

## QUALIFIED SCIENTIST FORM

To ensure that safe and ethical science is conducted, this form is required for research involving microbial experimentation. It is also required when non-human vertebrate animals are tested and their environment is changed, and when human subjects are tested and there is more than minimal risk involved for the subjects.

A Qualified Scientist is a medical doctor, veterinarian or individual with relevant science credentials. A science teacher, without these specific credentials, cannot be a "qualified scientist". This form must be signed prior to the start of the student's experimentation. Completed forms will be retained at the school.

Student's Name \_\_\_\_\_

Title of Project \_\_\_\_\_

**To be completed by the Qualified Scientist:**

Scientist Name \_\_\_\_\_

Advanced Degree \_\_\_\_\_

Degree Specialty \_\_\_\_\_

Position \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

- Students must provide a copy of their Science Project Research Plan and Approval Form to the Qualified Scientist.
- Students should always follow approved procedures and never perform unauthorized experiments.

**1. Will microbial samples/organisms be used? Yes                      No**

Microbial experimentation (involving microscopic organisms such as bacteria, fungi, etc.) done by elementary students is potentially dangerous and should only be done with expert and careful supervision. Samples/organisms should **not** be collected, isolated and/or cultured from the environment as they are potentially pathogenic. This includes, but is not limited to, projects involving blood, growing mold and culturing swabs from the environment. Instead, all microbial samples/organisms should be obtained from a science supplier/company and are limited to Biosafety Level 1 (BSL-1). The BSL-1 Checklist must be used to guide safe practices such as sealing Petri dishes, proper disposal, etc.

**2. Will non-human vertebrates be used? Yes                      No**

Projects involving non-human vertebrates (including embryos, eggs, tadpoles, and other early life cycle stages of vertebrates) are held to a higher standard than projects testing invertebrates. Vertebrates must be treated humanely, and if a project could cause pain or distress to the vertebrate, the student will need to design a new procedure. This form is required when changes are made to an organism's environment. A project with a mortality rate of 30% or greater in any vertebrate group or subgroup is not permitted to be entered into the Science Fair even if the deaths were unintentional or accidental.

**3. Will human subjects be used? Yes                      No**

When an experiment could cause more than minimal risks to a human subject, the subjects (and their parents, when a minor) must be informed of, and consent to, the testing procedures before any experimentation begins.

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*I certify that I have reviewed and approved the Research Plan prior to the start of experimentation. If the student or Designated Supervisor is not trained in the necessary procedures, I will ensure his/her training. I will provide advice and supervision during the research. I have a working knowledge of the techniques to be used by the student in the Research Plan. I understand that a Designated Supervisor is required when the student is not conducting experimentation under my direct supervision.*

\_\_\_\_\_  
Qualified Scientist's Printed Name

\_\_\_\_\_  
Signature of School Person Approving

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval

The Intel International Science and Engineering Fair (Intel ISEF) website provides additional resources and guidelines that can be a valuable resource for students, teachers, and parents. Visit <http://www.societyforscience.org/isef/rulesandguidelines>