
Massachusetts Institute of Technology

**Brief Overview
and International Activities
Eduniversal Visit
Thursday, October 15, 2015**

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Director of International Affairs**



Massachusetts Institute of Technology

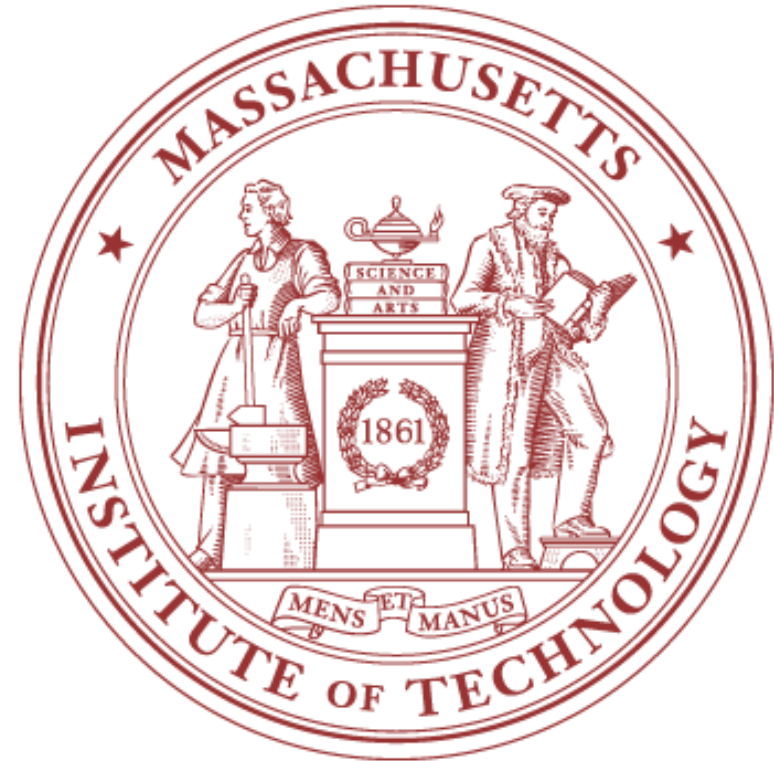
-
- Founded in 1861 by William Barton Rogers

- Private, independent research university

- MIT Motto:

“Mens et Manus” –
“Mind and Hand”

- Learning by doing



MIT Community

- **Students (fall 2014)**

- 4,512 Undergraduates (4 year curriculum)

- 46% women

- 10% international students, 98 countries represented

- About 80 undergraduate students in Sloan School

- 6,807 Graduate Students

- 32% women

- 42% international students, 102 countries represented

- About 1280 MBA and 140 Ph.D. students in Sloan School

- **Alumni**

- over 130,000 living alumni, 14% are international



MIT Community

- **International Scholars (FY2014, includes postdocs)**
 - 2,305 international scholars
 - 24% women
 - 90 countries represented
- **Postdoctoral Scholars (fall 2014)**
 - 1,565 Postdoctoral scholars
 - 27% women
 - 65% international postdocs
 - Postdoctoral scholars are citizens of over 80 countries



MIT Community

- **Faculty (fall 2014)**

 - 1,021 Faculty

 - 22% women

 - 42% of faculty were not born in the US

- **Other Teaching Staff (fall 2014)**

 - 617 Senior lecturers, lecturers, and professors emeriti

 - 155 Instructors (including technical instructors)

 - 37 Professors of the practice and adjunct faculty

- **Research staff and scientists (fall 2014)**

 - 4,827 Research staff and scientists

 - 2,188 On campus

 - 2,639 at Lincoln Laboratory

- **5,734 administrative staff, support and service staff (fall 2014)**



Five MIT Schools

The logo for the School of Architecture and Planning, consisting of the letters 'SA+P' in a bold, sans-serif font. The 'A' is orange, and the '+' is a small orange square.

School of Architecture
and Planning

• 3 departments

The logo for the MIT School of Engineering, featuring the stylized 'MIT' letters in black and red.

School of
Engineering

School of Engineering

• 8 departments



School of Humanities,
Arts, and Social Science

• 10 departments



Sloan School of
Management

• 1 department



School of Science

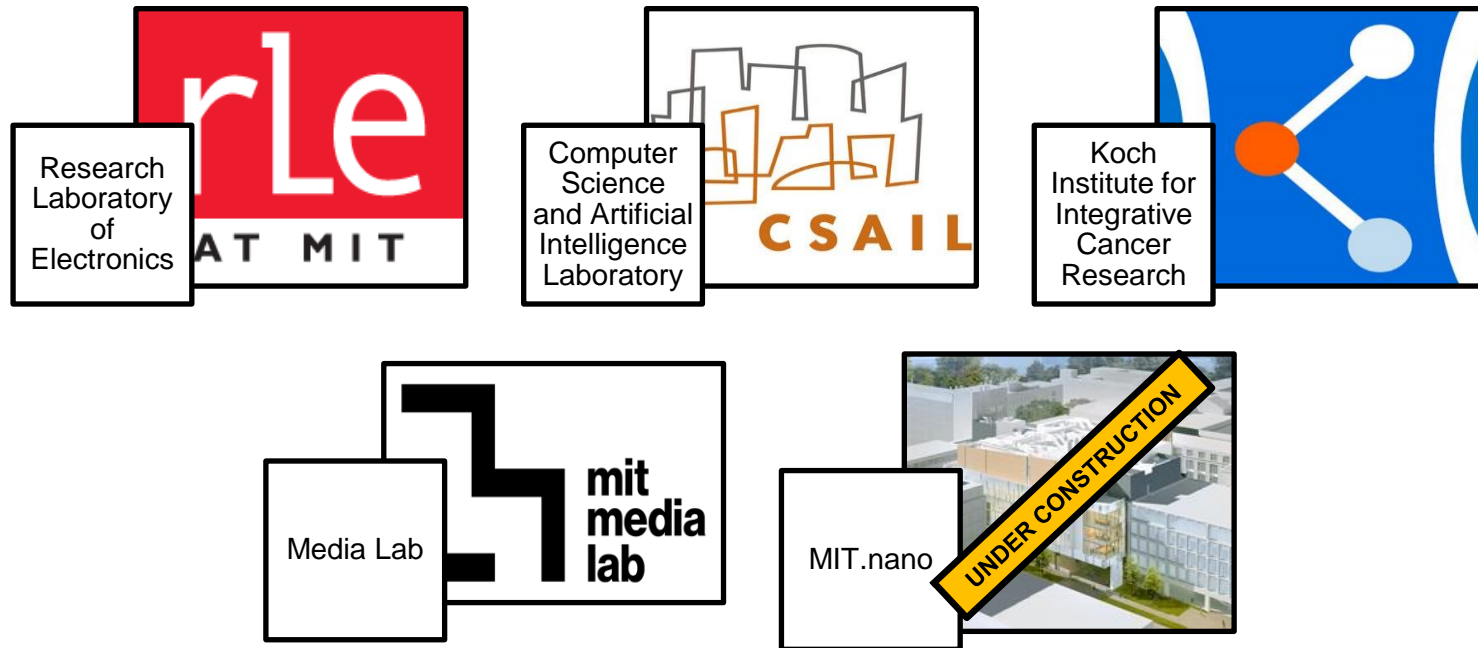
• 6 departments

+ Over 30 Interdisciplinary Centers, Labs, and Programs



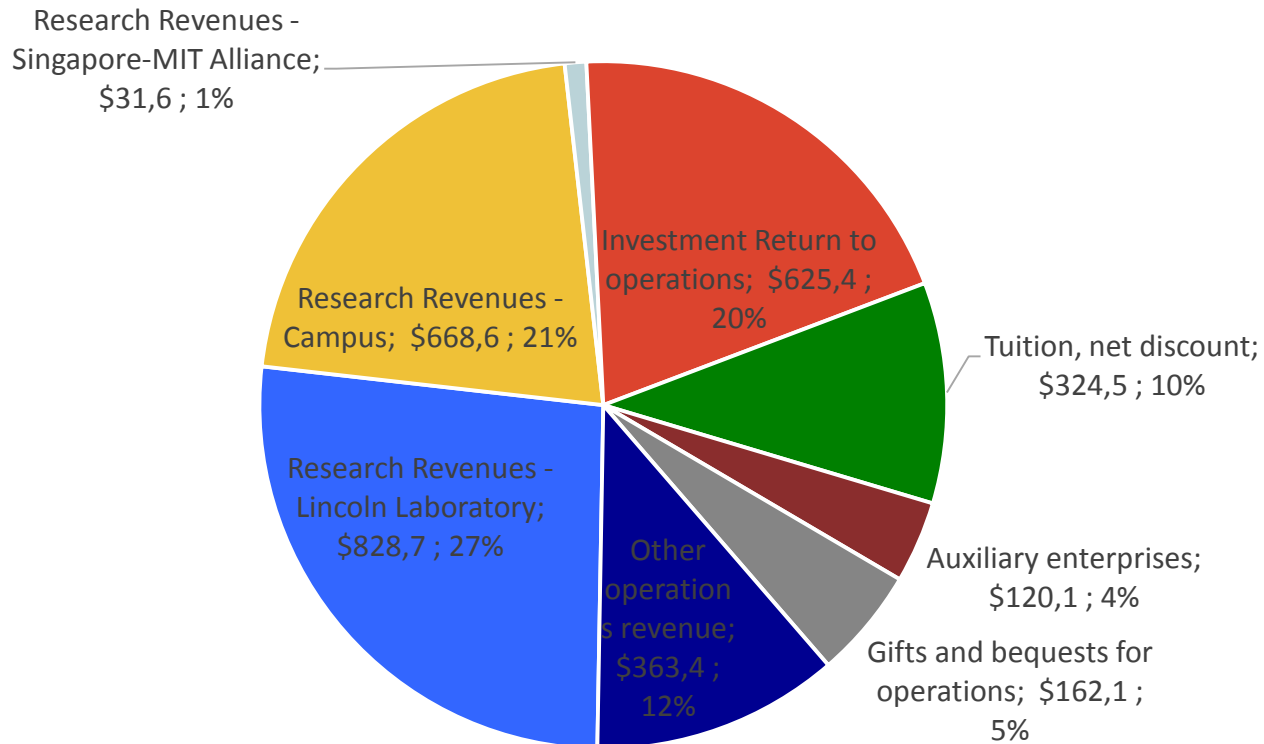
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Large Laboratories and New Construction



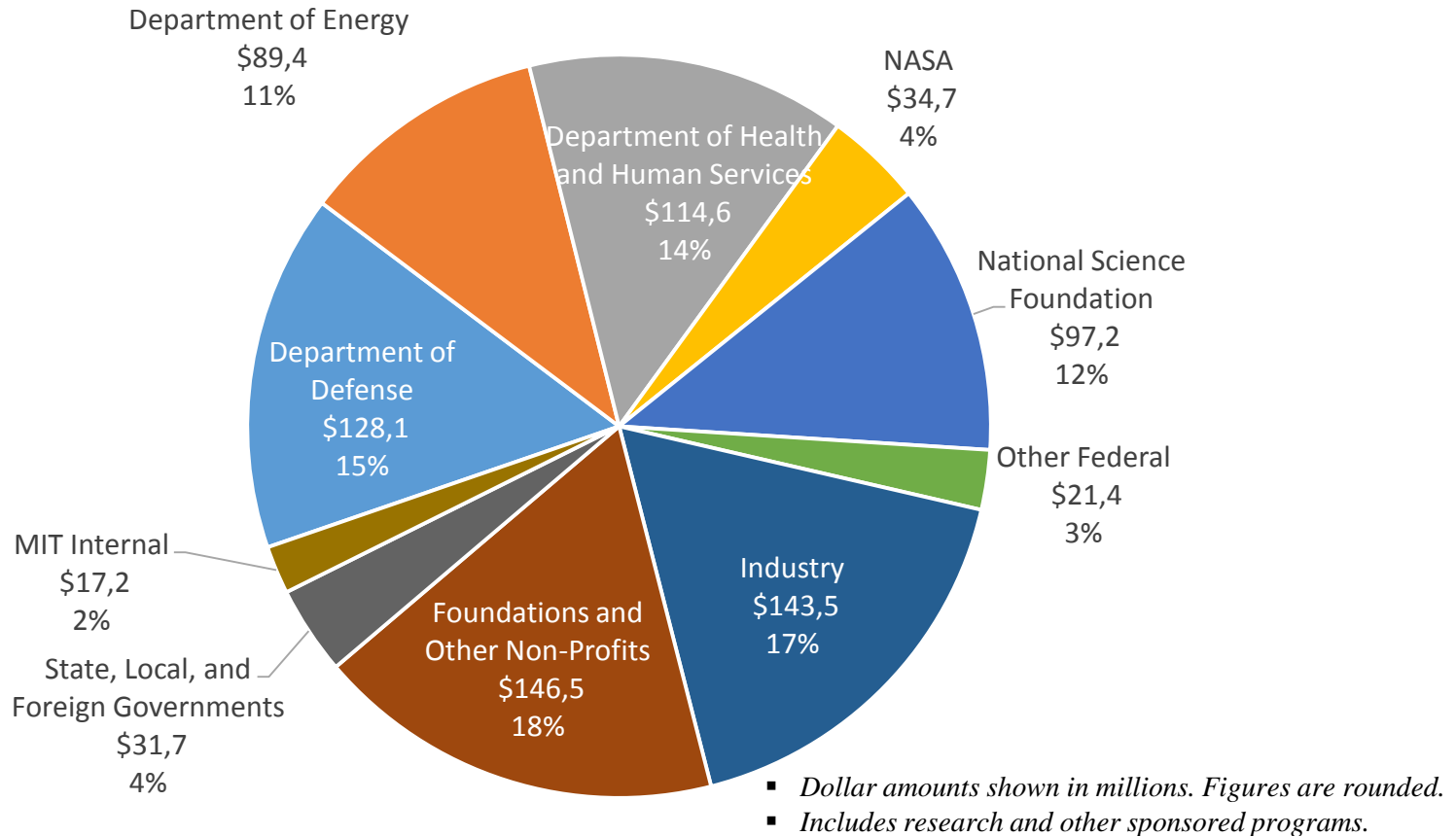
Operating Revenues – FY 2014

\$3,124 million, including Lincoln Lab



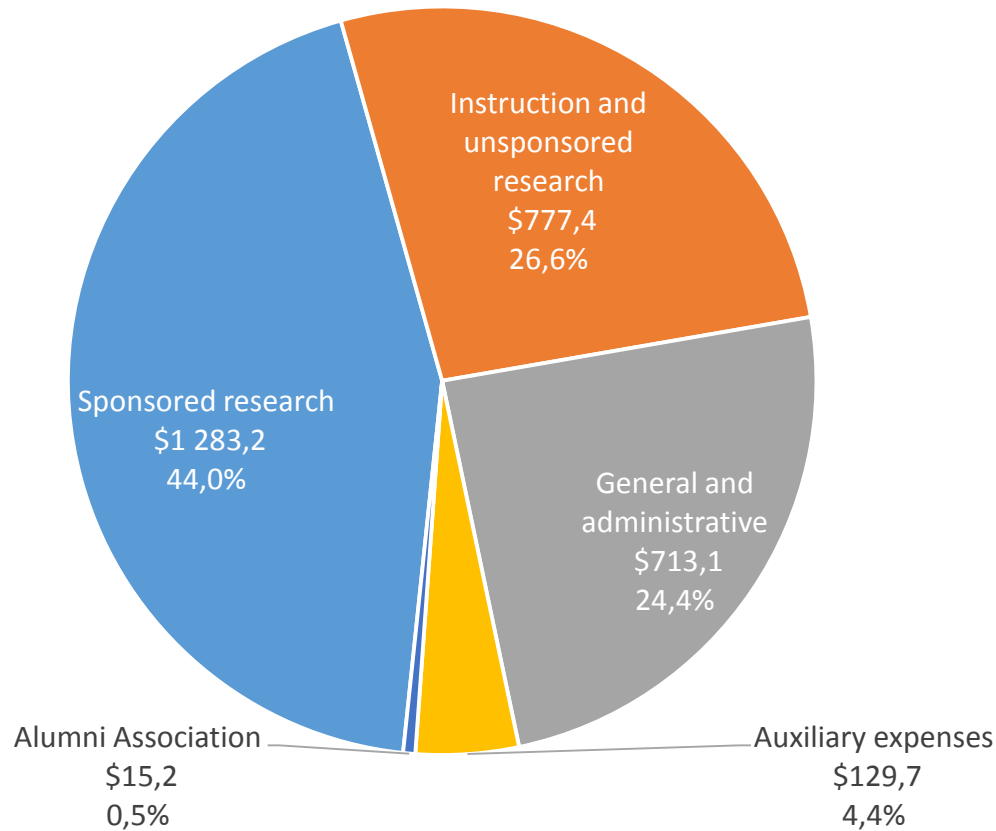
Sources for Sponsored Programs Funding – FY 2014

\$824.3 million
(excluding Lincoln Laboratory)



Operating Expenditures – FY 2014

\$2,919 million



* Dollar amounts shown in millions. Figures are rounded.



Institute-wide Initiatives



MIT Energy Initiative (MITEI)

- Launched in the fall of 2006, creating a new platform for highly focused energy-related activity at MIT
- Includes research, education, campus energy management and outreach programs that cover all areas of energy supply and demand, security, and environmental impact



MIT Innovation Initiative

- Institute-wide, multi-year agenda to transform the Institute's innovation ecosystem — internally, around the globe and with its partners — for accelerated impact well into the 21st century
- Supports MIT's focus on solving a range of critical challenges in energy, the health of the planet, human health and beyond



MIT Environmental Solutions Initiative

- Focuses MIT's talents on the interdisciplinary environmental challenges of today



Engagement with Industry



Industrial Liaison Program (ILP) and MIT Energy Initiative (MITEI)

- Over 700 companies
- \$ 143 mil. industry sponsored research in FY2014



Technology Licensing Office (TLO) FY2014 Statistics

- 743 new invention disclosures
- 304 U.S. patents issued, 80 licenses, 27 options
- 22 start up companies
- \$78 mil. in licensing income



Continuing Education

- MIT Sloan Executive Education
- MIT Professional Education



Innovation Ecosystem

THE CAMBRIDGE-AREA INNOVATION ECOSYSTEM

A sample of the rich resources available in the MIT Community and beyond.

EDUCATIONAL INSTITUTIONS

Harvard University
Boston University
Boston College
Northeastern University
Tufts University
Babson College
Brandeis University
University of Massachusetts
Worcester Polytechnic Institute

REGIONAL PUBLICATIONS

Mass High Tech
Boston Business Journal
Xconomy
Innovation Economy
column in the Boston Globe

ENTREPRENEURS/START-UP COMPANIES

Life Sciences/Biotech
Energy
Robotics
Internet/Web 2.0/Web 3.0
Gaming
Information & Communication Technologies

SERVICE PROVIDERS

Law Firms
Marketing and Publicity Services
Accountants and Part-Time CFOs
HR
Outsourced IT
Traditional Office Space
Incubators
Consultants

CORPORATE R&D LABS

Microsoft
Google
Mitsubishi Electric
Novartis
Pfizer
Schlumberger
Nokia

ENTREPRENEURSHIP SUPPORT

TiE Boston
128 Innovation Capital Group
Boston Entrepreneurs' Network

INVESTORS

Venture Capitalists
Angel Investors
Private Equity
Corporate Investor Groups



MIT ORGANIZATIONS

Deshpande Center for Technological Innovation
Venture Mentoring Service
MIT Entrepreneurship Center
MIT Enterprise Forum
MIT Entrepreneurs Club (e-Club)

MODULAR, ADD-AS-YOU-GROW OFFICES / SERVICES

Cambridge Innovation Center
One Kendall Square
Regus

STATE & LOCAL GOVT. INITIATIVES

Life Sciences Cluster
Robotics Cluster
Clean Energy Cluster
IT Cluster

REGIONAL TRADE ASSOCIATIONS

Mass Technology Leadership Council
Mass Software Council
Mass Innovation and Technology Exchange
Mass IT Collaborative Entrepreneurship Committee

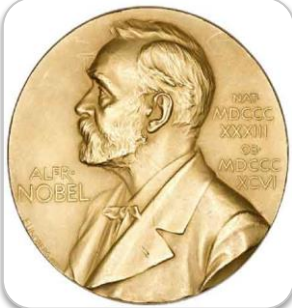
COMPETITIONS

MIT \$100k Entrepreneurship Competition
MIT Clean Energy Entrepreneurship Prize
MIT IDEAS
X-Prize
MIT and Dow Materials Engineering Contest



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Some Measures of Excellence and Impact



Nobel Prizes

- 81 present and former MIT faculty, staff, and students have won Nobel Prizes,
- 9 are currently faculty members



2009 Kauffman Foundation Study

- MIT graduates have founded 25,800 active companies
- Those companies employ 3.3M people
- Annual sales of \$ 2 trillion
- Equivalent of 11th largest economy in the world



Some Measures of Excellence and Impact



Rankings

- QS International: 1
- Shanghai Jiao Tong ARWU: 3
- US News & World Report Global Universities Rank: 2



Admissions

- 2014 Admission rate for undergraduates: 7.9%; central admission
- 2014 Admission rate for graduate students: 15.2%, admission by departments
- MIT has need-blind admission policy



MIT is a leader in online and distance learning

- OpenCourseWare
- MITx
- edX

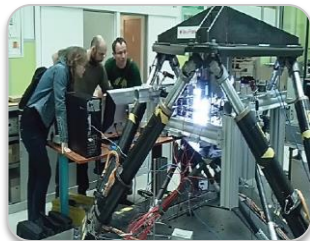


Motivation and Goals of Global Engagement



Education

- Provide MIT students and faculty with high quality opportunities to learn about and engage with the world



Research

- Gain access to unique or enhanced research opportunities and talent world-wide



Service

- Undertake international service activities that build on and contribute to MIT's strengths, leadership, and reputation -- coupled with research and education



Motivation and Goals for Global Engagement - 2



Campus Community

- Maximize the quality of our educational, research and service programs by attracting to MIT the best faculty and students from around the world

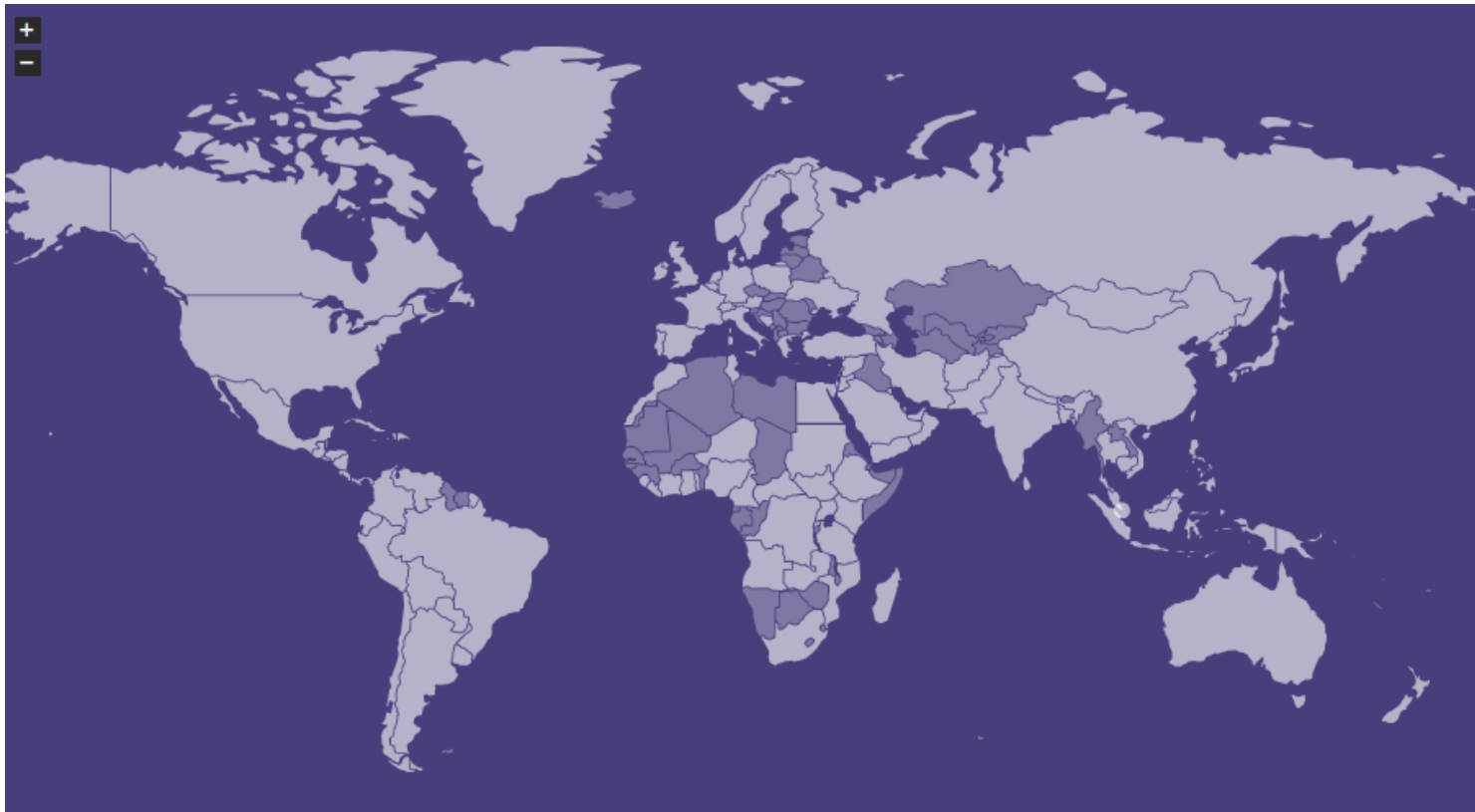


Diversified Funding Sources

- Grow an alternative source of funding during a time of flat or declining federal budgets



Where does MIT Engage Internationally?



* Based on educational and research projects active at MIT in FY14



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Where do we engage internationally?

Number of Projects

1	 Japan
2	 France
3	 United Kingdom
4	 Korea
5	 Germany
6	 Switzerland
7	 Italy
8	 China
9	 Netherlands
10	 Singapore

Top Funding Sources*

 Russia
 Singapore
 Japan
 United Kingdom
 Switzerland
 Saudi Arabia
 Spain
 United Arab Emirates
 Italy
 Taiwan

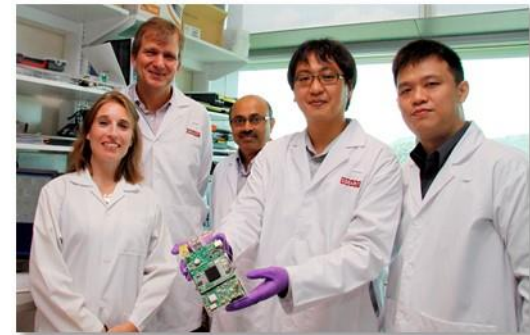
* Based on FY14 sponsored program expenditures

Singapore-MIT Alliance for Research and Technology (SMART)



Singapore-MIT Alliance for Research and Technology

- Partnership with the **National Research Foundation of Singapore**
- Time period: **2007–2017**
- Areas of focus:
 - biosystems and micomechanics
 - infectious disease
 - environmental sensing and modeling
 - low energy electronic systems
 - future urban mobility



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Singapore University of Technology and Design (SUTD)



SINGAPORE UNIVERSITY OF
TECHNOLOGY AND DESIGN

Established in collaboration with MIT

- A collaboration among **Singapore, MIT, and China's Zhejiang University**

- Time period: **2010–2020**
- Areas of focus:
 - engineering product design
 - information systems technology and design
 - engineering systems and design
 - architecture and sustainable design



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Skolkovo Institute of Science and Technology

Skolkovo Tech

Skolkovo Institute of Science and Technology

- Partnership with **Skolkovo Foundation** in Russia
- Time period: **2011–2016**
- Areas of focus:
 - energy science and technology
 - biomedical science and technology
 - information science and technology
 - space science and technology
 - nuclear science and technology



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MIT/Masdar Institute Cooperative Program



- Time period: **2006 – 2016**
- Areas of focus:
 - Alternative energy, sustainability, innovation and entrepreneurship
 - Collaboration so far on over 60 research projects
 - Help in developing new Master's and Ph.D. programs
- Partnership with government of Abu Dhabi to establish a graduate university



MIT Portugal Program (established 2006)

MIT Portugal

Network Model

Affiliates

6 Universities + 8 Schools, 525 current PhD students
270 Portuguese faculty, 70 MIT faculty
9 Associated Laboratories
50+ Companies
5 Schools and 25 departments at MIT

Engineering Systems Focus

Education: new programs in

Bio-Engineering Systems (PhD, EM)
Eng. Design & Adv. Manufacturing (PhD, EM)
Sustainable Energy Systems (PhD, EM)
Transportation Systems (PhD, MSc)

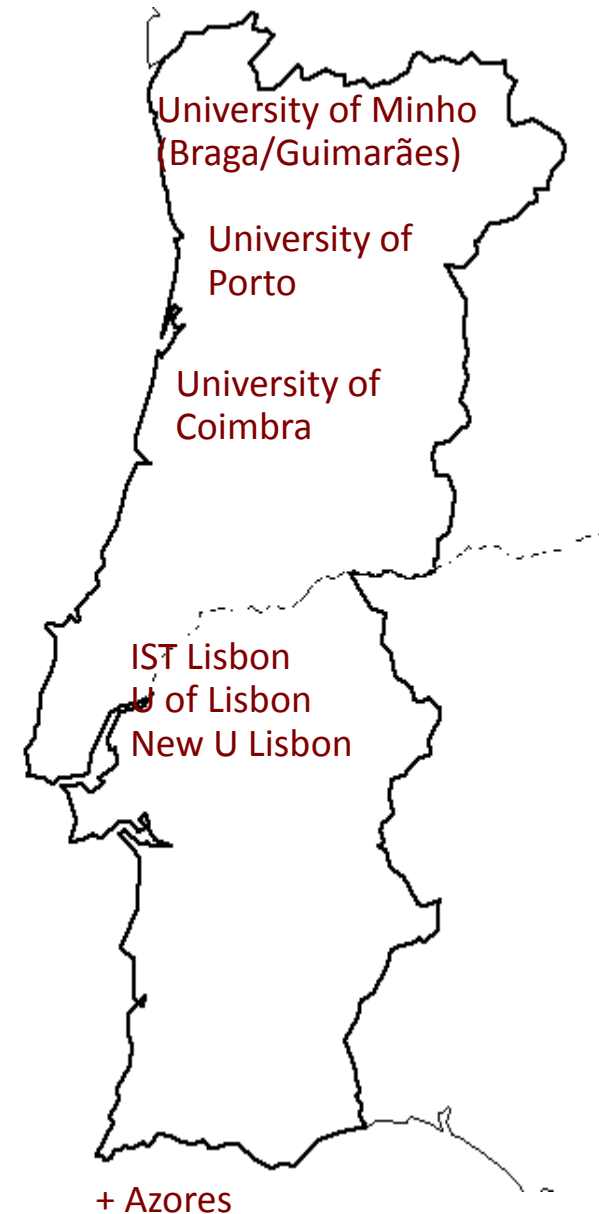
Integrated Research

Research

Collaborative projects
Seed-funds

Industry and Entrepreneurship

59 Industry Affiliates
320+ new jobs created
32M+ Euros in venture financing



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Tata Center for Technology and Design

TATA CENTER

TECHNOLOGY
+ DESIGN

- Partnership with the **Sir Dorabji Tata Trust** in India

- Time period: **2012–2018**
- Areas of focus:
 - Technology and design for developing countries
 - Sister center launched at IIT Bombay in 2014
 - Initial focus on Masters and PhD programs
 - Agriculture, energy, health, housing, infrastructure, water





MIT Sloan - Asia School of Business

Partnership with Central Bank of Malaysia
(Bank Negara) to create world-class
business school in Kuala Lumpur

- Time period: **2015 – 2023**
- Asian perspective – Global leadership
 - Curriculum
 - Teaching support
 - Action learning
 - Visits to Sloan
- Founding Dean/Pres:
MIT Prof. Charles Fine



MIT International Science and Technology Initiatives (MISTI)

MISTI



- MISTI programs are available in Africa, Belgium, Brazil, Chile, China, France, Germany, India, Israel, Italy, Japan, Korea, Mexico, Netherlands, Russia, Singapore, Spain, and Switzerland

- MISTI matches over 600 MIT students with internships and research abroad each year
- MISTI seed funds promote and support early-stage research collaborations around the world, 360 projects since 2008





Thank you for your attention!

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