their families in new ways. Her ideas compliment recent efforts of the STEAM Advisory Group convened by the City of Cambridge and the Cambridge Public Schools. She is a strong collaborator and was instrumental in the submission of a grant proposal to the National Endowment for the Humanities in partnership with the Design Museum, the Foundation and the City's Youth Centers to create the 'youth innovation corps' to tackle local problems and encourage youth mentorships by graduate students and tech bio-tech employees.

The Foundation is excited about the progress this proposal represents and will actively work to support the efforts of the consortium where possible. We look forward to seeing the Foundry emerge as a place that ensures our city's children and families become competitive in the innovation economy.

Sincerely,



Geeta Pradhan

PRESIDENT

Geeta Pradhan

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Dr. Stephanie Couch
 Executive Director
 Lemelson-MIT Program
 222 Third Street, Suite 0300
 Cambridge, MA 02142

February 26, 2018

Dear Dr. Couch:

The Community Charter School of Cambridge is so pleased to provide a letter of support to the Lemelson-MIT Program's proposal to be the operator of the renovated Foundry building located one block from our campus. I have reviewed your program's objectives for the building and find them to be aligned with our school's mission. We strive to combine challenging academics with the creative use of technology and real-world experiences in order to prepare our diverse student body for postsecondary success and productive citizenship. Our graduates are excellent problem solvers and communicators who contribute to the community through internships and field experience. Your proposal would no doubt enhance our offerings and provide myriad opportunities for our students and families, the largest subset of whom call Cambridge home.

I envision several ways that CCSC may utilize the Foundry space. First, your proposal for the Foundry offers mentorships, internships, apprenticeships, and workforce training as well as educational programs. These real-world experiences are a key component of our program and have been integral to our students' success. I believe your organization experienced this first-hand when one of our senior boys interned for you in 2014; he will be graduating this spring with an undergraduate degree in computer science. We work hard to bring new organizations in as partners for our internship program (completion of which is required in order to earn a high school diploma), but it continues to be challenging to establish new connections. The Foundry will no doubt help facilitate this process for my team to the benefit of our students. Secondly, CCSC has several extracurricular activities that will benefit from your proposal's offerings. Robotics could utilize the workshop space while our performing arts students rehearse and perform in the black box theatre. These experiences, and others, would offer more opportunities for CCSC students to interact with the world outside our walls and expose our community to the work of the school.

CCSC has benefitted from ongoing interactions with your program over the past

C O M M U N I T Y



CHARTER SCHOOL OF CAMBRIDGE

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five years. We were pleased to have been the pilot site for your national grants initiative, Junior Varsity InvenTeams. Your program consistently reaches out to us with civic engagements and grants opportunities. We are proud of our current collaboration and excited to push this critical work forward alongside members of your organization. I am thrilled to imagine even greater ways in which we can work together through the Foundry on behalf of our deserving students and families.

Regards,

A handwritten signature in black ink, appearing to read 'Caleb Hurst-Hiller', with a long horizontal flourish extending to the right.

Caleb Hurst-Hiller
Head of School

March 2, 2018



Mr. Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

Dear Mr. Evans:

I am writing in my capacities as the Executive Artistic Director of The Dance Complex, as well as an independent dance-maker, currently appointed the 2018 Choreographer in Residence at the Isabella Stewart Gardner Museum, to express my strong support for the proposed Foundry Consortium represented in the proposal put forth by the Lemelson-MIT Program.

The Foundry, and the STEAM opportunities that are envisioned by the consortium, create the possibility of breaking new ground in terms of the ways the arts and STEM can be brought together in innovative ways. The potential for The Foundry to connect multiple cross sections of Cambridge, and the region's public, is a key attraction for me in their proposal.

I begin to imagine what happens when minds and bodies of all ages learn and grow in new ways when introduced to the technologies and creative processes of a STEAM mentality: we blur the line between a solely academic, singular narratives and place a public in the practice of thinking and being multi-dimensional.

As a professional artist, I see the decided impact for the work beyond current studio practice – technologies that effect stage design and create stage sets and props with 3D printing, for instance. But the impact is even greater for learners of all ages and from all walks of life, with the potential applications of lessons learned within a creative laboratory-STEAM approach. I believe a STEAM approach creates better thinkers, creators due to the nature of total engagement in idea, content, process and actualization. I'd go so far to say we create better citizens and better communities through creative processes of STEAM.

Many people use the term "STEAM". The Foundry Consortium proposal offers the opportunity to be a national showcase for ways the term can be put into practice. The establishment of this type of crossroad for community engagement is long overdue, and a right next step for us. I urge your approval of the consortium's response to the RFP.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter DiMuro". The signature is fluid and cursive, written over a white rectangular background.

Peter DiMuro
Executive Artistic Director, The Dance Complex
Artistic Director, Peter DiMuro/Public Displays of Motion

February 28, 2018

Dr. Stephanie Couch
Lemelson-MIT
Cambridge, MA

Dear Dr. Couch,

I am writing on behalf of The Possible Project to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the additional possibilities the Foundry creates for people who live in and/or work in the city. The Possible Project is the largest after-school program in Cambridge that allows underserved high school students to design pathways to college and careers and our efforts are complementary to what is envisioned at the Foundry. This capacity building will make for an even greater impact on our community.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a 'crossroads' or place that people come together to engage in new ways around science, technology, engineering, the arts and mathematics (STEAM).

We hope you and others submitting this proposal with you are successful in your bid. We will fill out the survey you provided to share additional details about how we envision being involved as your work progresses.

Sincerely,

Dr. Gretchen Fougere
Vice President of Education
The Possible Project

CAMBRIDGE PUBLIC SCHOOLS
FLETCHER MAYNARD ACADEMY



Robin Harris, *Principal*
Deborah Hood-Brown, *Assistant Principal*

225 WINDSOR STREET, CAMBRIDGE, MASSACHUSETTS 02139
(617) 349-6588
Fax: (617) 349-6595

February 26, 2018

Dear Dr. Couch,

I am writing on behalf of Fletcher Maynard Academy to express our strong support for your proposal to manage the Foundry building in east Cambridge. We are excited about the new possibilities the Foundry creates for people who live in and/or work in the city.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a "crossroads" or place that people can come together to engage in the new ways around science, technology, engineering, the arts and mathematics (STEAM).

We hope you and others submitting this proposal with you are successful in your bid. We will fill out the survey you provided to share additional details how we envision being involved as your work progresses.

Sincerely,

A handwritten signature in black ink, appearing to read "Robin Harris", written over a circular stamp or seal.

Robin Harris



Building life skills and STEM competencies: **Massachusetts State Science & Engineering Fair (MSSEF)** and **Curious Minds Initiative (CMI)** programs

955 Massachusetts Ave., #350 • Cambridge, MA 02139 • 617.491.1500 www.scifair.com

February 27, 2018

Dear Dr. Couch,

I am writing on behalf of MSSEF to express our strong support for your proposal to manage the Foundry building in East Cambridge. Your vision for this community space will benefit so many children and help prepare them for the future, and we are excited about the new possibilities the Foundry creates for all people who live in and/or work in the city.

We believe that the proposed use for the Foundry is the highest and best use, and we are eager to be part of a partnership that will serve as a crossroad in which people from diverse walks of life are brought together intentionally to engage creatively with one another in STEAM.

Your proposal holds great promise for creating a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry.

We hope that you and your team are successful in your bid. We have completed the survey you provided to share additional details about how we can contribute to the partnership, including our most successful STEM programs for students and teachers.

Sincerely,

A handwritten signature in black ink, appearing to read "Cora Beth Abel", with a long, sweeping horizontal line extending to the right.

Cora Beth Abel
President & CEO

Engagement and Organizing Consultants

Jeanne DuBois
J DuBois Consulting & Associates
jaduboisconsulting@gmail.com;
617-943-8492

Joan Squeri
Healthy Communities Capital Consulting
www.hccconsult.net
joan.squeri@gmail.com;
617-710-2219

March 6, 2018

Dear Dr. Couch,

We are writing to express our support for the proposal to build a Foundry Consortium, an effort which will be led by Lemelson-MIT and various Cambridge partners, as a means to manage the Foundry building.

We believe that a non-profit partnership with a mission is to serve the greater good is the right vehicle to program the Foundry building fairly, responsibly and inclusively.

We have experience in creating community enterprises such as the Maud Morgan Visual Arts Center, the Commonwealth Kitchen and the Village Market in Roslindale as well as others. A joint venture partnership such as the one proposed by the Lemelson group partners insures that the community at large will be the primary beneficiary from the value which is created by the venture, over any one individual group or entity's self interest.

Joint venture partnerships guarantee a single point of accountability for building owners. They leverage the financial longevity and stability of their core team members which serves as a guarantee to banks and future underwriters, while allowing in and inviting in, other smaller, groups who bring in other forms of capital; (think social capital, member followings, needed skills and experience, single-source expertise and other in kind things of value.)

Joint ventures allow the creation of 'backbone organizations' (structures such as the one we've discussed creating with Lemelson MIT and its partners), which allow for the creation of governance with feedback loops, which enable tenants to contribute to the on-going vitality of the building as full partners. They provide a way for smaller community groups and community service providers to capitalize on the muscular strengths of the larger partners without being swallowed up by them.

Our many conversations with Dr Crouch as head of the Lemelson MIT group effort lead us to believe she (and they) see a community engagement strategy as the fuel to light the way forward for the Foundry. Together we are working to create a consortium of those willing to attract existing Cambridge players and programs to participate in a partnership.

For example:

(Agenda for Children, Just a Start.org, The East End House, Tutoring Plus, Community Arts Center, Fletcher Maynard, Margaret Fuller Neighborhood House, The Cambridge Arts Council, The offices of Workforce & Economic Development, Cambridge's S.T.E.A.M. Coordinator, R.S.T.A., etc.)

A strong bridge network dedicated to players like these would bring about real, active and ongoing S.T.E.A.M. focused partnerships --to say nothing of the additions of other organizations, businesses and institutional resources which would be attracted to participate in such a network.

Why the 'existing conditions' of STEAM efforts in Cambridge matter to The Foundry

The Foundry's geographic location is significant in the context of present day Cambridge. Located at an intersection of Cambridge which has seen unprecedented wealth and opportunity grow up right next to neighborhoods where poverty and limited avenues to employment are the norm. The Foundry represents the potential to become to a true bridge over which S.T.E.A.M. related learning activities and skill-building can be accessed at multiple points of entry. Such a bridge could help deliver on pathways to employment even for entry level workers. Dr Couch and the Lemelson team seem to be committed to creating these much needed connections.

Two examples of ideal potential tenants who align with Lemelson's own objectives are the Rindge School of Technical Arts, (RSTA) and Innovators 4 Purpose, which hold similar engineering and design objectives. Each of these potential users focuses on different age groups, but require the use of shared makerspace, identical building infrastructure and equipment, and aspires to reap the benefits of collaborative relationships.

It is worth noting that very few people who utilize the makerspaces and shared work places which currently operate in Cambridge and Somerville, are residents who feel isolated and left out of the booming tech economy. A breathtaking array of work and social spaces continue to be built in Cambridge which cater to those who (already) have access in this economy.

What about the people who currently live and grow up in Cambridge--the people who go to school at the Fletcher Maynard Academy, attend CLRS and RSTA, who play soccer at Danahey Park, or practice for little league at Donnelly Field, or make films at the Community Arts Center, or swim at the War Memorial pool?

They need discernible, clear pathways to light the way to participation in the white hot economy and all of its ancillary occupations. They need clearly marked roads and bridges if they hope to enjoy the social and material benefits of the tech economy.

The importance of The Foundry connecting what already exists

As strategists, we think about engagement opportunities as the foundation of any good building project with multiple stakeholders and shared-use objectives, which is another reason we support the Lemelson Group's Consortium approach. As a city which prides itself on equitable opportunity and innovation *both*, we believe that residents of Cambridge deserve to see a visible, connected pathway of experiential learning which leads them directly to further

study and/or employment. We think a Foundry Consortium can model some of the vital missing connections to that pathway.

The Trouble with the words 'Entrepreneurial' and 'Innovative'

In many cases, well-intentioned businesses and groups looking to do charitable work with under-resourced communities create 'innovation based / entrepreneurial' programs designed to give young people a first exposure to this type of experience. The trouble with many of these programs is that they leave participants with a 'one-off' experience, rather than presenting a gateway to an ascending array of opportunities leading to greater upward mobility. Simple exposure to new activities and potential opportunities may open a window for a few, but sadly, most of these programs fail to produce a door or a ladder for the many.

Programs which act as stepping stones to opportunity are not built in a vacuum.

The Foundry represents the opportunity to enhance and connect existing programs with one another. It offers satellite campus opportunities to programs who are already promoting arts and technology. It offers private organizations and public school departments, City-wide initiatives such as The Agenda for Children (many of whom are already attempting to find ways to use existing S.T.E.A.M. learning opportunities to work together) both in and outside of schools, and to create vital missing links to wider teaching and learning in Cambridge as a whole.

This Consortium would be directed and supported by solid, rooted-in-the community institutions and organizations, but independent of any one institution or group's individual self-interest.

We are excited about working with the Cambridge Redevelopment Authority and the Foundry Consortium led by Lemelson MIT, particularly because Dr. Crouch and her team are willing to build the backbone organization upon which a true consortium could function.

- **This unique combination of enlightened governance, mutual self interest, financial capacity, and the commitment to building new and shared connections among programs, brings both financial viability and stability together with a robust commitment to community engagement, which we think will provide a greater good.**
- **It also has the advantage of providing a single point of contact to the CRA and the City of Cambridge.**

We are encouraged that teachers and administrators in existing engineering and maker space communities, including R.S.T.A. and Innovators 4 Purpose, Lemelson MIT, The Fletcher Maynard Academy and others-- along with strong arts producers from Lesley University and many other educational institutions, arts and service organizations, are already involved with this proposal.

All have demonstrated an interest in contributing their programmatic experience and practical skills to building a living, breathing and exciting hub at the Foundry. We are excited to engage with this community of creative builders, learners and doers and to reach out to more of them.

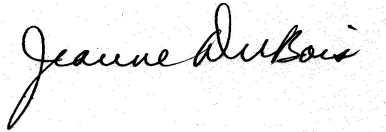
As women business owners we have both been committed to grass roots organizing in lower income communities for decades. We have seen that partnerships who are strategic in their

thinking and engaging in their practice, are capable of transformative building and development projects.

The commitment of Dr Crouch and the Lemelson project partners is the most robust resident engagement agenda that we have come across among the potential Foundry bidders.. We are convinced that engagement will ultimately become the fuel which connects the S.T.E.A.M. 'engine' to people at all income and educational levels and bridges barriers, both seen and unseen. Regardless of which bidder or combination of bidders ultimately wins a favorable decision, we stand ready to share additional details on how we could assist the engagement process.

The Foundry, located between very different worlds, is exactly the right kind of place to build a powerful network which serves community residents as well as organizations and businesses with opportunities to share the prosperity of Cambridge.

Sincerely,



Jeanne DuBois



Joan Squeri

464 Commonwealth Avenue, Apt. 21
Boston, MA, 02215

Dr. Stephanie Couch
Lemelson-MIT
222 Third St.
Cambridge, MA, 02142

Dear Dr. Couch:

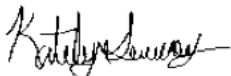
Throughout my education and career, I have been fortunate enough to have access to inventor spaces, labs, and theatres of creation that have fostered my ability not only to do well academically, but also to succeed as an innovator in the professional sphere. Creative and inventive spaces are invaluable in effective Science, Technology, Arts, and Mathematics (STEAM) Education. STEAM programming in an accessible space like the Foundry would empower and impact community residents and local students alike.

As a student and musician, I have always inherently felt the connection between artistic and computational ability. As astronaut Mae Jemison said, "the difference between science and the arts is not that they are different sides of the same coin ... but rather, they are manifestations of the same thing. The arts and sciences are avatars of human creativity." Neurobiologically, the ability to process and understand music has been linked to better intuitive understanding of science and mathematics. The ability to access creative spaces and opportunities is an often-untapped resource and aid in science education. For me, the ability to express both musically has expanded my creativity and opened my mind to new ideas, making me a better inventor.

A space like The Foundry has the opportunity to not only bolster STEM education with the Arts, it has the opportunity to positively impact communities underserved by traditional educational means. Cambridge is an extremely diverse city ethnically, educationally, and financially. Women and minorities in STEM fields make up less than 20% of the workforce. At its core, this is a problem rooted in a systemic lack of empowerment. Lemelson-MIT has the opportunity to change that in a major way, and I cannot emphasize enough how important that is. Different backgrounds cultivate new and innovative ways of solving problems and affecting change. As a woman in STEAM, I have had incredible opportunities through InvenTeams, and MIT that have allowed me to grow creatively.

When I reflect on my experience as a student and a woman in engineering, I recognize many extracurricular art and science programs that helped shape me as a person and professional. I want that same sense of empowerment for all students, and the proposed program at The Foundry is a huge step in the right direction. Access to inventive spaces and programming to enhance my education has helped me and so many others to begin to overcome the gap that exists in STEM fields. This is not only an opportunity to create new educational programming, it is an opportunity to foster major positive change in the lives of the future leaders, engineers, scientists, and artists budding in our community.

Sincerely,



Katelyn Sweeney
Department of Mechanical Engineering
Massachusetts Institute of Technology
Class of 2018

Cambridge High School Extension Program

359 Broadway

Cambridge, MA 02139

Telephone (617) 349-6880

Fax (617) 349-6306



Mr. Ryan Souliotis

Principal

March 1, 2018

Dr. Stephanie Couch
Executive Director
Lemelson-MIT Program
MIT School of Engineering
77 Massachusetts Ave. 10-110, Cambridge, MA 02139

Dear Dr. Couch,

It is with great interest and enthusiasm that I offer this letter of support for your proposal to manage the Foundry building in East Cambridge. As the principal of the High School Extension Program, an alternative high school within Cambridge Public Schools, I am excited by the possibilities for our students and the unique opportunities to provide them with a range of hands-on, real world experiences that could support their academic, college readiness, and career needs in science, technology, engineering, arts, and mathematics.

The students in our school would greatly benefit from the kind of community effort that you envision for the Foundry. Given the close proximity of our school to this dynamic space, we can imagine our students engaging in programming, internships, and mentoring opportunities that would strengthen their STEAM education and support their access to workforce development "pathways" in Cambridge.

I also appreciate the emphasis in your proposal to foster greater community connections and building on these local strengths to support Cambridge youth. Our students are the underserved that your vision addresses and would greatly benefit from the coordinated and thoughtful approach that your proposal speaks to.

I am looking forward to the successful approval of this proposal as it is clear that our students and the larger community need this kind of comprehensive and collaborative approach to gathering resources, designing programming, and making meaning connections between our students and the STEAM community.

Sincerely,

Ryan Souliotis, Principal
High School Extension Program
Cambridge Public School



March 5, 2018

Dear Dr. Couch,

I am writing on behalf of Jean Appolon Expressions to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for us to build a home where we may celebrate and advance Haitian folkloric dance by building a contemporary cultural community that produces professional performances, educational opportunities, and dance training for people of all ages, abilities, and backgrounds.

We are particularly excited by the prospect of working with the Foundry Consortium because of its potential for us to collaborate with other partners to integrate the "A" into STEAM education. Our dancers can provide training in a full range of dance technique from ballet, to Afro hip-hop, to yoga. We are also in the process of creating curriculum that integrates movement arts into STEM education. For children as young as 3-7 years old, we plan to offer classes such as "Drumming, rhythm, and math," "Feelings through dance" (to foster social and emotional learning) and "Yoga through storytelling" (for early literacy). For teenagers, we are creating courses such as "Choreographing with Math Structures," "Programming Visual Art," and "Number Theory and Contemporary Technique." Your proposal to create a new Foundry Consortium would create a "crossroads" where we could build these kinds of interdisciplinary programs for the benefit of the community.

We hope to work with the Foundry Consortium so we may have access to the black box theater for company performances, rehearsals, and dance classes. We project that we would also be able to program one of the 1000 square foot classrooms for twelve hours a day, five days a week, should it be built out to be a multi-purpose dance studio. In order to generate income for these programs, we expect to charge competitive rates for the classes, obtain grants and donations to cover scholarships to those who can't afford it, and are open to paying the going rate for use of the space like we currently do at the Dance Complex.

We hope you and others submitting this proposal with you are successful in your bid. We have filled out the survey you provided to share additional details about how we envision being involved as your work progresses.

Sincerely,

Daniel Koff, JAE Grant Manager

Jean Appolon, JAE Co-Founder and Artistic Director

Herb and Maxine Jacobs Foundation

February 25, 2018

Dear Dr. Couch,

We are writing on behalf of the Herb and Maxine Jacobs Foundation to add our enthusiastic support for your proposal to manage the Foundry building in East Cambridge. Our foundation believes that there is much to gain by expanding the technology resources available to all people in Cambridge. The city has world class colleges and cutting edge employers, so projects like the Foundry are logical to connect more individuals to the local prosperity created by STEAM topics.

The Foundry Consortium idea seems excellent because Cambridge contains so many different cohorts, and we would like to see them all benefit from the project. Your proposal seems to do a very good job of creating a place where many different groups can come together to engage around valuable technologies of the present and future.

Not only do we support your proposal, but we think that it makes sense for the Lemelson-MIT Program to have the leadership role due to Lemelson's impressive history of using innovation to help improve lives.

Best regards,

Carl Whittaker and Jill Jacobs
Directors
Herb and Maxine Jacobs Foundation

March 2nd 2018

Dear Dr. Couch,

I am writing on behalf of Formlabs to express our support for your proposal to manage the Foundry building. We are very excited about the kinds of opportunities that the Foundry represents for people in our community.

This proposal for a Foundry Consortium will help streamline decision making around the building's use moving forward. Formlabs is a big supporter of STEAM education and we think that a unified Foundry would be a major asset to the community.

We hope that this proposal is successful. Our team looks forward to collaborating on future efforts to improve this part of the fabric of Cambridge.

Best,
Eduardo Torrealba
Director of Engineering



Office of the Provost and Dean of Faculty

Olin Way, Needham, MA 02492-1200 // www.olin.edu

TEL 781.292.2591

Provost@olin.edu

March 2, 2018

Stephanie Couch, Ph.D.
Executive Director, Lemelson-MIT Program

Dear Dr. Couch,

I am writing on behalf of the Olin College of Engineering to express our support for your proposal to manage the Foundry building in East Cambridge, to convey our willingness to engage in substantive discussions about ways we could work together if the proposal is selected, and to endorse the participation of Jeff Goldenson and Mark Somerville in the project planning process. Jeff and Mark bring to the table deep and complementary knowledge of Olin and will be assets to the process as you envision possibilities.

At Olin we believe in collaboration, developing people, and experimentation. I see strong alignment between our core values and your proposed vision for the Foundry. I was pleased to learn about the engagement our faculty, staff, and students who participated in exploratory activities over the past few weeks as well as their personal passion for your project goals. At their own initiative, some of our students have even set up a web site, atthefoundry.org, to illustrate their approach to collaborative design and share their imaginative ideas for what the Foundry could become. These factors all bode well for the future.

I speak for many of us at Olin in wishing you success in your bid, and look forward to the possibilities afforded by potential collaboration with you on this important and inspirational effort.

Sincerely,

A handwritten signature in blue ink, appearing to read "V. Manno".

Vincent P. Manno, Sc.D.
Provost and Dean of Faculty
Professor of Engineering

February 27th, 2018

Dear Dr. Couch,

I am writing on behalf of the Woodrow Wilson Academy of Teaching and Learning to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live in and/or work in the city.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a 'crossroads' or place that people come together to engage in new ways around science, technology, engineering, the arts and mathematics (STEAM). As a graduate school of education located in East Cambridge that is preparing the next generation of STEM educators, we look forward to opportunities to use the Foundry and to collaborate with others who share our goals.

We hope you and others submitting this proposal with you are successful in your bid. We will fill out the survey you provided to share additional details about how we envision being involved as your work progresses.

Sincerely,



Peter Lajpson
Chief Administrative Officer



imagine the possibilities

OFFICE OF THE PRESIDENT

March 5, 2018

Stephanie Couch, Ph.D.
Executive Director
Lemelson-MIT Program
MIT School of Engineering
77 Massachusetts Ave. 10-110
Cambridge, MA 02139

Dear Dr. Couch,

I am writing on behalf of Bunker Hill Community College to express our strong support for your proposal to manage the Foundry building in East Cambridge. Bunker Hill Community College is a leader in the provision of workforce development and educational opportunities. Our offerings extend to high school students in our Early College High School programs. The Foundry offers many possibilities for new partnerships and new approaches to serving Cambridge residents.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a 'crossroads' or place that people come together to engage in new ways around science, technology, engineering, the arts and mathematics (STEAM).

We hope you and others submitting this proposal with you are successful in your bid. We will fill out the survey you provided to share additional details about how we envision being involved as your work progresses.

Sincerely,

A handwritten signature in black ink that reads "Pam Eddinger". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Pam Y. Eddinger, Ph.D.
President

CHARLESTOWN CAMPUS

250 New Rutherford Avenue • Boston, Massachusetts 02129-2925
Phone: 617-228-2000 TTY: 617-242-2365

CHELSEA CAMPUS

70 Everett Avenue • Chelsea, Massachusetts 02150-2917
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bhcc.edu



February 22, 2018

TO: Stephanie Couch, Executive Director, Lemelson-MIT Program
FR: Ron Mallis
SUBJECT: THE LEMELSON-MIT OPERATOR PROPOSAL FOR THE FOUNDRY

Dear Dr. Couch:

I am pleased to offer my full support for your proposal to manage the Foundry building in East Cambridge, excited about the possibilities for creating new resources through new collaborations for all who live or work in the City.

Your proposal to create a new Foundry Consortium speaks to the facility's enormous potential for generating – and housing – a wide range of possibilities and outcomes forged via new links among science, technology, engineering, the arts, and mathematics, as well as emerging relationships between all people of Cambridge and those disciplines.

The Foundry is a singular opportunity, and I do believe that your Consortium framework will provide the right sets of mechanisms with which to respond to that opportunity.

Cheers,

Ron Mallis, Executive Director
BostonAPP/Lab
www.bostonapp.org
617-512-1396
ron.mallis@bostonapp.org

StanleyBlack&Decker

March 5, 2018

Dr. Stephanie Couch
Lemelson-MIT Program
222 Third Street, Suite 0300
Cambridge, MA 02142

Dear Dr. Couch:

I am writing on behalf of Stanley Black & Decker to express our strong support for your proposal to operate the Foundry building in East Cambridge. Your program and its partners offer a myriad of possibilities at the Foundry for people of all ages to become innovators with opportunities to experience science, technology, engineering, and math as well as the arts. The primary objective for the Foundry to foster a center of creativity and innovation accessible to all may create a culture similar to ours. Here at SB&D, we share a unified passion for creating – in our case, for creating products, tools, and solutions for those who make the world.

Sincerely,

Abigail Dreher
Director, Public Affairs
Stanley Black & Decker
1000 Stanley Drive
New Britain, CT 06053



February 28, 2018

Dr. Stephanie Couch
Lemelson-MIT Program
MIT School of Engineering
77 Massachusetts Ave. 10-110, Cambridge, MA 02139

Dear Dr. Couch,

Lesley University is pleased to partner with you to form the Foundry Consortium and support your vision for a vibrant center and STEAM partnership hub that benefits the Cambridge community. Through this consortium, we would bring our expertise in STEAM education to professional learning programs for Cambridge Public School teachers and Out-of-School Time providers, arts integrated STEM (STEAM) programs for students, and community outreach.

We have experience in integrating the arts across the STEM disciplines in our teaching and leadership of the Cambridge Creativity Commons (CCC). CCC is a collaborative project of the Cambridge Arts Council, Cambridge Community Foundation (CCF), the Cambridge Public Schools and Lesley University which provides arts-based teaching and learning to engage teachers and students in the exploration of meaningful ideas using creative processes in arts and science-based experiential projects both in school and out-of-school. Lesley has also played a leadership role in the Cambridge STEAM initiative with Martha McKenna serving as members of the CCF advisory board, including presenting on "STEM + Art = STEAM" at the Cambridge City STEM Forum, Cambridge, April 2016.

The University also brings the expertise of our Lesley STEAM Learning Lab, where we have deep experience working with educators and their students creating learning opportunities that are hands-on, authentic, and culturally responsive. This work explores "making" in an education context where teachers, and their out-of-school time counterparts, engage in design thinking, project based learning, and explore instructional strategies that are student-centered and anchored in real-world STEAM activities. As Director of this Center, Sue Cusack also serves on the STEAM Advisory Committee by invitation of Town Manager DePasquale and Superintendent Salim.

It would be a privilege to support you in this forward thinking, socially relevant proposal. We appreciate the thoughtfulness of your vision and your efforts to be inclusive in the design and implementation of a STEAM infused community resource that addresses local needs while amplifying local opportunities.

Sincerely,

Handwritten signature of Martha McKenna in black ink.

Martha McKenna
University Professor and Director
Creativity Commons

Handwritten signature of Sue Cusack in black ink.

Sue Cusack
Assistant Professor and Director
Lesley STEAM Learning Lab



March 5, 2018

Stephanie Couch, pHD
Lemelson-MIT Program
222 Third Street, Suite 0300
Cambridge, MA 02142

Dear Dr Couch,

As Director of Education and Early Engagement, DASSAULT SYSTEMES SolidWorks Corporation and advocate of Science, Technology, Engineering, and Math (STEM) education in our communities, I provide this letter of support for your proposal to manage the programs and physical space at the Foundry in East Cambridge, MA, USA.

For over 12 years, I have worked directly with the Lemelson-MIT program, InvenTeams, and know first-hand, the dedication and quality education your organization can provide to a community.

SOLIDWORKS remains committed to our support to your vision as Operator for the new Foundry Consortium.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'G. Marie Planchard'.

G. Marie Planchard,
Director of Education & Early Engagement, SOLIDWORKS
DASSAULT SYSTEMES



INNOVATORS FOR *PURPOSE*

CULTIVATING THE NEXT GENERATION OF PROBLEM SOLVERS

February 27, 2018

Dear Dr. Couch,

I am writing on behalf of Innovators *for* Purpose (iFp) to express our enthusiastic and strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live and work in the city.

The vision of the Foundry that includes educational opportunities for young people to gain skills and knowledge required to become professionals in Kendall Square and beyond is directly aligned with iFp's mission. Since our inception, we have been focused on one question - How Might We spark student interest, especially under-resourced youth, to develop their identity as professionals in critical 21st century careers? We have found success in our work, but it has been limited.

Cambridge has been a tale of two cities for decades. Many ambitious leaders have attempted to reimagine education in Cambridge, then left finding success in other communities. Larry Rosenstock, CEO of one of the most progressive High School Networks in the country, was once principal of the Rindge School of Technical Arts. San Diego embraced him when Cambridge said no. The success of ours and others will remain limited until a creative forward-thinking leader emerges with significant institutional support behind them.

Innovators *for* Purpose is providing our support, because we believe you are the right person at the right time to drive the change the Foundry hopes to catalyze. We believe your success in building networks, cultivating relationships and securing financial resources will be instrumental during the most critical pre-launch period. Under your leadership, we believe that the Foundry will open on day 1 extremely well-positioned to meet its mission.

Sincerely,

Michael K. Dawson
Co-Founder & CEO
Innovators for Purpose



3041 W. Avenue K
Lancaster, CA 93526
(661) 722-6509

February 28, 2018

Dear Dr. Couch:

This is a letter of support for the STEAM work you want to undertake in your Cambridge community to foster creativity and innovation that is accessible to all. The Foundry, as you and your team envision it, will benefit your local residents in the near term but I will be watching how it develops and grows as a model for our own Antelope Valley community in the high desert of Los Angeles County.

Our community has seen economic busts due to national recessions and downturns in defense spending; our major employers are defense and aerospace contractors with nearby Edwards Air Force Base. I teach college-articulated courses at a public early college high school located on the Antelope Valley Community College campus. Our school's mission is to recruit underrepresented, first-generation college students, thus our students are predominantly Hispanic or Latino, and minority. With an emphasis in math, science, and engineering, we recruit "average" students with high potential and motivation to prepare them for success at the university level and, ultimately, employment in the nearby high-tech industries. Though our area is experiencing an economic boom right now, a seesaw trend that happens every ten years or so, almost 60% of our school's students are eligible to receive free and reduced-price meals. I write this background for the proposal reviewing committee so they get a sense of our students 3,000 miles away who have been *significantly* impacted by your program. I have no doubt that if you can reach this far into our small community changing the lives of so many students and teachers, you will be successful in your home community through the Foundry.

To update you, our team of young inventors held their technical review – something that we would not have known to do without your program's guidance and support over many years. 35 people from the community attended, including representatives from Northrop Grumman, Southern California Edison, and the Air Force Research Laboratories. Many parents were in the audience, too. The students presented on their current invention that they are working on as an extracurricular activity.



Though our community is in the infant stages of invention education design, I believe there are certainly parallels between what we are trying to do and what the Lemelson-MIT Program wants to make available in East Cambridge. When my team of students attend the capstone event that you host for young inventors, EurekaFest at MIT, in June I would like to sneak away at some point to go see the Foundry. I am imagining an incredible gathering place for the community – an intersection between the community and true STEAM access! Awesome! I'm now dreaming about a Foundry in the Antelope Valley.

Thank you for all you do to bring together diverse groups of people to do incredible things.

Sincerely,

A handwritten signature in cursive script that reads "Rachel K.M. Thibault". The signature is written in black ink and is positioned above the typed name.

Rachel K.M. Thibault
SOAR Early College High School, Teacher
Lemelson-MIT InvenTeam, Advisor

February 27, 2018

Dear Cambridge Redevelopment Authority,

I am writing a letter of emphatic support for the Lemelson-MIT Program as operator of the Foundry on behalf of The Business of Doing Good, an organization that empowers young social entrepreneurs. I am excited about this opportunity because we are realizing that interdisciplinary entrepreneurship education is needed now more than ever. Students have ideas that can solve and challenge real problems in our society; our collective efforts should be focused on providing them with the space to solve problems.

I had the opportunity to work with Lemelson-MIT staff in my previous role through MIT Launch, a premier high school entrepreneurship incubator. I reached out to their staff because I was interested in developing new curriculum that was centered on invention and product design. Many of my students had ideas and some business acumen, but they did not have complementary knowledge to make their ideas a reality. Working together, we facilitated a thoughtful redevelopment of several workshops. We created more “maker” oriented options for students during the weekends and created incentives for product-driven solutions. Our sessions on business models included more representation from product companies like Humon. Together, we noticed that Lemelson-MIT and Launch overlapped and we wanted to leverage our shared expertise.

Currently, I am helping scale a social entrepreneurship program that serves students who live in the Greater Boston area. Our Boston summer boot-camp will reside this year at WeWork Boston and Cathedral High School. We may be looking to expand in Cambridge, as well (note: our program also serves students in NYC and Philadelphia). We have had conversations with members of the ecosystem about our work and we are excited that the opportunity with Lemelson-MIT and the Foundry may present another area of impact as our organization grows. We want to include maker workshops for our middle school students to tinker and unleash their creativity. We want to use a theater space to host our improv sessions on public speaking and open our pitch presentations to the community. Many schools in Cambridge do not have an entrepreneurship program, but in collaboration with Lemelson-MIT and The Foundry, we hope to spearhead movement in this area.

Thank you for considering the Lemelson-MIT Program as the Foundry's operator. I cannot speak more highly about the potential that is brewing with all these synergies in our communities. The enormity of the collective impact is certain. I am available via e-mail at marvinv@mit.edu if you have any questions. I look forward to hearing more about The Foundry and how it will make an impact on the Cambridge community.

Sincerely,

Marvin Vilma

Lead Instructor

Brand & Engagement Assoc.

The Business of Doing Good



SAMUEL J. PETUCHOWSKI, PH.D.
T 617 443 9292 x237
SPETUCHOWSKI@SUNSTEINLAW.COM

March 2, 2018

Dr. Stephanie Couch
Executive Director
Lemelson-MIT Program
222 Third Street, Suite 0300
Cambridge, MA 02142

Dear Dr. Couch,

Leigh Estabrooks asked whether I would see fit to write a letter in support of a proposal of the Lemelson-MIT Program to plan and manage a new creative space at The Foundry in Cambridge. I do so enthusiastically because, as someone who has devoted a career to science and then, as an attorney, to the role it can play in making life better for all, I can't imagine any organization better suited than LMIT to assembling a vision around transformation through creativity and then bringing that vision through to fruition.

I have seen LMIT, through the years, bringing the most diverse set of stakeholders together to create wonders. After working in the ivory tower of a NASA space flight center for 15 years, I came to appreciate that human creativity not only enriches our storehouse of knowledge but enables the very sustainability of our society. People who don't appreciate the power of thinking and creating for themselves will not remain free.

It is only through widely sharing the ability to view our situation with new and critical eyes that anyone can do something differently today from what he/she did yesterday.

We are all creative – we all have ideas, dreams and ways to see and interpret our world. But we have to learn – through every stage of life - how to have faith in our ideas and dreams and how to act on them and develop them through interaction with others. That is precisely the

niche that the Lemelson-MIT Program has come to inhabit with remarkable success. No program can match LMIT in the raw number of ideas generated by young people, especially in otherwise challenged and underserved circumstances, that have been brought to fruition, and brought to the fore, by gathering people of diverse experience and diverse skills and engendering true interaction and learning. LMIT has shown and leveraged a deep understanding of how we acquire skills and tools and an appreciation for what we can do.

I have seen LMIT build bridges between high school students in all corners of our country and people in their very own communities – and, then, in others - who partner with those students and inspire them with faith in themselves and their own possibilities to enrich all our lives. The LMIT team has a track record of fostering the best of the human spirit, and I know that they have the wherewithal to engender cooperation across a wide network of talents and skills, scientific, technical, artistic, organizational, and many others. LMIT works across every possible demographic of our society. LMIT worked with a largely urban immigrant student group in a Texas town to partner with a group of largely suburban non-immigrant disabled students nearby and some dedicated college computer mavens to talk with each other about needs and solutions. That is LMIT's strength.

I would like to see that very energy - that has brought young people across the country to pursue their potential in creative careers - focused in our own community. And I am confident that LMIT has the organizational wherewithal to bring the local community together to achieve a synergy no less inspiring. We have immense strengths in our community. I stand fully behind the vision and capabilities of LMIT, as I am sure that many others will do.

Yours truly,

A handwritten signature in black ink, appearing to read "Sam Petuchowski". The signature is fluid and cursive, written in a professional style.

Sam Petuchowski, Ph.D., J.D., Partner
Sunstein Kann Murphy & Timbers LLP
125 Summer St.
Boston, MA. 02110

March 2, 2018

Mr. Thomas Evans
Executive Director
Cambridge Redevelopment Authority
8th floor
255 Main Street
Cambridge, MA 02142

Re: Letter of Support for the Foundry Consortium

Dear Mr. Evans:

I write in support of the Foundry Consortium bid for STEAM programming and building management at the Foundry, and the lead applicant, Lemelson-MIT Program.

I have been involved with the Lemelson-MIT Program (LMIT) in several ways over the last several years that spans the range of programs that LMIT facilitates and sponsors. Based on my experiences with LMIT, I believe them to have the knowledge, dedication and range of expertise needed to support a community that will make the Foundry success for the City of Cambridge and the various populations that will benefit.

The first way I have been involved with LMIT is through my daughter's participation in an LMIT-sponsored InvenTeam at Natick High School. Along with a dozen or more other high school students and several teachers, my daughter was part of a team that designed and built a robot that performs underwater search and rescue under the ice of New England's frozen ponds, thereby lessening the risk to first responders. Most of the students had little prior experience with robotics, let alone inventing a robot for a particular real-world purpose, but LMIT's support of the InvenTeam allowed them to gain a tremendous amount of knowledge and experience in a supportive environment. In addition to inventing and building the invention, students learned how to make a group work by assuming various roles including: technical/engineering, internal and external communications, and managing group finances. Thus, while teachers and other adults provided guidance, the students were involved at every level of developing their invention.

LMIT supports the InvenTeam program in schools across the United States and, works to include students from all backgrounds and socioeconomic groups regardless of prior experience. In doing so, LMIT has been creating sparks of inventive and entrepreneurial thought and action across this nation, including in disadvantaged populations.

The second way I have been involved with LMIT is through Lemelson-MIT Student Prize competition. I was asked to be a screener of applications for the Student Prize in my field of technological expertise, biotechnology. I was impressed with the quality of applications as well

Mr. Thomas Evans
March 2, 2018
Page 2

as the dedication of the LMIT staff in organizing the nationwide competition and encouraging ever more diverse participation.

In my own professional career as a patent attorney, I have spoken to many groups on the basics of intellectual property (IP) protection, including patents, trademarks and copyrights. In the Cambridge ecosystem, IP is so important to economic growth and creation of jobs and opportunities. IP is an important pillar of the success of the renowned universities and the vibrant biotechnology and computer industries in Cambridge. But having a greater understanding of IP also can be important to understanding rights and responsibilities with respect to inventions, creative works of art or music, and trademarks. LMIT can be a catalyst for increasing understanding of IP by offering programs that educate the various constituencies that will utilize the Foundry. As one example, an artist could learn how to protect his creations and realize more fully the benefit of his creativity. As another example, a budding inventor could understand what is needed to protect and leverage her inventions.

Based on my experiences with and observations of LMIT, I strongly believe that LMIT has the experience and dedication to create and maintain a tremendous resource for Cambridge.

Very truly yours,

A handwritten signature in black ink, reading "John Van Amstel". The signature is written in a cursive style with a long, sweeping horizontal line extending to the right.

MINISTRY OF SUPPLY

Ministry of Supply
105 South Street
Boston, MA 02111

February 27, 2018

To the Cambridge Redevelopment Authority:

I'm writing to express Ministry of Supply's support and commitment for the Lemelson-MIT Program's proposal for a STEAM-focused community space at The Foundry.

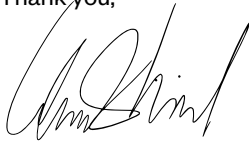
I'm one of the founders of Ministry of Supply, a performance professional apparel start-up born out of MIT. We're seeking to reinvent how wear-to-work clothing is designed and made, and imbuing it with the technology through fabric, wearable and manufacturing innovation. We are industry leaders in 3D-printed on-demand garments and creators of the category Performance Professional apparel, we are very much born at the intersection Design & Technology. For that reason, STEAM initiatives are very close to our heart.

The maker-space in The Foundry, will unlock a critical resource for tinkerers, and build a sense of curiosity at a young age in a non-academic setting. Moreover, the workshops at the space will pair resources with skills to empower young engineers and artists to translate concepts into tangible prototypes and artwork. Additionally, the Blackbox offers a performance space that could include fashion shows of the creations.

The Ministry of Supply team would like to extend our support through a variety of resources, but particularly through developing and offering workshops around product design and development, and in the past we've offered programs around wearable technology development, which we find captures the interest of artists and engineers alike.

Personally, as a Cambridge resident for nearly ten of my formative years – I've realized how important this community is and the impact programs like this can have on aspiring engineers and artists.

Thank you,



Gihan Amarasiriwardena
Co-founder, President, Ministry of Supply



Stephanie Couch
Executive Director
Lemelson-MIT Program
MIT School of Engineering
77 Massachusetts Ave. 10-110, Cambridge, MA 02139

February 20, 2018

Dear Dr. Couch,

I am writing to express our support for your proposal to manage the Foundry building in East Cambridge.

We believe that the Lemelson-MIT Program has the capacity to bring together a range of users who together will foster educational synergy between STEAM fields in science, engineering and the arts. We embrace your idea of the building as a crossroads where people can come together to engage in creative thinking, making, teaching and learning. Specifically, we are interested in your commitment to serve people and groups of all ages and from all walks of life.

As you know, the Eliot School's mission is to inspire lifelong learning in craftsmanship and creativity for all. We look forward to a deepening partnership in the coming years and both of our programs continue to develop.

Sincerely,

Abigail Norman
Director

NATE BALL

Entrepreneur • CEO • TV Host • Speaker • Author • Mechanical Engineer

March 1, 2018

TO: Cambridge Redevelopment Association

RE: Letter of Support of Lemelson-MIT Program Proposal

Dear CRA,

It was great news to me that the Lemelson-MIT Program is putting in a proposal to expand their reach beyond MIT and into our community. Since winning the 2007 \$30,000 Lemelson-MIT Student Prize as a graduate student at MIT, I've been proud to be affiliated with the program in many capacities over the years. I believe their mission to promote inventing and STEAM education is a crucial one in our world today, and that they are uniquely well positioned to make an especially large impact on our local community through their proposed expansion.

Having created and sustained communities of inventors across the US, I'm excited to provide the following support to the Lemelson-MIT Program's new STEAM programming:

- Utilize the Black Box for appearances, talks and performances that engage the community in the intersection of innovation and the arts, in the same way that I've done in TEDx, TEDMED, the USA Science and Engineering Festival, and other high profile appearances around the US
- Hosting children's book signings and hands-on experimentation sessions for my book series [Alien in My Pocket](#) and [Let's Investigate With Nate](#)
- Helping to design the "maker space" with accessible tools and materials as a consortium member
- Utilize the facilities to host and produce episodes of *Design Squad Global*, the Emmy and Peabody award winning STEAM-focused TV show produced by WGBH-Boston that I've hosted since 2007
- Bring engineers and technicians from my company, Atlas Devices, to do outreach activities of all kinds. We build real-life Batman equipment for the military and first responders, and our demonstrations are highly engaging!
- Bring my own kids to participate in the events and programs!

Please consider me an enthusiastic supporter of the Lemelson-MIT Program's proposal and let me know if I can assist in any way. I look forward to being an active participant in this exciting project!

Best regards,



Nate Ball

Co-Founder & CEO, Atlas Devices, LLC

Host & Producer, PBS's Design Squad and Design Squad Global, produced by WGBH

Author, Alien in My Pocket and Let's Investigate with Nate series, published by Harper Children's

81 Columbus Ave
Somerville, MA 02143
nateball@gmail.com



Rindge School of Technical Arts
459 Broadway
Cambridge, MA 02138-4198

Tel: 617-349-RSTA (7782)
Fax: 617-349-6770

www.rindgetech.com

Kenneth Salim, Ed.D.
Superintendent of Schools
Cambridge Public Schools

Michael V. Ananis, Ed.D.
Executive Director
RSTA

February 20, 2018

Dear Dr. Couch,

I am writing on behalf of the Rindge School of Technical Arts (Cambridge Public Schools) to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live in and/or work in the city.

Your proposal to create a new Foundry Consortium that will help with making decisions about the building's use and with efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry holds great promise. We embrace the notion of the building as a 'crossroads' or place that people come together to engage in new ways around science, technology, engineering, the arts, and mathematics (STEAM).

We hope you and others submitting this proposal with you are successful in your bid. We will fill out the survey you provided to share additional details about how we envision being involved as your work progresses.

Sincerely,

Michael V. Ananis

Michael V. Ananis, Ed.D.
Executive Director
Rindge School of Technical Arts



BOSTON COLLEGE

CAROLYN A. AND PETER S. LYNCH SCHOOL OF EDUCATION
OFFICE OF THE DEAN

February 27, 2018

Stephanie Couch
Executive Director
Lemelson-MIT Program
scouch@mit.edu

Dear Dr. Couch,

I am writing on behalf of the Boston College Lynch School of Education to express our strong support for your proposal to manage the Foundry building in East Cambridge. We are excited about the new possibilities the Foundry creates for people who live or work in the city.

Your proposal to create a new Foundry Consortium that will help make decisions about the building's use, and about your collective efforts to ensure that other sites in the community benefit from partnerships forged in the Foundry, holds great promise. We embrace the notion of the building as a place where people can come together to engage in new ways around science, technology, engineering, the arts and mathematics.

We will fill out the survey you provided and share additional details about how we envision being involved as your work progresses. We have enjoyed and benefited from our ongoing joint work building invention curricula and providing professional development for teachers in local schools. We would welcome the opportunity to collaborate further on projects with teachers, students and community members in Cambridge that could be sponsored by the Foundry.

We hope you and your partners are successful in your bid.

Sincerely,

A handwritten signature in black ink, appearing to read "Stanton E. F. Wortham", with a long horizontal flourish extending to the right.

Stanton E. F. Wortham
Charles F. Donovan, S.J., Dean

STATEMENT IN SUPPORT OF THE LEMELSON-MIT PROGRAM

03/03/2018

Dear Cambridge Redevelopment Authority:

I have known Dr. Leigh Estabrooks, and through Leigh, the Lemelson-MIT Program, its mission, programs, facilities and accomplishments over the last six years.

I am a native New Yorker and I relocated with family to our vibrant Kendall Square Community on a full-time basis five years ago. I was indoctrinated into the world of Wall Street finance as an undergraduate and graduate Student at Columbia University. After graduation, I worked at Bankers Trust and steadily moved through the ranks at JP Morgan and IBM/PwC. Aside from work, I served as an advisor for Columbia's Industrial Engineering and Operations (IEOR) Department and also served as a multi-term board member and treasurer for the Columbia and Princeton Clubs.

Having come from a family of professionals, consisting of educators, scientists, and engineers, it was imprinted early on that a broad-based interdisciplinary education was as elemental to the existence our world as the classical ones of yore: earth, wind, fire, and water.

Over the last few years, I have had the great pleasure to keep in touch with Leigh and the Lemelson-MIT Program as a Cambridge resident, and an Entrepreneur-in-Residence. From meeting staff during morning runs and walks with my Australian Shepherd, Bruno, to longer visits and walkthroughs, I have frequently visited the Lemelson facilities. I have seen first-hand, and I have read about and heard about the impact that Lemelson has had on our country's educational system.

Indeed, as I expanded my career as an entrepreneur, rather than passively following the natural tide of the broader world as key innovations and industry areas come into focus, I was inspired by Lemelson to weld together my various very diverse interests in finance, technology, science, the arts, technology and biotechnology.

Currently, I serve as a Corporate and Fund Advisor to a life science accelerator in Kendall Square. The accelerator is the world's preeminent acceleration facility for launching high growth life sciences companies. All of its 25+ member companies reduce to practice, be it diagnostic devices, methodologies or drug therapies, science and principles advanced by Lemelson award recipients, from the CRISPR technology of Feng Zhang to the numerous drug delivery patents of Professor Robert Langer to the nanotechnology of Angela Belcher, for instance.

In the near future, as I understand the Lemelson-MIT Program is growing in scale and is proposing to operate a large multi-disciplinary facility beyond the confines of the MIT Campus, I applaud and support the Program in its grand next steps. The move represents a march on a steadfast path toward further engagement with the community and the world at large.

I would be pleased to introduce Lemelson-MIT and the Foundry Consortium to members of my extensive banking, asset management, academic and life sciences network. I anticipate aligning with, and being of joint service to Lemelson, first in our Cambridge / Kendall Square Community; and secondly, in Lemelson's broader, more global footprint and mandate.

With kindest regards and best wishes,

Joseph V. Singh
(917) 328-7633
JVS10@Columbia.edu

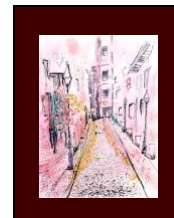


Bruno – Australian Shepherd

Cambridge Art & Frame

41 2nd Street
Cambridge, MA 02141
617.547.5944

www.CambridgeArtandFrame.com



March 1, 2018

Dear Dr. Couch:

Thank you for reaching out to local small business owners like myself to share your exciting plans for the Foundry. Cambridge Art & Frame is a family-owned and operated business in East Cambridge offering museum-quality custom picture and mirror framing. This year we are celebrating our tenth year in business here in Cambridge. Additionally, I am a founding member of the East Cambridge Business Association and board member for the first seven years of the Association's existence.

I am in complete support of the Lemelson-MIT Program's plan and proposal to the Cambridge Redevelopment Authority to be the operator of the Foundry and encourage other neighborhood businesses to do the same.

Your proposal and the Foundry are of interest to me on several levels:

- I may be interested in leasing space for my business at the Foundry in order to bring my framing services closer to artists and community members. I currently utilize 800 – 1,000 square feet of space.
- I would be interested in sharing my technical knowledge with young people. In fact, my daughter, who works with me, would be an excellent workshop leader for young people and could combine the "A" with the "M" in STEAM through framing. She, too, sees the therapeutic benefit of art for young people.
- Finally, I may be interested in being on the Foundry Consortium to help plan and direct activities, programs, and events. My years of experience with the East Cambridge Business Association may be beneficial to a diverse group of Consortium members. My background also includes photography, graphic design, writing, and marketing - communications (I spent most of my career in executive marketing management roles at both large corporations and start-ups).

I would be happy to speak with you in more depth regarding your future plans for the Foundry and my interest in this exciting project.

Sincerely,

Andrew Montone
Cambridge Art & Frame
41 2nd Street
Cambridge, MA 02141

www.CambridgeArtandFrame.com
617-547-5944

March 5, 2018

Dear Dr. Couch,

This is a letter of support for the Lemelson-MIT Program (LMIT) to be operator and form a consortium for on-going management for the Foundry in the diverse community in Cambridge where all voices are important to be heard.

The Lemelson-MIT Program continues to inspire and drive me throughout my college years. My participation in the program persisted throughout my high school career in the Antelope Valley (California). Being on my InvenTeam was extremely liberating, especially as a young student. My experiences were heightened when I would be able to travel across the country to MIT, but my favorite adventure every week would be working on our low-cost, wearable breathalyzer with my team members. Incidentally, one of my closest friends in college at UC-San Diego was made during our time with InvenTeams. Being with a team every week and creating a brand-new product inspired me to become an engineer. The amount of control and complexity required to invent is too inspiring to experience only once. I remember a phrase that a teammate of mine, Mary Alaberkyan, reiterated, "If it's worth doing, it's worth overdoing." In this regard, everyone within the team persisted throughout the late nights and long weekends. It was extremely fun.

The time I spent with the Lemelson-MIT founders and the people I was able to network with are invaluable connections to me. I remember being awarded the opportunity to present at the 2015 White House Science Fair and meeting a man leading the charge to create alternative high schools in which the students designed inventions every month or so with industry leaders. The impact he had on me is insurmountable. It's the unconventional ideas that strike me as the most powerful and directly putting students in the forefront of industries is powerful.

These collections of experiences inspired me to study Computer Science upon entrance to UC San Diego. Studying computer science provides me with the foundation to manipulate and input my creations within the virtual space. Major tech companies are an extremely welcoming space that, like Lemelson-MIT, encourage bursts of invention. I recently interviewed with Microsoft at their headquarters in Seattle, Washington, and one of the major amenities they provide for their workers is a space called the Microsoft Garage. The space encourages and facilitates the creation of projects, pushing their workers to explore their own ingenuity even if it has no relation to the company. Lemelson-MIT inspired me to envision the importance within invention. Companies that promote the spaces and ideals similar to the Microsoft Garage embody values I gained from my time with my InvenTeam.

Similarly, the Foundry extends the most important values I experienced with Lemelson-MIT. Their first objective: "Fostering a center of creativity and innovation

through the shared use of space populated with complimentary uses that are accessible to all” is essential to inclusivity. Students such as those that are low-income or are not able-bodied would benefit from the Foundry in Cambridge. The second objective, “Creating mentorship, internship, apprenticeship, workforce training and educational programs for Cambridge residents that can directly benefit and engage the surrounding community” provides a surplus of opportunity for students to actively participate and grow in. Additionally, the third objective promotes STEAM, science, technology, engineering, art, and mathematics, an increasingly important professional field growing in Kendall Square. Finally, the Foundry’s fourth objective aims to “emphasize youth and senior engagement, with a particular focus on under-represented, lower-income households.” I cannot overstate how important it is for organizations like the Foundry to actively recruit communities that are predominantly low-income. Students in these areas lack the necessary programs to excel further in their educational journey when programs are delivered to disproportionately rich, White, suburban students. Low-income students with diverse races and ethnicities would greatly benefit from the Foundry.

Lemelson-MIT’s dedication to working with the community and creating a host of beneficial networks to students and partners universally is simply astounding. The connections and experiences Lemelson-MIT has granted me are treasures that drive my motivation while in school and I’m sure the Foundry will do the same for students to come.

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan Hernandez". The signature is fluid and cursive, with the first name being more prominent.

Jonathan Hernandez
2014 SOAR High School InvenTeam
Cognitive Science - Machine Learning (B.S.)
University of California San Diego c/o 2020



**East Cambridge ~ Wellington-Harrington ~ Inman Square
One Kendall Square ~ Lechmere Square**

www.EastCambridgeBA.com

Executive Director

March 6, 2018

Jason Alves
Executive Director
baecamb@gmail.com
Office 617-945-1416

Tom Evans
Executive Director
Cambridge Redevelopment Authority
255 Main Street
Cambridge, MA 02142

Board and Officers

Patrick Magee, President
Atwoods's Tavern
ecbapresident@gmail.com

Dear Mr. Evans:

As part of their process for submitting a proposal for the Foundry Building, the Lemelson-MIT Program team reached out to the East Cambridge Business Association to share their vision and seek our feedback. We were happy to be included in their outreach and ultimately look forward to working with the finalist to make this a great destination in East Cambridge.

Stephen LaMaster, Clerk
Vinfen

The Foundry will help to reinforce STEAM learning that is happening throughout the City, and the Lemelson proposal is consistent with themes heard during the public process. The ECBA is happy to see a local operator take interest in building a dynamic program that can reach into our local schools and youth centers, and we would be excited to help maintain a vision for the Foundry as part of the consortium structure.

Michelle Lower, Treasurer
*Alexandria Real Estate
Equities*

Sincerely

Jason Alves
Executive Director
East Cambridge Business Association

Carl Fantasia
New Deal Fish Market

Paul Ferreira
Cambridge Printing Co.

Lenny Frisoli
Frisoli Associates, P.C.

Michael Grill
Fairlane Properties

Michael J. Ring
*The Law Office
of Michael J. Ring*

Mark Rogers
Rogers Properties Group



March 6, 2018

Thomas Evans
Executive Director
Cambridge Redevelopment Authority
255 Main Street
Cambridge, Massachusetts 02142

Dear Tom,

On behalf of East End House, a nonprofit, community center serving Cambridge for over 142 years, we are writing to express our strong support of the proposal presented by the Lemelson-MIT Program for the redevelopment of the Foundry. We strongly believe that a collaborative and inclusive operating and governance model has the greatest success for realizing the mission and vision of the building. For many years, East End House has been strongly advocating for better and more community spaces in East Cambridge to better serve the under-resourced children and families of Cambridge. If the Lemelson-MIT Program is awarded this project, we will work closely with them and other partners to help provide programs for Cambridge residents that directly benefit and engage the surrounding community.

East End House community center uses a holistic approach to promote the well-being, academic achievement, and successful transition to adulthood of children and youth from under-resourced families in Cambridge and surrounding communities. It provides programming for infants to seniors, and provides services to not only East Cambridge residents but to residents in every neighborhood of Cambridge. The ability to be innovative, while also grounded in best practices, makes it an important institution for those it serves, as well as a leader in the community.

We are excited in regard to the opportunity to partner and collaborate closely with the Lemelson-MIT Program and other partners to create a flexible, inclusive, dynamic, and welcoming building for all the residents of Cambridge.

Best Regards,

Michael J. Delia, President and Chief Executive Officer

105 Spring Street
Cambridge, MA 02141
T 617.876.4444
F 617.868.3616

www.eastendhouse.org

Q1 Full Name

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	Peter DiMuro	3/3/2018 6:47 PM
2	Daniel Koff	3/2/2018 1:28 PM
3	Michael V. Ananis	3/2/2018 11:24 AM
4	Christian Blanc	3/1/2018 5:18 PM
5	Daniel Wilson	2/28/2018 11:20 AM
6	Cora Beth Abel	2/27/2018 4:27 PM
7	Joan Squeri	2/27/2018 1:00 PM
8	Peter Laipson	2/27/2018 10:07 AM
9	Sam Aquillano	2/27/2018 9:52 AM
10	Carl Whittaker	2/25/2018 9:54 AM
11	Jeanne DuBois	2/23/2018 5:28 PM
12	Ron Mallis	2/22/2018 3:58 PM

Q2 Job Title

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	Executive Artistic Director/Artistic Director	3/3/2018 6:47 PM
2	Director of New Initiatives	3/2/2018 1:28 PM
3	Executive Director, Rindge School of Technical Arts	3/2/2018 11:24 AM
4	Senior Manager, Strategic Accounts	3/1/2018 5:18 PM
5	Director, Project Zero	2/28/2018 11:20 AM
6	President & CEO	2/27/2018 4:27 PM
7	Principal	2/27/2018 1:00 PM
8	Chief Administrative Officer	2/27/2018 10:07 AM
9	Executive Director	2/27/2018 9:52 AM
10	Director	2/25/2018 9:54 AM
11	Principal	2/23/2018 5:28 PM
12	Executive Director	2/22/2018 3:58 PM

Q3 Organization

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	The Dance Complex/ Peter DiMuro/Public Displays of Motion	3/3/2018 6:47 PM
2	Jean Appolon Expressions	3/2/2018 1:28 PM
3	Cambridge Public Schools	3/2/2018 11:24 AM
4	Dassault Systèmes SolidWorks Corp.	3/1/2018 5:18 PM
5	Harvard Graduate School of Education	2/28/2018 11:20 AM
6	MSSEF	2/27/2018 4:27 PM
7	HCC Consulting Associates	2/27/2018 1:00 PM
8	Woodrow Wilson Academy of Teaching and Learning	2/27/2018 10:07 AM
9	Design Museum Foundation	2/27/2018 9:52 AM
10	Herb and Maxine Jacobs Foundation	2/25/2018 9:54 AM
11	J DuBois Consulting Associates	2/23/2018 5:28 PM
12	BostonAPP/Lab	2/22/2018 3:58 PM

Q4 Organization Address

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	536 Massachusetts Avenue, Cambridge, MA 02139	3/3/2018 6:47 PM
2	P.O. Box 391173, Cambridge, MA 02139	3/2/2018 1:28 PM
3	459 Broadway Cambridge, MA 02138	3/2/2018 11:24 AM
4	175 Wyman St Waltham, MA 02451	3/1/2018 5:18 PM
5	4th Floor Longfellow Hall 13 Appian Way Cambridge, MA 02138	2/28/2018 11:20 AM
6	955 Massachusetts Avenue #350 Cambridge, MA 02139	2/27/2018 4:27 PM
7	118 Pearl Street Suite 2 Cambridge, MA	2/27/2018 1:00 PM
8	24 Thorndike Street Cambridge, MA 02141	2/27/2018 10:07 AM
9	50 Milk St, 16th FL Boston, MA 02109	2/27/2018 9:52 AM
10	15 Sycamore Rd. Wayland, MA 01778	2/25/2018 9:54 AM
11	15 Heathcote St. Boston, MA, 02131	2/23/2018 5:28 PM
12	567 Tremont Street Boston, MA 02118	2/22/2018 3:58 PM

Q5 E-mail

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	peter@dancecomplex.org	3/3/2018 6:47 PM
2	jaexpressions@gmail.com	3/2/2018 1:28 PM
3	mananis@cpsd.us	3/2/2018 11:24 AM
4	christian.blanc@3ds.com	3/1/2018 5:18 PM
5	daniel_wilson@harvard.edu	2/28/2018 11:20 AM
6	abel@scifair.com	2/27/2018 4:27 PM
7	joan.squeri@gmail.com	2/27/2018 1:00 PM
8	laipson@woodrow.org	2/27/2018 10:07 AM
9	sam@designmuseumfoundation.org	2/27/2018 9:52 AM
10	jacwhit195@gmail.com	2/25/2018 9:54 AM
11	jaduboisconsulting@gmail.com	2/23/2018 5:28 PM
12	ron.mallis@bostonapp.org	2/22/2018 3:58 PM

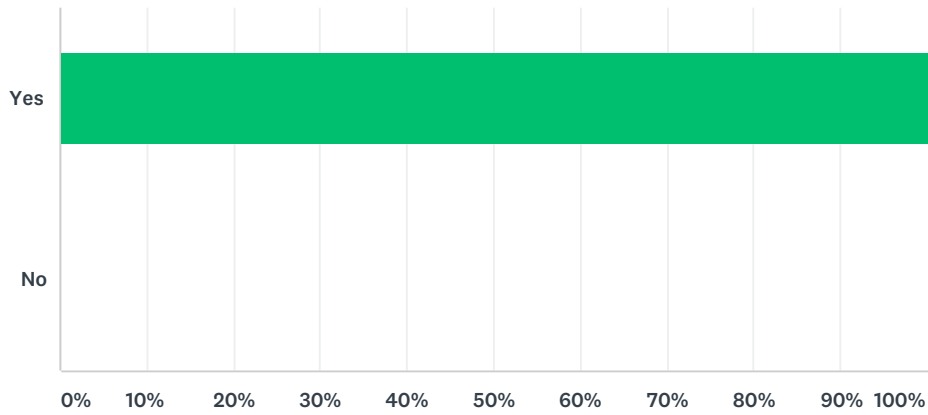
Q6 Describe the primary audiences served by the organization

Answered: 12 Skipped: 0

#	RESPONSES	DATE
1	The Dance Complex serves an very wide an authentically diverse cross section of both professional and recreational dance participants; including all ages of those who study; audiences, professionals who teach and the "maker" community in dance	3/3/2018 6:47 PM
2	Young children and families, teenagers, and adults	3/2/2018 1:28 PM
3	Cambridge high school (grades 9-12) students who choose to enroll in Career & Technical Education (CTE) courses while attending Cambridge Rindge & Latin School.	3/2/2018 11:24 AM
4	STEM education K to post-doc; Commercial applications of design & validation	3/1/2018 5:18 PM
5	Educators and educational leaders across sectors and ages.	2/28/2018 11:20 AM
6	Children in grades 6-12, their STEM teachers and their schools.	2/27/2018 4:27 PM
7	Large, cross sector partnerships and initiatives seeking to be informed by authentic community enagement	2/27/2018 1:00 PM
8	The WW Academy is a graduate school of education that offers the M.Ed. and recommends candidates for initial licensure in math, biology, and chemistry.	2/27/2018 10:07 AM
9	From kids to CEOs, we strive to impact all audiences. Through our regular events with design professionals and design enthusiasts, to our transformational community projects, we work with all types of audiences in the greater Boston and Portland, OR areas.	2/27/2018 9:52 AM
10	Low income individuals.	2/25/2018 9:54 AM
11	Community Development Corporations and other non-CDC developers; Economic Development entities such as Main Streets, Business Associations, redevelopment authorities, etc.; Citizens and residents in mixed income communities learning tools of engagement and organizing to increase their individual and collective power.	2/23/2018 5:28 PM
12	artists, community and neighborhood organizations, city and state agencies	2/22/2018 3:58 PM

Q7 I will be sending a business/corporate/non-profit organization support letter on our organization's letterhead to scouch@mit.edu by March 1, 2018.

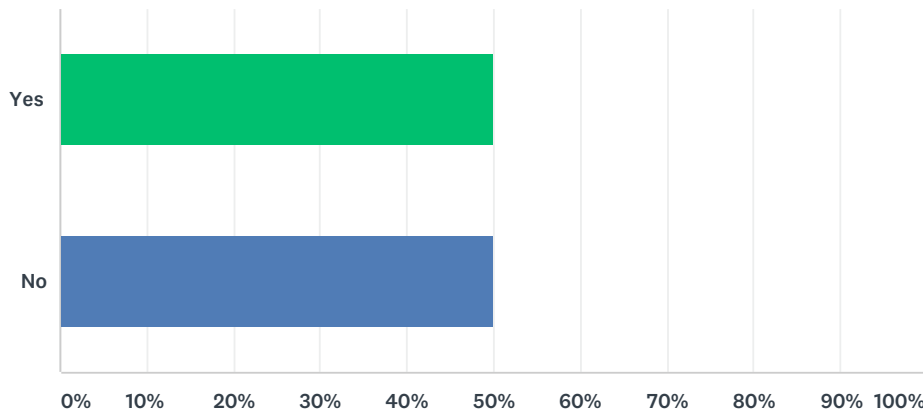
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	100.00%	12
No	0.00%	0
TOTAL		12

Q8 I will be sending a personal support letter to scouch@mit.edu by March 1, 2018.

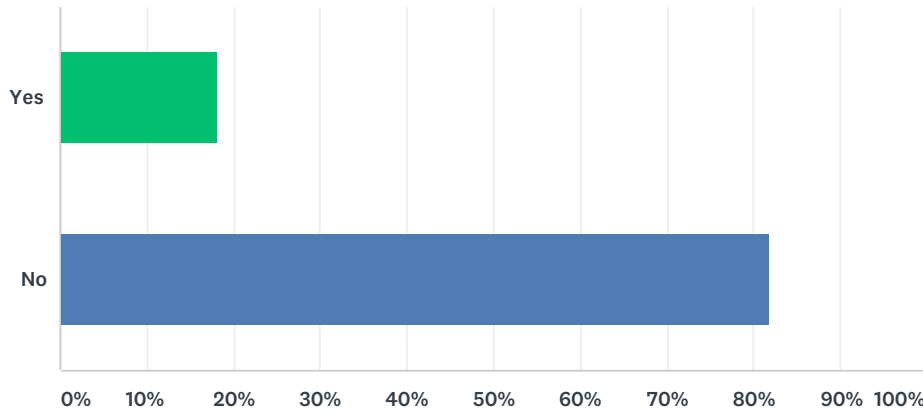
Answered: 8 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes	50.00%	4
No	50.00%	4
TOTAL		8

Q9 We envision renting non-profit office space (\$50 sq. ft. long-term lease up to 5,000 sq. ft. starting 1/2021)

Answered: 11 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	18.18%	2
No	81.82%	9
TOTAL		11

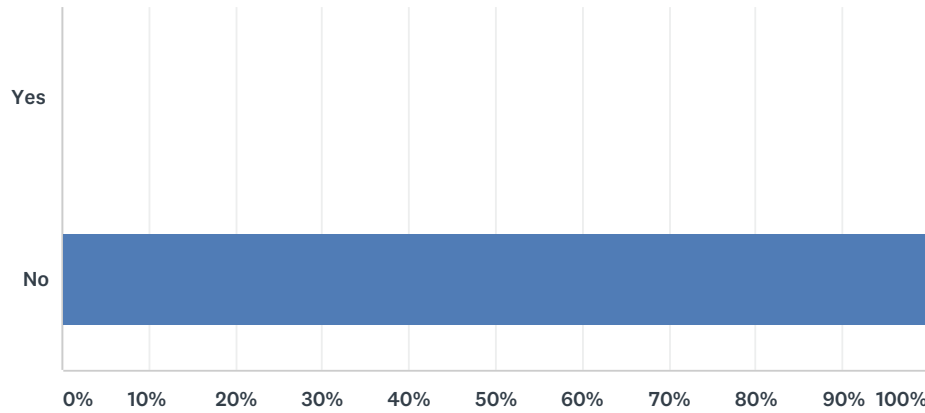
Q10 If yes, how many sq. ft. of non-profit office space?

Answered: 2 Skipped: 10

#	RESPONSES	DATE
1	150	3/2/2018 1:31 PM
2	up to 2,000 sq ft	2/27/2018 9:56 AM

Q11 We envision renting market-rate office space (\$50 sq. ft. long-term lease up to 15,500 sq. ft. starting /2021)

Answered: 10 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	0.00%	0
No	100.00%	10
TOTAL		10

Q12 If yes, how many sq. ft. of market-rate office space?

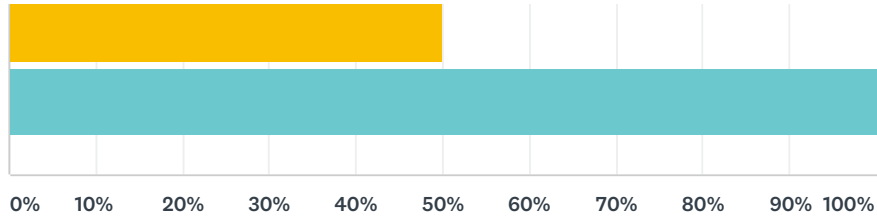
Answered: 2 Skipped: 10

#	RESPONSES	DATE
1	none	2/27/2018 1:01 PM
2	Possibly, depending upon our needs	2/27/2018 10:10 AM

Q13 I envision my organization renting or leasing (for a fee) the following Foundry spaces:

Answered: 5 Skipped: 7





■ yearly
 ■ weekly
 ■ daily
 ■ hourly

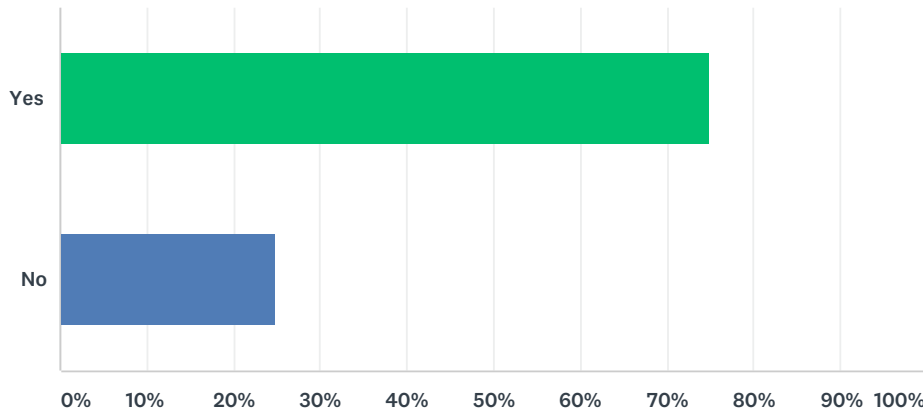
	YEARLY	WEEKLY	DAILY	HOURLY	TOTAL RESPONDENTS
Large Community room (3,000 sq. ft.)	0.00% 0	0.00% 0	33.33% 1	100.00% 3	3
Classroom space (1,000 sq. ft. each)	20.00% 1	0.00% 0	40.00% 2	60.00% 3	5
Performance space/black box	0.00% 0	0.00% 0	33.33% 1	100.00% 3	3
Workshop with tools	0.00% 0	0.00% 0	66.67% 2	66.67% 2	3
Lobby/Gallery	0.00% 0	0.00% 0	50.00% 1	100.00% 2	2

#	PLEASE SPECIFY WHAT YOU ENVISION USAGE OF EACH SPACE TO BE.	DATE
1	The Dance Complex would be interested in replicating its diverse body of classes in a smaller format; helping to present or facilitate presentations in the black box (2- 4 times per year);	3/3/2018 6:50 PM
2	In the classroom space we anticipate: 9am-noon: 45 min/1hr classes for 10-15 young children and parents such as: Drumming, rhythm and math Creative movement Haitian Folkloric dance Yoga through storytelling (early literacy) Dance through feelings (social and emotional learning) Video and dance Noon-3pm: Programs for public school children integrated with STEAM education Advanced drumming rhythm and math Dance production including: costume-making and wearable technology, lighting projections, experimental video production, sound design, etc. Dance training (see list below) 3pm-6pm: After school pre-professional training for 30-40 teens with education in: Ballet Modern/Horton technique Folkloric Haitian Yoga Contemporary Jazz Afro Hip-hop 6-9pm: Classes for adults (similar offerings as above) for 30-40 people The performance space will be used approximately once a week for large classes, as well as up to 3 hours daily during the week for rehearsals. The lobby/gallery space could be used during performances to brand the space with artistic materials	3/2/2018 1:31 PM
3	Space to be used to house training/support activities for the community at large in order to acquire & refine STEAM skills appropriate for employment/ advancement in the Cambridge economy & workplace.	3/2/2018 11:28 AM
4	Quarterly workshops/gatherings for 50-200 local educators, students, and organizational leaders to learn about STEAM topics and pedagogy.	2/28/2018 11:23 AM
5	N/A	2/27/2018 1:01 PM
6	Our future needs are still uncertain	2/27/2018 10:10 AM
7	I can definitely picture us hosting events, building out exhibitions, and more in these types of spaces	2/27/2018 9:56 AM

8	<p>The engagement/organizing consulting team of Jeanne DuBois and Joan Squeri will be working on an in-depth visitation/engagement process with various local leaders with large networks or existing organizations involved in STEAM activities. We intend to balance the heavy arts engagement with strong vocational ed and gap programs for light industrial work. We anticipate this process will be an essential function before, during, and after the development process is completed. Most of our time will be spent outside with those various groups, helping the Foundry Consortium build a strong organizing committee or feedback mechanism. Such a vehicle/group can provide deeper clarity on needs and local assets, political savvy, engaging multiplying levels of networks in programming and events. After opening, the organizing committee can continue to link the local groups' interests and specific activities to the Foundry's Operating team and the Foundry Advisory Committee planning. We will only need individual office space, meeting space, or event space as it relates to the Foundry's organizations and joint efforts.</p>	2/26/2018 3:00 PM
9	<p>We are not likely to rent space.</p>	2/25/2018 9:55 AM

Q14 I want to be listed as an initial member of the Foundry Consortium and I am willing to actively support its success. Please list me and my organization in the proposal.

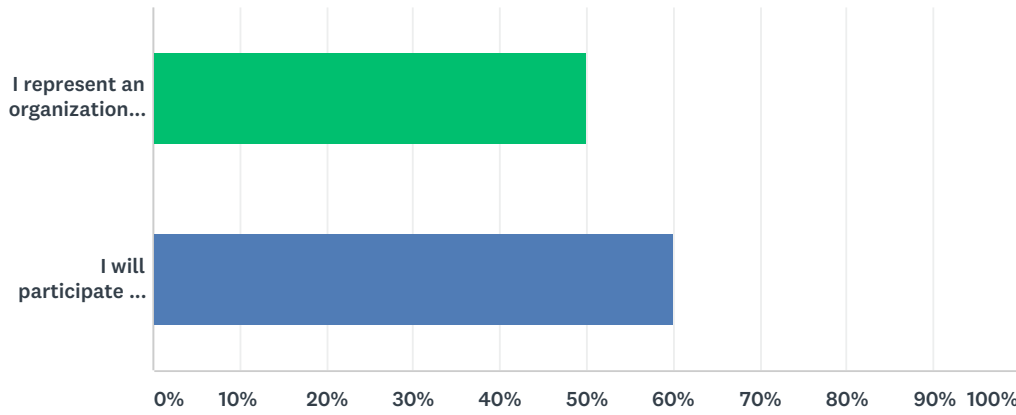
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	75.00%	9
No	25.00%	3
TOTAL		12

Q15 If yes, please indicate the level of participation

Answered: 10 Skipped: 2



ANSWER CHOICES	RESPONSES	
I represent an organization that provides workforce development, serves as a community center, or has a physical space dedicated to the performing and visual arts. We are willing to be part of STEM Roundtable convenings for distributed events.	50.00%	5
I will participate in meetings and efforts of the Foundry Consortium's Action Groups/Committees	60.00%	6
Total Respondents: 10		

11.0 APPENDIX

11. 1. Reference Letters for Stephanie Couch

Those submitting reference letters were:

1. Alexander Zwissler, Einstellung Labs LLC
2. Darien Louie, East Bay Economic Development Alliance
3. Philip Hampton, California State University Channel Islands, Education Partnerships

February 26, 2018

Mr. Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

Dear Mr. Evans,

I am writing to strongly recommend Dr. Stephanie Couch, Executive Director of the Lemelson-MIT Program, as the lead for the partners coming together in Cambridge to serve as the Operator for programming at the Foundry. I worked with Stephanie for many years in my capacity as the Executive Director of the Chabot Space and Science Center through my volunteer work as the Co-Chair of the Gateways East Bay STEM Network. Stephanie was instrumental in forming and developing the network and served as its Director for five years while at Cal State East Bay. She left the organization in great shape when she moved to take her new position in Massachusetts.

As the Co-Chair of Gateways, I have first-hand knowledge of her ability to bring stakeholders from a variety of institutions together and to facilitate discussions that lead to better alignment and greater impact in the local community. She is especially gifted in her ability to gain the respect and mobilize individuals and organizations who would not normally work together. Our regional STEM network efforts included representatives from K12 education, higher education, the private sector, government, elected officials, and nonprofits (including the Chabot Space and Science Center, the Lawrence Hall of Science, the Exploratorium, Techbridge, and Girls Inc. among others).

The STEM Network efforts were funded by grants that she developed in partnership with Gateways member organizations and staff. She is extremely gifted in managing these types of efforts, which is why Cal State East Bay also appointed her as their interim Associate Vice President for Research - a position she filled successfully for nearly two years on top of her work with Gateways and the Institute for STEM Education.

I can't think of anyone more suited to the job of the Operator at the Foundry. I strongly encourage your acceptance of the proposal from the community consortium she is developing.

Sincerely,



Alexander Zwissler, Principal, Einstellung Labs LLC



February 27, 2018

Mr. Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

Dear Mr. Evans,

I am writing on behalf of the Ventura County STEM Network to strongly recommend your selection of the proposal submitted by Dr. Stephanie Couch, Executive Director of the Lemelson-MIT Program, for service as the Operator for programming at the Foundry. Stephanie served as a consultant to VC STEM between 204 - 2015. She supported my work in conceptualizing a \$75,000 planning grant that Amgen Foundation funded. The grant provided the resources that we needed to convene community partners to further design and grow the network. Her consultation with me, the Steering Committee, and with chairs of our Action Groups was invaluable in our early days.

We continue to partner with Stephanie in her new role as the Executive Director of the Lemelson-MIT program. Her recent research suggests that helping young people invent solutions to problems in their community develops interest in the pursuit of STEM pathways and helps to develop confidence in students underrepresented in STEM. She has co-written grant proposals with me and with local schools that we hope will resource our joint work. There is no doubt that these types of strengths will be of benefit to entities who want to offer STEAM programs at the Foundry.

I cannot think of anyone more suited to the job of the Operator at the Foundry. I strongly encourage your acceptance of the proposal from the community consortium she is developing.

If you need any additional information from me, feel free to contact me by phone (805-437-8869), or by email (Philip.Hampton@csuci.edu).

Sincerely,

A handwritten signature in black ink that reads "Philip D. Hampton".

Philip D. Hampton, PhD
Professor of Chemistry
Interim Director of Educational Partnerships



February 26, 2018

Mr. Thomas Evans, Executive Director
Cambridge Redevelopment Authority
255 Main Street, 8th Floor
Cambridge, MA 02142

Dear Mr. Evans,

I am writing to strongly recommend Dr. Stephanie Couch, Executive Director of the Lemelson-MIT Program, as the lead for the partners coming together in Cambridge to serve as the Operator for programming at the Foundry. I worked with Stephanie for many years in my capacity as the Executive Director of the East Bay Economic Development Alliance and as a partner of both CSU East Bay's Institute for STEM Education and the Gateways East Bay STEM Network.

The business community has a keen interest in STEM education and workforce development. The needs and perspectives of the business community often differ from the views of educators. We greatly appreciated Stephanie's ability to forge productive partnerships and initiatives that addressed the needs and concerns of our members while enjoying support from educators. Her lengthy history in education policy roles contributes to her success.

We miss her here in the East Bay. I know you will be very pleased if she is your choice for the job of the Operator at the Foundry. I strongly encourage your acceptance of the proposal from the community consortium she is developing.

Sincerely,

A handwritten signature in black ink, appearing to read "Darien Louie", written in a cursive style.

Darien Louie
Executive Director

11.2 Roles for Foundry Operations Team and Related Strategies for Success

Table 15: Roles for Foundry Operations Team and Related Strategies for Success

1. Program recruitment and/or development	Strategy 1: Leverage the strengths, relationships with organizations and individuals, and ongoing work in the community that is part of the mission of Lesley University and the LMIT programs to recruit offerings within the Foundry and with STEAM Roundtable partners.
2. Fundraising and grants management	Strategy 2: Dedicate personnel time and resources to fundraising and grants management. Strategy 3: Coordinate proposals with other participants in the STEAM Roundtable to overcome space limitations and to ensure that program participation can reach large numbers of residents.
3. Master Scheduling	Strategy 4: Integrate programming and space use decision making (including master scheduling), with intelligence gathered from ongoing community engagement efforts
4. Tenant contracting	Strategy 5: Outsource building management, including tenant contracting, to experienced firms with a proven track record. Select the management company selected through an RFP process.
5. Contracting and revenue collection for hourly rental space	Strategy 6: Outsource contracting and revenue collection for space available on an hourly basis to the management company selected through an RFP process.
6. Event management, workshops, classes and fee structures	Strategy 7: Leverage differential strengths and expertise by splitting the functions across the management team: event management to be provided by the building management staff, functions related to the selection of who uses the space when and how to be co-determined by Lesley University (with experience in the arts) and LMIT (with experience in STEM).
7. Tenant Recruitment and contracting	Strategy 8: We do not anticipate any challenge with finding tenants to lease the short-term and long-term space given limited number of spaces available (estimate seven tenants). The challenge will be in ensuring the right mix of tenants. The Foundry Consortium will issue a RFI in year one to determine demand for available space leases in the Foundry and the potential for a mix of tenants that address the Foundry goals and objectives. Available space includes: 2,000 in non-profit office space (i.e. one non-profit with roughly seven employees) and 10,500 square feet in market rate space (i.e. roughly 1-6 medium for-profit entities). The selection of tenants will be jointly agreed upon by Lesley University, LMIT and the Foundry Consortium with input from the CRA. Leases will be negotiated and executed by LMIT by year three with assistance of the firm contracted for building management and the CRA.
8. Outreach & community partnerships	Strategy 9: Actively participate in ongoing, collaborative dialogues with a wide range of community partners so that the Foundry and its tenants' efforts complement and enhance the efforts of others across the community. Strategy 10: Enlist other groups' and programs' assistance with sharing information about opportunities at the Foundry. Strategy 11: Continuously engage target audiences in each neighborhood in order to inform the design or program offerings and to ensure that offerings address the dynamic needs of each neighborhood. Contract for support with neighborhood listening tours during initial start-up and periodically thereafter to supplement what is heard during STEAM Roundtable discussions.
9. Marketing and communications	Strategy 12: Dedicate personnel time and resources to marketing and communications. Strategy 13: Coordinate marketing and communications with Foundry tenants to leverage their planned expenditures. Strategy 14: Coordinate marketing and communications with other participants in the STEAM Roundtable to overcome space limitations and to ensure that program participation can reach large numbers of residents

10. Master calendaring	Strategy 15: LMIT will specify a technology tool that will allow for Lesley University, LMIT, and the building management to have information on demand and to be able to schedule space use in accordance with agreed upon protocols.
11. Fee structures	Strategy 16: Fee structures will vary in each of the spaces and will be based on a sliding scale that will take peak demand into account. The fees will be established in a way that ensures some access to free programming for Cambridge residents. Additional low or no fee access will be supported through fundraising and grants.
12. Internal and External coordination	<p>Strategy 17: The Foundry Consortium will prioritize occupancy of space in the Foundry for tenants and program providers willing to collaborate on the design of offerings and to participate in the fundraising/grant development and related documentation efforts. The Foundry Consortium will convene meetings of tenants and program providers to continuously evolve offerings in light of the latest feedback from area residents and businesses.</p> <p>Strategy 18: The Foundry Consortium will convene and facilitate the work of willing participants in a STEAM Roundtable to leverage the expertise, programming resources and cultural capital that exists across all of the spaces in Cambridge providing STEAM offerings to residents</p>
13. IT Support	Strategy 19: The Foundry Consortium will explore possibilities for getting IT support from other entities in the surrounding area who have the range of expertise needed, and possibilities for mentorship, internship, apprenticeship, workforce training, and educational programming that would extend the capacity of paid support.
14. Fiscal accounting and reporting	Strategy 20: Fiscal accounting and reporting functions will be shared across the building contractor, Lesley University (manager of arts events) and LMIT (manager of STEM), with LMIT having the prime responsibility and ability to be held accountable. The contractor selected for building management will produce the fiscal accounts and reporting for space leases, rental agreements with those accessing facilities on a fee for service basis, and operational costs for the building. Lesley University will manage fiscal accounts and reporting for the performance space, art studios and gallery space. LMIT will manage fiscal accounts and reporting for all other spaces. LMIT will aggregate these reports and will account for management fees attributable to their coordination of the entire range of STEAM programming, engagement with internal and external stakeholders, marketing and communications work, and fundraising, grants management, data collection, analysis and reporting functions. The information will be shared with the Foundry Consortium in advance of submittal to the CRA and minutes from the meeting will be included in the report to the CRA.
15. Data collection, analysis and reporting	Strategy 21: Working with the Foundry Consortium, LMIT will establish data collection and reporting mechanisms to evaluate success and determine opportunities for changes that will address evolving community needs. Share data collection and reporting functions across four entities (building contractor, Lesley University, and LMIT).

11.3 Detailed Cash Flow

SOURCES	2021	2022	2023
Sponsorships	\$ 70,000	\$ 70,000	\$ 70,000
Grants/gifts (fundraising for individual spaces and annual fund)	\$ 175,000	\$ 187,500	\$ 193,750
Fee-for-Space (events, meetings, educational programs, performances, etc.)	\$ 352,348	\$ 364,848	\$ 364,848
Gross Rents (assumes \$1/SF/year escalation on office; includes studios & café carts)	\$ 1,187,000	\$ 1,207,500	\$ 1,228,000
Vacancy	30%	10%	10%
Less: rent for Foundry staff, ~1200 SF, nonprofit rate	\$ 48,000	\$ 49,200	\$ 50,400
Net Rents	\$ 782,900	\$ 1,037,550	\$ 1,054,800
Membership (for workshop)	\$ 10,000	\$ 10,000	\$ 10,000
Total Sources	\$ 1,390,248	\$ 1,669,898	\$ 1,693,398
USES*			
Staffing (salary and benefits), with 3% annual increase	\$ 415,736	\$ 428,208	\$ 441,054
Cleaning	\$ 46,500	\$ 47,430	\$ 48,379
Repairs and Maintenance	\$ 99,831	\$ 101,828	\$ 99,831
Utilities	\$ 229,312	\$ 233,898	\$ 238,576
Landscaping	\$ 7,500	\$ 7,650	\$ 7,803
Security	\$ 1,500	\$ 1,530	\$ 1,561
Administrative	\$ 87,344	\$ 89,091	\$ 90,873
Management fee, 2% on gross rents	\$ 30,787	\$ 31,447	\$ 31,857
Taxes (on for-profit rental area)	\$ 217,926	\$ 217,926	\$ 217,926
Insurance	\$ 19,500	\$ 19,890	\$ 20,288
Non-recoverable	\$ 8,208	\$ 8,372	\$ 8,539
Contractors			
LMIT management, YR 1 only	\$ 84,918	\$ -	\$ -
IT Contractor, \$160/hour, 10/hours/wk	\$ 83,200	\$ 84,864	\$ 86,561
Community Outreach (20 hours/month, \$100/hour)	\$ 24,000	\$ 24,480	\$ 24,970
Grants writer (10 hours/month, \$100/hour)	\$ 12,000	\$ 12,240	\$ 12,485
Marketing, \$150/hour, 4 hours/wk	\$ 28,800	\$ 29,376	\$ 29,964
Workshop/Maker space contractor, annual	\$ 83,160	\$ 84,823	\$ 86,520
Capital reserve	\$ 200,000	\$ 200,000	\$ 200,000
Total Uses	\$ 1,680,222	\$ 1,623,053	\$ 1,647,186
NET	\$ (289,974)	\$ 46,845	\$ 46,212

2024	2025	2026	2027	2028	2029	2030
70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000
200,625	\$ 208,188	\$ 216,506	\$ 225,657	\$ 235,723	\$ 246,795	\$ 258,974
364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848	\$ 364,848
1,248,500	\$ 1,269,000	\$ 1,289,500	\$ 1,310,000	\$ 1,330,500	\$ 1,351,000	\$ 1,371,500
10%	10%	10%	10%	10%	10%	10%
51,600	\$ 52,800	\$ 54,000	\$ 55,200	\$ 56,400	\$ 57,600	\$ 58,800
1,072,050	\$ 1,089,300	\$ 1,106,550	\$ 1,123,800	\$ 1,141,050	\$ 1,158,300	\$ 1,175,550
10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
1,717,523	\$ 1,742,336	\$ 1,767,904	\$ 1,794,305	\$ 1,821,621	\$ 1,849,943	\$ 1,879,372
454,286	\$ 467,915	\$ 481,952	\$ 496,411	\$ 511,303	\$ 526,642	\$ 542,441
49,346	\$ 50,333	\$ 51,340	\$ 52,367	\$ 53,414	\$ 54,482	\$ 55,572
99,831	\$ 99,831	\$ 99,831	\$ 99,831	\$ 99,831	\$ 99,831	\$ 99,831
243,347	\$ 248,214	\$ 253,179	\$ 258,242	\$ 263,407	\$ 268,675	\$ 274,049
7,959	\$ 8,118	\$ 8,281	\$ 8,446	\$ 8,615	\$ 8,787	\$ 8,963
1,592	\$ 1,624	\$ 1,656	\$ 1,689	\$ 1,723	\$ 1,757	\$ 1,793
92,690	\$ 94,544	\$ 96,435	\$ 98,364	\$ 100,331	\$ 102,338	\$ 104,384
32,267	\$ 32,677	\$ 33,087	\$ 33,497	\$ 33,907	\$ 34,317	\$ 34,727
217,926	\$ 217,926	\$ 217,926	\$ 217,926	\$ 217,926	\$ 217,926	\$ 217,926
20,694	\$ 21,107	\$ 21,530	\$ 21,960	\$ 22,399	\$ 22,847	\$ 23,304
8,710	\$ 8,884	\$ 9,062	\$ 9,243	\$ 9,428	\$ 9,617	\$ 9,809
-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
88,293	\$ 90,058	\$ 91,860	\$ 93,697	\$ 95,571	\$ 97,482	\$ 99,432
25,469	\$ 25,978	\$ 26,498	\$ 27,028	\$ 27,568	\$ 28,120	\$ 28,682
12,734	\$ 12,989	\$ 13,249	\$ 13,514	\$ 13,784	\$ 14,060	\$ 14,341
30,563	\$ 31,174	\$ 31,798	\$ 32,433	\$ 33,082	\$ 33,744	\$ 34,419
88,250	\$ 90,015	\$ 91,815	\$ 93,652	\$ 95,525	\$ 97,435	\$ 99,384
200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
1,673,958	\$ 1,701,389	\$ 1,729,498	\$ 1,758,300	\$ 1,787,815	\$ 1,818,061	\$ 1,849,057
43,565	\$ 40,946	\$ 38,407	\$ 36,005	\$ 33,805	\$ 31,882	\$ 30,315

Ferguson, M. (2017). *Lemelson-MIT InvenTeams survey*. Unpublished Report, Department of Institutional Research, Massachusetts Institute of Technology, Cambridge, MA.

Form A: Policy on Release of Documents

All materials submitted to the CRA in response to the RFP will become the property of the CRA and the City and, unless specifically exempted, should be considered to be public records under Massachusetts law. The CRA reserves the right to post materials submitted by Responders on its website at the appropriate time. As part of the selection process, the CRA will invite some or all of the Responders to participate in interview(s) and a community presentation. The undersigned certifies under penalties of perjury that the Responder understands the policy on Release of Documents.

Responder Name:

Stephanie Couch

Authorized Signature:



Name (Printed):

Stephanie Couch

Title:

Executive Director

Date:

March 8, 2018

Form B: Anti-Collusion Agreement

The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any other person (defined to mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals), and that it includes all submission requirements listed above.

Responder Name: _____
Stephanie Couch

Authorized Signature: _____


Name (Printed): _____
Stephanie Couch

Title: _____
Executive Director

Date: _____
March 8, 2018

