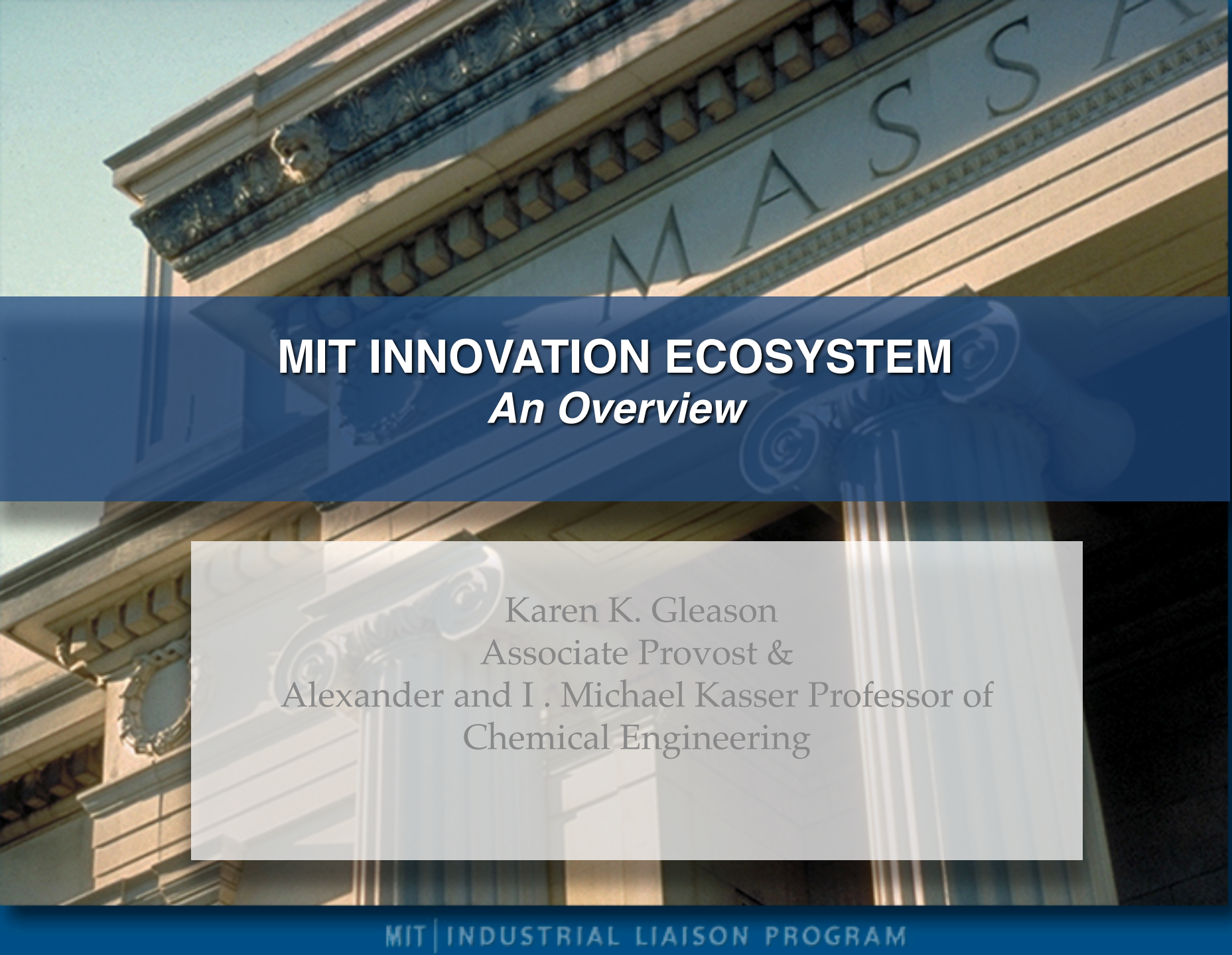
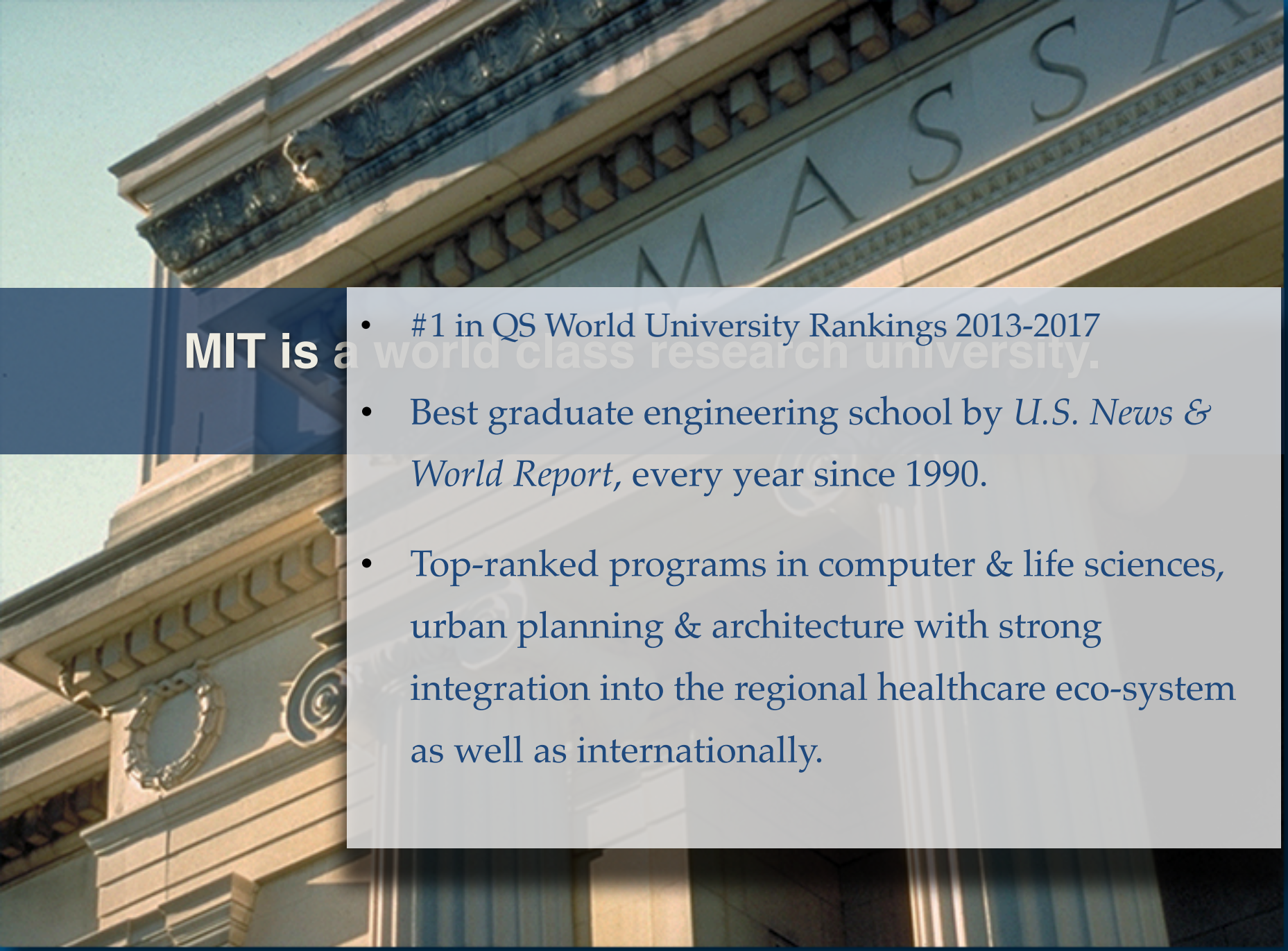


MIT INNOVATION ECOSYSTEM

An Overview

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



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

- Interdisciplinary research enhances problem-solving.
- Entrepreneurial ecosystem spurs innovation.

MIT discovery is focused on practical impact, commercial value.

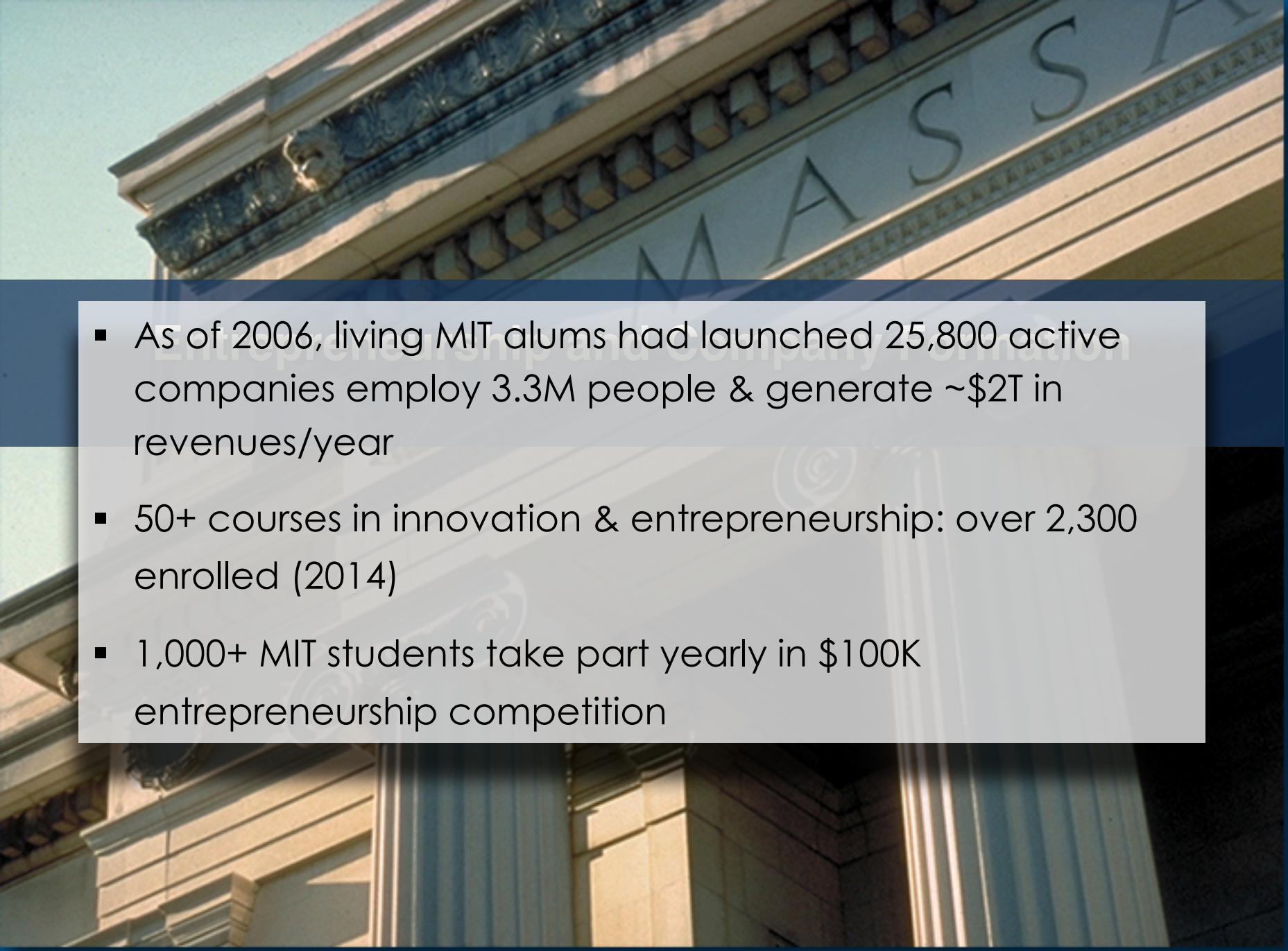
- Patenting/licensing speeds commercialization.
- MIT ranks first in industry R&D expenditures.

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

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

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.



- 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

GLOBAL MIT FOUNDERS' SKILLS ACCELERATOR

LEGATUM CENTER FOR DEVELOPMENT & ENTREPRENEURSHIP

i·Teams

DESHPANDE CENTER | FOR TECHNOLOGICAL INNOVATION

MIT TLO

LEMELSON-MIT

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Inspiration / Invention / Idea Generation	Technology Development / Idea Refinement	Commercialization Planning	Development of Business Plan	Real Company/ Project Formation	Early Stage Growth	High-Growth

Global Corporations

MIT TLO

MIT ILP INDUSTRIAL LIAISON PROGRAM

DESHPANDE CENTER | FOR TECHNOLOGICAL INNOVATION

Exploit cutting edge technologies by collaborating with MIT startups

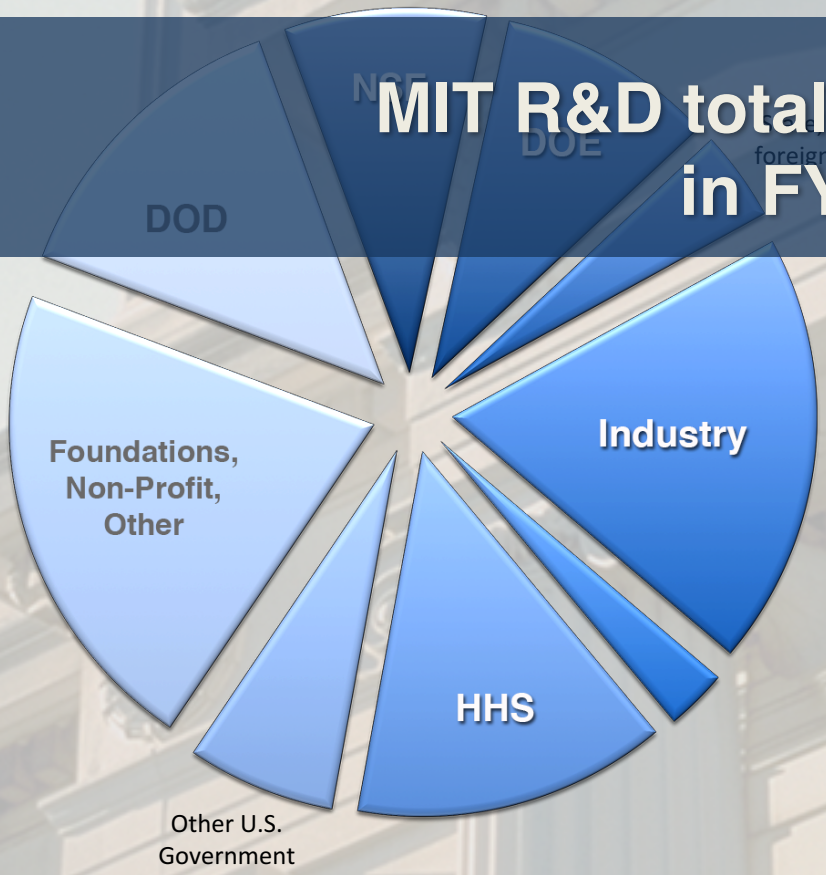
MIT Startup Exchange

http://startupexchange.mit.edu/

Community | **Matchmaking** | **Impact**

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

MIT R&D totaled $720 million in FY 2017

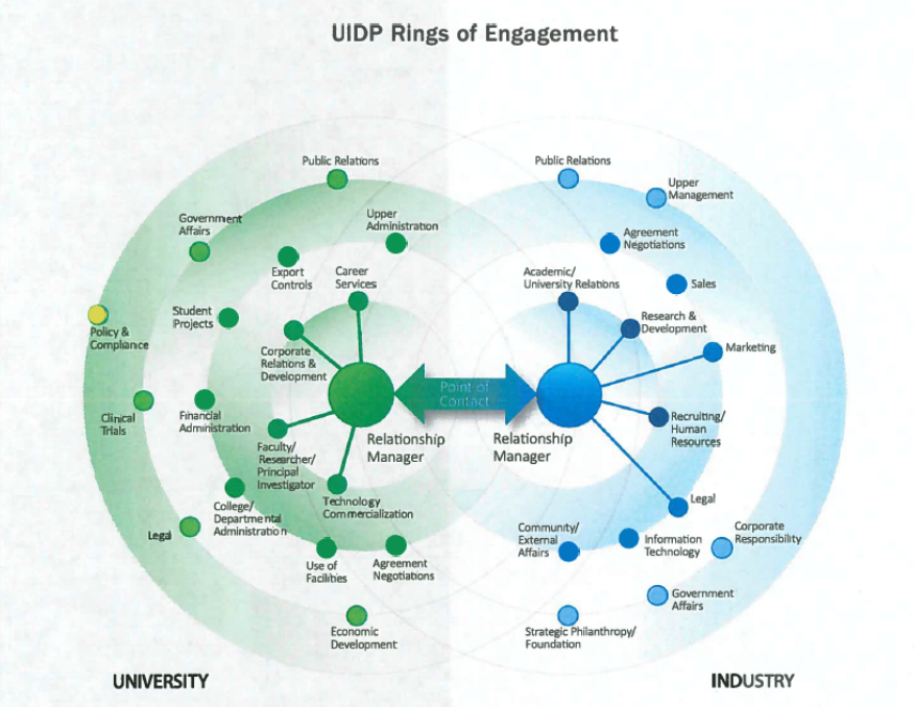


Industry Sponsored R&D
$148 million (21%)

Corporate Engagement: Customization Essential

- Ideas for Disruption
- Campus Infrastructure
- Talent

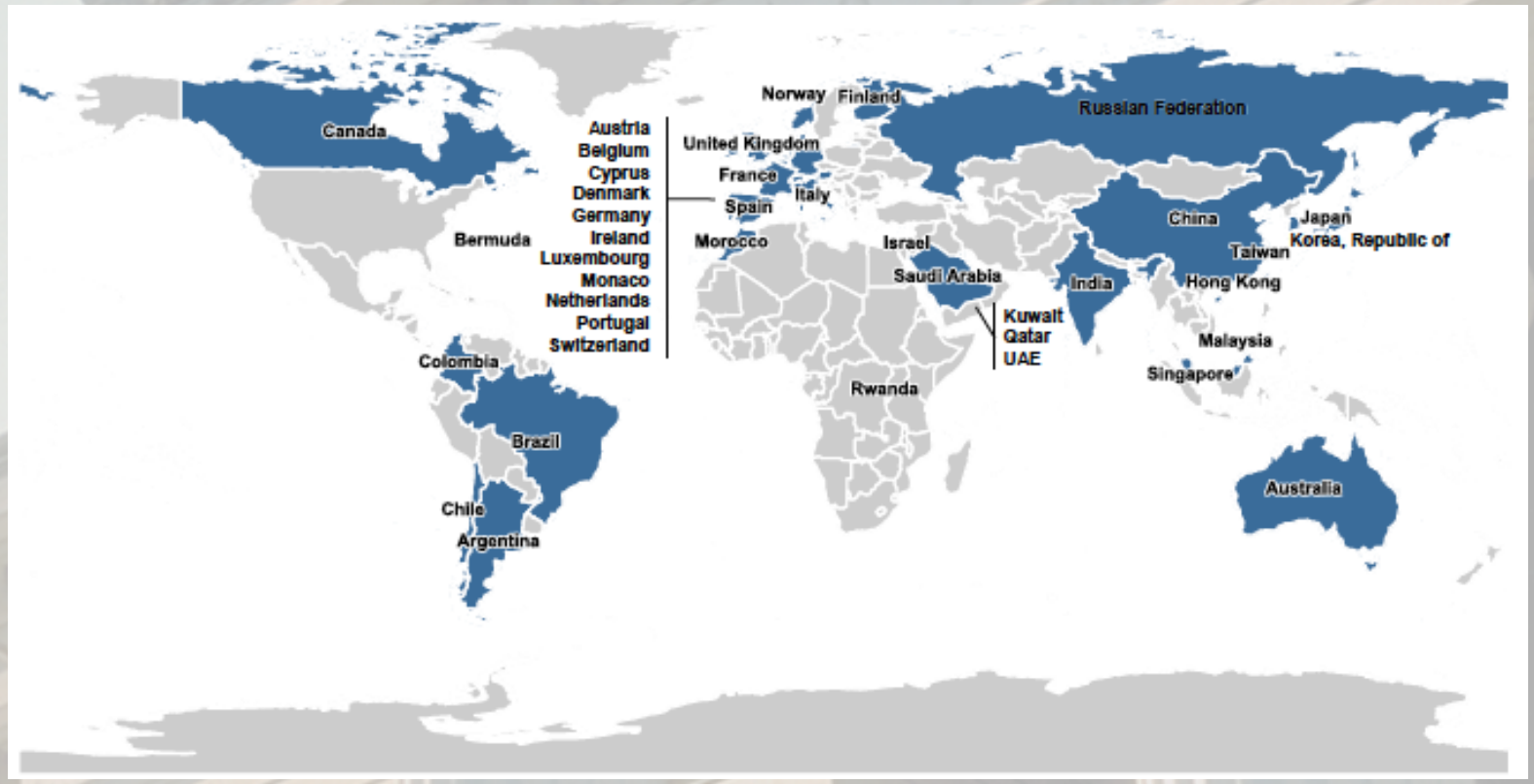
Decades of investment are required to create a world-class research university, including its background IP portfolio). The rights of all sponsors (past, present, and future) needs to be equitably protected.



Collaboration: Synergies & Acceleration

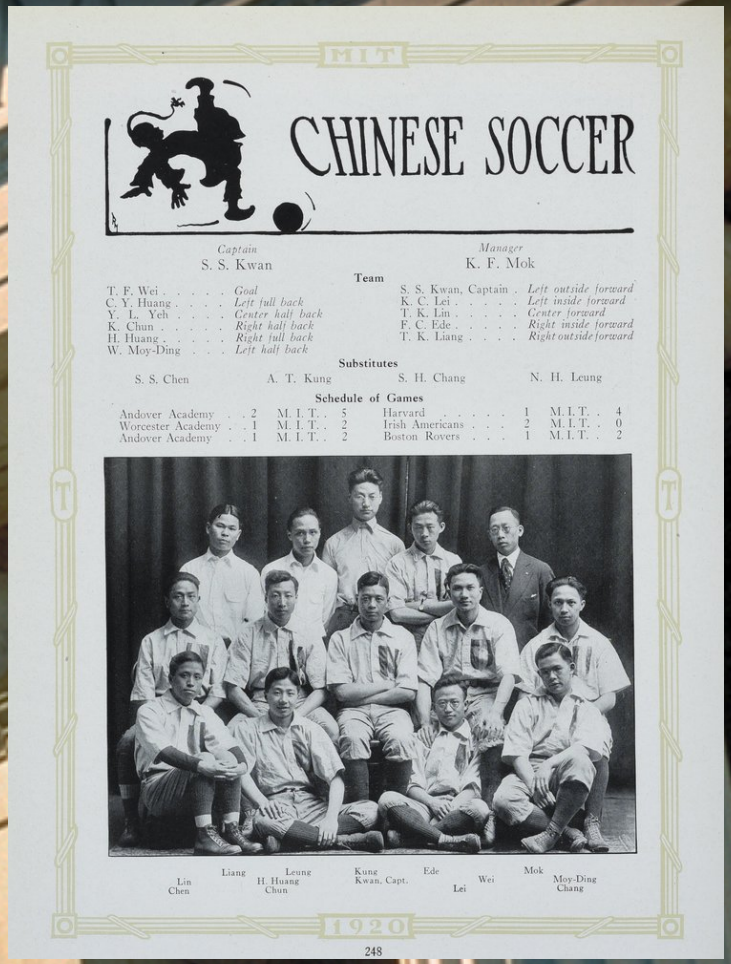
- Research Support
- Market Knowledge
- Translation Pathways

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

Team

T. F. Wei	*Goal*	S. S. Kwan, Captain	*Left outside forward*
C. Y. Huang	*Left full back*	K. C. Lei	*Left inside forward*
Y. L. Yeh	*Center half back*	T. K. Lin	*Center forward*
K. Chun	*Right half back*	F. C. Ede	*Right inside forward*
H. Huang	*Right full back*	T. K. Liang	*Right outside forward*
W. Moy-Ding	*Left half back*		

Substitutes

S. S. Chen, A. T. Kung, S. H. Chang, N. H. Leung

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

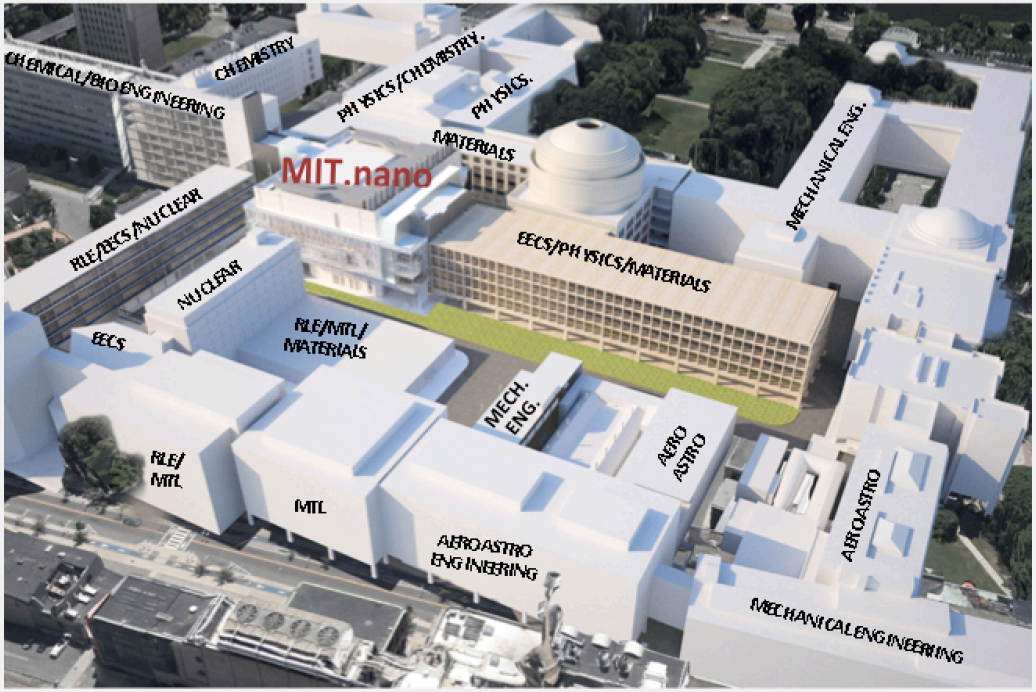
1920

248

Concentration, Connection, Constantly Evolving

MIT.nano: World's Largest University Nanofab

The intellectual hub of MIT



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

- 2000+ innovators/year
- 20,000 m^2; construction underway; opens 2018
- ***LEED Gold***
- Technology on display
- Social spaces for research, education, maker/ prototyping

A New Gateway to MIT in Kendall Square

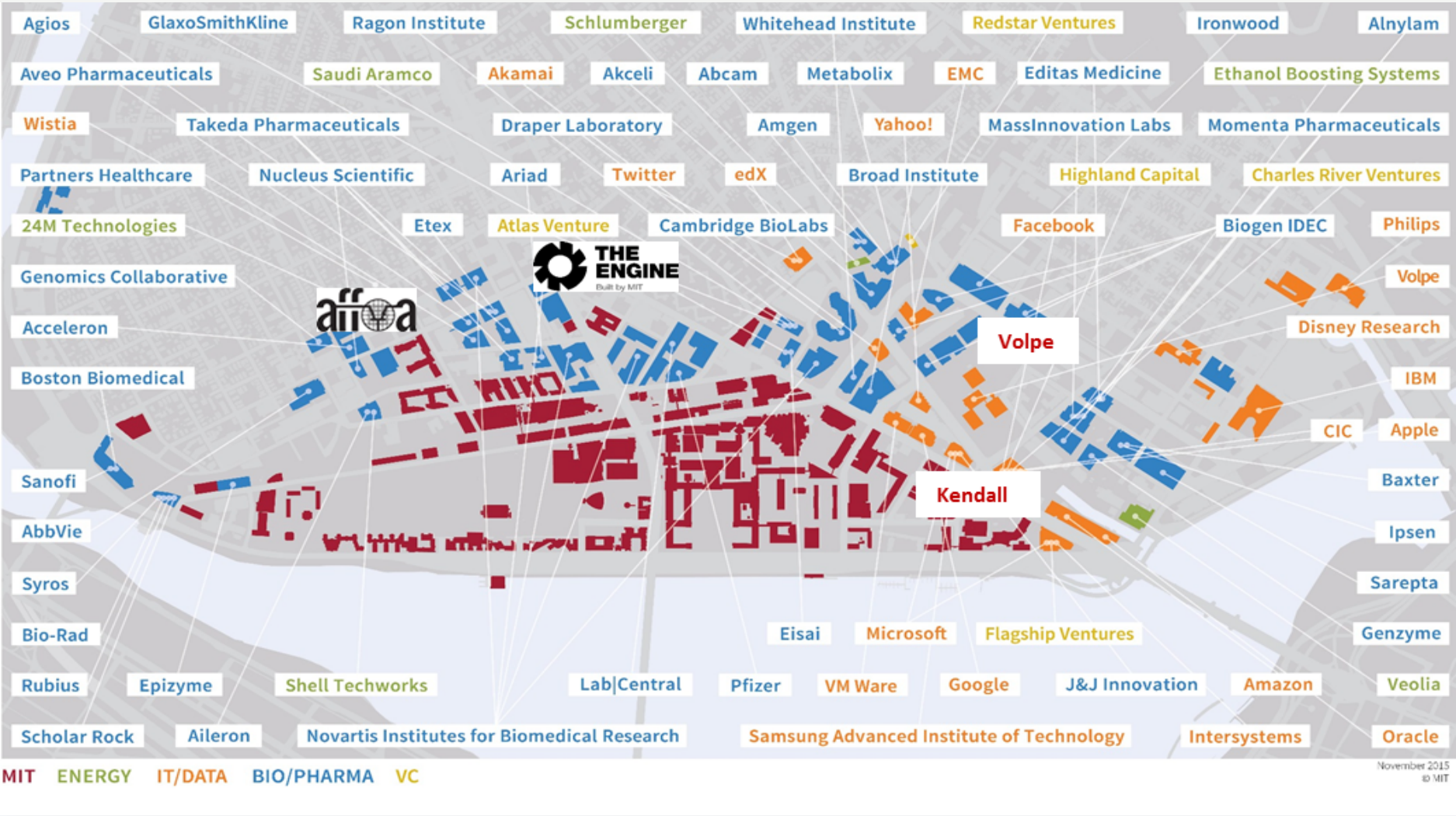
Recent rezoning for heights of up to 300 feet

MIT anticipates adding

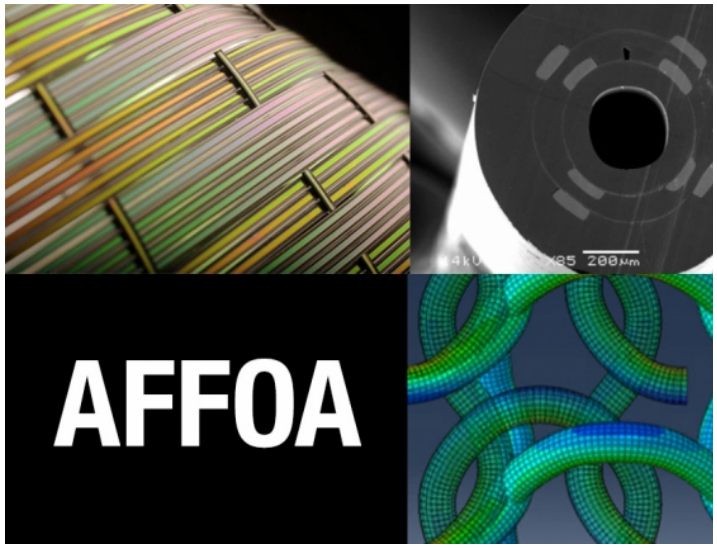
- up to 1.9 million sft of mixed use space;
- creation of a new campus courtyard; and
- underground parking

Completion of 1st building in 2020

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



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.

http://fabric.mit.edu/

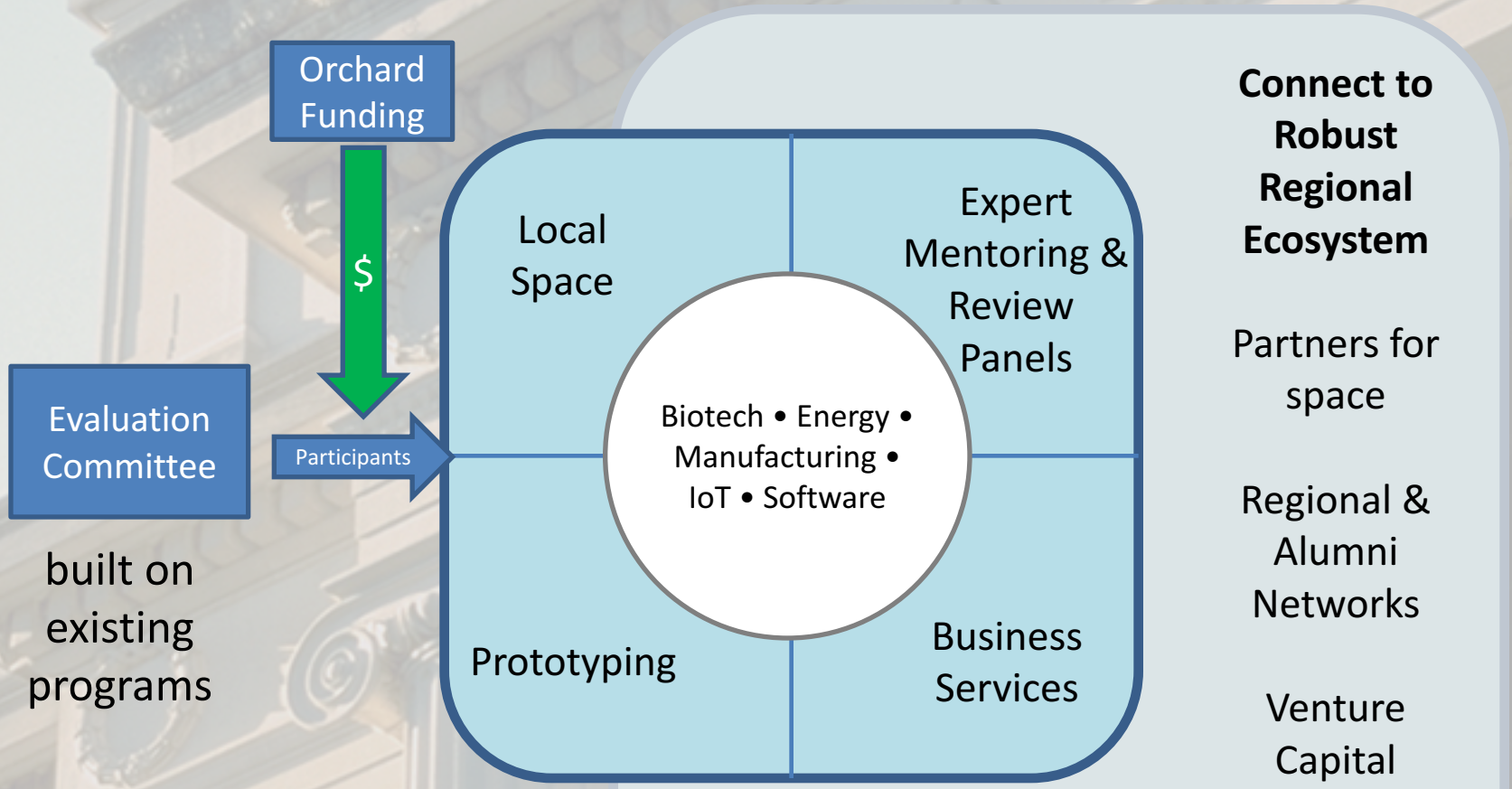
THE ENGINE

Built by MIT

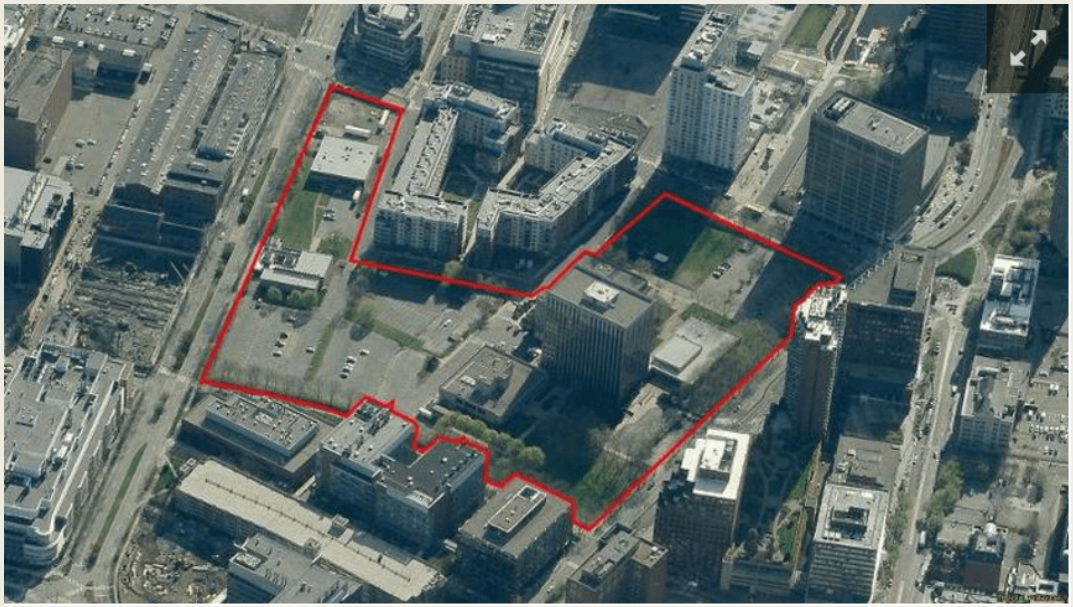
Enable more breakthrough innovations from the lab to reach the marketplace.

- 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 begun in 2017

Plan for Mixed-use

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

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