

## MISSION AND VISION

The Lemelson-MIT Program promotes invention and the early stages of entrepreneurship across the United States through its prize program for collegiate inventors and its invention education initiatives. Our mission is to inspire young people to pursue creative lives and careers through invention, and to support their development as inventors and creative problem solvers through invention education opportunities. We are leading research efforts in the new field of invention education with a goal of forging collaborations and invention education pathways from kindergarten through college to ensure all youth have opportunities to learn to think and work as inventors.

One of U.S. history's most prolific inventors, Jerome Lemelson and his wife Dorothy, founded the Lemelson-MIT Program at the Massachusetts Institute of Technology in 1994. The family continues to support this vision through <a href="https://doi.org/10.25/10.25/">The Lemelson Foundation</a> and grant funding administered by <a href="https://doi.org/10.25/">MIT's School of Engineering</a>.

# **TEAM LEADERSHIP**

The program carries out its mission with a creative team of 11 people and is led by faculty director, Michael J. Cima, an inventor with over 80 patents and associate dean of innovation in MIT's School of Engineering. Executive director, Stephanie Couch, PhD, leads the program with over 16 years of experience in STEAM education policy, research, development and fundraising experience.

### PROGRAMS FOR STUDENTS

### **Student Prize for Collegiate Inventors**

The Lemelson-MIT Student Prize recognizes and brings national awareness to undergraduate teams and graduate students that have invented solutions in prize categories that represent significant sectors of the global economy. Recognition college students receive from winning the Lemelson-MIT Student Prize brings new opportunities and added support for students' work as inventors.

### InvenTeam® Grant for High School Inventors

Since 2003, the InvenTeam® initiative has been changing the way educators teach, and providing young people – especially young women and students from underrepresented backgrounds - with creative problem solving and 21st century skills to flourish in college and career.

### **Invention Education Curriculum for Young Inventors**

Lemelson-MIT offers free JV InvenTeams™ curricula on its website for students in grades 6–10 to hone their hands-on skills and enrich their STEM education through invention-based design activities. Activity guides support hands-on learning and teach students the role invention plays in making everyday products.

### InventionAdventures™ for Young Inventors

InventionAdventures is a two-week summer camp program for middle school students to build hands-on STEM skills, experience teamwork, learn about the work of inventors, while creating an invention activity and having fun in the process. (Summers 2020 and 2021 cancelled due to COVID-19).

# PROGRAMS FOR K-12 EDUCATORS AND ADMINISTRATORS

### **Excite Awards for K-12 Educators**

Lemelson-MIT provides Excite Awards each year to K-12 educators who want to learn ways of engaging youth— especially young women and students from underrepresented backgrounds—in science, technology, engineering and mathematics (STEM) through creative problem solving and the design and construction of invention prototypes. Excite Award recipients receive a stipend and free registration to professional development for invention educators.

#### Partners in Invention Education

Partners in Invention Education is a membership driven professional learning community for collaborative efforts between K-12 and community college administrators, educators and those who specialize in working with young people to invent solutions to real world problems.

## **Invention Education Summer Workshop**

A three-day summer workshop to develop educators' capacity to help kids learn to think and act as inventors while developing solutions to real-world problems. Educators learn how inventing can be used to engage youth in STEM learning opportunities that focus on creative, open ended, inquiry-based problem finding and problem solving.

### **PARTNERSHIPS**

Lemelson-MIT collaborates with a variety of organizations and businesses working to expand learning opportunities in the areas of engineering, science, computer science and computational thinking, making, inventing, entrepreneurship and the arts. We partner with K-12 educators, administrators, and colleges and universities around the country to accomplish our mission. If you are interested in partnering with us, contact us at <a href="mailto:lmit-partners@mit.edu">lmit-partners@mit.edu</a>.



Students from Fletcher Maynard Academy in Cambridge, Mass with 2019 Lemelson-MIT Student Prize winner, Mercy Asiedu at EurekaFest.



InvenTeam students showcase their invention at the Lemelson-MIT Program's annual event, EurekaFest.

# **RESULTS AND IMPACT**

**Billions in global economic development** made possible by **26 prolific inventors** winning our \$500K Lemelson-MIT Prize

Massive media impact with 108M impressions and earned media value of \$5.1M in 2019

World class leadership with over 20 research journal publications, 9 conference papers and 17 case studies published

109 college students awarded prizes since 1995.30% of those women64% launched their own startups

InvenTeams are on average 35% women and individual InvenTeams are between 21-44% underrepresented minorities

Twelve InvenTeams have been awarded patents to date, with 5 more in progress

Annual estimated reach through workshops, webinars and youth invention camps

3,219 students494 educators

