

LEMELSON-MIT

Celebrating invention, inspiring youth

Lemelson-MIT Student Prize

APPLICATION INFORMATION

Apply Now for the 2017 Lemelson-MIT Student Prize
Initial Application Deadline: September 30, 2016

To learn more and to start your application, visit: <http://lemelson.mit.edu/studentprize>

The Lemelson-MIT Student Program is searching nationwide for undergraduate teams and individual graduate students who have developed technology-based inventions in healthcare, transportation, consumer devices, and food & agriculture. Graduate students win \$15,000 for their portfolio of inventions. Undergraduate teams win \$10,000 for their invention. In addition, winners receive national media exposure, exposure to investment and business communities, and a trip to MIT for an award celebration (EurekaFest) in June 14-18, 2017.

Eligibility: The competition is open to teams (2-5 people) of undergraduate students with one invention and individual graduate students with two or more inventions. Applicants must be full-time, matriculated students as of Spring 2017 at a U.S. college or university. Applicants must have a tested prototype of their invention(s). Patents are encouraged but not required.

How to Apply & Prize Categories: Initial applications must be completed online by September 30, 2016. Eligible applicants will be invited to complete the Category Application which is due October 21, 2016. Prize categories are: 1) **“Cure it!”** for technology-based inventions that can improve healthcare, 2) **“Drive it!”** for technology-based inventions that can improve transportation, 3) **“Eat it!”** for technology-based inventions that can improve food and agriculture, and 4) **“Use it!”** for technology-based inventions that can improve consumer devices – defined as tangible consumer products where the end user is a retail customer who would purchase the product for use in their daily life.

Selection Criteria: Applicants will be judged on the inventiveness of their work, the invention(s) potential for commercialization, the systems and design thinking approach applied to the invention’s development, youth mentoring experience and faculty recommendations.

Contact: Marlena Love, Awards Program Officer, Lemelson-MIT Program.

Email: marlenam@mit.edu

Detailed Instructions for the 2017 Lemelson-MIT Student Prize

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Overview

The 2017 Lemelson-MIT Student Prize features a two-part online application process, the Initial Application and the Category Application, using the SlideRoom applicant program. All applicants create an account on SlideRoom by clicking the “Apply Now” button on the Student Prize website’s right side bar. Category-specific screening committees review applicants and a prestigious national jury selects winners. Details appear below.

The Initial Application deadline: Friday, September 30, 2016 at 5:00 p.m. Eastern

The Initial Application is a rolling application with a final deadline of September 30, 2016. If applicants meet all eligibility and Initial Application criteria, they will be invited to submit the Category Application within two weeks of submitting the Initial Application. Applicants are encouraged to submit materials BEFORE the September deadline as doing so will facilitate an early review of materials AND grant access to the Category Application if eligibility requirements and criteria are met. Hence applicants submitting earlier will have more time to complete the Category Application.

The Category Application deadline: Friday, October 21, 2016 at 5:00 p.m. Eastern

Eligible applicants will be invited via email to submit the Category Application. All Category Application materials must be received no later than the October 21, 2016.

The Final Round and Announcement of Winners

Applicants selected as Finalists will be notified that they are advancing to the next round by December 21, 2016, and will be required to submit additional materials due January 10, 2017. See details on next page. Winners will be notified in late February 2017 and a public announcement will occur in late April 2017. Awards will be made at EurekaFest 2017: June 14-18, 2017 @ MIT (winners required to attend).

Note: The dates listed above and on the next page are subject to change.

Additional Submission Guidelines

As a courtesy to the distinguished individuals who volunteer their time to help make the prize possible, we ask that you strictly observe all of the guidelines for submission. Please note, applications that do not follow instructions will be disqualified from consideration. Thank you in advance for your consideration.

Once a SlideRoom account is created, applicants will start the Initial Application. Initial Application requirements include:

- Applicants indicate the **prize** (Undergraduate Team or Individual Graduate Student) and **category** (“Cure it!”, “Drive it!”, “Eat it!”, or “Use it!”)
- **Biographical Information and Team Member Listing** (if applicable)
- **Resume** (PDF upload)
- **Invention Description** in non-technical terms (must have a tested prototype)
- **Slide Deck Presentation** (5-slide slide deck in PowerPoint or PDF of a presentation about the invention)

Eligible applicants will be invited via email to submit the Category Application. Category Application requirements include:

- **One-Page Cover Letter** (about 1500 word for Undergrad Teams and 1000 words for Individual Graduates) giving the reader a brief snapshot of who you are and your main focus and inspiration as an Inventor.
- **Description of Inventiveness** (single invention for Undergraduate Teams - about 1000 words, portfolio of two or more inventions for individual graduate students - about 2000 words) addressing the following:
 - Define the problems/needs and how your invention(s) offers solutions
 - What makes your invention(s) novel?
 - How does your invention(s) improve upon prior technology or processes?
 - What are the potential economic, environmental and societal benefits of your invention(s)?
 - If you have worked in team environments, what was your role in developing the invention(s)?

Please be sure to address for IP purposes:

- What is the background of each inventor including education and any relevant job experience?
 - What were the roles and responsibilities of each inventor particularly with regard to the invention?
 - What is the problem that the invention(s) is trying to solve?
 - How did the problem come to the inventors' attention?
 - How did the inventors decide that this was an important problem to solve?
 - What solutions were attempted to solve the problem and how were they developed and tested
- **Description of Potential Commercialization or Adoption**
 - Describe how you envision your inventions being commercialized, or possessing the potential for adoption (500 words or less).
 - **Description of Systems & Design Thinking**
 - Answering how you have applied systems thinking to your invention process (500 words or less). Be sure to highlight the entire process from start to finish and discuss any materials sourced/used and the product lifecycle, as well as the economic, environmental, and community impacts resulting from the invention's development.
 - **Description of Youth Mentoring and Leadership Experience**

Describe your/your team's leadership and youth mentoring experience (500 words or less), addressing the following:

 - How have you served as a leader(s)?
 - How have you mentored youth and others?
 - What was the impetus for your involvement and what did you learn?
 - Be sure to touch on any community outreach activities, academic and co-curricular.
 - For Grad Students - Activities that go above and beyond mentoring and advising undergrads/lab members that would be generally expected as part of the graduate student experience should be highlighted.
 - **Faculty Letter of Recommendation**

One letter of recommendation from a faculty member or research-scientist staff is

required. Letters are submitted via the SlideRoom applicant portal via email request. Each letter should be addressed to the Lemelson-MIT Student Prize Committee, limited to two pages or less, and:

- Describe the significance of the applicant's invention(s) to the field
- State the student's role in developing the invention(s)
- Define the state-of-the-art status in the area of the invention(s)
- Describe potential implications of the student's work

Optional – up to two supplemental documents/media uploads. Media can be linked or uploaded and can include PDFs of pertinent supporting such as videos, professional articles, photos, diagrams, and press clippings.

Guidelines for Finalists

A small number of graduate and undergraduate team applicants will be advanced as finalists in each category. Applicants selected to advance past the Category Application round (a.k.a. “Finalists”) will be asked to produce and submit a **short, two-minute video** by January 10, 2017. The video must describe their invention (primary invention for graduate students) and adhere to the content guidelines set forth by the Lemelson-MIT Program. Video files should be submitted to SlideRoom in .mov, .mp4 or .mpg. Each video upload can be up to 250MB. The minimum video resolution is 1080 x 720. Creativity is encouraged! **DO NOT USE ANY COPYRIGHTED MATERIALS** (music, images, video, etc.) without the explicit written permission for use from the copyright holder. Finalists will also be asked to submit **two additional letters of recommendation**.

If a candidate is selected as a student prize recipient, some (non-confidential) information presented in their applications will be used to prepare public press materials.

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2017 Lemelson-MIT Student Prize: Frequently Asked Questions

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What are the goals of the Lemelson-MIT Student Prize?

The Lemelson-MIT Student Prize seeks to serve as a catalyst for burgeoning inventors. Prizes will be awarded annually to inventive graduate students, and teams of undergraduate students from any college or university in the U.S. The award publicity can expose winners to the technology, engineering, science, business, and investment communities.

What qualifies as an invention for the purposes of this competition?

Lemelson-MIT considers an invention to be a new technology, product, or process developed by the student applicant that is unique, useful, and solves a real-world problem with an identified user. Strong applications have some evidence of reduction to practice and engagement with users during the evaluation of the invention.

What is a tested prototype?

A prototype must be tested and functional. It should work as designed beyond proof of concept models. Evidence of the functional prototype can be data from lab, human subjects testing, or consumer products testing that has been collected and analyzed. Applicants need to provide evidence that the functional prototype performs as intended.

Prototypes do not need to be commercially available but they should be commercially viable. Applicants are not expected to develop prototypes past early stages nor do they need to present a business plan. Commercialization potential is however a criterion of the competition and prototypes further along in development exhibiting strong commercialization potential may be rated higher than early stage inventions.

What does it mean to be “an undergraduate student-founded and led team”?

An undergraduate student-founded and led team is one in which the idea for the invention was generated by an undergraduate student who then built and is actively leading this team of 2-5 undergraduates to develop and commercialize that invention. The team must identify a member who will serve as the group leader and primary representative.

Is the candidate/are the candidates required to have any patents?

No, the candidate(s) is not required to have any patents. However, the Lemelson-MIT Program strongly encourages applicants to discuss in their application any IP they have filed or plan to file and correctly attribute ownership, i.e. candidates should own the IP of any invention entered into the competition. The supplemental materials section is an excellent place to submit patent abstracts. The strongest applications over the years have featured patented inventions or inventions involved in the patenting process.

Does the candidate forfeit intellectual property rights by submitting an application?

The Lemelson-MIT Program asks screening committees and the judging panel to acknowledge that student applications are distributed solely for the candidacy of the Lemelson-MIT Student Prize, and should not be reproduced for other purposes. Candidates are advised to consult their school's Intellectual Property policies as directed by their Technology Licensing Office, and the United States Patent and Trademark Office to ensure protection of their intellectual property, if applicable.

Are winners required to use the award money for research?

No, the money is an unrestricted cash gift but could be used for future research or development of their prototype.

What is required of winners?

The winners are asked to participate in media opportunities arranged by the Lemelson-MIT Program to celebrate their winning and recognize their work. Winners are required to attend EurekaFest, the Lemelson-MIT Program's annual multi-day celebration of the inventive spirit, which will be held at MIT in June of the award year. Attendance at EurekaFest is at the Lemelson-MIT Program's expense. The program may request the winner to participate in future public education and press activities as applicable.

When is the deadline to apply?

The Initial Application deadline is September 30, 2016. Applicants can apply any time before September 2016 and are encouraged to do so early as it will enable access to the Category Application if all criteria are met. The Category Application deadline is October 21, 2016. *See page 3 above for deadline information.

Who are the judges?

There is a two-tiered judging process:

1st & 2nd Rounds: Screening Committees who have expertise in the candidates' fields areas (i.e. Prize categories: Healthcare, Consumer Products, Transportation, and Food & Agriculture).

Finalist Round: A judging panel composed of experts from a variety of disciplines such as mechanical engineering, bioengineering, physics, medicine, finance, transportation, and food and agriculture.

What criteria are used to judge the candidates?

Applicants will be evaluated by category-specific screening groups and a prestigious national jury based on a range of criteria including:

- Portfolio of inventiveness for (graduate students) and single-specific inventions (undergraduate teams)
- Potential adoption and/ or commercialization of inventions, to help boost the economy
- Ability and experience to be a role model for youth
- Ability to articulate a systems design approach to the invention process
- Supporting letters

No criterion is considered paramount. Judges are asked to take a holistic view of each candidate with respect to the goals of the Lemelson-MIT Student Prize.

What makes an excellent application?

An excellent application is well presented, complete, and follows instructions (e.g. word count). Strong applications feature truly inventive (not just innovative) technology and make a compelling case based on the selection criteria listed above. The material should be written for a technically literate audience, similar to the writing style in *Scientific American* or *Technology Review*.

How many student prizes are awarded each year?

There will be up to a total of eight prizes awarded in 2017.

- "Cure it!" category: one \$15,000 prize for one graduate student, and one \$10,000 prize for a team of undergraduate students.
- "Use it!" category: one \$15,000 prize for one graduate student, and one \$10,000 prize for a team of undergraduate students.
- "Drive it!" category: one \$15,000 prize for one graduate student, and one \$10,000 prize for a team of undergraduate students.
- "Eat it!" category: one \$15,000 prize for one graduate student, and one \$10,000 prize for a team of undergraduate students.

I would like to apply but my project does not fit into either of this year's categories.

What can I do?

The Lemelson-MIT Program hopes to award prizes in additional categories in future years. For now, applicants must choose one of the four current categories: "Cure it!", "Drive it!", "Eat it!", or "Use it!".

Is the prize given to college students with proposed work/inventions?

No, this is not an idea competition or pitch for funding for yet-to-be developed projects. Submissions must be existing tech-based invention work, with potential for real commercialization, implementation, or greater impact. Applicants must have a tested prototype.

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