**IMPORTANT: Completion of this Hazard Assessment form (Exhibit A) is NOT the only documentation required for minors at MIT. All other required forms are available at** [**http://hrweb.mit.edu/employee-labor-relations/guidelines-minors#forms**](http://hrweb.mit.edu/employee-labor-relations/guidelines-minors#forms) **.**

[**Principal Investigator]** of the Mechanical Engineering Department (MechE) at the Massachusetts Institute of Technology (MIT) is [**hiring / sponsoring] (delete one) [Student name].** Hereafter, these people will be referred to as Principal Investigator (PI) and Student.

Name of Minor/Student

Age at beginning of project ­­­­­­

Will this be a paid or unpaid position?

Start and end dates of proposed project

Anticipated work hours (M-F, during normal work hours only)

Room(s) in which minor will work

Transportation to and from MIT

**Primary Supervisor**

Name: Title:  **Alternate Supervisor** who is responsible for the student when Primary Supervisor is unavailable:

Name: Title:

The Student will be carefully supervised by the Primary Supervisor or Alternate Supervisor at all times whenever s/he is in the lab/ workshop. Unless explicitly stated below, the Supervisor will be able to see and/ or hear the Student so the Supervisor is able to quickly respond if necessary.

Include a **short description** of the project to facilitate the EHS review.

The Student will be protected from the hazards involved in their project and other hazards that are in the [**lab in bldg# room#**] in the following ways:

On the first day, the Supervisor, PI, and/or the EHS representative will train the Student in a more thorough way than the Lab Specific Training that all new lab members receive. The training will emphasize how to implement what the Student learned in the EHS courses; additional training must also be provided about how to work on the Student’s specific project safely. This includes evacuation procedures for the lab and the meeting areas for good/inclement weather. Primary Supervisor or alternate will show the Student what parts of the lab are off limits and explain that this is for his/her safety. The Student will complete the EHS Training Needs (this means that Student needs an MIT ID number and a Kerberos), and the Student is required to complete all required training prior to beginning to work in the lab; for example, EHS courses required for all minors working in a lab with chemicals are General Chemical Hygiene -100, Managing Hazardous Waste -501, and Lab- Specific Training -110c.

The Primary Supervisor and Alternate must have completed all of their EHS training requirements, which should include any courses that the Student will take.

The lab will provide the Student with appropriate Personal Protective Equipment, based on the hazard assessment. (Safety glasses with lots of adjustable features are available, samples can be tried on at the VWR stockroom, from your EHS Coordinator, and the EHS Office.) The Primary Supervisor and Alternate will reinforce the importance of wearing Personal Protective Equipment and they will reinforce the training points. The Supervisor will ask the other lab members to be a safe role model, to remind the Student about safety, and to explain what they are doing if the Student would like to learn.

If the scope of this project expands beyond the hazards and activities that have been reviewed above, the

Primary Supervisor will review this with the EHS Coordinator and/or the EHS Lead Contact. They will determine if additional precautions are necessary, if this review needs to be updated, and who may need to approve it again.

**Work with Hazardous materials/ equipment**

To facilitate the EHS review, the Supervisor will be asked to provide a list of all the hazardous materials/

equipment that the minor may use. The Supervisor, PI, and EHS Coordinator will discuss the guidelines about what hazardous materials/equipment minors can and can’t work with, as part of the hazard assessment. The Primary Supervisor, EHS Coordinator, and EHS Lead Contact will do a risk assessment of the protocol(s) and the lab area to verify that the Student’s safety will be protected. They will include the detailed assessment in the section above. This is also to comply with the intent of the Child Labor laws (federal and Mass.). Include the final version of what the minor will work with and the precautions that will be taken in this section.

**Approval by the Principal Investigator, others**

This Hazard Assessment for Minors Working in a Laboratory at MIT should be reviewed, approved, and signed by the PI, the Primary Supervisor (the person who will be overseeing the minor’s day-to-day activities),the Alternate Supervisor, the MechE EHS Coordinator (Daniel C. Herrick), and the MechE EHS Lead Contact (James N. Doughty). The signed form can be scanned and emailed if the PI and others are not available to sign the original form. A copy of the completed and signed Hazard Assessment Form will be sent to the parents, along with the parental signature forms.

Principal Investigator:

Signature Title Date

Primary Supervisor:

Signature Title Date

Alternate Supervisor:

Signature Title Date

**EHS Review of this project**

The following people have reviewed the EHS related issues of this project. They have been involved in the hazard assessment of the project and work area where the student will be present. Their recommendations are included in the plan described above.

EHS Coordinator: Signature Title Date

EHS Lead Contact: Signature Title Date

**Document retention and Distribution of forms**

Exhibit A following must be retained for 3 years after the end date of the project.

Signed original - DLC Administrative Officer (AO) or Human Resources Administrator (HRA) Copy – EHS Office (EHS Coordinator may also retain)

Distribute this page only if the Student will be performing Biological Research (consult EHS Office Biosafety)

**MIT Committee on Assessment of Biohazards and**

**Embryonic Stem Cell Research Oversight**

Policy on Oversight and Supervision for Undergraduates, High School and Junior High Students, and Teachers

Engaged in Biological Research in MIT Facilities

Each year MIT Principal Investigators are involved in various outreach, educational and research efforts involving undergraduate students, high school and junior high school students and teachers. The Committee on Assessment of Biohazards and Embryonic Stem Cell Research (CAB/ESCRO) recognizes the intrinsic value of these efforts. However, the committee also recognizes that the lack of experience and familiarity with the research environment of these individuals places them at risk when in the laboratory.

In order to assist investigators, the CAB/ESCRO has developed the following policy concerning supervision, training, and appropriate risk level of laboratory research projects for different students and teachers (regardless of length of project, i.e., days, weeks or semesters). If the Principal Investigator is not sure whether a project is appropriate for a particular group or individual, the MIT Biosafety Program will gladly assist with the project risk assessment.

While these individuals or groups are in the laboratory their safety is the responsibility of the Principal

Investigator (PI). All work should be preceded by a training and acclimatization period during which

individuals are thoroughly familiarized with laboratory and microbiological safety techniques and procedures, as well as spill control, waste handling and emergency procedures. In all cases a supervisor, either the PI or their

designee, should be clearly identified.

Biosafety training may be provided by the Principal Investigator or by a responsible person designated by the PI. For projects involving the use of human materials, participants must receive training and have had the HBV vaccination series prior to start of the project or provide the PI with documentation of the offer of the HBV vaccine. MIT BSP staff will gladly assist with this training.

Note: this excerpt focuses on the section about minors. The full text of the policy is at <http://web.mit.edu/cab/policies.html>click on ‘CAB/ESCRO Policies.’

1. Undergraduate students may engage in research….

2. High school and junior high school students may engage in research that has been designated as requiring only BL1 containment and is low risk. This includes research involving murine cell culture. Potential projects that wish to use particular, well-characterized, human cell lines should be discussed with the Biosafety Office before initiation of the project. High school and junior high students cannot work "after hours" and must be carefully supervised at all times in the laboratory.

**3.** High school and junior high teachers, depending on experience, may engage in research projects …

**Distribution:**

Parent or legal guardian reviews this but no signature is required

AO/ HRA and supervisor keep a copy of this policy in minor’s file