MISTI

MIT International Science and Technology Initiatives

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

MISSION

The mission of MIT is to **advance knowledge** and educate students in science, technology, and other areas of scholarship that will best serve the nation and **the world in the 21st century**. MIT is dedicated to providing its students with an education that combines rigorous academic study and the excitement of **discovery**.

MENS ET MANUS

Private institution founded in 1861

Budget: $2.9 billion

1,056 faculty
3,820 researchers + other academic staff

90 Nobel Prize winners

11,500 students

3,337 international students

MIT SCHOOLS

School of Architecture and Planning

- Architecture
- Media Arts and Sciences
- Urban Studies and Planning

School of Engineering

- Aeronautics and Astronautics
- Biological Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Electrical Engineering and Computer Science
- Engineering Systems
- Materials Science and Engineering
- Mechanical Engineering
- Nuclear Science and Engineering
- Institute for Medical Engineering and Science

School of Science

- Biology
- Brain and Cognitive Sciences
- Chemistry
- Earth, Atmospheric, and Planetary Sciences
- Mathematics
- Physics

School of Humanities, Arts and Social Sciences

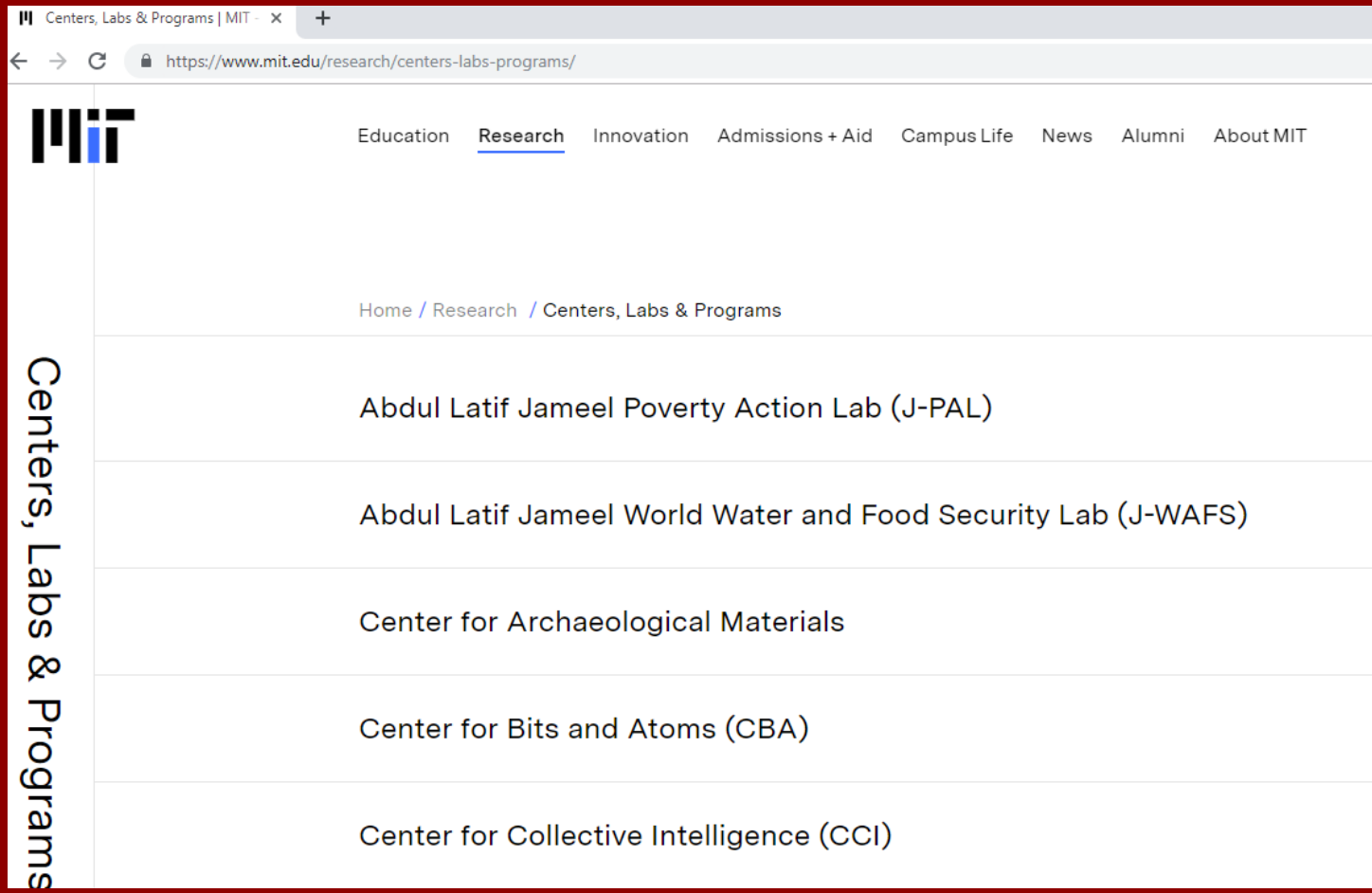
- Anthropology
- Comparative Media Studies/Writing
- Economics
- Global Studies and Languages
- History
- Humanities
- Linguistics and Philosophy
- Literature
- Music and Theater Arts
- Political Science
- Science, Technology and Society

MIT Sloan School of Management

- Management

Research centers and labs*

60+ Research centers, labs, programs and initiatives



ENTREPRENEURSHIP AT MIT

The GDP of a nation formed by businesses started by MIT graduates would be **$2 trillion.** This would rank them as 10th in the world (equivalent to Italy, the UK, and Brazil).

25,800
active companies have been started by MIT alumni

Intel, Bose, Koch Industries, Texas Instruments, Dropbox & Campbell Soup founded by MIT Alums

3.3 million
are employed by companies started by MIT alumni

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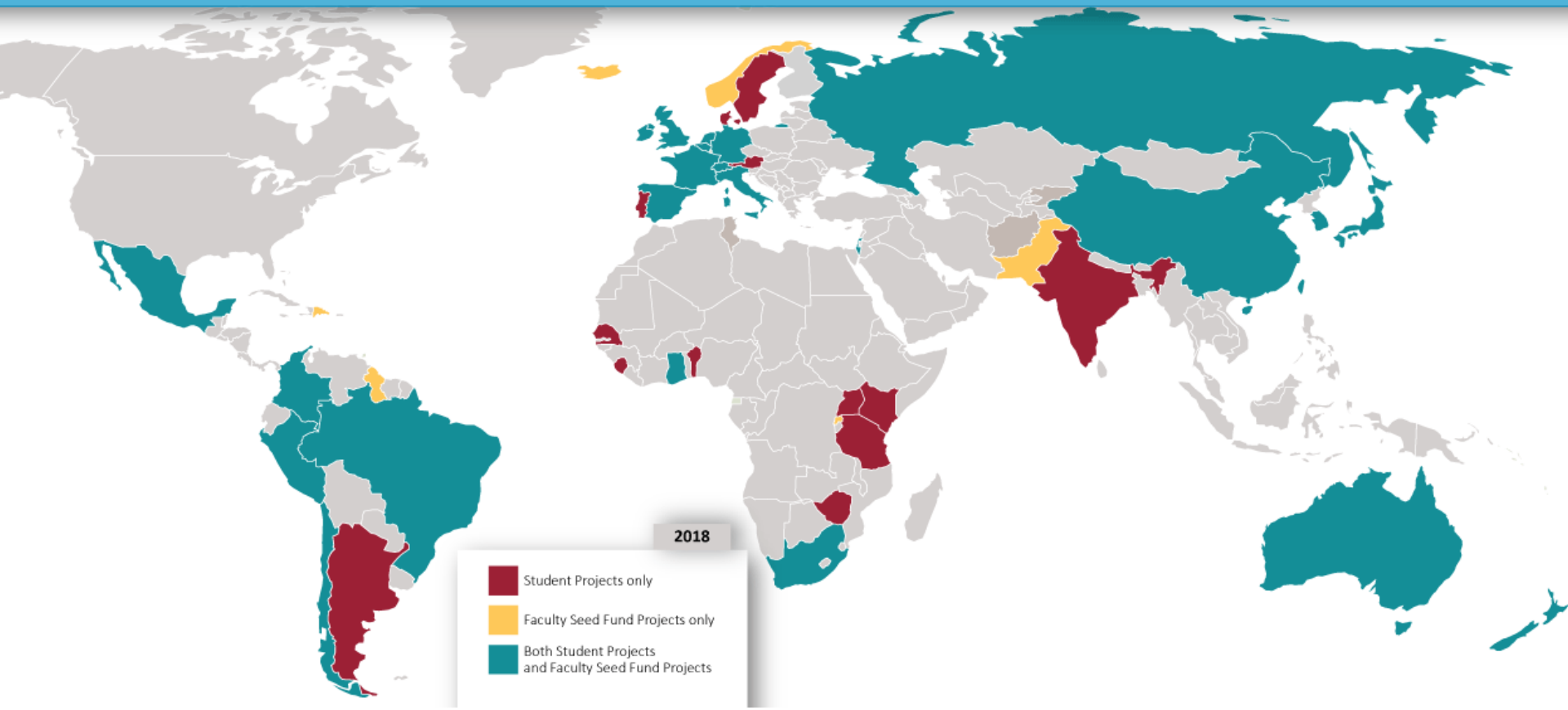
AT MIT, WE EDUCATE OUR STUDENTS TO TAKE ON THE WORLD’S GREAT CHALLENGES FOR THE BETTERMENT OF HUMANKIND. WHAT BETTER PREPARATION THAN FOR THEM TO EXPLORE THE WORLD, CONFRONT ITS CHALLENGES AND EXPERIENCE ITS HUMANITY THROUGH MISTI?

- MIT President L. Rafael Reif

PROGRAMS

MISTI



"MIT is a community eager to solve hard problems in service to the nation and the world."

-MIT President L. Rafael Reif

Create future global leaders

Promote faculty international research collaboration

Connect international partners with MIT

OUR MISSION

MISTI

MISTI STATISTICS

1,500+
Student placements each year

$18.5M
Awarded to MIT faculty since 2008

450+
Partnerships around the world

STUDENT PROGRAMS

INTERNSHIPS

MISTI's award-winning international internship program provides a one-of-a-kind, world-class experience for MIT students: **the opportunity to gain real-life work experience in leading companies and labs around the world.**

KEY FACTS:

- Internships abroad in **companies, universities, non-profits and research labs**
- **Student expenses are covered**, including stipend and airfare
- Internships last **3 to 12 months**
- **MISTI is open to all MIT students:** undergraduates, graduate students and graduating students
- There are opportunities in **every MIT major**
- Most students go during the **summer**, but internships are **available year-round**

MISTI STUDENTS

MISTI provides MIT students with the chance to gain real-life work experience in leading companies and labs around the world. Each year 1110+ students are matched with international **internship**, **research**, **entrepreneurial** and **teaching opportunities**.

THE VALUE OF A MISTI STUDENT

- Pre-selected from the top tier of MIT students (4.0 minimum GPA)
- Recommended by their professors
- Prepared in the language and culture of the host country
- Instructed on living and working in the host country
- Skilled in the lab/work setting thanks to previous internships, UROPs and other hands-on MIT opportunities
- Ready to hit the ground running

UNIVERSIDAD DE SANTIAGO DE CHILE

ESTUDIANTES ACADÉMICOS EGRESADOS FUNCIONARIOS

Nuestra Universidad Admisión Programas de estudio Facultades Investigación Vida Universitaria

NOTICIAS

2 Agosto 2018

Programa de educación internacional:

U. de Santiago recibe por primera vez a un estudiante del MIT para realizar una pasantía

Se trata de Enriko Granadoz Chávez, perteneciente a segundo año de Ingeniería en Ciencia de los Materiales, quien se convirtió en el primer estudiante del prestigioso Massachusetts Institute of Technology que se desempeñará durante una temporada en nuestro Plantel. El joven llegó a la U. de Santiago a través del programa Misti del MIT, cuyo objetivo es financiar y fortalecer la conexión y colaboración entre pares de Casas de Estudios, principalmente enfocado a la investigación. "Espero que desde ahora más estudiantes del MIT lleguen a esta Universidad, donde me acogieron con calidez y tuve una experiencia muy

GLOBAL TEACHING LABS

Students are matched with **foreign high school hosts** throughout the country for three weeks in January. At each location students prepare tailored courses on **science, technology, engineering and math (STEM) subjects** that complement the school's curriculum and highlight MIT's hands-on approach to education.

KEY FACTS:

- GTL takes place over MIT's January session **IAP;** all other programs occur in the summer.
- Students apply and are selected in the **fall.**
- Participants attend **MISTI Prep and Training sessions** on teaching methodologies and the culture and society of the host country.
- There are **no foreign language requirements** for participation in the program

MISTI's Global Teaching Labs students share MIT's hands-on approach to education by teaching STEM subjects at high schools and universities across the globe.

GTL students are currently teaching in:

FRANCE
GEORGIA
GERMANY

ISRAEL
ITALY
JORDAN

KAZAKHSTAN
KOREA
MEXICO

MOROCCO
SPAIN / ANDORRA

PERU
CHILE
BRAZIL

1800
MIT students have taught abroad through GTL

424
GTL students in 2018

15+
countries have hosted GTL students

Past GTL host countries include:

RUSSIA

SOUTH AFRICA

GLOBAL STARTUP LABS

MISTI GSL promotes development in emerging regions by **cultivating young technology entrepreneurs**. GSL develops curriculum materials, software technologies, platforms, and networks that enable **undergraduate students in emerging regions to innovate** in the area of information and communication technologies (ICTs).

GSL partners with universities in emerging regions and organizes advanced courses taught by MIT students/instructors. The courses focus on **mobile and Internet technologies**, and are structured so that our students are awakened to the commercial possibilities of the technologies.

Components of the course include detailed **technical curriculum, funded business competitions, guest lectures, and networking events** all to help our students develop and realize their ideas.

FACULTY FUNDS

“

THE GSF PROGRAM IS AN EXTRAORDINARY BENEFIT TO THE MIT COMMUNITY AND WAS CRITICAL FOR US IN THIS PROJECT. WE ARE EXCITED TO CONTINUE TO BE A PART OF IT AS WE INITIATE ADDITIONAL INTERNATIONAL COLLABORATIONS.

- Matthew Shoulders, MIT Chemistry Assistant Professor

MISTI GLOBAL SEED FUNDS

MISTI Global Seed Funds (GSF) support MIT's global engagement by promoting and supporting early-stage **collaborations** between **MIT researchers** and their **counterparts around the globe.**

Many of the joint projects we fund lead to additional grant awards and the development of **valuable long-term relationships** between international researchers and MIT faculty and students.

MIT-USACH Seed Fund Agreement

SF

Up to USD $20,000 per project, 2 projects a year

Interns

Internships for MIT students, UG+G

Frame

For further collaborations

HOW IT WORKS

MISTI GSF comprises a general fund for projects in any country and several country funds with their own requirements. **Most funds provide a maximum of $20,000 per proposal**.

Proposals must be jointly submitted by the MIT and international applicants. Applicants are **encouraged to involve MIT undergraduate and graduate students** in their projects. Funds are intended to be used during the initial phase of developing an international collaboration.

The deadline for the grant cycle is in December; applicants are informed of the results in early May. Funds are available for use over the next 18 months.

HOW IT WORKS

STEP 1 Identify and contact a MIT researcher (PI status required)

STEP 2 Work on the proposal, considering a balanced exchanged and inclusion of students.

STEP 3 The researchers must submit the proposal before the deadline, December 14.

SELECTION PROCESS

Grantees are selected through a 2-tiered process.

1. SCIENTIFIC COMMITTEE

- Importance of the scientific problem or project and its contribution to the field

2. SELECTION BOARD

- Balanced exchange
- Complementarity
- Newness
- Sustainability

Past Seed Fund Winners.

Synchronization of cortical layers underlies working memory

Field 1: *Brain and Cognitive Sciences*
Field 2: *Biology*
Subfield: *Cognition*

Non US countries involved in this project

Chile

name	Elias Leiva Salcedo
title	Assistant Professor
institution	Universidad de Santiago de Chile
dept.	Departamento de Biologia
lab/center	Laboratorio de Sistemas Neurales
email	elias.leiva@usach.cl

Chile

Main PI

name	Earl Miller
status	Professor
title	Picower Professor of Neuroscience
dept.	Brain and Cognitive Sciences (Course 9)
school	School of Science
lab/center	The Picower Institute for Learning and Memory
email	ekmiller@mit.edu

Has PI status

Past Seed Fund Winners.

The Design of Vertical Evacuation Structures as a Response to Tsunami Events in Coastal Cities: The Case of Iquique, Chile

Field 1: *Architecture*
Field 2: *Urban Studies and Planning*
Subfield: *Disaster Mitigation*

Non US countries involved in this project

Chile

Main PI

name	Miho Mazereeuw
status	Associate Professor
title	Associate Professor without tenure
dept.	Architecture (Course 4)
school	School of Architecture and Planning
lab/center	Urban Risk Lab
email	mmaz@mit.edu

Has PI status

name	Larisa Ovalles
status	Principal Research Scientist
title	Research Scientist
dept.	Architecture (Course 4)
school	School of Architecture and Planning
lab/center	Urban Risk Lab
email	lovalles@mit.edu

DOES NOT have PI status

name	Rodrigo Aguilar Perez
title	School of Architecture Director, Associate Professor
institution	Universidad de Santiago de Chile USACH
dept.	School of Architecture
lab/center	School of Architecture
email	rodrigo.aguilarp@usach.cl

Chile

name	Sebastián Laclabere Arenas
title	Assistant Professor, School of Architecture
institution	Universidad de Santiago de Chile USACH
dept.	School of Architecture
lab/center	School of Architecture
email	maurice.laclabere@usach.cl

Chile

name	Rodrigo Martin Quijada
title	Smart City Lab vice principal, Associate Professor
institution	Universidad de Santiago de Chile USACH
dept.	School of Architecture
lab/center	Smart City Lab
email	rodrigo.martin@usach.cl

Chile

name	Ivan Jimenez Maturana
title	Assistant Professor, School of Architecture
institution	Universidad de Santiago de Chile USACH
dept.	School of Architecture
lab/center	School of Architecture
email	ivan.jimenez.m@usach.cl

Chile

Past Seed Fund Winners. Examples

"La Niebla, una fuente alternativa de recursos hídricos en zonas semiáridas, con sistemas de captación altamente eficiente y usos no tradicionales." P. Cereceda, P. Hernández, J. Leiva and J. de Dios Rivera.

- **Sponsor and amount: CORFO: CLP$179.232.078**
- Project dates and number: 2011-2014, 2011-10148-INNOVA_PRODUCCION2011-10148
- Related seed fund: MIT-Chile - Pontificia Universidad Católica de Chile Seed Fund, *The Fog Harvesting Challenge – Phase II*

"Ambulatory Monitoring of Vocal Function to Improve Voice Disorder Assessment." R. E. Hillman. Project includes members from MIT, Massachusetts General Hospital (MGH) and the Universidad Técnica Federico Santa María (USM).

- **Sponsor and amount: NIH / National Institute on Deafness and Other Communication Disorders: USD$560,371**
- Project dates and number: 2011-2017 (awarded 2015), 5R33DC011588-05
- Former number: 4R21DC011588-02
- Related seed fund: MIT-Chile Fund, *The development of ambulatory biofeedback approaches to more effectively treat common voice disorders*

"Clinical Research Center for the Improved Prevention, Diagnosis, and Treatment of Vocal Hyperfunction."

- **Sponsor and amount:** NIDCD Clinical Research Center (P50): **USD$2,397,233**
- Project dates and number: 2017-2022 P50 DC015446 01A1
  Related seed fund: MIT-Chile 2013- "Numerical Modeling and Other Engineering Tools for the Ambulatory Assessment of Vocal Function."

Important Deadlines

Deadline: December 14, 2020

Use of Funds: May 2021-Dec 2022

https://www.mit.edu/research/centers-labs-programs/

https://www.mit.edu/education/schools-and-departments/

MISTI

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MISTI.MIT.EDU
MISTI@MIT.EDU

EDURIV@MIT.EDU