Those who have worked in a machine shop here on campus know that they can be very busy places. To help keep them safe, EHS has paired with the MIT Machine Shop instructors and supervisors to create a basic training on Machine Shop Safety, and how to conduct oneself in the shop. In January we held a contest for all of MIT to create a training video based on our guidelines which will be shown to incoming shop users. The contest was a fun way of involving everyone to ensure the content was useful and timely. “The videos were exactly what we were hoping for...of the culture, by the culture, for the culture” said Pam Greenley, Associate Director of EHS. The grand prize of $3,500 ended up being a tie between two teams; Safe Machine Air comprised of Sophie Poizeau, Heather Murdoch and Elizabeth Rappaport all from DMSE; and Mediated Matter comprised of Ben Peters, Ben Judge, and Daniel McDuff from the Media Lab and Mechanical Engineering. Our runner up, and winner of the $1,500 prize was Team Victory from the Nuclear Reactor shop and included Paul Same, Paul Nawazelski, Travis Newsad, and Adam Grein. The links provided here will take you to their video submissions.

A list of the full Machine Shop Safety Rules can be found here. We hope to have more contests like this one throughout the next few years, so be on the lookout for information from EHS!

EHS has also been working with the shop instructors’ group to upgrade shop equipment with guards and emergency stops. Our goal is to continually improve MIT’s culture of safety, and the more people know about the machines they will be working on, the better. If you have any questions or interest in please email Bret Dyer.

Above: (from left) Ben Peters, Daniel McDuff, Ben Judge, Adam Grein, Travis Newsad, Paul Same, Paul Nawazelski, Sophie Poizeau, Elizabeth Rappaport, Heather Murdoch.
Machine Shop Safety Initiative

BRET DYER

The Safety Program within the EHS Office has embarked on a Machine and Woodworking Shop Safety Initiative. This involves development of a working alone policy, enhanced training programs and physical surveys of all machine shops on campus to assess the need for additional safety features on machine tools. For purposes of this initiative, a “machine shop” represents a collection of machine tools including bench and pedestal grinders/buffers, drill presses, metal and wood lathes, as well as milling machines. Machine shops where the purpose is to fulfill the institute’s academic mission/student-use have received high priority.

Shop Assessments

The Safety Program has visited all machine shop on campus (in excess of 60) and conducted an initial assessment. The current phase of the initiative involves coordinating machine tool-level surveys by outside machine tool experts. These experts have visited approx. 10 shops to date and are providing quotations for machine tool upgrades. The upgrades include retrofitting existing equipment with chip shields/guards, and emergency stop capability per OSHA, NFPA and ANSI standards. At this early stage, one shop has undergone a complete machine tool upgrade, with 3 more shops scheduled for early July.

Contact Bret Dyer of the EHS Office Safety Program for further information.

Spotlight DRILL PRESS SAFETY

The drill press is one of the most common shop tools at MIT. The picture to the left provides a great example of best work practices for safeguarding our drill presses. This example includes a chip shield/chuck guard and a red mushroom shaped emergency stop button with a yellow background. The emergency stop button shall be within immediate reach of the operator for instant access. Also, be sure to secure your drill press to the floor or bench top to prevent accidental movement of the press during operation. Always remember to remove the chuck key and to fasten the stock to the drill press table. Never operate a drill press, or any shop machine without proper training on its safe use. Please contact your shop manager or EHS for questions on safeguarding a drill press or other shop machines.

Questions? Comments? We'd love to hear from you!
Please email environment@mit.edu