
Section 8 ***Service to Local and World Communities***

Priscilla King Gray Public Service Center	106
Office of Government and Community Relations	108
Abdul Latif Jameel Poverty Action Lab	108
MIT D-Lab	109
Local Programs	111
World Programs	113

Service to Local and World Communities

Founded with the mission of advancing knowledge to serve the nation and the world, MIT has been strongly committed to public service from its start. While MIT faculty, students, and staff regularly engage in conventional projects such as raising money for hurricane victims, renovating old housing, or restoring local nature reserves, MIT's scientific and technological orientation gives much of its public service outreach a particular emphasis. Many of its public service programs are specifically devoted to inventing new technologies and applying new knowledge that will advance social well-being.

Priscilla King Gray Public Service Center

The Priscilla King Gray Public Service Center (PKG Center) helps MIT achieve its mission of working wisely, creatively, and effectively for the betterment of humankind. Through its programs, they provide encouragement, advice, logistical support, and funding to help students engage in meaningful and effective public service projects, working with communities in the greater Boston area, throughout the United States, and around the world.

PKG Center's goal is to enrich the MIT education for students through hands-on, real-world opportunities that complement the innovative culture of MIT. Their programs (described below) are designed to help students apply classroom learning, develop new skills, and understand the complexities of resolving community challenges.

<http://studentlife.mit.edu/pkgcenter>

Public Service Fellowships Program

MIT students tackle a great variety of human and environmental challenges in communities around the world through this program. Participating students build their skills and reflect on their experiences to enhance classroom learning. Students can work individually or as part of a team on projects during IAP, summer, and the academic year. Fellows tackle some of the most pressing issues in the United States and abroad, working in sectors such as agriculture, water and sanitation, climate change, community development, assistive technology, education, environmental sustainability, food and agriculture, health and health technology, technology dissemination, and urban planning.

IDEAS Global Challenge

Through this annual innovation and social entrepreneurship competition, students form teams to work with a community partner to design and implement innovative projects that improve the quality of life in communities around the world. Teams work in many sectors, including energy, mobile technology, health and medical devices, water and sanitation, education, and agriculture.

ReachOut Tim Tutors

The ReachOut Tim Tutors program recruits, trains, and matches MIT students, faculty, staff, spouses, and partners with children at a local community center to engage and challenge them with reading and math activities. The program currently partners with three local community centers. In addition, ReachOut Tim Tutors is a Federal Work-Study eligible program. Students who are eligible for Federal Work-Study as part of their financial aid package can be paid for providing this valuable community service.

Community Service Work-Study

This program enables MIT students to give back to the community while earning a paycheck during the semester, summer, or winter break. Students who qualify for Federal Work-Study are able to add to their work experience while assisting nonprofit organizations with finding creative solutions to the problems they face. For instance, Work-Study students might help staff a local homeless shelter, create communication materials for a lead-poisoning prevention program, serve as advocates for low-income clients, or tutor Boston high school athletes. Through a partnership between Community Service Work-Study and the Externship program, four students traveled to Los Angeles to design material for a STEM program with the i.am.angel Foundation.

CityDays

CityDays is a series of one-day volunteer opportunities for all members of the MIT community. All students, faculty, and staff are encouraged to engage with the Cambridge and greater Boston community by devoting a few hours to volunteer with CityDays throughout the year. In conjunction with MIT's mission, the CityDays campaign aims to work for the "betterment of humankind" by connecting those who are a part of the MIT community with local organizations who need volunteers.

Four Weeks for America

This program enables MIT students to spend IAP working with Teach for America teachers on science and math projects in classrooms in small rural areas or big inner cities while learning about educational change and policy. Participating students might develop hands-on science curriculum, perform data analysis of classroom performance, or research tools that improve learning.

Alternative Spring Break

Alternative Spring Break enables MIT students to spend spring break participating in service in our local region. The PKG Center typically arranges week-long group experiences with community agencies in Greater Boston and New Jersey. Students combine hands-on service activities with learning about local issues and exploring societal challenges. They also offer grants to service groups who plan their own alternative spring break trips combining service and reflection.

LEAP Grants

Learn, Explore, Act, & Prepare (LEAP) Grants provide MIT students with funding to carry out a service project, volunteer day, or philanthropy event in the United States. LEAP grants also help students learn about service and social responsibility or build their skills to tackle a community challenge.

Freshman Urban Program

Through this week-long freshman pre-orientation program, incoming MIT students can help others while exploring their new neighborhood, learning about community challenges, and making friends. Freshman Urban Program participants volunteer with local agencies such as the Charles River Conservancy and Bridge over Troubled Waters and explore how issues like hunger and homelessness affect our community.

Office of Government and Community Relations

Since its founding, MIT has maintained a commitment to serving the local community as both a resource for education and technology and as a good neighbor. Through the Office of Government and Community Relations (OGCR), MIT works collaboratively with dozens of Cambridge nonprofits that address local challenges and opportunities such as meeting the needs of underserved populations, youth programs, and environmental sustainability. The Institute supports these organizations by providing direct financial support as well as in-kind resources including facility use, faculty & staff expertise, and volunteer engagement. In addition, OGCR collaborates with the MIT PKG Center and MIT Community Giving to oversee the MIT Community Service Fund (CSF). The CSF provides support for nonprofits where MIT volunteers are at work and encourages the creation of new community service projects by providing grants to MIT affiliates.

In addition to working with nonprofits to serve the local community, the Institute's various departments, labs, and centers (DLCs) coordinate outreach programs to educate and inspire K–12 students. OGCR works with these outreach programs to facilitate their relationships to educators and leaders in the local educational ecosystem.

Service to the community is embedded into the culture of MIT—the Institute's various DLCs have a diverse array of programs that support our host community.

Abdul Latif Jameel Poverty Action Lab

The Abdul Latif Jameel Poverty Action Lab (J-PAL) is a global research center based at MIT working to reduce poverty by ensuring that policy is informed by scientific evidence. Anchored by a network of more than 180 affiliated professors at universities around the world, J-PAL conducts large-scale randomized impact evaluations of social programs to answer critical questions in the fight against poverty. J-PAL builds partnerships with governments, multilateral organizations, NGOs, and others to share this knowledge, scale up effective programs, and advance evidence-informed decision-making.

J-PAL was launched at the Department of Economics at MIT in 2003 by professors Abhijit Banerjee, Esther Duflo, and Sendhil Mullainathan and now has regional centers at leading research universities in Cape Town, Jakarta, New Delhi, Paris, and Santiago. With more than 400 research associates, policy experts, and training staff around the world, J-PAL's work spans ten broad sectors: Agriculture; Crime, Violence, and Conflict; Education; Environment and Energy; Finance; Firms; Health; Gender; Labor Markets; and Political Economy and Governance.

Research

At J-PAL we believe investing in rigorous research is essential to finding solutions to the world's greatest challenges. Working with governments, NGOs, donors, and private firms, J-PAL affiliates have conducted more than 900 randomized evaluations across a diverse range of topics, from clean water to microfinance to crime prevention.

J-PAL's research group works with affiliates to forge relationships with implementers on the ground and contributes to the design of survey instruments, data collection and survey efforts, statistical analysis, and data publication. J-PAL also creates practical research resources designed to help people develop and carry out high-quality randomized evaluations. Its comprehensive online library features evaluation manuals, analysis and survey tools, coding tools, and guidelines on ethics and transparency in research.

Education and Training

The education and training group at J-PAL works to build the capacity of researchers who produce evidence, policymakers and donors who use it, and advocates of evidence-informed policy. J-PAL's training offerings include half-day workshops, five-day Executive Education courses, and full-year degree programs, and cover topics from applied statistical analysis to ethics and responsible decision-making.

To make this capacity building more accessible, J-PAL partnered with MITx to develop a series of free open online courses for students and professionals. These twelve-week courses are taught by J-PAL's affiliated professors and are open to all who are interested in using evidence to promote effective policies and programs.

Policy Expertise

The policy group at J-PAL bridges gaps between researchers and policymakers. J-PAL's policy experts work with its affiliated professors to distill research results into practical lessons that are clear, concise, and relevant to policymakers. Through trusted government partnerships spanning the globe, J-PAL provides funding, technical assistance, and embedded staff to help shape programs and policies that deliver results. J-PAL's research and policy outreach work has contributed to cost-effective programs being scaled up to reach more than 400 million people.

J-PAL North America

J-PAL North America, one of J-PAL's six regional research centers, is also based at MIT. To address the complex causes and consequences of poverty, J-PAL North America's work spans a range of sectors including health care, housing, criminal justice, education, and labor markets. J-PAL North America works with decisionmakers at the local, state, and federal level to conduct randomized evaluations of social policy, share research results, and train policymakers and practitioners to generate and use evidence.

J-PAL North America runs five major initiatives to support randomized evaluations and evidence-informed policymaking: the Education, Technology, and Opportunity Initiative; the State and Local Innovation Initiative; the Health Care Delivery Initiative; the Social Policy and Research Initiative; and, in partnership with MIT's Task Force on Work of the Future, the Work of the Future Initiative. Amy Finkelstein (MIT) and Lawrence Katz (Harvard University) lead J-PAL North America as its scientific directors. J-PAL affiliates have carried out more than 250 randomized evaluations in the region.

MIT D-Lab

MIT D-Lab works with people around the world to develop and advance collaborative approaches and practical solutions to global poverty challenges. The program's mission is pursued through interdisciplinary courses, research in collaboration with global partners, social entrepreneurship, capacity building, humanitarian intervention, technology development, and community initiatives—all of which emphasize experiential learning, real-world projects, community-led development, and scalability.

D-Lab classes and projects are connected to communities around the world in countries including Bangladesh, Botswana, Brazil, Burkina Faso, Colombia, El Salvador, Ethiopia, Ghana, Guatemala, Greece, Haiti, India, Indonesia, Kenya, Lesotho, Mali, Mexico, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Peru, Rwanda, Senegal, Tanzania, Uganda, the United States (Puerto Rico), Zambia, and others.

Programs & Opportunities

Education

Through hands-on projects in real-world settings, D-Lab students can make a difference in the lives of people living in poverty. They give real substance to the MIT commitment to solve hard problems in service to the world. In D-Lab's 20+ MIT classes, D-Lab students acquire competency in the participatory design process, understand and apply principles of engineering and design, engage in hands-on shop work, learn to think critically about theories of development, and obtain meaningful experiences in the field—all preparing you to continue socially and environmentally conscious work that addresses issues of global poverty.

<http://d-lab.mit.edu/education>

Research

D-Lab's lean, collaborative, and interdisciplinary research team creates, shares, and uses collaborative research practices, actionable findings, and practical solutions to address global poverty challenges. The team designs and implements a variety of studies (such as needs assessment and asset mapping, technology evaluations, technology development projects, assessing the outcomes and impacts of local innovation, and understanding innovation processes) in collaboration with organizations and local community members around the world in several sectors (evaporative cooling, biomass fuels and cookstoves, water treatment, digital financial services, and mobile technologies). The research program is integrated with the other programs within D-Lab and its findings inform the continual development of the D-Lab Education and Innovation Practice programs.

D-Lab is also home to the Comprehensive Initiative on Technology Evaluation (CITE), launched with USAID funding by D-Lab and a consortium of MIT partners in 2012. This past year, D-Lab received USAID funding to take on six projects under the auspices of CITE: 1) Assessing the Impact of Evaporative Cooling Technologies for Improved Vegetable Preservation (Mali); 2) Investigating Inclusive Systems Innovation; 3) Designing an Evaluation Methodology to Assess Capacity Development for Local Innovation; 4) Fairness, Bias, and Appropriate Use of Machine Learning; 5) Internet of Things: Low Cost Sensors for Agriculture (Kenya and India); 6) Digital Financial Services for Smallholder Farmers (Senegal, Guatemala, and Burkina Faso).

Ongoing research in evaporative cooling for fruit and vegetable preservation (Burkina Faso, Rwanda, India, Mali, Kenya), xylem water filter development (India), local innovation (Mexico and Morocco), a green products evaluation (India), and mobile health technologies (multiple countries) continued throughout the year. In the fall of 2018, MIT D-Lab received a grant from the National Science Foundation to create and evaluate a co-creation toolkit for graduate students working in humanitarian settings.

<http://d-lab.mit.edu/research>

Innovation Practice

The third pillar of D-Lab, Innovation Practice, was formed in spring 2017 to develop, advance, and apply participatory innovation as a methodology for tackling poverty. To achieve this, the Innovation Practice team conducts design trainings, fosters global communities of practice, and partners with other development actors to implement local innovation programs in complex settings. This year, the Innovation Practice team began to tackle a new question across all of its programs: how can we support local innovators by strengthening the innovation ecosystems they inhabit? The programs that make up the Innovation Practice pillar include:

- The **D-Lab Scale-Ups Fellowship**, which supports social entrepreneurs to bring poverty-alleviating products and services to emerging markets at scale. This past year, six new fellows were selected—all founders of homegrown, high-impact ventures in underserved markets in Kenya, Tanzania, and Uganda. To date, the fellowship has supported 39 fellows who have reached 1.5 million people with goods and services.
- **Humanitarian Innovation**, which is spearheaded by D-Lab Founding Director Amy Smith and humanitarian relief expert Martha Thompson. The team engages refugees and displaced persons in the design process so that they can create the things they need to improve their lives and ultimately improve the way humanitarian work is delivered. The program has delivered workshops in Sudan, Uganda, El Salvador, and Greece with multiyear projects in Greece and El Salvador, where Innovations Centers run by local staff have been established. A new program, working with Rohingya refugees in Bangladesh, is just getting under way.

- The **Inclusive Markets** program engages with regional and community leaders to develop inclusive businesses, markets, and economies that promote equity, resourcefulness, and resilience for people living in poverty. This year, this program has leveraged D-Lab's Creative Capacity Building and Co-Design methodologies to engage with wastepickers in Ghana and artisanal miners in Colombia, facilitating opportunities for these workers to co-create new market systems alongside government and industry leaders.
- **Innovation Ecosystem Building** at D-Lab seeks to support grassroots informal sector entrepreneurs addressing local and global challenges by bringing together diverse regional actors to support innovation and entrepreneurship. This year, D-Lab held catalytic innovation ecosystem convenings through the NEXTi2i program in Accra, Ghana; the OC3 program in Oaxaca, Mexico; and at the PIA Co-Design Summit in Laayoune, Western Sahara/Southern Morocco.
- The **Practical Impact Alliance (PIA)**, a membership organization of leaders from diverse organizations with aligned missions who learn, collaborate, and develop best practices together. 2019 members included Danone, Johnson & Johnson, OCP Phosboucraa Foundation, PACT, SC Johnson, Siemens Stiftung, USAID, and World Vision.

Local Programs

Amphibious Achievement

Amphibious Achievement is an MIT undergraduate student run group that mentors high school students in the greater Boston area in athletics and academics. Under the guidance of MIT student coaches/tutors, Amphibious Achievers train to row and swim competitively while also working on college-preparatory academics. It is free of cost to all students who participate.

<http://amphibious.mit.edu/>

Cambridge Science Festival

The annual Cambridge Science Festival, the first of its kind in the United States, is a 10-day (and night!) celebration showcasing Cambridge as a leader in science, technology, engineering, and math. The festival is presented to the public by the MIT Museum in collaboration with the City of Cambridge, community organizations, schools, universities, and businesses. A multifaceted, multicultural event held every spring, Cambridge Science Festival celebrates curiosity and makes science accessible, interactive, and fun for everyone through 225+ engaging events across the city.

<http://www.CambridgeScienceFestival.org/>

Edgerton Center—K–12 Programs

The Edgerton Center continues the learning-by-doing legacy of “Doc” Edgerton. The Center’s K–12 programs educate, inspire, and motivate primarily middle school through 12th grade students through hands-on science and engineering challenges. Concentrating in the Greater Boston area, with selected out-of-state and foreign endeavors, the Edgerton Center’s multifaceted approach supports over 150 on-campus classroom workshops annually, intensive summer programs, innovative curriculum, and professional development workshops for teachers. MIT students are closely involved in many of the programs, and all programs are provided at no or minimal cost.

Educational Studies Program

The MIT Educational Studies Program (ESP) was created by MIT students in 1957 to make a difference in the community by sharing their knowledge and creativity with local high school students. Since then, they have grown to support well over three thousand students each year with the help of hundreds of MIT students. Through an extensive offering of academic and non-academic classes, ESP is dedicated to providing a unique, affordable educational experience for motivated middle school and high school students. ESP courses are developed and taught by MIT students, alumni, faculty, and members of the community.

<http://esp.mit.edu/>

Giving Tree

The MIT Giving Tree allows students, alumni, faculty, staff, and friends to provide gifts to local children and families each holiday season. The MIT PKG Center works with several campus groups, along with hundreds of individuals across campus to collect gifts for 12 local agencies serving low-income children. This program provides MIT a means to expand our ethic of caring to local children and families.

Graduate Student Council External Affairs Board

Part of the broader MIT Graduate Student Council (GSC) student government, the External Affairs Board (EAB) coordinates relationships with organizations outside MIT; political advocacy at all levels of government; community outreach, education, and service; and the writing of statements of the positions of the GSC or the graduate student body on issues of significance to the welfare of graduate students at MIT, all in line with the GSC Policy Platform, which can be found on the GSC website. Examples of EAB's work include biannual U.S. Congressional advocacy trips, regular Massachusetts statehouse advocacy visits, outreach efforts to the hometown schools and newspapers of MIT graduate students, and regular participation in multi-university collaborations at the Boston, regional, and national levels.

MIT Integrated Learning Initiative

Launched in 2016, MIT Integrated Learning Initiative's (MITili) mission is to transform learning through research and applied practice. This initiative studies learning the MIT way: through rigorous, interdisciplinary research on the fundamental mechanisms of learning and how we can improve it. MITili draws from fields as wide-ranging as cognitive psychology, neuroscience, economics, health, design, engineering, architecture and discipline-based education research to study learning from several perspectives.

MITili projects include work in pK–12 education, such as “Reach Every Reader” which leverages neuroscience to develop digital screening tools that detect potential learning difficulties, so that intervention

can begin before the child falls behind; a project that leverages artificial intelligence to support low socioeconomic status families in fostering early language development; development and assessment of learning games to increase early mathematics readiness; and partnering with school districts to create more effective and equitable school choice mechanisms. In higher education, MITili supports creation of visualization tools to enhance understanding of physics and identifying ways to increase learner completion in online courses. In the workforce learning space, MITili has researched ways to enhance professional education, from evaluating pedagogical structure of training classes to reduce mind wandering and increase retention, to assessing the neuroscience of inserting novelty videos to enhance engagement and learning.

Teaching Systems Labs

MIT's Teaching Systems Labs (TSL) helps prepare pK–12 teachers for the complex, technology-driven classrooms of the future, by developing games, simulations and other tools for teaching, offering practice spaces for teachers to design and test new pedagogies, and offering online and in person training for teachers on innovative content.

Playful Journey Lab

The MIT Playful Journey Lab explores frontiers in lifelong, lifewide learning with the goal of understanding the ways we can strengthen future-ready skills. With a focus on learner-centered assessment and playful exploration, researchers and educators in the lab design and investigate new ways to prepare schools, teachers, students, and members of society to thrive in a rapidly-changing world. Through the design of both digital and non-digital tools, design-based research with learners and practitioners, and a growing community of passionate educators, this work will map out new pathways for the future of learning.

World Programs

MIT has a strong commitment to service. There are programs that are active both domestically and abroad while others cover more than service. Below are a couple of examples of work abroad. Please see descriptions of J-PAL and D-Lab on pages 108–110, and the Global Engagement section beginning on page 95 for additional work.

Abdul Latif Jameel World Education Laboratory

Founded in 2017, the Abdul Latif Jameel World Education Laboratory (J-WEL) is an incubator for change in education at MIT and around the world. It brings together educators, technologists, policymakers, and societal leaders to address global challenges in education through online and in-person collaborations, workshops, and conferences. It consists of three collaboratives that address these challenges across all levels of education: pK–12, higher-ed, and workforce learning.

Legatum Center for Development and Entrepreneurship

The Legatum Center for Development and Entrepreneurship at MIT was founded on the belief that economic progress and good governance in low-income countries emerge from entrepreneurship and innovations that empower ordinary citizens. The center administers a highly competitive fellowship program for MIT graduate students who intend to launch innovative and inclusive for-profit enterprises in developing countries. In addition to supporting the Legatum Fellows, the Legatum Center aims to catalyze entrepreneurship for broad-based prosperity by administering programs including case writing, research, articles, lectures, conferences, and seed grants.

<http://legatum.mit.edu/>

