

State Science and  
Engineering Fair of Florida  
STEM Competition

2015-16

RULES

SUPPLEMENT

To the  
International Science &  
Engineering Fair  
Rules

**NEW**

[www.ssefflorida.com](http://www.ssefflorida.com)

# 2015-16 SSEF of Florida

## OFFICIAL RULES SUPPLEMENT

It is the responsibility of the **Regional Science & Engineering Fair Directors, Scientific Review Committees, and Institutional Review Boards** to develop a complete knowledge and understanding of the *ISEF & SSEF Rules*. The **Regional Director** *MUST* make every effort to ensure that each person and committee involved in science research or intending to participate in an affiliated science fair receive copies of both *ISEF & SSEF Rules Supplement* documents and *follow ALL the rules* outlined within them. All of the RULES, REGULATIONS, and PROCEDURES of the **Intel ISEF** are in effect at each affiliated regional science fair and at the *SSEF of Florida*.

**Be advised that in accordance with the Intel ISEF rules, there are some rules of the SSEF of Florida that are more stringent than the official Intel ISEF International Rules and Guidelines. These additional requirements will take precedence over the International Rules.**

**REQUIRED:** Affiliated Regional Science and Engineering Fair Scientific Review Committees (SRC) must review and approve all projects after experimentation and **BEFORE** competition in the Regional SEF and State SEF of Florida - including those previously reviewed and approved prior to experimentation.

**THE DEATH OF COMMON SENSE** – when we are reviewing projects during the pre-SSEF SRC we often ask “Did any adult **really** read this before approving the procedure?” **Please make sure the projects allowed to enter your fairs adhere to the Intel ISEF AND SSEF Rules and Guidelines.** Please don’t send us incomplete paper work or a project that has not been critically reviewed before submission for entry in the SSEF of Florida. We are more than happy to assist you with questions before the spring SSEF SRC!

**If anyone at the school or regional fair level needs to consult with someone concerning ISEF Rules or this SSEF Rules Supplement they are encouraged to contact:**

**Sharon Suits, Chairperson**  
SSEF Scientific Review Committee  
(863) 763-4245 or (863) 610-2054  
[SHSuits@icloud.com](mailto:SHSuits@icloud.com) or  
[ssuits@embarqmail.com](mailto:ssuits@embarqmail.com)

**Kim Rex, Chairperson**  
SSEF Safety and Display Committee  
(863) 860-7092  
[kim.rex@polk-fl.net](mailto:kim.rex@polk-fl.net)

**Dan Thomas, Chairperson**  
SSEF Logistics Committee  
(863) 462-5288  
[thomasde@okee.k12.fl.us](mailto:thomasde@okee.k12.fl.us)

**Nancy Besley, Executive Director**  
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More contacts on page 6

State Science and Engineering Fair of Florida  
STEM Competition  
**2015-16 RULES SUPPLEMENT**  
to the International Science & Engineering Fair

**Reminder:** Be advised that in accordance with the Intel ISEF rules, there are some rules of the SSEF of Florida that are more stringent than the official Intel ISEF International Rules and Guidelines. These additional requirements will take precedence over the International Rules.

### **Electricity**

Electricity will only be available on a pre-paid fee basis and may only be used if it is a necessary part of the experimental process. There will be *NO* electricity available for display lighting purposes or non-essential electronics.

### **Abstracts**

All abstracts for the 2016 SSEF *MUST* be on the *official 2016 SSEF Abstract form* (using only SSEF categories). We will no longer accept the INTEL ISEF Abstract due to category discrepancies.

### **Bibliography**

- If a student uses procedures taken from a published study, laboratory standards, or equipment manual, a complete citation **MUST** be included with the *Research Plan*, otherwise the procedure **MUST** be written in complete detail into the research plan.
- If a student uses humans, non-human vertebrates or PHBAs in their research a reference for the protection of human and/or vertebrate subjects and/or a reference for appropriate microbiological technique **MUST** be reviewed and cited in their bibliography.
- If a student uses a hazardous device, procedure, or substance they must review a safety reference and include it in their bibliography.

### **Non-Human Vertebrates**

- If the project involves use of non-human vertebrates the 2016 SSEF **MORTALITY Report** **MUST** be submitted along with all other required forms to the Regional and State SRC whether or not any deaths occurred. This form is available from the FFFS website at [www.ssefflorida.com](http://www.ssefflorida.com) .
- For all projects using vertebrates the bibliography **MUST** include an animal care reference.
- Animals obtained from commercial sources or any captured invasive species may **NOT** be released into the environment.
- If a member of any experimental group or subgroup dies during experimentation, **a professional with experience in necropsy** must document cause of death and absence of connection to experimentation.

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## Potentially Hazardous Biological Agents

- **PROJECTS INVOLVING BSL2 ORGANISMS or PROCEDURES** (i.e., *opening an actively growing culture or sub-culturing*) **MAY NOT BE PERFORMED BY JUNIOR DIVISION RESEARCHERS.** An initial sub-culture from a known stock culture may be performed by either a designated supervisor or qualified scientist mentoring the project.
- **The use of *E.coli* K-12 in projects requires prior SRC approval.** NOTE: *This is stricter than INTEL ISEF Rules/Guidelines.*
- For **ALL** projects involving potentially hazardous biological agents, a detailed description of *collection, aseptic techniques* and *disposal methods for media and cultures* **MUST be included in the Research Plan.**  
The only acceptable methods of disposal are those outlined in the 2016 ISEF rules or an approved use of the institution's biohazard disposal procedure with detailed documentation. These procedures must be thoroughly **outlined in the Research Plan or cited in the Bibliography.**
- For all projects using PHBAs, the bibliography **MUST** include a **standard procedures reference.**
- A student researcher utilizing any organism classified as PHBA **must** submit a Facilities and Operations Assessment form for BSL1 or BSL2 facilities as appropriate.
- Students conducting PHBA projects may be interviewed by the SSEF SRC prior to qualifying for participation in the SSEF.
- **Microbial Fuel Cells requires a Form 3 Risk Assessment and prior SRC review. Any sub-culturing from opened microbial fuel cells will classify the project to a BSL2 and will also require Form 6.**

## Use of Hazardous Substances, Equipment, or Procedures

- Projects involving the use of *hazardous chemicals, activities, or devices* **MUST** be reviewed by the local SRC prior to experimentation.
- Form 3 is **required** for any chemicals used with an NFPA ranking of 2 or higher.
- Contact the related state agency for documented permission and legal requirements.
- When potentially hazardous chemicals are being used in the research corresponding **SDS** citations
  - **MUST** be made in the Bibliography for any substance classified by OSHA as a potential health or physical hazard (see the FLINN SCIENTIFIC catalog or [www.flinnsci.com](http://www.flinnsci.com)).
- Students conducting research under a mentor using proprietary materials must honor the privacy concerns regarding these materials. If hazardous proprietary materials or methods are used, then the Qualified Scientist or the Designated Supervisor must provide a letter on letterhead outlining the hazard, including the NFPA code, if applicable, a statement that the materials or methods are proprietary and a valid phone number where they may be reached, if questions arise.
- Projects involving the use of firearms, archery equipment or any projectile devices must be supervised by a **qualified Designated Supervisor.**
- Experiments involving discharge of projectiles must be conducted on a range supervised by qualified personnel.

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## Collection of Organisms or Artifacts

- Any project involving **collection of protected/regulated organisms**, whether plants or animals, **MUST** include documentation from appropriate governmental agencies in their original paperwork submission to the SRC. Collection of aquatic animals or marine plants should be made under supervision of a holder of the state's Educator's Aquatic Collection Permit.
- Students planning to conduct research involving "listed" invasive plants (any plant found on the chart at <http://www.fleppc.org/list/list.htm> that has ANY letter under the "gov list" column) **MUST** have or be working under a permit issued by the FDACS Division of Plant Industry. Appropriate disposal methods for these plants **MUST** be listed in the research plan. Aquatic plants should be frozen for at least 24 hours or dried completely before being disposed of in the household garbage. Other invasive plants should be sealed in plastic bags before being disposed of in the household garbage. **NEVER** compost or dispose of invasive plants with landscaping waste.
- Precautions must be taken and documented when collecting living or dead organic material from the natural environment due to potential hazards and/or toxicity. An explanation of precautions to be utilized and a potential treatment plan must be outlined in the student's procedures and on the risk assessment (Form 3).
- Non-native animals **MUST NOT** be released, even if they were caught in the wild. **BEFORE** starting a project involving non-native animals (example - Cuban tree frogs), contact the Florida Fish and Wildlife Conservation Commission for appropriate disposal techniques (remember, student researchers cannot euthanize vertebrates).
- Living organisms (plants or animals) purchased in pet stores or by mail should **NOT** be released, even if they are species that are native to Florida. Releasing these organisms could introduce disease or a different genetic pool to the local populations.
- Projects involving **archeological** or **paleontological** excavations **MUST** be accompanied by appropriate documentation from the state organization or governmental agency responsible for oversight of such procedures. This documentation must be submitted with other required paperwork to the SRC.

## Human Subject Projects

- A completed Verification of Informed Consent Form (VICF) must be presented to the Display and Safety Committee at project check in. It must list the quantity of assent or consent forms completed by human participants, as well as the date range for the forms. One completed consent form with name and signature redacted and date showing must also be presented at check in with the VICF. Note: The VICF with the redacted consent form attached must also be included with the paperwork submitted to SRC.
- Human subject projects that involve laboratory tests/procedures (e.g. blood tests, cultures, x-rays, etc.) must include information in the research plan about how the costs of the tests will be paid. If the costs will be paid by the human subject or their health insurance, the risk section of the Human Subject Consent Form must include the following statement: "tests and/or procedures in this project may be billed to you or your health insurance."

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## **RESOURCES:**

*Animal specimen collection:* Melissa Tucker, Fla. Fish and Wildlife Conservation Commission (850) 617-6070; [melissatucker@myfwc.com](mailto:melissatucker@myfwc.com)

*Plant specimen collection:* Brian Camposano, State Department of Agriculture (850) 681-5890; [briancamposano@freshfromflorida.com](mailto:briancamposano@freshfromflorida.com)

*Paleontological collection:* Florida Fossil Permit <http://www.flmnh.ufl.edu/vertpaleo/vppermit.htm>

*Archaeological collection:* Florida's Unmarked Burial Law <http://dhr.dos.state.fl.us/archaeology/FS872/> or <http://www.cr.nps.gov/linklaws.htm>

*Marine fishing regulations* (covers collection of fish, invertebrates, algae and sea grasses): <http://www.myfwc.com/fishing/saltwater/regulations/>

*Freshwater fishing regulations:* <http://www.myfwc.com/fishing/freshwater/regulations/>

*Invasive plant list:* <http://www.fleppc.org/list/list.htm>

NOTE: Any plant on this list that has ANY letter under the "gov list" column may not be possessed, transported, cultured etc. without a permit from the FDACS Division of Plant Industry (see contact under "Plant specimen collection".)

*Non-native animal lists:* <http://myfwc.com/wildlifehabitats/nonnatives/invasive-species/>

*Educator Aquatic Specimen Collecting permit:* <http://www.fmsea.org/events/default.html#workshops>

## **SSEF SCIENTIFIC REVIEW CORE COMMITTEE MEMBERS**

*Any of the following members of the SSEF Core Scientific Review Committee are available to answer your questions regarding student science research procedures.*

Sharon Suits, Chairperson  
SHSuits@icloud.com or ssuits@embarqmail.com  
(863) 763-4245 or (863) 610-2054

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