



CAMPAIGN FOR A BETTER WORLD



Since MIT was founded to help a young nation seize its future as an industrial powerhouse, the people of MIT have been busy solving hard problems and answering big questions, and they have left society transformed. Today, everyone at MIT is hacking societal problems. And we see humanity's pressing global challenges as invitations to action.

As we strive to meet these challenges, we seek allies who share our sense of mission, urgency, and infinite possibility. We invite you to join us in creating the future.

This is the MIT Campaign for a Better World.

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L. Rafael Reif, President



Stories of Impact

#### Martin L. Culpepper SM '97, PhD '00

Professor, Mechanical Engineering; Maker Czar

#### Li-Huei Tsai

Director, Picower Institute for Learning and Memory; Picower Professor of Neuroscience

#### Caleb Harper MA '14

Director of the Open Agriculture Initiative, MIT Media Lab

**Closing Remarks** 

#### L. Rafael Reif

Reception to follow



"MIT's greatest invention may be itself– an unusual concentration of unusual talent, restlessly reinventing itself on a mission to make a better world."

## **Discovery Science**

Transforming our world through fundamental scientific research.



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## **Health of the Planet**

Addressing critical environmental and sustainability challenges facing humankind. "MIT's greatest invention may be itself– an unusual concentration of unusual talent, restlessly reinventing itself on a mission to make a better world."

## Human Health

Defining the future of health through advances from bench to bedside across a broad range of disciplines. "MIT's greatest invention may be itself– an unusual concentration of unusual talent, restlessly reinventing itself on a mission to make a better world."



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## Teaching, Learning, and Living

Reimagining education for the 21st-century learner.



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## The MIT Core

Attracting extraordinary students and faculty and providing them with the resources they need to thrive.

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# (5×10<sup>9</sup>)

#### **The Goal**

The MIT Campaign for a Better World is about rising to meet humanity's urgent global challenges through the vision and talent of the people of MIT. Our \$5 BILLION goal is a bold one. To reach it, we call on MIT's friends and supporters to join us as we work to achieve our greatest aspirations for the world. "MIT's greatest invention may be itself– an unusual concentration of unusual talent, restlessly reinventing itself on a mission to make a better world."



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#### SPEAKER BIOGRAPHIES

## Martin L. Culpepper SM '97, PhD '00 is a profes-

sor in the Department of Mechanical Engineering. As "maker czar," he represents the makers and makerspaces at MIT. and coordinates outreach and collaboration with makerspaces at other universities and with government policy makers. He founded HEMI, a group of universities that is guiding the maker movement in higher education. He is the director of the Precision Compliant Systems Lab. Culpepper's research is focused on nanoscale science and engineering, precision engineering, and advanced mechanical design. He has received numerous awards, including the Presidential Early Career Awards for Scientists and Engineers, two R&D 100 Awards, and the Ruth and Joel Spira Award for Distinguished Teaching. Culpepper earned a BS from Iowa State University and an SM and a PhD in mechanical engineering from MIT.

Caleb Harper MA '14 is the director of the Open Agriculture Initiative and a research scientist at the MIT Media Lab. He leads a diverse group of engineers, architects, and scientists in the exploration and development of future food systems. His group, together with strategic partners, is developing an open-source agricultural hardware, software, and data common with the goal of creating a more agile, responsive, and collaborative food system. Harper is a National Geographic Emerging Explorer and a member of the World Economic Forum New Vision for Agriculture Transformation Leaders Network. He earned a BA in architecture from Washington University in St. Louis, a BA from Baylor University, and an MA in architecture from MIT.

L. Rafael Reif became MIT's 17th president in July 2012. In the face of rapidly expanding alternatives in online learning, Reif has fostered the growth of MIT's nonprofit online platform, edX, and the recommendations of his Institute-wide Task Force on the Future of MIT Education are charting a path for MIT to help pioneer the future of higher education. Since launching the MIT Innovation Initiative, he is leading an ambitious redevelopment of MIT's innovation district. He also created the Environmental Solutions Initiative, anchored by the Abdul Latif Jameel World Water and Food Security Lab, and issued the MIT Plan for Action on Climate Change. Born in Venezuela. Reif earned a PhD in electrical engineering from Stanford University. On the MIT faculty since 1980, he is a member of the National Academy of Engineering.

David Siegel SM '86, PhD '91, co-chairman of the algorithmic investment manager Two Sigma, is a recognized pioneer in the fields of technology and investment management. He has had a lifelong interest in building intelligent computational systems. Before cofounding Two Sigma, Siegel was chief technology officer and managing director at Tudor Investment Corp. He currently sits on the board of directors of the Hamilton Insurance Group, the Scratch Foundation, NYC FIRST, and NAF. In addition, Siegel is an Executive Advisory Committee member of the Center for Brains. Minds & Machines at MIT and a member of the Corporation Visiting Committee for the MIT Media Lab. He earned a bachelor's degree from Princeton University, and an SM and a PhD in electrical engineering and computer science from MIT.

#### SPEAKER BIOGRAPHIES

Li-Huei Tsai is the director of the Picower Institute for Learning and Memory and the Picower Professor of Neuroscience. She is the lead investigator for MIT's Aging Brain Initiative. Tsai's research strives to illuminate the pathological mechanisms underlying neurological disorders affecting learning and memory. Her areas of focus include neurodevelopmental disorders and Alzheimer's disease. She is a member of the National Academy of Medicine and has won numerous awards, including the Glenn Award for Aging Research, and has authored and coauthored more than 150 peer-reviewed articles. Tsai earned a PhD from the University of Texas Southwestern Medical Center at Dallas.

#### MIT BETTER WORLD (NEW YORK CITY) HOST COMMITTEE

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a '79	Barrie R. Zesiger HM

At MIT, we pursue education, research, and innovation with a passion for serious impact. We have a record of transforming society for the better—and we are just getting started. As we look to the horizon, we see a future of important challenges and inspiring opportunities. With your help, we can build a better world.

betterworld.mit.edu #MITBetterWorld

MIT BETTER WORLD EVENTS

Community gatherings will be hosted in cities across the globe throughout the MIT Campaign for a Better World.

**New York City** 10.20.16

San Francisco 11.02.16

Hong Kong 12.14.16

**London** 01.13.17

**Tel Aviv** 01.22.17

**Los Angeles** 02.07.17

**Mexico City** 03.23.17

Washington, DC 04.13.17

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