The IMAG Fab Lab
PROJECT
The IMAG Fab Lab:
A Fab Lab is a collaborative space for learning, problem solving, and creating through use of off-the-shelf, industrial-grade fabrication and electronics tools operated by open source software and programs. The IMAG Fab Lab will be multi-purpose, furthering the center’s efforts to advance Science, Technology, Engineering and Mathematics (STEM) literacy. It will also serve as a community resource for area entrepreneurs, and those from the public who want to explore fabrication and the possibilities of inventing.

OPPORTUNITY
Become a Partner:
There are several ways you can partner with IMAG to invest in the IMAG Fab Lab. The most common means of investment include sponsorships, gifts of cash and appreciated stock, real estate, gift annuities, remainder trusts, charitable lead trusts, and bequests.

Contact Kelly Palmer at (239)243-0043 ext. 202 to learn more.

IMPACT
Education and Workforce Development:
• IMAG, with over twenty years of experience in high-quality STEM programming, is committed to advancing Florida’s academic standing, and contributing to workforce development.
• The IMAG Fab Lab will expand and strengthen the impact that IMAG has in advancing STEM education, but furthermore it will introduce many children who otherwise would not receive such exposure to interdisciplinary learning, and the integration of STEM concepts into meaningful real-world applications.
• The IMAG Fab Lab environment will be supported by collaboration with peers and guidance from mentors.
• The environment and programming style provides encouragement for pursuing educational, civic, and/or economic opportunities.

Economic Development:
• The IMAG Fab Lab will offer memberships to area entrepreneurs and small business owners providing cost-effective prototyping and an environment that supports knowledge creation, collaboration, creative inquiry, and problem solving.
• With an economy fueled largely by small businesses, and with a high concentration of entrepreneurs, Lee County is primed for a Fab Lab. The lab would round out the area’s ecosystem of organizations that support entrepreneurs, such as incubators, and associations.

Community and Public Access:
• The IMAG Fab Lab will provide members of the public access to state-of-the-art technology to explore their interests and potentially invent a new product, becoming an entrepreneur in their own right.
SPONSORSHIP LEVELS

Title Sponsor - $100,000* (1 available)

- Exclusive Naming Rights for IMAG Fab Lab for three years.
- Permanent Fab Lab founding supporter recognition.
- The right to use IMAG’s brand and logo for three years to showcase community partnership.
- Prominent logo placement and/or recognition for five years on all IMAG marketing including:
  - Outdoor signage on building
  - Exhibit floor
  - theIMAG.org website
  - Social media
  - Newsletter
- Prominent logo placement and/or recognition for three years on all external (paid) advertising including:
  - Digital
  - Social media
  - Pertinent Print/ TV/ Radio
- 25 invitations to the exclusive VIP opening night**
- One complimentary facility rental***
- 10 Fab Lab gift memberships

*Sponsorship and associated benefits are in effect for three years.
**Names of those attending must be emailed to the director of marketing and development at least 24 hours prior to VIP Openings.
***Must be used within one year. Not all dates are available. Includes rental of the facility only; i.e. no additional amenities; e.g. no food, beverages, music, special equipment. Please work with the Event Manager to schedule.

Contributing Sponsor - $50,000*

- Permanent Fab Lab founding supporter recognition.
- The right to use IMAG’s brand and logo for three years to showcase community partnership.
- Logo placement and/or recognition for three years on all IMAG marketing including:
  - Outdoor signage on building siding
  - Exhibit floor
  - theIMAG.org website
  - Social media
  - Newsletter
- Mentions in some earned media related to the IMAG Fab Lab. -Logo placement and/or recognition for three years on all external (paid) advertising including:
  - Pertinent print/TV/radio
  - Digital
  - Social media
- 15 invitations to the exclusive VIP opening night**
- 8 Fab Lab gift memberships

*Sponsorship and associated benefits are in effect for three years.
**Names of those attending must be emailed to the director of marketing and development at least 24 hours prior to VIP Openings.
Supporting Sponsor - $25,000

- Permanent Fab Lab founding supporter recognition
- Logo placement and/or recognition on some IMAG marketing including (at IMAG's discretion):
  - Newsletter
  - theIMAG.org website
  - Social media shout outs
  - Exhibit Floor

- 10 invitations to the exclusive VIP opening night**
- 5 Fab Lab gift memberships
* Sponsorship and associated benefits are in effect for one year. **Names of those attending must be emailed to the director of marketing and development at least 24 hours prior to VIP Openings.

Equipment Sponsors:
$2,500 - $15,000*

- Permanent plaque located on specific sponsored equipment
- Logo placement and/or recognition on some IMAG marketing including (at IMAG's discretion):
  - Newsletter
  - theIMAG.org website
  - Social media shout outs

- 5 invitations to the exclusive VIP opening night**
  - 2 Fab Lab gift memberships
* Sponsorship and associated benefits are in effect for one year. **Names of those attending must be emailed to the

For more information or to become a sponsor of IMAG History and Science Center, please contact Kelly Palmer:

Marketing and Development Director, kelly@theimag.org, Cell # 208-631-0037
THE PROPOSAL

The Objective
The IMAG Fab Lab will be multi-purpose, furthering the center’s efforts to advance Science, Technology, Engineering and Mathematics (STEM) literacy. It will also serve as a community resource for area entrepreneurs, and those from the public who want to explore fabrication and the possibilities of inventing.

What is a Fab Lab?
A Fab Lab is a collaborative space for learning, problem solving, and creating through use of off-the-shelf, industrial-grade fabrication and electronics tools operated by open source software and programs.

MIT Professor Neil Gershenfeld, a scientist and inventor formed the concept for Fab Lab after offering a course called “How to Make (Almost) Anything” which was met with overwhelming demand. “His idea was a simple one: to provide the environment, skills, advanced materials and technology to make things cheaply and quickly anywhere in the world, and to make this available on a local basis to entrepreneurs, students, artists, small businesses and in fact, anyone who wants to create something new or bespoke.”

Currently Fab Labs include a laser cutter that makes 2D and 3D structures, a sign cutter that plots in copper to make antennas and flex circuits, a high-resolution NC milling machine that makes circuit boards and precision parts, a large wood router for building furniture and housing, and a suite of electronic components and programming tools for low-cost, high-speed microcontrollers for on-site rapid circuit prototyping.

Impact
Education and Workforce Development:
IMAG plays a key role in augmenting the formal education system in Southwest Florida through providing engaging interdisciplinary activities, programs, workshops and camp curricula. With over twenty years of experience in high-quality STEM programming, it is committed to advancing Florida’s academic standing, and contributing to workforce development. As a science center, and a non-school facility IMAG provides an informal learning environment according to generally accepted terms - “provide a safe, nonthreatening, open-ended environment for engaging in science” ii
A report prepared by the Academic Competitiveness Council and the National Science Board “cites informal education as one of three integral pieces of the U.S. education system (the other two being K12 education and higher education) needed to ensure ‘U.S. economic competitiveness, particularly the future ability of the nation’s education institutions to produce citizens literate in STEM concepts and to produce future scientists, engineers, mathematicians, and technologists.’”

IMAG is attuned to the specific educational and employment challenges Florida faces and works to make sure that the state’s youth gain the skills they need to pursue postsecondary education and/or join the workforce, leveraging economic opportunities of the future.

“In the next two decades, STEM jobs will grow faster than non-STEM jobs. Between 2014 and 2024, the number of STEM jobs will grow 17 percent, as compared to 12 percent for non-STEM jobs.”

Nearly all of the 30 fastest-growing occupations in the next decade will require at least some background in STEM.

Education Week’s 20th annual edition of Quality Counts, a longstanding report that tracks key education indicators of performance by state illuminates some of Florida’s key metrics:

- Early foundations
  - Family income – 50.8% (percent of children in families with incomes at least 200% of poverty level)
  - Parent education – 49.3% (percent of children with at least one parent with a postsecondary degree)
  - Parental employment – 74% (percent of children with at least one parent working full time and year-round)
- Pre-school enrollment – 50.8%
- Kindergarten enrollment – 79.6%
- High school graduation – 77.9%
- Young-adult education - 55.4% (percent of young adults (18-22) enrolled in postsecondary education or with a degree)
- Adult educational attainment - 40.1% (percent of adults (25-64) with a 2-or-4-year postsecondary degree)
- Annual income - 41.4% (percent of adults (25-64) with income at or above the national median)
- Steady employment - 72% (percent of adults (25-64) in the labor force working full-time and year-round)
The Fab Lab will expand and strengthen the impact that IMAG has in advancing STEM education, but furthermore it will introduce many children who otherwise would not receive such exposure to interdisciplinary learning, and the integration of STEM concepts into meaningful real-world applications. Through outreach to parents, schools and teachers IMAG will engage students to participate in the innovative

The IMAG Fab Lab will foster an environment in which young people’s learning will be fueled by their own interests, and supported by collaboration with their peers and guidance from mentors. This environment combined with the programming style provides an encouraging starting point for pursuing educational, civic and/or economic opportunities.

Economic Development:

The IMAG Fab Lab will offer memberships to area entrepreneurs and small business owners providing cost-effective prototyping and an environment that supports knowledge creation, collaboration, creative inquiry, and problem solving. Fifty percent of businesses in Lee County, Florida are comprised of 99 employees or less, and eighty-nine percent have 249 employees or less. Adding to this, there are an estimated 8,739 non-employer businesses (firms that have no paid employees) per 100,000 residents in the Cape Coral-Fort Myers area. These small businesses may lack payroll, but have great potential to create jobs in the future. With an economy primarily fueled by small businesses, and consisting of a considerable number of entrepreneurs, Lee County is primed for a Fab Lab. The lab would round out the ecosystem of small organizations that support these types of businesses, such as incubators, and associations.

Community and Public Access:

In addition to the benefits the IMAG Fab Lab will offer in terms of education and economic development, it will provide members of the public access to state-of-the-art technology to explore their interests and potentially invent a new product, becoming an entrepreneur in their own right. Much like the evolution of the personal computer which democratized access to advanced computing technology, Fab Labs are democratizing access to manufacturing technology. This access transcends socioeconomic barriers, and cuts across all ages and genders.

What Will it Take?

There are four qualities and requirements that qualify an environment to be called a Fab Lab as defined by the Fab Foundation, a U.S. nonprofit that emerged from MIT’s Center for Bits and Atoms Fab Lab Program.
The foundation was formed in 2009 to promote and support the growth of the International Fab Lab Network with a mission to provide access to the tools, the knowledge, and to the financial means to educate, innovate and invent using technology and digital fabrication to allow anyone to make (almost) anything, and thereby creating opportunities to improve lives and livelihoods around the world. First and foremost a Fab Lab must be open to the public for free or in-kind/barter at least part of the week. One of the main tenets of Fab Labs is to democratize access to the tools for personal expression and invention. Another major qualification to operate as an official Fab Lab is to have inventory and software consistent with all other sanctioned Fab Labs. In this way, there is ease of replication through collaboration and knowledge sharing across a global network of Fab Labs, which is another requirement – membership and participation in this global network. Fab Labs do not exist in isolation as that runs counter to the tenets and mission of what a Fab Lab is. Lastly, Fab Labs support and subscribe to the Fab Lab Charter.

The current inventory for a qualified Fab Lab can be viewed in the PDF titled ‘Fab Lab Inventory’. It totals nearly $108,000, and adding to that the annual salary and benefits for a professional with the skills and experience to run the lab, the total amount necessary to launch the IMAG Fab Lab is $175,000.

The Invitation

We invite you to consider partnering with us in funding the IMAG Fab Lab to support IMAG’s efforts to advance educational and economic opportunities in Southwest Florida. The most common means of support include sponsorships, gifts of cash and appreciated stock, real estate, gift annuities, remainder trusts, charitable lead trusts, and bequests.
References

i http://www.fablabni.com/what-fablab.html


iii Ibid


v STEM Education Coalition; The case for investing in Out-of-School Learning as a Core Strategy in Improving Science, Technology, Engineering, and Mathematics (STEM) Education. April 2016; their source: Business Center for a College- and Career-Ready America

vi Lee County Business Climate Survey, Third Quarter 2017; Horizon Council Team Lee County and The Regional Economic Research Institute at Florida Gulf Coast University. https://www2.fgcu.edu/cob/beri/bcs_reports/bcs2017q3.pdf

vii Lee County Economic Development; http://leecountybusiness.com/lee-county-florida-ranks-no-3-best-place-for-smallbusiness-vitality/

What is a fab lab?
Fab labs are a global network of local labs, enabling invention by providing access to tools for digital fabrication.

What’s in a fab lab?
Fab labs share an evolving inventory of core capabilities to make (almost) anything, allowing people and projects to be shared.

What does the fab lab network provide?
Operational, educational, technical, financial, and logistical assistance beyond what’s available within one lab.

Who can use a fab lab?
Fab labs are available as a community resource, offering open access for individuals as well as scheduled access for programs.

What are your responsibilities?
safety: not hurting people or machines operations: assisting with cleaning, maintaining, and improving the lab knowledge: contributing to documentation and instruction.

Who owns fab lab inventions?
Designs and processes developed in fab labs can be protected and sold however an inventor chooses, but should remain available for individuals to use and learn from.

How can businesses use a fab lab?
Commercial activities can be prototyped and incubated in a fab lab, but they must not conflict with other uses, they should grow beyond rather than within the lab, and they are expected to benefit the inventors, labs, and networks that contribute to their success.