



2009 - 2010

Guide toINTERNATIONAL DEVELOPMENT at MIT

web.mit.edu/idn





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October 2, 2009

Dear Member of the MIT Community:

It is my pleasure to welcome your participation in the International Development Network (IDN) at MIT. Since 2002 the IDN has organized an Activities Fair, run other Institute-wide special events focused on development, published this Guide, and provided an essential introduction to the many MIT clubs, classes, competitions, and laboratories involved in global development efforts.

The Institute encourages active participation in development issues, both on campus and beyond, and I urge you to seek out and discover these possibilities. This past year several new initiatives emerged. The MIT Sloan G-Lab Global Health Delivery began field work in Africa, the student-run India Initiatives was launched at the MIT Media Lab, the D-Lab family of classes expanded to include D-Lab Health and now ICT and Cycle Ventures. Every year a growing number of students continue to travel overseas through MISTI internships, D-Lab curricular field classes, or study or work abroad — experiences that many find transformative and rewarding.

We at MIT are proud of our long-standing tradition of practical action and student engagement in learning by doing. You might participate in research projects on development-related themes ranging from off-grid energy innovations and clean water solutions to rural prosperity and emerging business models. You might enter the extracurricular MIT IDEAS and \$100K Entrepreneurship Competitions to develop and deploy projects and ventures that have growing positive impact in the world. Both grassroots student initiatives and more formal MIT research continue to spur the creation of new businesses and even new industries to meet pressing human needs.

Many students weave a personalized pathway through these many curricular and extracurricular offerings. Indeed, alumni- and alumnae-founded companies and NGOs are part of a vibrant and growing international network connected both with one another and back to the Institute.

MIT's mission is to bring knowledge to bear on the world's great challenges, and our students, faculty, and staff do this with tremendous intensity and passion. It is precisely this combination of innovation and commitment that the field of sustainable development now needs. I encourage you to make your own contributions to this vital effort.

Sincerely,

(Sugar Hochfuld

Welcome

The MIT International Development Network (IDN) exists to help you engage fully in international development at MIT and beyond. To kick off the 2009-2010 academic year, we host our Eighth Annual MIT International Development Fair on October 2nd, 2009. The Fair helps introduce incoming students and other members of the MIT community to the many student groups, classes, centers, programs and academic departments at MIT who, through their activities, have demonstrated an interest in sustainable international development.

Throughout the year we organize large-scale, Institute-wide events spotlighting and celebrating aspects of international development at the Institute, including an end-of-semester Fall Celebration, the International Development Night in early Spring, and the end-of-semester Spring Showcase event featuring all the student projects from the D-Lab family of classes.

The content of this guide and other useful information can be viewed online at our website http://web.mit.edu/idn. We welcome your suggestions, questions, and ideas on promoting a greater understanding of the Institute's potential to be a leader in sustainable international development.

Finally, we would like to thank everyone who contributes to our vibrant global community at MIT.

Alex Hamilton Chan

Sincerely,

Elizabeth Basha

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Joost Bonsen

On the cover: Public Service Fellow Ming Leong '09' refined the design of the Universal Nut Sheller, part of the Full Belly Project's repertoire of income-generating agricultural devices.

Introduction to International Development @ MIT

Joost Bonsen

The lack of clean water, nutritious food, sustainable energy, accessible communications, effective healthcare, efficient transport, affordable financial services, and basic education are each among the global giga-challenges affecting at least one billion people worldwide. It is central to achieving MIT's mission that we proactively seek solutions to these pressing international problems, and indeed, there is substantial and growing faculty research throughout MIT's five schools and myriad labs towards these ends. Furthermore, student contributions, both through experiential-learning Action Lab classes and extracurricular clubs and initiatives, are hugely important and are central to MIT's learning-by-doing ethos.

The full range of international development activities at the Institute can, however, be a bit difficult to grasp quickly or in its entirety. To help everyone interested in development meet one another and learn of the many opportunities at the Institute, a team of students and staff from the International Development Network (IDN) created the annual International Development Fair (IDF) hosted early in the Fall semester. This Fair and the related Guide showcases the many groups, projects and activities at the Institute that engage students in international development activities and provide the opportunity for students to meet and connect with others involved with practical and actionable global development at MIT.

Throughout the year, student clubs in energy and sustainability host regular talks and discussions. MIT's graduate student-run Muddy Charles Pub in Walker Memorial hosts informal development drinks and dinner gatherings to bring together Harvard and MIT students, as well as Monday CultureNights featuring foods from different countries. The Technology & Culture Forum at MIT (TAC) offers public lectures and symposia throughout the year, often focused on development-related issues. In the Spring, the MIT Museum hosts the International Development Night to welcome both attendees of the Harvard-MIT International Development Conference (IDC) and our community at large.

The MIT IDEAS (Innovation-Development-Enterprise-Action-Service) Competition supports teams that develop and implement projects that will have positive impact in the world. With the support of IDEAS, student teams can make progress toward solving challenges faced by communities, all driven by the spirit of public service and student enterprise. The most promising projects continue on beyond IDEAS, with further prototyping and field trials. They may form the basis for an entrepreneurial startup company, with many IDEAS participants also entering a business plan in the MIT \$100K Entrepreneurship Competition – including Dinube, OneEarthDesigns, EGG and Global Cycle Solutions in this past year. Over the past eight years, IDEAS and \$100K winners have secured millions of dollars in follow-on funding for their service projects from sources including USAID, the World Bank Development Marketplace, angel financiers, and venture capitalists.

Several project-oriented development classes prepare students during the regular semester for time in the field during MIT's Independent Activity Period (IAP) in January or over the summer. These classes include the D-Lab offerings, or Development-Design-Dissemination Labs, including the new D-Lab Cycle Ventures, ICT4D, and Health classes as well as the joint Media Lab / Sloan course on Development Ventures (DV), and Sloan's Global Entrepreneurship Labs (G-Lab) offering on Global Health Delivery, the S-Lab classes on Sustainability, and L-Lab class on transformative leadership. Dozens more courses in Urban Planning, Architecture, the Media Lab, Sloan School, the Humanities, Arts, and Social Sciences as well as Engineering and the Sciences have international development aspects.

Anyone interested in international development at MIT can find information in this Guide and online via the IDN website. One growing focus of attention is the MIT International Development Initiative (IDI) as it pursues appropriate design solutions, engages students in



Photo courtesy of the Legatum Center

Andre Thomas '11, a member of Team Malawi Bio-Fuels, with a group of micro entrepreneurs

collaborative designs, and ultimately implements and disseminates technologies in partner communities throughout the world. In the past few years, IDI has formed both the Mobility Lab and Innovations in International Health (IIH) to focus on medical devices for the developing world. The International Development Group (IDG) within MIT's Urban Studies and Planning department conducts research and assists in the planning practice in countries around the world striving for social, political, and economic development. The Jameel Poverty Action Lab (J-PAL) in MIT's Economics department concentrates on poverty research based on randomized trials leading to clear scientific results that enable policy makers to more successfully combat poverty. These are only a few of the development initiatives at the Institute; there are many more focused programs in water and sanitation, clean energy, educational technology, and beyond.

Solving global giga-challenges requires a concert of methods, including cross-cutting approaches drawn from various emerging sectors, all while harnessing the full power of our triad of research, education, and extracurricular activities at MIT. Only through novel technological and social innovations can we address the greatest problems facing our planet.

The following broad categories should give some sense of the range of activities at the Institute:

Broad, Multi-Sector – A variety of groups cut across many sectors of global development at MIT, including the International Development Initiative, Sustainability @ MIT, the Global System for Sustainable Development, the MIT IDEAS Competition, the MIT Public Service Center, the Technology and Culture Forum at MIT, the International Development Group and the Global Poverty Initiative.

http://web.mit.edu/idi/ & http://sustainability.mit.edu & http://web.mit.edu/global/ & http://web.mit.edu/ideas & http://web.mit.edu/mitpsc/ & http://web.mit.edu/tac & http://web.mit.edu/dusp/idg/ & http://gpi.mit.edu

Business, Finance, and Entrepreneurship – At the intersection of business and finance and development are the MIT Entrepreneurship Center, Development Ventures, the Deshpande Center for Technological Innovation, the Legatum Center, and the MIT \$100K Entrepreneurship Competition.

http://entrepreneurship.mit.edu/ & http://developmentventures.org & http://web.mit.edu/deshpandecenter/ & http://www.mit100k.org/ & http://www.lcde.org/ **Communications, Computing, and Media** – The Media Lab, the Computer Science and Artificial Intelligence Laboratory (CSAIL), and several departments engage in a wide variety of analysis and development projects related to next generation communication devices, network infrastructure, and higher level applications.

http://www.media.mit.edu/ & http://www.csail.mit.edu

Education – The Media Lab, through programs such as Lifelong Kindergarten, is creating tools to expand the range and reach of creative educational possibilities. MIT's OpenCourseWare provides high quality course material to people around the world via the web. Other groups that are heavily involved in educational development include the Middle East Education through Technology (MEET), Expediting Access to Standard Education (EASE), American Students Promoting Iraqi Education (ASPIRE), the Global System for Sustainable Development, Learning International Networks Consortium (LINC), and the MIT-Africa Internet Technology Initiative (AITI).

http://meet.csail.mit.edu/ & http://web.mit.edu/ease/www/ & http://web.mit.edu/mit-africa/ www/home/ & http://linc.mit.edu/ & http://aiti.mit.edu

Energy – The cross-campus Energy Initiative highlights how MIT expertise can address the world's energy crisis through research and education, for example, via the work in the Laboratory for Energy and Environment (LFEE), or on energy conversion technologies in the Microsystems Technology Lab (MTL). The student-run MIT Energy Club provides a cross-disciplinary forum for literature reviews and discussions of emerging energy technologies and runs the annual MIT Energy Conference.

http://web.mit.edu/mitei/& http://mtlweb.mit.edu/& http://mitenergyclub.org

Environment – Understanding and working within Earth's ecological constraints requires reliable scientific data about the evolution and current state of our planet. This is the goal of a number of different programs at MIT, including the Earth System Initiative, the Alliance for Global Sustainability, the Laboratory for Energy and the Environment, Sustainability@MIT, and the Technology and Culture (TAC) Forum at MIT. The Environment at MIT website surveys the research and education landscape and highlights on-campus initiatives.

 $http://web.mit.edu/esi/\&\ http://sustainability.mit.edu\&\ http://web.mit.edu/tac/$

Health Care and Life Sciences – There is substantial fundamental through applied research at MIT in prosthetics, medical diagnostics, molecular therapeutics, and tissue engineering, just to name a few. Advanced research on infectious disease genomics and proteomics happens at the Whitehead and Broad Institutes. Low-cost X-Ray and agri- and bio-diagnostic labs-on-a-chip are among the research supported by the Deshpande Center in the School of Engineering. Innovations in International Health program focuses on medical devices for developing countries; the Global Health Initiative builds connections between members of the MIT community interested in global health issues.

http://www.broad.mit.edu/& http://web.mit.edu/deshpandecenter/ & http://hst.mit.edu & http://iih.mit.edu & http://qlobalhealth.mit.edu/qhi/

Impact Assessment – The Jameel Poverty Action Lab (J-PAL), based in the Department of Economics, assesses the effectiveness of development efforts around the world through randomized trials of policy interventions, much like clinical trials validate the efficacy of pharmaceuticals.

http://www.povertyactionlab.org/

Labor, Migration, and Social Justice – The Migration and Development Working Group and Students for Labor Justice focus on issues in labor and development, including international and regional migration, fair trade, working conditions, and offshoring employment practices. Amnesty International and the MIT Program on Human Rights and Justice span the spectrum ranging from proactive tactics and advocacy through research and policy-making. http://web.mit.edu/polisci/research/wgmd.html & http://web.mit.edu/labor/www/ & http://web.mi

Law, Regulation, and Dispute Resolution – The Technology and Law Program bridges policy and technology, with special focus on sustainability, trade, and the environment. The MIT-Harvard Public Disputes Program seeks to understand mediation and other forms of consensus building to resolve public disputes surrounding resources, priorities, regulations, and other sources of conflict.

http://web.mit.edu/ctpid/www/tl/ & http://web.mit.edu/publicdisputes/

Security and Disaster Relief – The Security Studies Program connected with the Political Science Department is a focal point for work in understanding the political, cultural, and strategic dimensions of conflict and international security. Other groups working in this area include MIT Humanitarian Demining and the Program on Human Rights and Justice.

http://web.mit.edu/ssp/ & http://web.mit.edu/phrj/ & http://web.mit.edu/demining/

Shelter and Urbanization – The Department of Urban Studies and Planning, particularly through the International Development Group (IDG), helps advance the state of the art in sustainable urbanization. The MIT Building Technology Program participates in cooperative projects to develop sustainable urban housing. The Smart Cities group is one of several efforts to pursue urban innovations.

http://web.mit.edu/dusp/idg/ & http://web.mit.edu/bt/www/ & http://cities.media.mit.edu/

Transportation – The Center for Transportation and Logistics (CTL) is a major node for research in ground transportation for people and freight, while the Department of Aeronautics and Astronautics focuses on air transportation innovations. The SmartCities group CityCar is one example of a School of Architecture and Planning-based effort to improve urban mobility. The Sloan Automotive Lab is one of the energy-related efforts focused on transportation fuel efficiency. And the Mobility initiative within D-Lab focuses on wheelchair designs suited for users in developing countries.

http://ctl.mit.edu/ & http://cities.media.mit.edu/ & http://web.mit.edu/sloan-auto-lab & http://web.mit.edu/sp.784/www/

Water—Major research into water and sanitation systems is centered in the Civil and Environmental Engineering Department and in Urban Studies and Planning, including both big infrastructure projects as well as highly distributed grassroots solutions. The Center for Ocean Engineering and Sea Grant Programs are foci for understanding soundly managed marine resources.

http://web.mit.edu/watsan & http://dusp.mit.edu & http://oe.mit.edu/ & http://web.mit.edu/seagrant

Guide to Organizations

Abdul Latif Jameel Poverty Action Lab (J-PAL)

Website: www.povertyactionlab.org/

Contact: Andrew Fraker < Andrew.fraker@povertyactionlab.org>

Description: The Abdul Latif Jameel Poverty Action Lab (J-PAL) serves as a focal point for development and poverty research based on randomized trials. The objective is to improve the success of poverty programs by providing policy makers with clear scientific results on their effectiveness, to help shape successful policies that combat poverty. J-PAL works with NGOs, international organizations, and others to evaluate programs and disseminate the results of high quality research. We work on issues as diverse as boosting girls' attendance at school, improving the output of farmers in sub-Saharan Africa, racial bias in employment in the US, and the role of women political leaders in India.

Participation: Recently matriculated undergraduates may apply for the opportunities posted at www.povertyactionlab.org/getinvolved. UROP opportunities starting in the spring semester will be available for students who have taken 14.74 Foundations of Development Policy and 14.32 Econometrics.

AID-MIT

Website: www.aidindia.org

Contact: Karthik Shekhar <kshekhar@mit.edu>, aidboston-exec@mit.edu

Description: AID is a volunteer movement committed to promoting sustainable, equitable and just development in India. AID supports non-government organizations in India at the grassroots level and initiates efforts in various interconnected spheres such as education, livelihoods, natural resources, health, women's empowerment and social justice.

Participation: Everyone



Photo courtesy of the MIT Public Service Center

Froylan Sifuentes '09 is building with community members in Ecuador

Amnesty International

Website: web.mit.edu/amnesty

Contact: Julia Yoo, Jasmine Park, Mary Xu, Mimi Yen <mitai-exec@mit.edu>

Description: Amnesty International is a non-governmental, non-partisan organization working for the protection of human rights. As one of the largest human rights organizations in the world (over 1 million members in 45 countries), Amnesty International uses its broad international membership to publicize cases of human rights abuse and brings international pressure to bear on the governments in question, thereby aiding the development of political and human rights around the world.

Participation: Chapter meetings are open to all

Asha for Education

Website: www.ashanet.org/mit

Contact: Yogesh Soneji, Tara Bhandari <mit@ashanet.org>

Description: Asha for Education is an all-volunteer, non-profit organization working to educate underprivileged children in India based on the belief that education is a critical requisite for socio-economic change. Since its inception in 1991, Asha has raised and disbursed over \$5 million and has directly supported 385 projects in 24 states benefiting thousands of children in India. Asha's MIT chapter, founded in 1995, has developed long-standing ties to people and organizations in India working to expand and improve education.

Participation: Anyone who is interested in supporting education related efforts in India

ASPIRE (American Students Promoting Iragi Education)

Website: http://web.mit.edu/mitpsc/volunteering/student-service-groups

Contact: aspire-exec@mit.edu

Description: ASPIRE works to strengthen the Iraqi higher education system by leveraging resources and experience at MIT. We run several programs, including regular shipment of high-quality academic textbooks to Iraqi university libraries. Other projects include advising the directors of an Iraqi government scholarship program, and working with OpenCourseWare to expand its presence at the University of Baghdad.

Participation: All MIT community members (including staff, postdocs, faculty, undergrads, and grad students)

Association of International Relations and Model United Nations (AIRMUN)

Website: web.mit.edu/airmun

Contact: Executive Board <airmun-exec@mit.edu>

Description: The Association of International Relations and Model United Nations (AIRMUN) is a group that organizes trips to Model United Nations conferences, hosts guest speakers relevant to current global issues, international development and international relations, and organizes a high school Model United Nations conference, MITMUNC. Model United Nations is a simulation of the United Nations system. At conferences, students research, debate, and work to solve global issues with peers from around the world. Common committees that focus on



Photo courtesy of the MIT Public Service Center

Lisa Tacorante constructing the bicilavadora at an orphanage in Peru

international development include the United Nations Development Programme (UNDP); United Nations High Commission for Refugees (UNHCR); the World Health Organization (WHO); the Social, Humanitarian and Cultural Committee (SOCHUM); and the Conference of NGOs in Consultative Relationship with the United Nations (CONGO). We hope to help students develop intellectually and discover the impact they can make in society.

Participation: Any member of the MIT community

Children of Guayaquil

Website: www.ChildrenofGuayaquil.org

Contact: Nicki Lehrer < lehrer.nicki@gmail.com>, < nicki@childrenofguayaquil.org>,

<nicki@alum.mit.edu>

Description: Children of Guayaquil is a non-profit organization dedicated to providing safety and education to street children in the city of Guayaquil, Ecuador. A children's education center, designed by MIT architecture professor Jan Wampler, includes an elementary school, daycare center, library, computer room, and medical room. The townspeople are involved in every step of the process, learning how to work together towards a common goal. Most importantly, the community now has the skills, confidence, and organization to fight other challenges. Volunteers are in need to support construction, as well as help design interactive cultural and educational programs!

Participation: Spanish-speaking students with a passion to help, motivation to learn, and the desire to become a friend to the children of Guavaquil.

China Development Initiative

Website: www.chinadevelopmentinitiative.org

Contact: mit-cdi@mit.edu

Description: The China Development Initiative (CDI) focuses on providing MIT students with opportunities to learn more about the business, entrepreneurial, and cultural aspects of modern China. CDI has an extensive network with China's modern business and student leaders, annually bringing them to MIT to share their experiences with students. CDI also runs the annual Service Leadership Project, a program that consists of 10+ day summer project held in a chosen city in China where MIT students will mentor Chinese high school students in leadership and service. The spirit of the program is "light the spark to start the flame." Its sustainability and impact will help to create a new network of leaders at MIT and in China who will continue to inspire and influence their surroundings as they put their leadership skills into practice.

Participation: Any MIT undergrads or grads

Citizen Water

Website: www.CitizenWater.org Contact: info@CitizenWater.org

Description: Citizen Water empowers communities worldwide to access safe drinking water using simple, inexpensive water quality test kits with multi-lingual and illustrated instructions. Our online database then connects stakeholders to appropriate treatment options and maps water quality data to help researchers and regulators optimize interventions. This unique blend of community empowerment and global information exchange enables people--regardless of location, economic class or scientific training--to participate in the quality of their drinking water.

Participation: All MIT students, faculty, staff, and community are invited to participate in collecting and mapping water quality data from their partner communities around the world. We also have specific needs for illustrators, written translators, and graphic designers.

Community Water Solutions

Website: www.communitywatersolutions.org

Contact: info@communitywatersolutions.org, Kate Clopeck <kclopeck@communitywatersolutions.org>, Vanessa Green <vqreen@mit.edu>

Description: Community Water Solutions' (CWS) mission is to address the urgent need for clean water and prevent diarrheal disease in developing countries by establishing sustainable water treatment businesses that use readily available, affordable materials to effectively treat and sell clean water. What sets CWS apart is that we help organize for-profit businesses and address the need for clean and healthy water at the community level. To date, we have worked with villagers to implement water treatment business in Kasaligu (~1500 people) and Nyamaliga (~600 people), two villages in Northern Region, Ghana. In each village, we trained two women to collect, treat, and sell water from their local water source. Both treatment centers are now consistently selling water, and the women are generating enough money to sustain their businesses and to earn a small income. Currently, CWS is working to expand our local presence in Northern Ghana and scale-up our operations through further implementations in 8-12 more villages over the next year.

Participation: Graduate students

Center for Bilingual/Bicultural Studies

Website: web.mit.edu/cbbs/

Contact: Andrea Wirth <awirth@mit.edu>

Description: The Center for Bilingual/Bicultural Studies at MIT is an interdisciplinary center in Foreign Languages and Literatures devoted to examining the multifaceted intersections between languages and cultures in the global environment of the 21st century. Since its inception in 1999, CB/BS has been committed to exploring the impact on art, identity, and cultural politics of crossing linguistic, national, and cultural boundaries. Each year the Center sponsors visiting writers, artists, filmmakers and scholars, classes, seminar series, web resources, student projects, faculty research, conferences, audio and video projects, and publications. Please see the web site for a list of current activities throughout the year.

Participation: Anyone!

D-Lab

Website: web.mit.edu/d-lab

Contact: Amy Smith <d-lab-staff@mit.edu>

Description: D-lab is a series of courses and field trips that focus on international development, appropriate technologies, and sustainable solutions for communities in developing countries. There are currently nine classes that make up the suite of D-Lab classes, falling into the broad categories of Development, Design and Dissemination. In the fall D-Lab: Development class (SP.721/11.025), students learn about technological improvements at the micro level for developing countries—in particular, how the quality of life of low-income households can be improved by adaptation of low cost sustainable technologies. Other fall classes include Development Ventures (MAS.665/15.375), D-Lab: Cycle Ventures (SP.712) and D-Lab: ICT (SP.720). During IAP, students work in the field with community partners in developing countries to implement projects and identify further challenges on which to collaborate. In the spring semester students can take several design classes—D-Lab: Design (SP.722,2.722J), D-Lab: Health (SP.718), Developing World Prosthetics (SP.714), Wheelchair Design in Developing Countries (SP.784)—or a class on project implementation—D-Lab: Dissemination (SP.723)—to develop solutions to the problems identified during he IAP field trips. Students can return to their host communities over the summer to test their designs and get feedback to refine their solutions. They can also continue working on the projects through independent UROPs, theses, internships or fellowships.

Participation: Students who register and take each class, graduate students interested in leading trips or mentoring projects, or international student groups that would like to host a field site

Developing World Prosthetics (DWP)

Website: http://web.mit.edu/sp.714/www/home.html

Contact: Ken Endo <kene@mit.edu>

Description: Developing World Prosthetics (DWP) is a non-profit organization dedicated to the design and deployment of prosthetic limbs, orthotic braces, mobility aids, and fitment and rehabilitation devices for patients in developing nations. In collaboration with the Jaipur Foot Organization (JFO) and other multinational rehabilitation organizations, we are increasing the number and quality of low-cost, specialized mobility devices that are specifically designed for large patient throughput. This fall, projects are continuing through UROPs, and undergraduate mechanical engineering theses. We are also offering a class, Developing World Prosthetics SP.714, in the spring semester as a part of the D-Lab family of classes.

Participation: Anyone; particularly looking for members to help with website design, grant writing, pursuing relationships with other non-profits, CAD and machining prototypes

Engineers Without Borders – MIT Chapter (EWB-MIT)

Website: web.mit.edu/ewb/www, www.ewb-usa.org Contact: EWB-MIT Exec Board <ewb-exec@mit.edu>

Description: Engineers Without Borders (EWB) is a national, non-profit, humanitarian organization aiming to improve the quality of life in developing communities worldwide through the implementation of technology, education, and lasting community relationships. EWB at MIT will focus on the implementation of a simple and currently existing technology in Ddegeya, Uganda this year. In addition we are seeking students from a wide range of fields to work on our project, travel to a selected developing region, and see the work through to completion. In addition, we are looking for students and faculty who can assist in the planning and preparation of this and other projects in the future.

Participation: All MIT undergraduates, graduates, faculty and staff

Expediting Access to Standard Education

Website: web.mit.edu/ease/www

Contact: Leonie Nana Adwo Badger <leonieb@mit.edu>, William Kyei-Manu <kyeimanu@mit.edu>, Nana Essilfe-Conduah <nconduah@mit.edu>

Description: MIT Expediting Access to Standard Education (MIT EASE) works hand in hand with EASE Ghana to ensure that under-privileged children in rural parts of Ghana receive basic education; school fees and other requirements for school are provided. This is done through fund raising activities that bring Ghanaian culture to the MIT community to bridge the gap, not just academically, but socially as well.

Participation: Anyone who is interested

FloodSafe Honduras

Website: groups.csail.mit.edu/drl/wiki/index.php/FSH_Student_Group Contact: floodsafe-exec@mit.edu

Description: Flood Safe Honduras (FSH) is a group of MIT students and affiliates working within Honduras to solve community problems using engineering and science skills. We work with a partner organization called the Fundacion San Alonso Rodriguez. Through their advice and community suggestions, we design and implement projects requiring technical solutions. Current projects include developing an automated flood early warning system called Sistema de Alerta Temprana (SAT) and a series of infrastructure projects in a rural farming community including wind-powered water pumps and biogas generation.

Participation: Anyone

Foreign Languages and Literatures Section

Website: web.mit.edu/fll/www/

Contact: Andrea Wirth <awirth@mit.edu>

Description: Students at MIT have the unique opportunity to combine an extraordinary professional training with a first-rate humanistic education. MIT's educational mission involves

providing students with the tools for a sensitive and successful involvement in the global community. The Foreign Languages and Literatures Section (FL&L) contributes in significant ways to the internationalization of MIT's education. MIT provides a unique perspective on foreign languages because of the opportunities available to integrate the study of natural languages with the latest technological advances in multimedia and interactive language learning. FL&L-affiliated faculty are exploring and implementing methods in which multimedia technology can be used to make learning a foreign language a more authentic experience.

Participation: All registered MIT students with an emphasis on undergraduates

Global Poverty Initiative

Website: web.mit.edu/gpi Contact: qpi-board@mit.edu

Description: GPI aims to make fighting poverty an MIT-wide initiative. We are doing that by promoting awareness, inspiring action, and, most importantly, connecting people to the resources needed to take action now. We work to accomplish these goals through our three teams - Education, Outreach, and Action.

Participation: All people are encouraged to participate as a GPI team member, volunteer, and/or event attendee.

H2O-1B (Safe Water for 1 Billion People)

Website: web.mit.edu/watsan

Contact: Susan Murcott <murcott@mit.edu>, Eric Adams <eeadams@mit.edu>

Description: Since 1998, the Civil & Environmental Engineering Department's Master of Engineering program has engaged graduate students in multi-disciplinary teams (with students from Sloan GLab, Urban Studies and Planning and other departments) to work on water and sanitation projects in developing countries, including sites in Asia, Africa and Latin America. We call this effort "Safe Water for 1 Billion People (H2O-1B)." Throughout the academic year, students work in teams with local partners to assess water quality, design treatment systems, emphasizing appropriate and sustainable development concepts. Teams travel to field sites during IAP to gather data and implement best solutions. The student's Masters thesis is usually derived from their group project work.

Participation: Most participants are enrolled in the department's 9-month Master of Engineering Program, but graduate students from other departments and some undergraduate UROPs and have also participated in multi-disciplinary teams.

IDEAS Competition

Website: web.mit.edu/ideas Contact: ideas-admin@mit.edu

Description: The annual MIT IDEAS Competition encourages teams to collaborate with a community partner to develop and implement projects that make a positive change in the world. IDEAS – which stands for Innovation, Development, Enterprise, Action and Service – awards up to \$7,500 to winning teams based on the innovation, feasibility, and community impact of the projects. IDEAS staff work closely with teams to help them refine their proposals and development grants are available to assist teams during the application process. Final entries are judged by a panel of experts during a judging and poster session in April and awards are made during an Awards Ceremony in May. Winning teams have up to one year to implement their projects

Participation: The Competition is open to everyone, but at least one third of a team must be full-time MIT students. Initial proposals are accepted on the 15th of every month through March. Final proposals must be entered by April 15.

Innovations in International Health @ MIT

Website: iih.mit.edu

Contact: Jose Gomez-Marquez < jfgm@mit.edu>, Anna Young < akyoung@mit.edu>

Description: The Innovations in International Health program aims to accelerate the development of global health technologies that address the needs of patients and physicians in resource-poor settings. Working with a network of researchers, doctors, inventors, and clinicians, IIH enhances the sustainability of its technologies by bridging the gap between the invention, funding, and clinical trial stages of medical products aimed at patients in the developing world. Our members' presence in more than 15 countries, including 3 H-Lab medical innovation sites, gives our group effective global reach in medical technology transfer, scaling up, and saving lives. In addition, our D-Lab Health academic offering teaches students the current state of global health and how to structure innovative responses to healthcare challenges. Students will employ hands-on medical-technology-learning modules, experience on-site visits in Nicaragua, and participate in real-world design collaboration with international partners.

Participation: Appropriate biomedical device innovators, users, and physicians in the MIT community. With 22 active technology projects that include inhalable vaccines, Google Earth-powered epidemiological tools, affordable microfluidic diagnostics, and neonatal patient simulators for community health care workers, you are certain to find an opportunity that matches your skill set. Sign up for our newsletter by sending an email to <iih-newsletter@mit.edu> to keep up with events and opportunities.



Photo courtesy of the MIT Public Service Center

Richard Mancco '11 training a women's empowerment group in Pascuales, Ecuador

International Development Initiative

Website: web.mit.edu/idi

Contact: Laura Sampath <idi-admin@mit.edu>

Description: The International Development Initiative (IDI) enables the MIT community to develop and deploy appropriate technologies, ventures and community collaborations that address the needs of the developing world. Through research, academic offerings, extracurricular activities and international experiences, IDI programs aim to provide tangible assistance to developing regions. In addition, IDI helps to connect students closely with communities to define their needs, find appropriate design solutions, implement and disseminate technologies, and build the capacity of community partners.

Participation: Open to MIT students and others in the MIT community

iHouse: International House for Global Leadership

Website: web.mit.edu/ihouse Contact: ihouse@mit.edu

Description: iHouse is an undergraduate residential living-learning community focused on international leadership through international development work. Residents participate in a range of co-curricular opportunities, including cultural events, speakers, discussions, and active participation in international development projects and other opportunities for experiential learning.

Participation: Undergraduates of all class levels can apply to live in iHouse. Social membership is also an option.

International Development Design Summit

Website: www.iddsummit.org
Contact: Amy Smith <idds@mit.edu>

Description:IDDS is a month-long, intense design experience that brings together students, faculty, and community partners from all over the world to create technologies to improve the lives of people in the developing world. IDDS 2010 will take place at Colorado State University and will focus on creating business models and implementation plans as wells as design for dissemination. It is organized in collaboration with CSU, Olin College, Cooper Perkins and the Kwame Nkrumah University of Science and Technology.

Participation: Students and members of the MIT community may join the organizing committee or may apply to participate in the summit.

Inter-University Committee on International Migration

Website: web.mit.edu/cis/www/migration/

Contact: Anna Hardman <ahardman@mit.edu>, Reed Ueda <reed.ueda@tufts.edu>

Description: The Inter-University Committee on International Migration organizes monthly seminars on migration, usually at the MIT Center for International Affairs. The seminars bring guest speakers, usually from beyond the Boston area, to speak on international migration and forced migration. The seminars are also a place where faculty and students interested in international migration and forced migration can meet and exchange ideas. Participants come from Boston area universities including MIT, Tufts, Harvard, BU, Brandeis and Wellesley and from the wider community. They represent a wide range of disciplines and countries of origin. The seminar list is available at <web.mit.edu/cis/www/migration/seminars.html>. We are planning a program of films and discussion on international migration for IAP in January.

Participation: All are welcome to attend the seminars listed on the website and submit ideas for the events. MIT graduate and undergraduate students interested in any aspect of international migration are particularly encouraged to attend or to email us.

International Association for the Exchange of Students for Technical Experience (IAESTE)

Website: www.iaesteunitedstates.org

Contact: iaeste@aipt.org

Description: IAESTE is the International Association for the Exchange of Students for Technical Experience, a global organization with more than 80 member countries. Dedicated to providing international internships in technical and scientific disciplines, IAESTE has matched nearly 300,000 student interns with more than 100,000 employers. IAESTE United States has over 1,000 student members annually and provides students at MIT and elsewhere the opportunities for internships abroad, as well as providing services to the foreign students who have internships in the Boston area and beyond.

Participation: Everyone

International Development Group (Department of Urban Studies and Planning)

Website: web.mit.edu/dusp/idg

Contact: Diane Davis <dedavis@mit.edu>, Jean Farewell <jeanm@mit.edu>

Description: The International Development faculty, in the Department of Urban Studies and Planning, conduct research and help with planning practice in low-income countries around the world that are striving for social, political, and economic development. The faculty cover issues from allocating resources regionally and sectorally, to examining urban, regional, and national socioeconomic impacts of major public and/or private investments, to solving the problems of squatter housing, to addressing issues of un- and under-employment, municipal finance, metropolitan sprawl, and social disparities at a variety of scales. IDG faculty and students believe that effective planners operating in today's world must acquire an institutional and integrated view of economic, physical, political, and social factors.

Participation: Students from all departments are encouraged to take IDG courses and participate in IDG activities. To facilitate exchange among faculty and students, IDG and the Special Program for Urban and Regional Studies (SPURS) sponsor a weekly luncheon seminar series on Mondays from 12:15pm-2:00pm in 7-338 at which noted development experts, scholars, and practitioners share ideas with students, Fellows, and faculty. For more information about the seminar, please contact Nimfa de Leon at nvdeleon@mit.edu.

Legatum Center for Development and Entrepreneurship

Website: www.lcde.org

Contact: info-legatum@mit.edu

Description: The Legatum Center for Development and Entrepreneurship at MIT is founded upon the idea that bottom-up entrepreneurship is the central driver of both economic development and the emergence of good governance in developing countries. The Legatum Center is seeking applications for Legatum Fellowships for the 2010-2011 academic year from graduate students at MIT. These fellowships will provide financial support to students who are motivated by a desire to apply their talents to grassroots commercial solutions in developing nations. The Legatum Center also provides seed grants to teams of MIT students who are working on innovative, sustainable projects in low-income countries.

Participation: The annual conference and Legatum Lecture series are open to MIT affiliates. Fellowships are specifically targeted to current or incoming MIT graduates students from any Institute program. Seed grant funding is open to graduate and undergraduate students. Please visit the website for more information regarding Legatum programs.

\$30,000 Lemelson-MIT Student Prize

Website: web.mit.edu/invent/a-student.html Contact: Ed Canton < lemelson awards@mit.edu>

Description: The prestigious \$30,000 Lemelson-MIT Student Prize serves as a catalyst to help today's young inventors rise into tomorrow's technological and entrepreneurial leaders. It is awarded annually to an inventive graduate student or graduating senior at MIT. Publicity around the award can lead to invaluable exposure to science, business, and investment communities. Past winners and finalists include Amy Smith, who invented low-tech devices that address problems in developing countries; Nathan Ball, who invented life-saving technologies such as a device for rapid vertical mobility; and Aviva Presser for her work with microbial fuel cell technology. The Lemelson-MIT Program recognizes outstanding inventors, encourages sustainable new solutions to real-world problems, and enables and inspires young people to pursue creative lives and careers through invention. Students can apply online at < http://web.mit.edu/invent/a-student. html>. Application deadline is December 10, 2009.

Participation: MIT seniors and graduate students

M-Lab (Mobility Lab)

Website: scripts.mit.edu/~mlab/web/
Contact: Amos Winter <awinter@mit.edu>

Description: M-Lab is an organization that is focused on improving the design and distribution of mobility aids worldwide while training MIT students as global citizens. M-Lab fosters international partnerships and cultural exchange by sponsoring student travel to community partner organizations to develop, test, and implement new designs, as well as bring mobility experts from around the world to interact with the MIT community. As an academic entity, M-Lab provides a physical space to develop projects as well as a group through which students can pursue theses/independent research projects, publish papers, and attend conferences.

Participation: Any MIT students interested in improving mobility aid design and distribution in developing countries

Middle East Education through Technology (MEET)

Website: meet.csail.mit.edu

Contact: Anat Binur <info@meet.csail.mit.edu>

Description: MEET is an innovative educational initiative started in 2003 that aims to create a common professional language between Israeli and Palestinian young leaders. Working together with students and faculty at MIT, MEET has created a three-year computer science and business program for Palestinian and Israeli high school students. The program, which takes place in Jerusalem, consists of intense summer sessions taught by instructors from MIT and yearlong projects led by local high tech professionals. The program enables its participants to acquire advanced technological and leadership tools while empowering them to create positive social change within their own communities.

Participation: Anyone

MIT \$100 K/MIT \$100K Entrepreneurship Competition

Website: www.mit100k.net/

Contact: Brian Cantwell <cantwell@mit.edu>, Sombit Mishra <dmishra@mit.edu>

Description: The MIT \$100K Entrepreneurship Competition is designed to encourage students and researchers in the MIT community to act on their talent, ideas and energy to produce tomorrow's leading firms. Now in its 20th year, the Competition has awarded hundreds of thousands of dollars in cash and business startup services to outstanding teams of student entrepreneurs who submitted business plans for new ventures showing significant business potential in areas ranging from cutting edge technology to social, economic and environmental development. The \$100K launched the Development Track in 2006 to jumpstart transformative change in emerging markets. Since its inception, the Development Track has helped launch over 50 revolutionary business ideas, ranging from income-generating bicycles to cell phone-enabled medical diagnostics for the rural poor.

Participation: All teams must have at least one MIT student to be eligible.

MIT Africa Information Technology Initiative (AITI)

Website: aiti.mit.edu
Contact: aiti@mit.edu

Description: The Africa Information Technology Initiative (AITI) is an MIT student group that sends MIT students of all disciplines to teach information and communication technologies (ICT) and entrepreneurship to high school and university students in Africa. AITI's current ICT curriculum focuses on appropriate mobile phone and Internet technologies. AITI has sent nearly 100 MIT students to teach over 1,500 African students and teachers since its inception in 2000. The group has been successful in encouraging African students to take an interest in ICT and equipping them with skills to leverage the technologies in their pursuits. Furthermore, we provide MIT students with rewarding international service experience.

Participation: All MIT undergraduate and graduate students

MIT Center for International Studies

Website: web.mit.edu/cis/ Contact: cis-info@mit.edu

Description: The Center for International Studies at MIT focuses on research and teaching in a wide range of international subjects, among them development studies, comparative politics, international relations, social movements, security studies, and international science and technology.

MIT Development Ventures Initiative

Website: development ventures. org & admissions. media. mit. edu/admissions/program-overview/entrepreneurship-program

Contact: Alex (Sandy) Pentland < pentland@mit.edu>, Joost Bonsen < jpbonsen@alum.mit.edu>

Description: The MIT Development Ventures Initiative (DV) focuses on design and implementation of commercially sustainable products and services for low-income people around the world. DV helps students invent new technologies and organizations, increases their understanding of the challenges faced by low income communities, connects them to other resources at MIT and elsewhere that may help them design and implement sustainable ventures, and conducts research that may be useful to entrepreneurs and enterprises. DV strives to provide support for

MIT-related entrepreneurs focused on low-income communities, providing travel funds and project Seed and Action Grants to develop their ideas, along with a vibrant network to help them grow and nurture their dreams. DV is part of the growing Media Lab Entrepreneurship Program and operates in conjunction with the MIT Entrepreneurship Center, the MIT International Development Initiative (IDI), and the MIT Design Lab (1) to offer instruction in development-oriented entrepreneurship, including running the D-Lab Development Ventures class since 2001; (2) to work with the International Development Network (IDN) on development-oriented programs and activities at MIT; (3) to build the Global Venture Network (GVN) in partnership with the MIT Alumni Association and MIT Enterprise Forum Global; (4) to engage Media Lab and MIT-related and sponsoring companies around development-oriented product lines and corporate ventures, and (5) to support innovation challenges, including the student-run MIT \$100K Entrepreneurship Competition Development Track.

Participation: Anyone interested

MIT International Development Consulting

Website: www.MIT-IDC.org Contact: idc-exec@mit.edu

Description: MIT International Development Consulting is a student organization that pairs passionate MIT students with exciting international development projects. We operate on four continents and provide support to the directors and presidents of international non-profit organizations. As a member of IDC, you will have the opportunity to partner with an international NGO, travel to your project's country, work with a diverse student team, and have a real impact on the lives of people in developing nations.

Participation: Any MIT student

MIT Public Service Center

Website: web.mit.edu/mitpsc

Contact: Sally Susnowitz <susnowit@mit.edu>, <psc@mit.edu>

Description: The PSC offers planning and financial assistance for students interested in all types of public service work, including international development work. Through Public Service Fellowships, Internships, and Grants, the service learning program, and the MIT IDEAS Competition, the PSC supports innovative, effective, and collaborative services to communities worldwide. In partnership with the Edgerton Center, the PSC also co-sponsors the MIT International Development Initiative to increase the capacity of MIT students to assist people in developing regions around the globe.

Participation: Undergraduate and graduate continuing students can use all PSC resources. Grants and planning assistance are available to all MIT community members for projects that involve MIT students in public service. Faculty and alumni are also welcome as project advisors and mentors

Sloan Global Micro-Consultants

Website: www.MIT-IDC.org Contact: idc-exec@mit.edu

Description: Our mission is to help improve the efficiency and sustainability of organizations focused on international development, by offering the consulting services of students throughout MIT free of charge. Sloan GMC will focus on consulting development projects that impact locals but are initiated by external members of the global community. We hope to give students

interested in international development and business the opportunity to get involved in meaningful consulting work that is a blend of both fields. Our clients may include NGOs and non-profits working in the development sector as well as MIT groups designing projects for international development (PSC fellowships, D-Lab technologies, IDEAS Competition entrants, etc.).

Participation: Any MIT student

Sloan School Laboratory for Sustainable Business (S-Lab)

Website: http://ocw.mit.edu/OcwWeb/Sloan-School-of-Management/15-992Spring-2008/

CourseHome/

Contact: Sarah Slaughter <slaughte@mit.edu>

Description: S-Lab is a unique course at the MIT Sloan School of Management. It is a blend of traditional classroom learning, focused on teaching students about an array of sustainability-related issues and practices, matched with an applied team project. Sustainability offers new opportunities to companies and countries, and firms and organizations can not only operate in sustainable ways but also play a positive role in the regeneration of the planet and the support of human health and welfare. We use the broad definition of sustainability that includes economic development, social equity, and environmental restoration at all levels, from individual to organization, community, region, nation and worldwide activities.

Southeast Asian Service Leadership Network (SEALNet)

Website: www.sealnetonline.org

Contact: Wesley Koo, Tuan Huynh, Kai Qiu <sealnet-exec@mit.edu>

Description: SEALNet is a nonprofit organization established in 2004. Its mission is to promote the spirit of service leadership in Southeast Asia. Every year, SEALNet sends teams of college students to Southeast Asian countries to conduct two-week long projects of different themes, ranging from health care to arts revival. The goal is to engage local high school students in current issues and to empower them to create positive change their communities. Last summer, SEALNet@MIT sent a team to Kota Kinabalu, Malaysia to address the issue of environmental awareness. Our project received immense support from the Malaysian government in addition to nationwide news coverage.

Participation: Anyone passionate about the development of Southeast Asia and interested in bringing service and teaching leadership skills to empower youths in Southeast Asia

Special Interest Group in Urban Settlement (SIGUS)

Website: web.mit.edu/sigus Contact: sigus@mit.edu

Description: SIGUS explores methods for promoting affordable and equitable housing for low-income communities, with focus in developing countries. It champions participatory technique through short workshops and courses, and undertakes research on innovative approaches in support of the low-income. It concentrates on the new professionalism emerging for designers, architects, and planners demanding a shift in practice and teaching. SIGUS has over 15 years of experience in Action-Learning workshops. It has lead programs in Peru, Ecuador, Poland, Vietnam, Cambodia, Thailand, Laos, India, Bhutan, Syria, and Ethiopia; hosted by governments, development agencies, or NGOs, with local universities as counterparts. Current focus on rebuilding in Louisiana, slum upgrading in Third World countries, and the new initiative in incremental housing as an effective proactive strategy for urban areas.

Participation: Open to all

Special Program for Urban and Regional Studies (SPURS)

Website: web.mit.edu/spurs/www/

Contact: Bish Sanyal <sanyal@mit.edu>, Nimfa de Leon <nvdeleon@mit.edu>, Xin Li <xinli@mit.

edu>, Graham Denyer Willis <g_dw@mit.edu>

Description: The Special Program for Urban and Regional Studies (SPURS) is a one-year, non-degree program designed for mid-career professionals from newly industrializing countries. Founded in 1967 in the Department of Urban Studies and Planning (DUSP), SPURS has a long-standing commitment to bringing outstanding development planners to MIT to reflect on their professional practice. The program is designed to nurture individuals, often at turning points in their professional careers, to retool and reflect on their policy-making and planning skills. SPURS Fellows return to their countries with a better understanding of the complex relationships between local, regional, and international issues. SPURS has hosted over 550 women and men from more than 90 countries in Latin America, Asia, Africa, the Middle East, and Eastern and Central Europe. SPURS enables the MIT community to create links with the Fellows who are in very influential positions in their home countries, and serve as a resource for MIT students and faculty.

SPURS/ Humphrey Fellows

Website: http://web.mit.edu/spurs/www/

Contact: Graham Denyer Willis <q dw@mit.edu >, Xin Li <xinli@mit.edu>

Description: The SPURS/ Humphrey Fellows are a group of mid-career professionals and academics from the developing world. They have come to MIT to study during sabbaticals or as selected by the State Department as Hubert Humphrey Fellows. The Fellows are admitted to the program each spring based on the requirements of the Hubert Humphrey Fellowship program or as SPURS Fellows admitted to the SPURS program. Typically, the Fellows are advanced in their professions.

Participation: This program is open to those who apply and are accepted by the Hubert Humphrey Fellowship or by the SPURS program in DUSP.

STG International (Solar Turbine Group)

Website: www.stginternational.org Contact: info@stginternational.org

Description: STG International is a non-profit organization founded with the dual goals of renewable energy technology development and micro-enterprise fostering, specifically focused on rural areas of developing nations. We aim to displace polluting or dangerous energy options, such as diesel generators or indoor brush fires, by providing a renewable (solar) co-generation technology that provides both electricity and hot water at an affordable price. The technology design is mechanically accessible and constructed entirely of mass-produced parts. Intensive training of local entrepreneurs and technicians jump-starts a micro-enterprise within the target market, providing education, jobs, and income within the local economic market in addition to electricity and hot water. STG is currently managing the construction of a pilot system at a rural clinic in Lesotho by our trained technical partners there.

Participation: Students, engineers, and entrepreneurs interested in promoting renewable energy in the developing world

Sustainability@MIT

Website: sustainability.mit.edu Contact: sustainability-exec@mit.edu

Description: Sustainability@MIT is committed to promoting the basic tenets of sustainable development through a combination of education and action. We are a local chapter of the World Student Community for Sustainable Development (WSC-SD, <www.wscsd.org>) which acts on campus to global scales. We are the result of the merger between Share A Vital Earth (SAVE), Students for Global Sustainability (SfGS), the MIT Generator, and Sustainability@Sloan Speaker Series -- making us the largest sustainability community on campus. Projects include retrofitting MIT facilities, poster exhibitions, speakers, film series, reused goods exchanges, low-waste events guide, campus food initiatives, etc, and our ties to the World Student Community allow for international sustainable development opportunities and collaborations.

Participation: Open to all graduate and undergraduate students

Sustainable Health Enterprises

Website: www.sheinnovates.com

Contact: Liying Bernice Huang < lbhuang@mit.edu>

Description: Sustainable Health Enterprises (SHE) strives to empower women through health, education and entrepreneurship. In developing areas around the world, women do not have access to affordable, high-quality sanitary napkins. As a result, women are constrained in their ability to carry out daily tasks during menstruation and girls often miss school. This disables women from realizing their full potential. Our goal is to offer the technology, training, and initial start-up funds to women's organizations to manufacture and sell affordable sanitary napkins in their communities. We are currently working on starting up a pilot franchise in Rwanda.

Participation: Anyone

Technology and Development Program (TDP)

Website: web.mit.edu/mit-tdp/www

Contact: Fred Moavenzadeh <tdpmail@mit.edu>

Description: TDP provides developing nations greater access to scientific and technological capabilities through collaborative research and educational programs. TDP's most recent collaborative program is the Masdar Institute of Science and Technology in Abu Dhabi. The need for regional and global energy sustainability is the driving force behind the establishment of The Masdar Institute of Science and Technology. This graduate level university is dedicated to the development of new and viable energy technologies and policies. The Masdar Institute, established with the assistance of TDP, is working with the Government of Abu Dhabi and industry to offer a landmark opportunity for world-class graduate level research and education.

Participation: MIT graduate students may participate as teaching or research assistants with the agreement of the professor or principal investigator. Undergraduate students may consider applying to Masdar for postgraduate study.

The Technology and Culture Forum at MIT

Website: web.mit.edu/tac

 ${\it Contact: Amy\ McCreath < mccreath@mit.edu>,\ Patricia\ Weinmann < weinmann@mit.edu>,}$

Christina English <cenglish@mit.edu>

Description: The Technology and Culture Forum at MIT sponsors lectures, symposia and meetings that address critical issues of our time. The programs explore the role of science and technology in promoting positive social, ecological, and economic change. In addition, the forum stimulates discussion about the ethical implications of scientific discovery and technological innovations. During the 2009–2010 academic year, offerings will include a year-long series on violence and women, a program on race and politics in the media, events on international development, sustainability and the environment, a two-day conference on building an ethical economy, an in-depth look at geo-engineering, discussions regarding robotic warfare, and an undergraduate seminar on ethics in Spring 2010.

Participation: A Steering Committee, comprised of students, faculty and alums, plans and coordinates events. All MIT students, faculty, staff and the public are invited to most events.

Western Hemisphere Project

Website: web.mit.edu/hemisphere

Contact: hemisphere-manboard@mit.edu

Description: The MIT Western Hemisphere project is a group of students, faculty, and community members dedicated to exploring issues of politics, economics, cultures, and societies across the Americas. We organize events, film series, and forums to discuss issues of sustainable development, indigenous rights and culture, and recent developments in the western hemisphere. We also host a weekly radio show *Spherio*, from 6-7pm on Fridays on the MIT radio station, WMBR 88.1FM, on which we feature different guests each week who share their experiences and perspective.

Participation: Students, faculty, staff, and community members



Photo courtesy of the Public Service Center

Tish Scolnik '10 in Tanzania with a modularized Small Business wheelchair user

How they made it happen: International Development at MIT

One Earth Designs

China, India, Nepal Scot Frank, Amy Qian, Orian Welling, Brad Simpson, Wendi Zhang, Stephanie Bachar, Irene Fan



One Earth Designs works with Himalayan communities to design and implement science and engineering solutions that help maintain healthy environments in a locally appropriate manner. Their current work includes projects on energy technologies, water quality and supply, sustainable building for extreme climates, ICT4D, and science/engineering education. Examples of three MIT IDEAS Competition award-winning projects include the Global Citizen Water Initiative (addressing global water quality through citizen science), HeatSource (a low-cost, mobile heating fabric), and the SolSource 3-in-1, a portable solar cooker, heater, and electricity generator (recipi-

ent of the St. Andrews Prize for the Environment and an EPA P3 grant). In addition to the MIT IDEAS Competition awards, including the 2009 Yunus Challenge and the 2008 Lemelson-MIT International Technology Award, OED project teams have entered the MIT \$100k Development Track, undertaken a MISTI-China program, enrolled in D-Lab classes, received Public Service Fellowships and Grants, and have received a Legatum Seed Grant.



Community Water Solutions

Ghana, Northern Region capital of Tamale Kate Clopeck and Vanessa Green

Community Water Solutions' (CWS) mission is to address the need for clean water and prevent diarrheal disease in developing countries by establishing sustainable water treatment businesses. The distinctive CWS approach combines the best features of existing models by using proven household water treatment and safe storage (HWTS) technologies to treat enough water for an entire community. Local women sell the treated water at affordable prices, generating revenue to cover costs of wa-

ter treatment, while also enabling the businesswomen to earn an income. Project members have taken D-Lab classes, entered the MIT IDEAS Competition, received Public Service Fellowships and Grants, and have been Legatum Fellows.

Global Cycle Solutions

Tanzania

Jodie Wu, Lisa Tacoronte, Caroline Hane-Weijman, Javier Lozano, Alex Shih, Semyon Dukach, Esmeralda Megally



Global Cycle Solutions (GCS) provides clean, intermediary technology that uses bicycles to power machinery. Current devices offered to small-acreage farmers include a corn sheller and a grinder. GCS is leveraging the region's vast network of dealers (bicycle shops, hardware & agriculture stores and agri-dealers) who sell GCS products to micro-entrepreneurs. Micro-entrepreneurs in turn service farmers in the community by locally processing their production, allowing farmers to increase productivity while earning income. GCS has benefited from D-Lab classes, the MIT IDEAS Competition, and Public Service Fellowships and Grants. GCS participated in the 2009 International

Development Design Summit (IDDS) in Ghana. In 2009, GCS was the winner of the MIT \$100k Development Track and received the Audience Choice Award.

MEDIK (Medical Education Design Invention Kits)

Nicaragua Anna Young and Lisa Schlecht



MEDIK (Medical Education Design Invention Kits) are medical device do-it-yourself (DIY) kits designed to foster innovation and creativity in medical professionals in developing countries. The MEDIK kits are a major initiative of MIT's Innovations in International Health (IIH) and are backed by a grant from the Inter-American Development Bank. This spring, students from the D-Lab Health course traveled to Nicaragua to collaborate with IIH partners CARE and CIES (Centro de Investigacion de Estudios). The resulting projects and on-the-ground evaluations inspired the design of six different kinds of kits: Drug Delivery, Diagnostics, Microfluidics, Telemedicine, Vital

Signs and Prosthetics. The technology for the MEDIK kits is being developed by an interdisciplinary team from IIH, which includes a Public Service Fellow and a team of MIT UROP students and MIT researchers.

Development Related Resources at MIT Funding

Carnegie Endowment for International Peace

Website: web.mit.edu/cis/fo2 9.html

Purpose: Carnegie runs an annual national competition to select from 8-10 graduating seniors to be research fellows in its DC offices. Successful applicants are matched with a senior associate—-academics, former government officials, lawyers and journalists from around the world—to work on a variety of international affairs issues.

Amount: \$2,750 per month; Full benefits package also provided

Time Commitment: 1 year

Eligibility: MIT graduating seniors or have graduated from MIT within the past year

Timing: December

Carroll L. Wilson Award

Website: entrepreneurship.mit.edu/wilson award.php

Purpose: To provide opportunities for MIT graduate students to study an important societal

problem with international dimensions.

Amount: Four or five \$5,000 awards each year

Time Commitment: Approx. six weeks

Eligibility: MIT graduate students selected through a competitive evaluation of proposals by the

Carroll Wilson Award Selection Committee

Timing: January

CIS Summer Study Grants

Website: web.mit.edu/cis/fo2 2.html

Purpose: To support dissertation research primarily on international aspects of such issues as energy and the environment, and the relationship between energy and security, although a broad range of international issues will be considered.

Amount: \$5,000

Time Commitment: Summer

Eligibility: Doctoral students studying international affairs

Timing: February

Echoing Green Fellowship

Website: www.echoinggreen.org

Purpose: For individuals with innovative ideas for creating new models for tackling seemingly unsolvable social challenges. These Fellowships offer them the opportunity to develop and test their ideas.

Amount: \$60,000 for individuals, \$90,000 for partnerships

Time Commitment: 2 years

Eligibility: Applicants 18 years and older

Timing: Early December

Eloranta Fellowship

Website: web.mit.edu/eloranta

Purpose: Student-originated and/or directed research, investigation, or creative study in any

field.

Amount: \$6,000; Allowable expenses: living, travel, or materials and service costs

Time Commitment: Full-time summer occupation

Eligibility: MIT undergraduates (including June graduates)

Timing: Early April

Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship

Website: web.mit.edu/scholarships/details/fulbright-hays.htm

Purpose: To support dissertation research in foreign languages and area studies.

Amount: Average fellowship amount is \$32,356

Time Commitment: During doctorate

Eligibility: Graduate students

Timing: MIT Deadline in Late September – Early October

Fulbright Program for US Students

Website: web.mit.edu/scholarships/details/fulbright.htm

Purpose: Advanced research, graduate study, or teaching at the university, secondary or elementary level.

Amount: Travel & educational expenses; language or orientation courses; maintenance for one academic year; supplemental health and accident insurance

Time Commitment: During graduate studies

Eligibility: Graduating seniors or graduate students

Timing: MIT Deadline in Late September – Early October

Harry S. Truman Scholarship Program

Website: web.mit.edu/scholarships/details/truman.htm

Purpose: Graduate studies in government, non-profit sector, or public service areas.

Amount: \$30,000

Time Commitment: During graduate studies

Eligibility: Juniors

Timing: MIT Deadline in Mid-November

John S. Hennessy Fellowship

Website: web.mit.edu/qso/financialaid/intfellowships.html#hennessy

Purpose: To support environmental studies.

Amount: Tuition, student health insurance and a stipend of \$2,220 per month

Time Commitment: Fall semester

Eligibility: Any graduate student pursuing environmental studies

Timing: March

Kelly/Douglas Traveling Fellowship

Website: web.mit.edu/shass/inside/kelly traveling.shtml

Purpose: To enable MIT undergraduates who are committed to further work in the humanities, arts, or social sciences to travel in order to pursue an independent project in an HASS field, or to collaborate in a humanitarian project.

Amount: Up to \$1,000

Time Commitment: Summer or IAP

Eligibility: Sophomores, Juniors and Seniors Timing: November for IAP; March for Summer

Legatum Center Fellowship

Website: Legatum.mit.edu/fellowship

Purpose: The Legatum Center administers a competitive fellowship program for incoming and current MIT graduate students, across all academic disciplines, who demonstrate the potential to create sustainable, for-profit enterprises in low-income countries. Southern Africa.

Amount: Varies

Time Commitment: September - June

Eligibility: Enrolled in or accepted to an MIT graduate degree program

Timing: Deadline for applications in January



Photo courtesy of the MIT Public Service Center

Yi Wang '09 demonstrates how to make charcoal in Sierra Leone

Legatum Center Seed Grant Program

Website: Legatum.mit.edu/grant

Purpose: The Legatum Center administers a competitive seed grant program for teams of MIT students who are working on innovative, sustainable projects in low-income countries during the IAP session and summer period.

Amount: Varies

Time Commitment: IAP or summer

Eligibility: Undergraduate or graduate students at MIT Timing: IAP and Summer break; check website for details

Morris K. Udall Undergraduate Scholarship

Website: web.mit.edu/scholarships/details/udall.htm

Purpose: Students studying environmental or related fields, or health care or tribal public policy

(Native American and Alaskan natives only).

Amount: Up to \$5000

Time Commitment: During undergraduate studies

Eligibility: Sophomores and juniors **Timing**: MIT Deadline in February

Muhammad Yunus Innovation Challenge to Alleviate Poverty

Website: web.mit.edu/ideas/www/challenge.htm

Purpose: The Muhammad Yunus Innovation Challenge to Alleviate Poverty is an annual challenge coordinated by the International Development Initiative (IDI) and named in honor of 2006 Nobel Peace Prize winner Dr. Muhammad Yunus. Every year the Yunus Challenge focuses on problems faced by some of the poorest communities in the world in an effort to bring the issues to the forefront of the academic community.

Amount: IDEAS: \$5,000 or \$3,000. Fellowships: vary. D-Lab: class projects

Time Commitment: varies

Eligibility: See IDEAS, PSC Fellowships and D-Lab Sections of the guide

Timing: Varies

Program on Human Rights and Justice

Website: mit.edu/phrj/internships.html

Purpose: To provide MIT students the opportunity to study human rights issues firsthand at the

field level or through applied research.

Amount: Up to \$5000; Living and travel expenses

Time Commitment: 8-12 weeks in summer

Eligibility: All students

Timing: April

Public Service Center Grants

Website: web.mit.edu/mitpsc/grants/

Purpose: Community service work covering a wide range of projects; Conference attendance grants for conferences tied directly to public service leadership activities; and Summer housing grants for residence-hall students working on public service projects in the summer.

Amount: Varies; Materials and transportation expenses

Time Commitment: During student studies

Eligibility: MIT students who will be enrolled for at least one semester following the grant

project

Timing: Applications accepted monthly

Public Service Center Fellowships and Internships

Website: web.mit.edu/mitpsc/resources/internshipsandfellowships/index.html

Purpose: Capacity building community service projects in any field around the world. Fellows and Interns work with community-focused organizations such as non-profits, government offices, international aid agencies, schools, grassroots groups, student-initiated service enterprises and even for-profit businesses if the business is using a social-entrepreneurship model to address the needs of an under-served community. Students in these programs receive a stipend for their work, which typically goes towards living and travel expenses.

Amount: Stipend depends on project budget

Time Commitment: IAP, Spring, Summer or Fall

Eligibility: MIT students (undergrad and grad) who will be enrolled for at least one semester following the funded project, plus limited funding for graduating students for up to 3 months after graduation

Timing for application deadlines: IAP: October; Spring: Rolling; Summer: March; Fall: Rolling

US Ashoka Fellowship

Website: www.ashoka.org/us-canada/main/home.cfm

Purpose: For leading social entrepreneurs who are recognized to have innovative solutions and

the potential to change patterns across society.

Amount: Varies

Time Commitment: None Eligibility: Everyone Timing: Rolling



Photo courtesy of the MIT Public Service Center Public Service Intern Alice Yu '11 is seen with bamboo sticks, which will later be made into chopsticks, located at the foot of one of the bamboo mountains in Beijing, China

Classes at MIT

Sunita Darbe

Classes touching on various aspects of international development are available through almost every academic department at MIT. Some classes give students the technical skills to get their hands dirty building or designing for the benefit of the world. Business, entrepreneurship, language and communication classes provide instruction of nontechnical skills. Regional and global context classes cover topics such as the culture, history, and current political situations of developing nations. Project classes incorporate the other three categories throughout the process of creating a product to aid the developing world.

The breadth of classes related to international development at MIT allows anyone to find something that suits his or her interests. From Introduction to Latin American Studies through the School of Humanities, Arts, and Social Sciences to the Global Entrepreneurship Lab at the Sloan School of Management, Water Resource Systems in the School of Engineering to Sustainable Settlement Design in the School of Architecture and Planning, and Alternative Energy Sources in the School of Science to Health Economics at the Whitaker College of Health Sciences and Technology, there is something for everyone. You can find the full list of development related classes, searchable both by department and category, at web.mit.edu/idn/getinvolved.html. If you see something missing from this list, please email idn-contact@mit.edu, so that we can ensure that it is a thorough and useful resource.

Service learning provides another academic venue for pursuing an interest in international development. Service learning grants are available to students and faculty for class projects that serve communities. For example, classes in the Department of Urban Studies and Planning have traveled to Peru, India, and Mozambique to work on issues they have studied in those areas. Students can also participate in the Service UROP program, which empowers them to extend their academic interests into fieldwork or other forms of research that yield community benefits. If you are interested in learning more about service learning grants and Service UROPs, check out web.mit. edu/servicelearning. Good luck exploring!

International Development Stories from Tech Talk



Crazy minds, able hands

More than 70 participants from around the world have gathered in Ghana for MIT's third annual Design and Development Summit, where they will work on a variety of prototypes for devices to help with issues faced by villagers in the developing world.

web.mit.edu/newsoffice/2009/idds-0710.htmll

A phone is not just a phone

Several startup business ventures spawned by MIT students are using phones to help people, especially in developing nations, to raise their incomes, learn to read, get where they're going and even diagnose their ailments.

web.mit.edu/newsoffice/2009/mobile-0702.html

Spin cycle: a new kind of washer

A pedal-powered washing machine that MIT students and staff built mostly from bicycle parts and empty barrels could make a big difference to the quality of life, and at the same time could be built locally and thereby create jobs.

web.mit.edu/newsoffice/2009/itw-bicilavadora-0219.html

An a-maize-ing path out of poverty

Jodie Wu, an MIT senior in mechanical engineering, spent the summer traveling around Tanzania to introduce a new system for processing corn: A simple attachment for a bicycle that makes it possible to remove the kernels quickly and efficiently.

web.mit.edu/newsoffice/2008/itw-corncob-tt1001.html



Photo courtesy of Nathan Cooke, IDDS

A group of IDDS participants at Maker Faire Africa 2009

Two from MIT win Rhodes Scholarships

Alia Whitney-Johnson, civil & environmental engineering, former Truman Scholar and one of Glamour Magazine's Top Ten College Women wins Rhodes Scholarship. In 2005, she founded Emerge Global, a non-profit organization that seeks to empower young Sri Lankan mothers - many of them children themselves - made pregnant through rape and incest.

http://web.mit.edu/newsoffice/2008/rhodes-1122.html

Improving people's lives, one device at a time

Using a bicycle wheel to thresh millet and making LEGO-like bricks from dirt were among the projects designed during a month-long summer workshop at MIT to help improve the lives of millions of people living in the world's developing countries.

web.mit.edu/newsoffice/2008/idds-0808.html

MIT students help cities plan for changing climate

Ten graduate students from MIT recently spent three weeks in Durban, South Africa, working on a project to develop an online tool that could help municipal governments around the world adapt to a changing climate

web.mit.edu/newsoffice/2008/itw-southafrica-0722.html

Simple insulation could combat heat, cold and noise

Around the world, an estimated one billion people--mostly in rural villages and the shanty towns surrounding developing-world cities—live in houses whose roofs are nothing more than thin sheets of corrugated metal.

web.mit.edu/newsoffice/2008/itw-insulation-0701.html

Student project innovates solar cooker in Tibet

When two students visited Tibet two years ago, they kept hearing from villagers that a solar cooker that was both lightweight and strong would make a big difference to their lives. So a team of students from MIT and Tibet ended up producing exactly that.

web.mit.edu/newsoffice/2008/itw-tibet-tt0604.html

Be sure to see David Chandler's MIT in the World column as well as other international development related stories on the MIT News Office website, <web.mit.edu/newsoffice>



The future of D-Lab

GLOBAL EDUCATION AND CAREER DEVELOPMENT CENTER (GECDC)

GECDC offers global education and career development services to students from all majors. This includes exploration of global experiences and career plans through personalized career counseling and programs, as well as specialized help and resources in preparing for global experiences and connections to employers, fellowships and graduate schools. Ultimately we help students to become leaders in a diverse society and prepare for the globalized world of work.

GLOBAL EDUCATION 12-189 617.253.6057

Global Education is the first place where students can get information and advice on how to go global. Global education opportunities for undergraduates include:

- · Academic exchanges and other study abroad programs, including IAP and Summer
- · MISTI internships in ten countries
- · International UROPs
- · Service learning, including D-Lab
- · Public service projects
- · Distinguished fellowships, including Truman, Rhodes, and Marshall scholarships

For more information, please visit: web.mit.edu/qeo/

CAREER SERVICES 12-170 617.253.4733

Career Services helps students connect what they are learning at MIT with the work they want to pursue in the 'real world.' Students who are seeking international development experience and careers can visit the CDC to learn about the most effective ways to search for internships and jobs in this field. Some resources that might be of interest to you in exploring this career area can be found at web.mit.edu/career/www/graduate/fieldinfo. html#international.

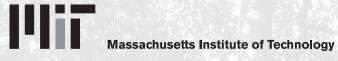
PREPROFESSIONAL ADVISING

12-185 617.715.5328

Preprofessional Advising provides advice and assistance to students interested in the medical, dental, and other health related professional school and law school. Services include:

- · Providing a Prehealth and Prelaw Advisor
- · Credentials
- · Individual Counseling and Advising
- · Mock Interviews
- Workshops that assist students with the application process
- · Special Events and Panels
- · Essay Critiques

For more information, please visit: http://web.mit.edu/career/www/preprof/





International Development Network

We would like to thank our sponsors whose generosity and spirit have made the International Development Fairs possible.

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The destiny of world civilization depends upon providing a decent standard of living for all mankind.

Norman Borlaug Agronomist, Humanitarian, Nobel Laureate

Our imagination is the only limit to what we can hope to have in the future.

Charles Kettering Inventor, Entrepreneur, Philanthropist

IDN Core Team











