Qualified Scientist Form

This form MUST be completed and signed before experimentation can begin.
For team projects, only one form is needed. ***Form must be shown at Check-In.***

To ensure that safe and ethical science is conducted, this form is REQUIRED for the following projects:

- projects involving microbial experimentation
- when non-human vertebrate animals are tested and their environment is changed
- when human subjects are tested

A Qualified Scientist is:

- a medical doctor or medical professional (doctor, nurse, technician)
- veterinarian or veterinary technician
- scientist or other individual with relevant science credentials
- school nurse, guidance counselor, psychologist
  Note: A science teacher, without these specific credentials, cannot be a Qualified Scientist.

Student Name(s)_____

Project Problem_____

To be completed by the Qualified Scientist :

Name_____

Degree(s)/Certification(s)/Professional License_____

Experience/Training as it relates to this project_____

_____

Position_____ Institution_____

Address_____

Email/Phone_____

Please answer the following questions. *(See other side for more information about each question.)*

1. Will microbial samples/organisms be used? ☐ YES ☐ NO
2. Will non-human vertebrates be used? ☐ YES ☐ NO
3. Will human subjects be used? ☐ YES ☐ NO

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I certify that I have reviewed and approved the Project Plan and project Procedure prior to the start of experimentation. I understand these expectations:

- *If the student or Designated Supervisor is not trained in the necessary procedures, I will ensure 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 project.*
- *I understand that a Designated Supervisor is required when the student is not conducting experimentation under my direct supervision.*

_____ _____

Qualified Scientist (printed) *Qualified Scientist Signature*

_____

Date

Information About Qualified Scientist Form Questions

Will microbial samples/organisms be used?

Microbial experimentation (involving microscopic organisms such as bacteria, fungi, etc.) done by elementary students is potentially dangerous and MUST only be done with expert and careful supervision in a BSL Level-1 setting. Samples/organisms MUST NOT be collected, isolated and/or cultured (grown) from the environment as they are potentially pathogenic. This includes, but is not limited to, projects involving blood, animal waste, soil, pond water, and culturing swabs. Instead, all microbial samples/organisms MUST 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. Centers for Disease Control and Prevention website has more information. http://www.cdc.gov

Will non-human vertebrates be used?

Projects involving non-human vertebrates (including embryos, eggs, tadpoles, and other early life cycles 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 project is NOT allowed. This form is required when any changes are made to an organism's environment. A project with ANY DEATHS in any vertebrate group or subgroup is NOT PERMITTED to be entered into the Science and Engineering Fair, even if the deaths were unintentional. Projects using non-human vertebrates MUST include a ***Vertebrate Animal*** form.

Will human subjects be used?

When an experiment involves the testing of human subjects, the subjects (and their parents, when a minor) MUST be informed of, and consent to, the testing procedures before any experimentation begins. All test subjects MUST complete the ***Informed Consent for Testing of Human Subjects*** form. All risks must be identified on the form before it is given to the human subjects for signature. Examples of risks include, but are not limited to:

- testing on subjects with any documented health issue
- gymnastic or cheerleading moves
- sustained physical activity and/or extreme vital sign (pulse, breathing) manipulation
- deprivation or excessive manipulation of bodily functions (sleep deprivation, excessive water consumption, etc.)
- use of projectiles, sharp, or breakable objects
- use of chemicals, lotions, hand sanitizer, perfumes, etc.
- exposure to heat or cold
- use of food
- use of mechanical, electrical, or motorized devices