International Education at MIT: Hands-on Learning in a Global Laboratory
Why MISTI?

To internationalize MIT education and research

• With the globalization of science, technology, and economy, we need to prepare our students for leadership in a new world
• Important centers of innovation are opening outside our own society
• To educate our students to access these advances in science and technology, we need to prepare them for lives and careers that span national boundaries
How?

- Intensive professional internships in companies, research labs, and universities around the world
- Study-abroad opportunities at select universities around the world
- Workshops, conferences, symposia, and lectures for our students and faculty with international corporations, government agencies, and NGOs
- Support of MIT faculty for cross-border research collaboration
- Facilitation of research opportunities for international students and postdoctoral visitors at MIT
MISTI International Internships

• Since 1983, MISTI has placed more than 1500 students into companies and labs from Beijing to Berlin

• All programs are open to undergraduates, graduates, and recent alumni

• MISTI places students from all areas of study

• Training in the language and culture of the host country precedes stay abroad

• All expenses paid
## MISTI Country Programs

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<th>Japan</th>
<th>China</th>
<th>Germany</th>
<th>India</th>
<th>Italy</th>
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* India 2002: No students sent due to travel restrictions
** China 2003: Travel restrictions due to SARS
MISTI Internships

Student Characteristics

Profiles:

- 60% Undergraduates
- 30% Graduates
- 10% Recent Graduates

- 60% School of Engineering
- 20% School of Science
- 10% School of Management
- 5% School of Humanities, Arts and Social Sciences
- 5% School of Architecture and Planning

- 70% Summer internships
- 30% Six to twelve months internships
- 10 – 15% Permanent hires
MISTI: Hands-On learning combined with in-depth academic preparation

- Language and literature subjects in Chinese, French, German, Italian, Spanish, and Japanese

- Subjects on society, politics, and culture
  - “Raw Fish”, “Issues in Contemporary Germany”, “Iron Rice Bowl”, “Mole”, and “Communicating Across Cultures”
  - Speaker series

- Intern training courses
  - Retreats and spring training seminars
International Outreach

- **MIT Japan:** Long established training programs for American executives
- **MIT China:** MISTI China Forum, Singapore Forum, China Educational Technology Initiative (CETI), MIT-China-OCW Project at Qinghai University
- **MIT India:** NSF funded program for graduate students
- **MIT Germany:** Workshops for MIT students, faculty, and German corporate partners on topics such as “Solutions for Mobility” (DaimlerChrysler, Siemens) or “Nanotechnology in the Chemical Industry” (BASF)
International Outreach

• MIT Italy: Organizes conferences with MIT faculty and Italian sponsors on Italian high tech industries; works with consortium of Italian universities and promotes MIT-Politechnico faculty collaborations

• MIT France: MIT-France Endowment for collaborative research, visiting faculty program bringing guests from France to MIT; strong study abroad component

• MIT Mexico: Placement of Mexican researchers in MIT Labs through CONACYT grant, Teach Abroad opportunities
Over 100 corporate partners worldwide including

- **Japan**
  - Mitsubishi Heavy Industries
  - NTT DoCoMo
  - Panasonic
  - SONY
  - Tokyo University

- **China**
  - Beijing University
  - IBM
  - Intel
  - Microsoft
  - Tsinghua University

- **Germany**
  - Bosch
  - BMW
  - DaimlerChrysler
  - Infineon Technologies
  - Lufthansa
  - Siemens

- **France**
  - Air Liquide
  - Delphi Automotive Systems
  - France Telecom R&D
  - INRIA
  - Renault
Support for MISTI Programs

FOUNDATIONS
- Ayukawa Foundation
- Fondazione A. and E. Rocca
- Fondazione Tronchetti Provera
- Freeman Foundation
- Max Kade Foundation
- National Science Foundation
- Starr Foundation

GOVERNMENTAL SUPPORT
- EduFrance Agency
- French Ministry of Foreign Affairs
- French Ministry of Education
- German Federal Ministry for Research, Education and Technology
- German Academic Exchange Service
- CONACYT

CORPORATE SPONSORS
- MIT Japan Consortium
- MIT Germany Consortium
- MIT France Consortium
- MIT Mexico Consortium

INDIVIDUAL DONORS
- Anthony and Rosina Sun
- Chu Fund
- Mr. Raymond Kwok
- Mexican Alumni
MISTI: A community of internationally aware students

- **MISTI Ambassador Program**
  Creating a core group of students interested in international issues; the student-voice of MISTI at MIT

- **Sun Fellowship Awards**

- **Annual retreat on Thompson Island**

2002 Sun Fellows with Nobel Prize Winner Wolfgang Ketterle
New Projects at MISTI

- **MISTI - OpenCourseWare Projects in China**

  New forms of engagement for our students and faculty with colleagues in China

- **MISTI – l-labs cooperation in Africa**

  Helping to connect African universities to virtual labs to facilitate in-depth learning experiences
  
  University of Dar es Salaam, Tanzania
  Makerere University, Uganda
  Obafemi Awolowo University, Nigeria
MISTI- I-labs Cooperation

• Tasks for MISTI in the I-Labs-Africa Project
  • Arrange internship opportunities for MIT students with partners
  • Train students before their departure to Africa
  • Work with partners in Africa on accommodation and supervision of MIT students
  • Host guests from African partners during their stay at MIT
MISTI- I-labs Cooperation

- Arrange internship opportunities for MIT students with partners
  
  - Planned number of students:
    
    - Teams of 2 students to each of our three partner universities = about 6 students per year
  
  - Students and their work projects will be selected by Prof. Alamo in close cooperation with hosts.
  
  - Students can be either advanced undergraduate or graduate students
  
  - Students will travel either during January or for about 8 weeks during the summer
  
  - Students will receive travel support from MISTI
MISTI- I-labs Cooperation

- Train students before their departure to Africa

  • MISTI has arranged a special tutor for those students who will be participating in I-labs project
  • Students can enroll in MIT course “Independent International Research Project” and may receive course credit for their work
MISTI- I-labs Cooperation

– Work with partners in Africa on accommodation and supervision of MIT students

• MISTI needs help from African partners regarding:
  – Accommodation: Can students be housed on campus or close to university?
  – Safety issues: Are students in a safe environment or properly instructed to avoid certain unsafe locations?
  – Health issues: MISTI will make sure that all students receive proper medical preparation
  – Mentorship: MISTI wants to work closely with African partners to ensure that each student team has a mentor/supervisor at respective university
MISTI- I-labs Cooperation

– Host guests from African partners during their stay at MIT

• Help guests with finding accommodation during their stay in Boston
• Arrange contact to students and faculty while visit MIT
• Arrange a guided tour to see MIT campus and Boston
• Arrange meetings with prospective MIT students who will go as interns to Africa
• Informal dinner with students from the “Africa Information Technology Initiative”
MISTI
MIT International Science and Technology Initiatives

Hands-on Learning in a Global Laboratory

for more information:

http://web.mit.edu/misti/www/