

# International Science and Engineering Fair 2020

## Overview of Rules Changes

May 30, 2019

### General

- Expanded Ethics Statement
- Roles and Responsibilities of the Students and Adults has been rewritten and reformatted
- Added Responsibilities for Qualified Scientist and Designated Supervisor
- Clarified PHBA rules
- Revised "Engineering Projects Guide"

### Human Participants

- Pg. 9, Rule 6: Students are **prohibited** from **independently diagnosing disease**, administering medication and/or performing medical procedures.
- Pg. 9, Rule 1 of Human Participant Involvement in Student-designed Invention, Prototype, Computer Application & Engineering/Design Projects: IRB review and pre-approval is necessary when the student-designed invention, prototype, application, etc. is tested by human participants other than the student researcher(s) **or a single adult guardian, adult sponsor/QS/DS when the testing requires an adult tester.**

### PHBAs

- Pg. 14, Rule 8: insertion of antibiotic resistance markers for the clonal selection of bioengineered organisms is permitted, **with the following exceptions:**
  - Students are **prohibited** from the insertion of antibiotic resistance traits...
  - Students are **prohibited** from designing or selecting for multiple drug resistance organisms...

### Engineering Projects Guide

- Changed section heading from "Human Participants" to "Device Testing with Human Participants"

### Ethics Statement

- Expanded Ethics Statement:
  - Addresses integrity, legality, respect for confidentiality and intellectual property, and stewardship of the environment.
  - Student researchers, **as well as adults who have a role in their projects**, are expected to maintain the highest ethical standards.