

The background of the slide is a photograph of the MIT building facade, showing classical architectural elements like columns and a pediment. The word 'MASS' is partially visible in large letters on the building's facade. A dark blue horizontal band is overlaid across the middle of the image, containing the title text.

MIT INNOVATION ECOSYSTEM

An Overview


Karen K. Gleason
Associate Provost &
Alexander and I. Michael Kasser Professor of
Chemical Engineering

The background of the slide is a photograph of the MIT building facade, showing classical architectural details like columns and a pediment with the letters 'MASS' visible. A semi-transparent blue box is overlaid on the left side, containing the text 'MIT is a world class research university.'

MIT is a world class research university.

- #1 in QS World University Rankings 2013-2017
- Best graduate engineering school by *U.S. News & World Report*, every year since 1990.
- Top-ranked programs in computer & life sciences, urban planning & architecture with strong integration into the regional healthcare eco-system as well as internationally.

- 
- 1,030 members of the MIT Faculty
 - 37% in Engineering, 27% in Science
 - 11,301 students
 - 4,528 undergraduate
 - 6,773 graduate
 - 1,441 postdocs
 - 10,350 staff on the MIT campus
 - Including 1,490 research staff
 - 3,437 staff at MIT Lincoln Laboratory
 - Including 2,611 research staff

An aerial photograph of the MIT campus at sunset. The image shows a dense cluster of modern, multi-story buildings with glass and brick facades, illuminated by the warm, golden light of the setting sun. The sky is a mix of orange and blue. In the foreground, there are more traditional brick buildings with distinctive domes and a large green lawn area. A semi-transparent white box with a dark border is overlaid on the center of the image, containing text and a list of bullet points.

MIT discovery is focused on practical impact, commercial value.

- Interdisciplinary research enhances problem-solving.
- Entrepreneurial ecosystem spurs innovation.
- Patenting/licensing speeds commercialization.
- MIT ranks first in industry R&D expenditures.

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- The image shows the iconic dome of the Massachusetts Institute of Technology (MIT) building, a large, light-colored, circular structure with a smaller dome on top. It is set against a clear blue sky with some light clouds. The dome is partially framed by green trees on the left and right sides. In the foreground, there is a well-maintained green lawn with some fallen leaves.
- MIT Energy Initiative

MIT initiatives focus MIT's vast resources on issues of global, immediate importance.

- Digital World / Digital Learning
- Global Environment / Sustainability
- Health Care
- MIT Innovation Initiative

An aerial photograph of the MIT campus, showing the iconic dome of the Old Chapel building in the upper left, surrounded by various academic buildings and lush green trees. A semi-transparent white text box is overlaid on the center of the image, containing a list of bullet points. The text 'MIT serves as a central node in a vibrant environment of invention, innovation and commercialization.' is written in a large, bold, white font across the top of the text box.

MIT serves as a central node in a vibrant environment of invention, innovation and commercialization.

- Startup companies founded on groundbreaking technologies, energized by entrepreneurial spirit.
- Lively nexus of students, researchers, entrepreneurs, venture capitalists, government officials.
- Proximity allows fluid flow of ideas, information and resources.

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- The background of the slide is a photograph of the MIT building facade, showing classical architectural elements like columns and a pediment with the letters 'MASS' visible. A semi-transparent white box is overlaid on the center of the image, containing a bulleted list of statistics and program information.
- As of 2006, living MIT alums had launched 25,800 active companies employ 3.3M people & generate ~\$2T in revenues/year
 - 50+ courses in innovation & entrepreneurship: over 2,300 enrolled (2014)
 - 1,000+ MIT students take part yearly in \$100K entrepreneurship competition

MIT Supporting Innovation on Campus



Entrepreneurs
& Risk Capital

MIT **Venture** Mentoring SERVICE

MIT
Entrepreneurship
CENTER

\$100K
PROGRAM

GLOBAL
MIT FOUNDERS'
SKILLS ACCELERATOR

MIT LEGATUM CENTER
FOR DEVELOPMENT &
ENTREPRENEURSHIP

i-Teams **DESHPANDE CENTER**
| FOR TECHNOLOGICAL INNOVATION

MIT
TLO

LEMELSON-MIT

Stage 1

Inspiration /
Invention /
Idea Generation

Stage 2

Technology
Development /
Idea Refinement

Stage 3

Commercialization
Planning

Stage 4

Development of
Business Plan

Stage 5

Real Company/
Project Formation

Stage 6

Early Stage Growth

Stage 7

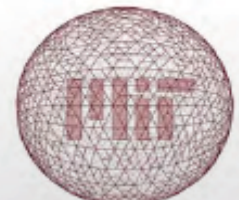
High-Growth

MIT
TLO

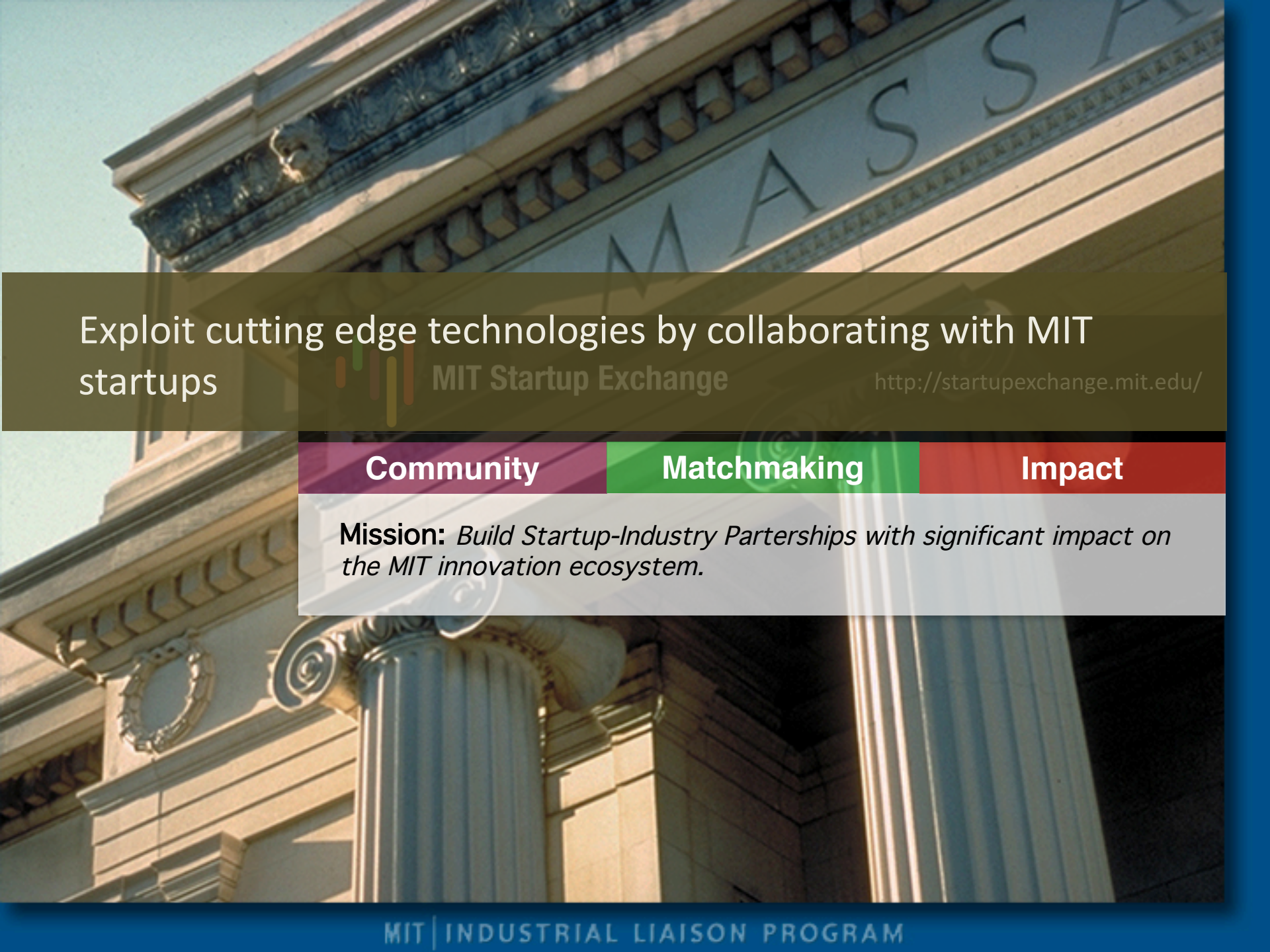
MIT
INDUSTRIAL
LIAISON
PROGRAM

DESHPANDE CENTER
| FOR TECHNOLOGICAL INNOVATION

Global
Corporations



MIT | INDUSTRIAL LIAISON PROGRAM



Exploit cutting edge technologies by collaborating with MIT startups

MIT Startup Exchange

<http://startupexchange.mit.edu/>

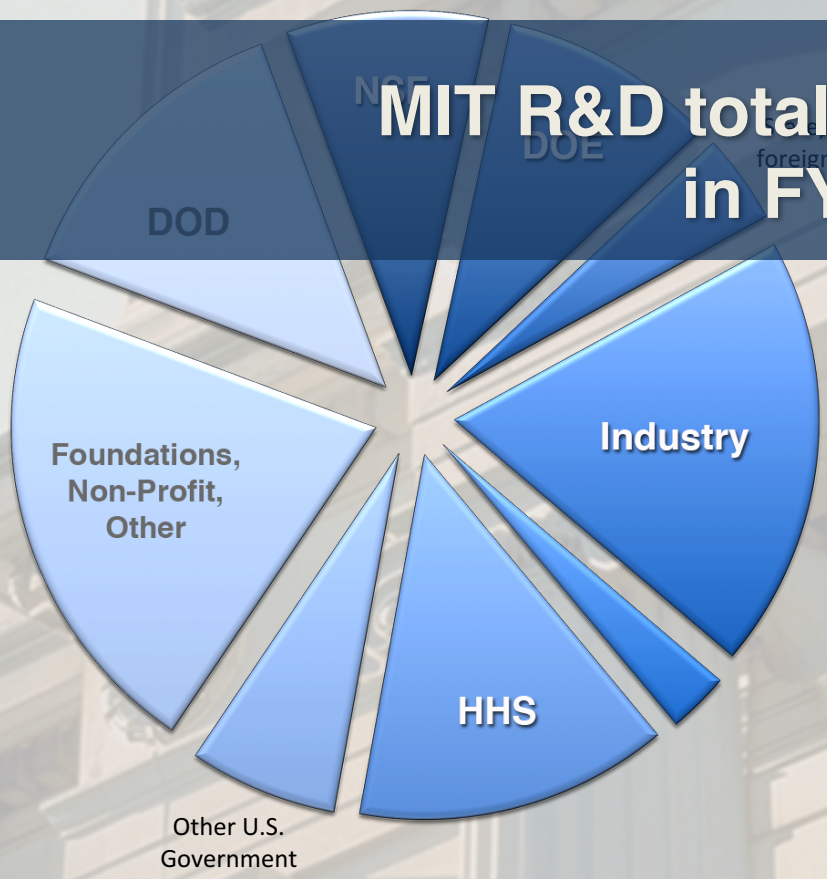
Community

Matchmaking

Impact

Mission: *Build Startup-Industry Partnerships with significant impact on the MIT innovation ecosystem.*

MIT R&D totaled \$720 million in FY 2017

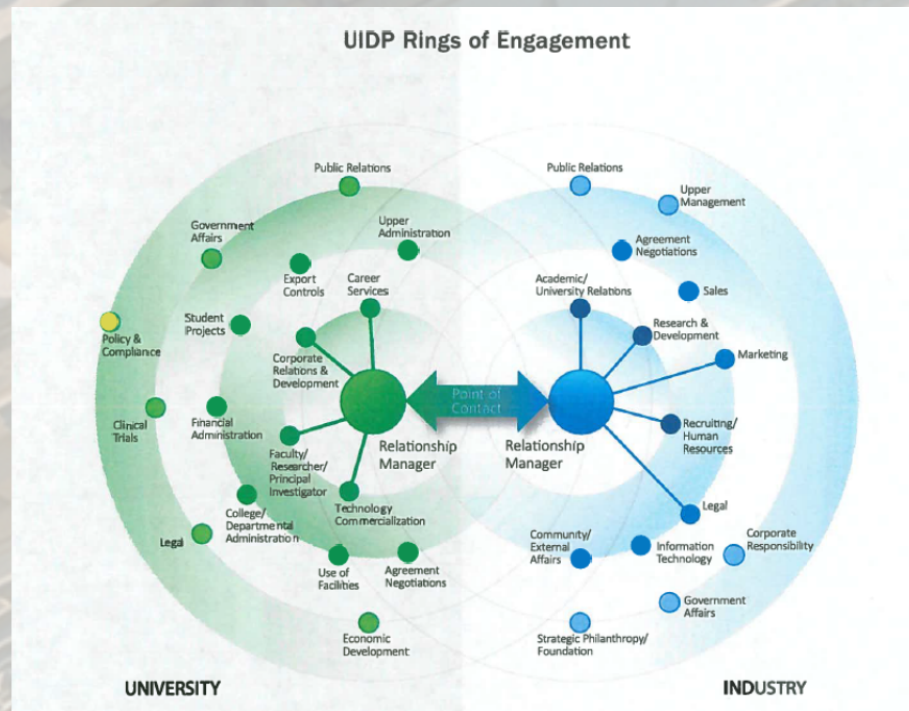


Industry Sponsored R&D
\$148 million (21%)

Corporate Engagement: Customization Essential

- Ideas for Disruption
- Campus Infrastructure
- Talent

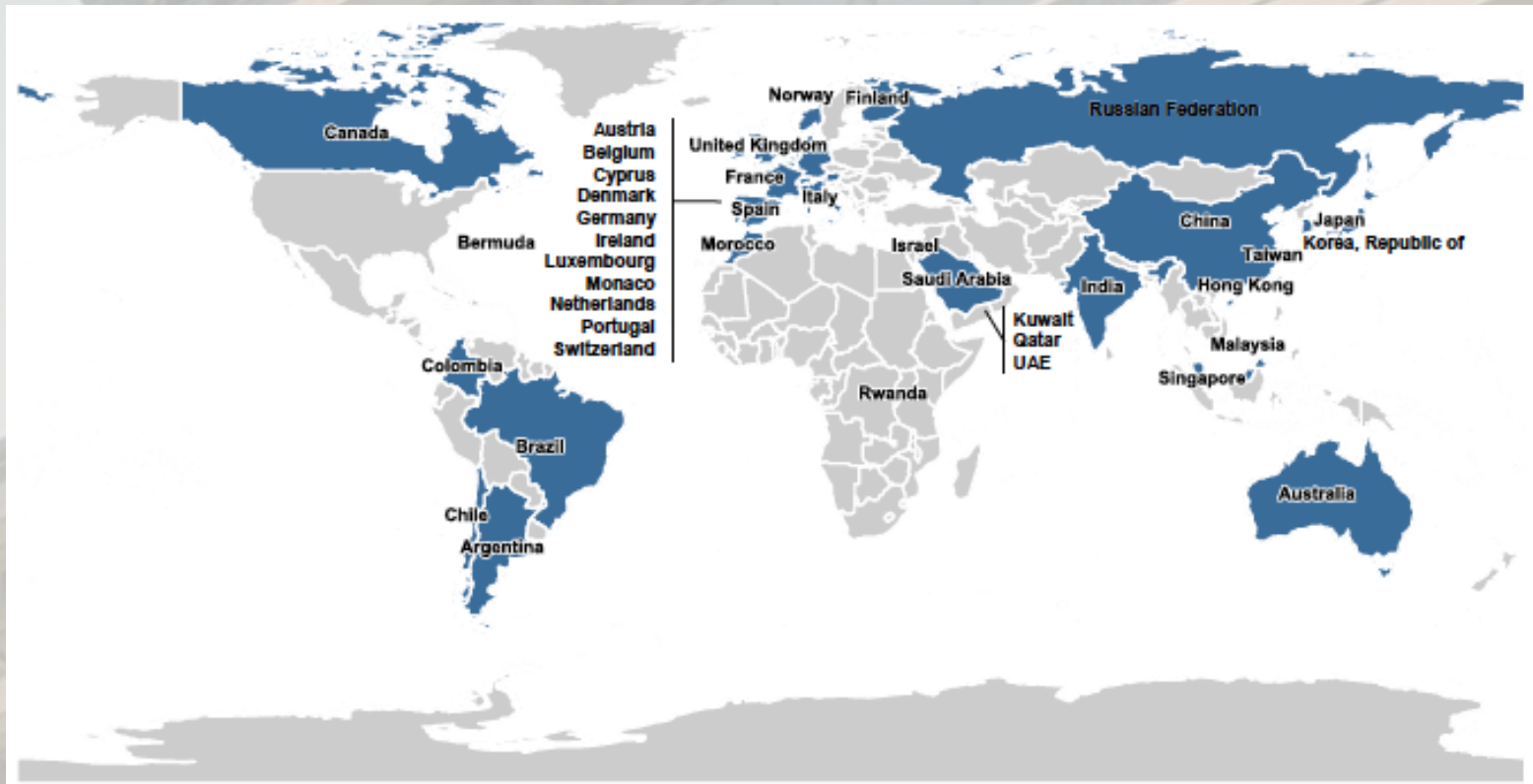
Decades of investment are required to create a world-class research university, including its background IP portfolio). The rights of all sponsors (past, present, and future) needs to be equitably protected.



- Research Support
- Market Knowledge
- Translation Pathways

***Collaboration:
Synergies & Acceleration***

International Sponsorship of MIT Research



CHINA COMES TO MIT


A History of the First Chinese Students: 1877-1931

Chinacomestomit.org



MIT Class of 1883

MIT



CHINESE SOCCER

Captain
S. S. Kwan


Manager
K. F. Mok

<i>Team</i>		<i>Substitutes</i>	
T. F. Wei	<i>Goal</i>	S. S. Kwan, <i>Captain</i>	<i>Left outside forward</i>
C. Y. Huang	<i>Left full back</i>	K. C. Lei	<i>Left inside forward</i>
Y. L. Yeh	<i>Center half back</i>	T. K. Lin	<i>Center forward</i>
K. Chan	<i>Right half back</i>	F. C. Ede	<i>Right inside forward</i>
H. Huang	<i>Right full back</i>	T. K. Liang	<i>Right outside forward</i>
W. Moy-Ding	<i>Left half back</i>		

S. S. Chen	A. T. Kung	S. H. Chang	N. H. Leung
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Schedule of Games

Andover Academy	2	M. I. T.	5	Harvard	1	M. I. T.	4
Worcester Academy	1	M. I. T.	2	Irish Americans	2	M. I. T.	0
Andover Academy	1	M. I. T.	2	Boston Rovers	1	M. I. T.	2



Lin	Liang	Leung	Kung	Ede	Mok
Chen	H. Huang	Chun	Kwan, Capt.	Lei	Moy-Ding
				Wei	Chang

1920

248

Concentration, Connection, Constantly Evolving



MGH

Boston

ILP

Sloan

*Kendall
Square*

Charles River

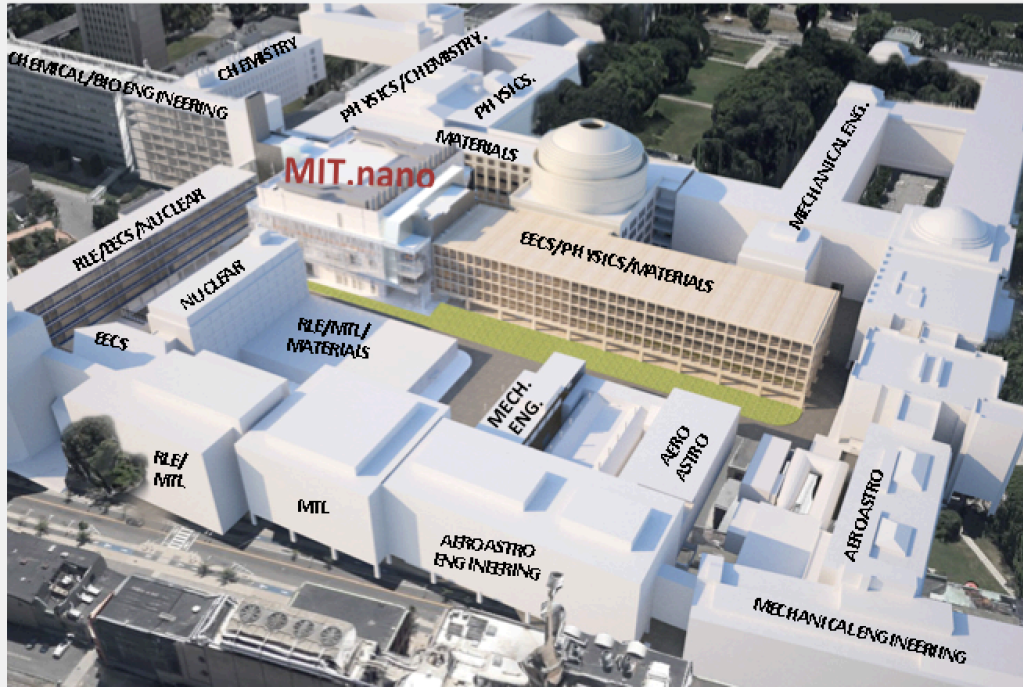
MIT

Cambridge

MIT.nano

MIT.nano: World's Largest University Nanofab

The intellectual hub of MIT



- 2000+ innovators/year
- 20,000 m²; construction underway; opens 2018
- **LEED Gold**
- Technology on display
- Social spaces for research, education, maker/prototyping

Integrates engineering & science

“MIT.nano ... will keep MIT at the forefront of discovery and innovation, and give us the power to solve urgent global challenges.”

– MIT President L. Rafael Reif



A New Gateway to MIT in Kendall Square



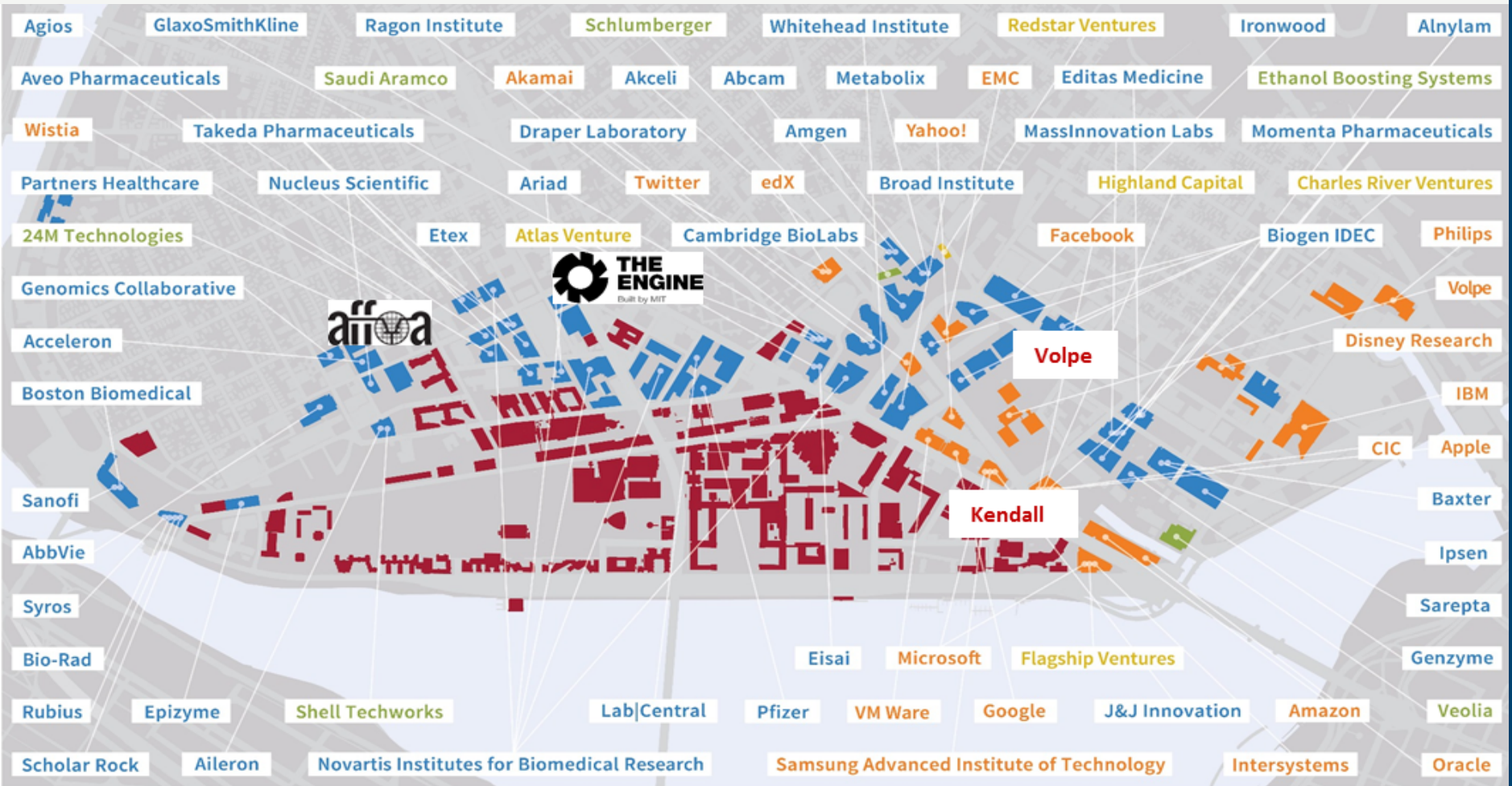
Recent rezoning for heights of up to 300 feet

MIT anticipates adding

- up to 1.9 million sft of mixed use space;
- creation of a new campus courtyard; and
- underground parking

Completion of 1st building in 2020

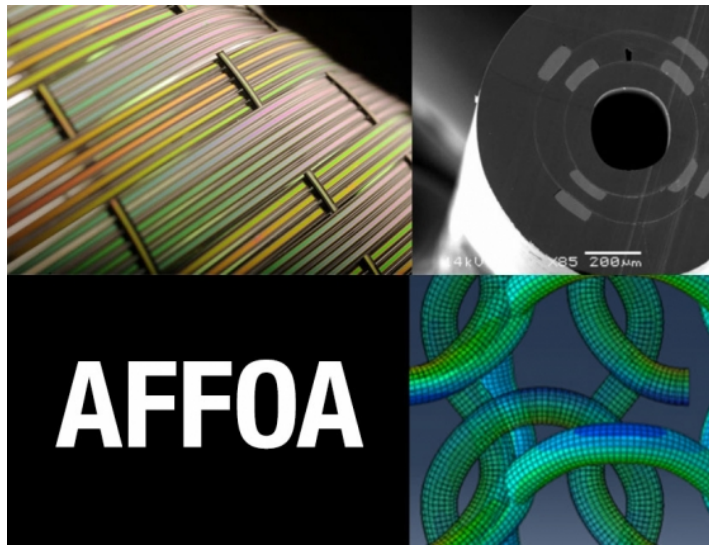
Talent + Resources + Proximity = Discovery, Innovation, & Entrepreneurship + Capital, Partnering & Commercial Products



MIT ENERGY IT/DATA BIO/PHARMA VC

November 2015
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Advanced Functional Fabrics of America



Independent nonprofit founded by MIT Announce April 1, 2016: \$317 million public-private partnership: \$75 million in federal funding with cost sharing among industrial partners, venture capitalists, universities, nonprofits, and states including the Commonwealth of Massachusetts.



Figure 4a.2 AFFOA Fabric Innovation Network. AFFOA assembles, tasks, and manages the FIN, comprising prototyping and pilot manufacturing nodes in industry and academia, each offering a unique set of capabilities and know-how.



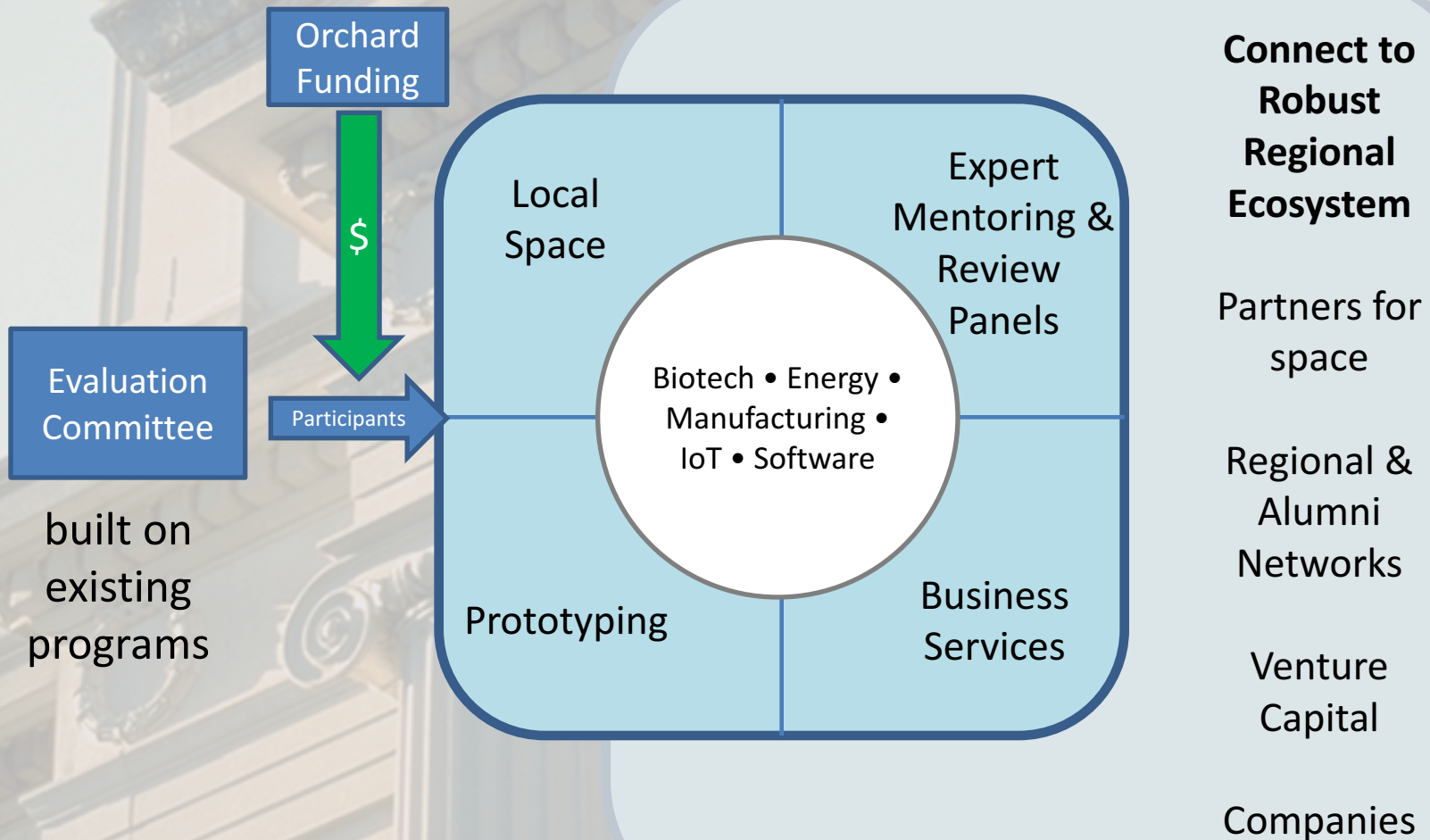
THE ENGINE

Built by MIT

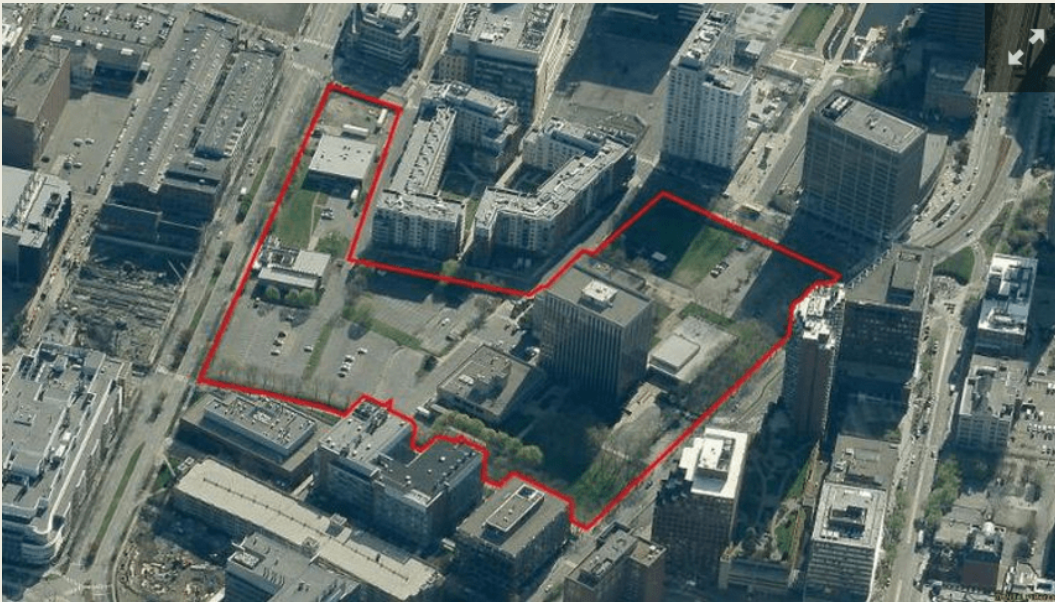
Enable more breakthrough innovations from the lab to reach the marketplace.

- Access to patient capital and affordable infrastructure
- Access to specialized equipment and expertise
- Enhanced regional network for 'tough-tech'

The Engine Approach



Volpe Development: 14 acres near to the MIT Campus

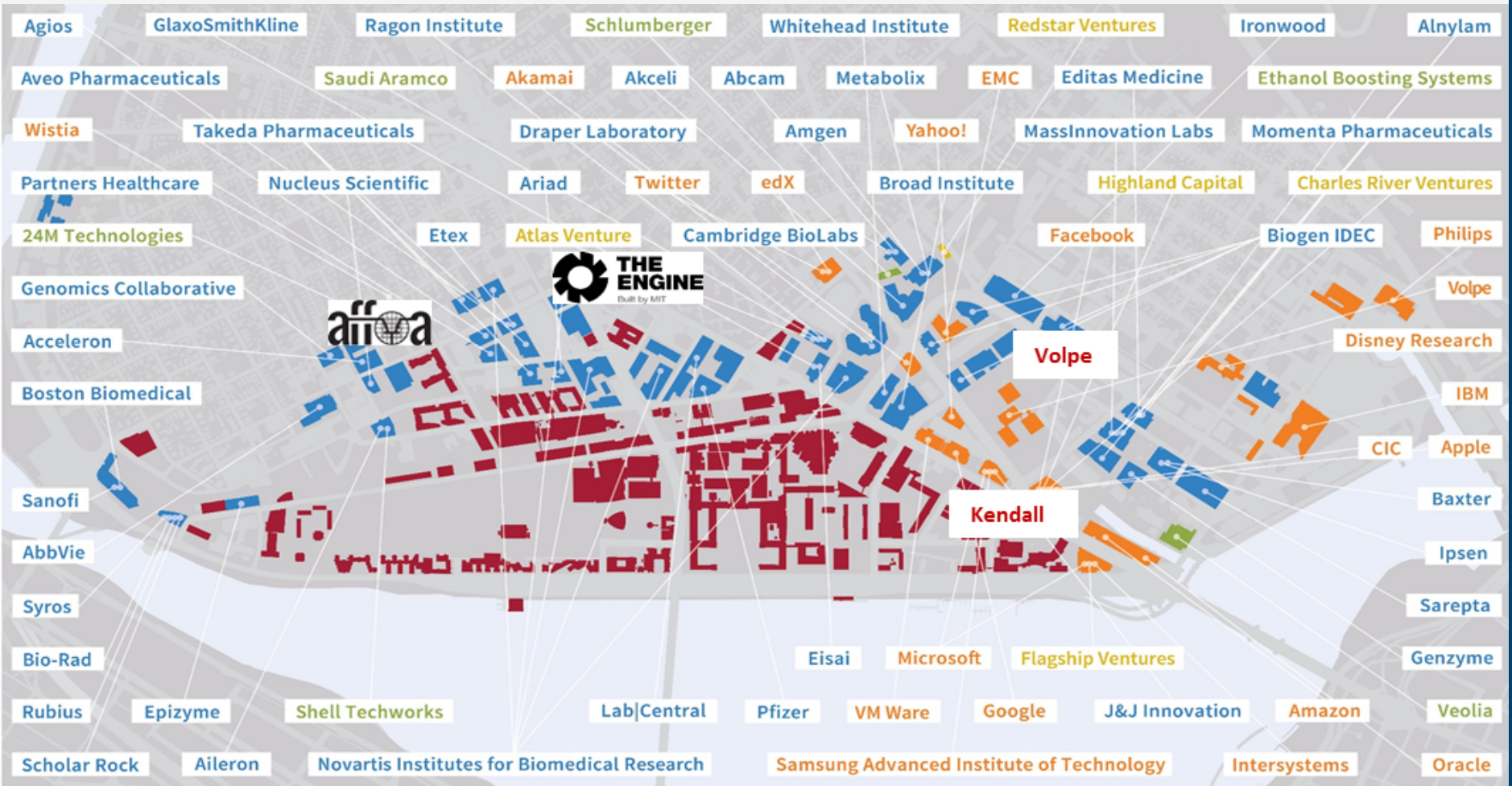


***MITIMCo development
began in 2017***

Plan for Mixed-use

- Housing
- Open space
- Retail
- Commercial Laboratories
- Innovation space

Talent + Resources + Proximity = Discovery, Innovation, & Entrepreneurship + Capital, Partnering & Commercial Products



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