

State Science and  
Engineering Fair of Florida

2017-18

RULES

SUPPLEMENT

To the  
International Science &  
Engineering Fair  
Rules

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

All students, teachers, schools should be provided the resources and training to properly approve Research Plans.

Please make sure the **projects allowed to enter your fair adhere to the ISEF and SSEF of Florida Rules Supplement**. All Projects should be critically reviewed before entering an Affiliated Regional Science and Engineering Fair.

All members of the Scientific Review Committee (SRC) for the State Science and Engineering Fair of Florida are more than happy to assist you with questions as your students and teachers begin submitting their Research Plans for approval. (see page 8).

# 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 Supplement*. 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*. In addition, the following SSEF Rules must be followed. Regional and local fairs may also adopt more restrictive rules.

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)

**Kim Rex, Chairperson**  
SSEF Display and Safety 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)

**Kim Unger**  
SSEF Statistics & Judging Committee, Regeneron STS Mentor  
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Goldenrod, FL 32733  
(407) 473-8475  
[nancybesley@gmail.com](mailto:nancybesley@gmail.com)

✓ *See page 8 more Contact Resources*

❖ **Regional directors/Regional Representatives are required to participate in the Scientific Review of all projects entered in the SSEF of Florida.**

# SSEF of Florida OFFICIAL RULES SUPPLEMENT

## ❖ Electricity

There will be *NO* electricity available for display lighting purposes. 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.

## ❖ Displays

No brand names, student produced or commercial logos or acknowledgements may be displayed on a project at the SSEF. This includes brand names in the project title and/or abstract.

## ❖ Abstracts

- All abstracts for the *2018 SSEF MUST* be on the *approved 2018 SSEF Abstract form* which is available at [www.ssefflorida.com](http://www.ssefflorida.com).
- The Official Stamped Abstract must be displayed at or on the project board.
- **No copies of the abstract or research plan may be distributed to judges or to the public.**

## ❖ Bibliography – SSEF will continue to require 5 bibliographic references including those indicated below:

- If a student uses procedures taken from a published study, laboratory standards, or equipment manual, a complete citation (see Formatting Guide at [www.ssefflorida.com](http://www.ssefflorida.com)) **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 (Potentially Hazardous Biological Agents) in their research a reference to the protection of human subjects, vertebrate subject care or a reference to appropriate microbiological technique **MUST** be cited in their bibliography.
- If a student uses HCADs (hazardous chemicals, activities or devices) they must include a safety reference in their bibliography.

## ❖ Research Plan

- A Research Plan, including a detailed outline of the student's involvement in procedures utilized during the research process, must be submitted with each project. The research plan must include materials, chemicals (stated in appropriate metric units) and apparatus used, organisms or subjects involved in a clear step-by-step procedure that can be followed, safety considerations, aseptic techniques and disposal. It is **NOT** a research report and should not include details about procedures in which the student researcher was not directly involved.
- A Project Summary is only required if the student makes a change in the procedures outlined in the student's original Research Plan.
- A Conclusion is not required.

# SSEF of Florida OFFICIAL RULES SUPPLEMENT

## ❖ Human Projects

- ALL projects involving humans must be reviewed by an IRB prior to experimentation.
- **Written parental informed consent (ISEF rules, p. 37) is required for all projects involving participation of minors.**
- Students conducting research at a registered research institute (RRI) that requires IRB or IACUC approval must have the appropriate documents approved by the committees at the institute where the research is being done (ISEF p. 8, Rules #5; p. 14, #1). Documentation from the student's mentor is **not** sufficient.
- In order to meet eligibility requirements as a finalist for participation in the SSEF of Florida all projects involving minors must have **box 5** on the *HUMAN PARTICIPANTS Form 4* checked by the reviewing IRB to indicate **YES** – informed consent is required.
- Student researchers with assent or consent forms must supply the quantity of each type (assent or consent) using the **Verification of Informed Consent Form (VICF)**. ([www.ssefflorida.com](http://www.ssefflorida.com) )
- If a student's project includes scripts, surveys, songs or lyrics these must be reviewed by an IRB prior to experimentation and must be available for subsequent review at each level of participation. Rating of videos and/or videos games must be provided in the research plan and on the informed consent form.
- **NO EXPEDITED REVIEWS will be allowed for Florida projects.**

## ❖ Non-Human Vertebrates

- If the project involves use of non-human vertebrates the *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 the purpose of husbandry responsibilities, experimentation date is established as the moment you take possession of the subject animal.
  - Any action taken involving obtaining and setting up the experiment is included in experimental responsibilities for the vertebrate (ex. Setting up aquaria).
- For all projects using vertebrates the bibliography **MUST** include an animal care reference (see Formatting Guide on [www.ssefflorida.com](http://www.ssefflorida.com) )
- 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 **degreed professional with experience in necropsy** must document cause of death and absence of connection to experimentation.

# SSEF of Florida OFFICIAL RULES SUPPLEMENT

## ❖ 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.**
- For **ALL** projects involving potentially hazardous biological agents, a detailed description of *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 **2018 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 and/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 BSL2 or procedures requiring facilities above a BSL1 **must** submit a Facilities and Operations Assessment form and a BSL2 Safety Checklist ([www.ssefflorida.com](http://www.ssefflorida.com)).
- Students conducting PHBA projects may be interviewed by the *SSEF SRC* prior to qualifying for participation in the *SSEF*.

## ❖ **PROHIBITED by the SSEF**

- The use of wild-collected mushrooms is prohibited.
- **Use of carbapenem-resistant Enterobacteriaceae (CRE), methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant Enterococci (VRE) or *Klebsiella pneumoniae* Carbapenemase (KPC) producing bacteria and other related resistant microbes is prohibited.**
- Sub-culturing from Microbial Fuel Cells is prohibited.
- **No projects involving emerging pathogens carried by arthropod (mosquitoes, flies, etc.) vectors or water samples collected from the environment containing cyanobacteria may be conducted by Junior Division participants.**
  - **Senior Division participants may conduct research on these subjects at Registered Research Institutions only when working with the RRI's collection.**

# SSEF of Florida OFFICIAL RULES SUPPLEMENT

## ❖ Use of Hazardous Chemicals, Activities, or Devices

- Projects involving the use of *hazardous chemicals, activities, or devices* **MUST** be reviewed by the local SRC **prior to experimentation**.
- **Projects involving water-based or near-water venues including but not limited to operation or passage in a water-craft must submit Form 3.**
- Projects involving the use of any chemicals with a National Fire Protection Association (NFPA) ranking of 2 or higher must submit a Form 3.”
- If the chemicals being used are regulated by a state agency documented permission and knowledge of legal requirements must be submitted with project paperwork (ex. Pesticides, fertilizer, petrochemical disposal, etc.).
- When potentially hazardous chemicals are being used in the research corresponding **MSDS/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)).
- 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.
- Projects involving the use of controlled substances must be reviewed by an SRC prior to experimentation.

## ❖ Use of LASERS

- Lasers that are outside of the visible spectrum and/or above 1500 mW in power are to be used in a certified laser lab with SRC approval, approval from a qualified scientist in the field, and supervision of an adult sponsor.
- Lasers that are within the visible spectrum and under 1500 mW must have a safety citation (<http://www.lasersafetyfacts.com> for example), and a narrative regarding the safety of the lab environment must be included in the experimental procedures.
- No operational LASERS may be displayed at the student’s project.

## ❖ Use of Drones

- All unmanned remote operated aircraft, subsequently referred to as drones, must adhere to [Florida State Statute 934.50](#) as well as all local and ISEF rules on such craft. If these vehicles are used in a research project, documentation of local and state requirements must be included with other project protocols.
- If the drone flight path is over private property, permission from the property owner must be secured and documented.
- Flight is restricted to RC fields (radio-controlled device) unless there is supervision by a licensed drone operator.
- A description of the steps taken to ensure the availability of a safe environment in which the drone is operated must be included in the experimental procedures.
- All drone flights require presence of the Adult Supervisor.
- Drones cannot be operated over state parks, airports, or military installations without express written consent of a supervisor of said facility. This includes any form of data collection and/or payload delivery or retrieval.

# SSEF of Florida OFFICIAL RULES SUPPLEMENT

## ❖ 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 plants due to potential toxicity. An explanation of precautions to be taken and a potential treatment plan must be outlined in the student's procedures.
- 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).
- Organisms subjected to experimental "treatments" may not be released into the environment after experimentation.
- 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.

## ❖ Work in the field

- When research is carried out on private property written permission from the property owner must be secured and submitted with project paperwork.

**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 ISEF and SSEF rules. Please don't send us incomplete paper work or a project that has not been critically reviewed before submission for entry in the SSEF. We are more than happy to assist you with questions before the spring SSEF SRC!

## **CONTACT RESOURCES:**

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

***Research on state forest lands:*** Brian Camposano , (850) 681 -5890  
State Dept. of Agriculture, [brian.camposano@freshfromflorida.com](mailto:brian.camposano@freshfromflorida.com)

***Invasive plant permit:*** Dr. Patti Anderson, (352) 395-4701  
Florida Department of Ag and Consumer Services, Division of Plant Industry  
[patti.anderson@freshfromflorida.com](mailto:patti.anderson@freshfromflorida.com)  
<http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Business-Services/Plant-Pest-Permits/Noxious-Weed-Permit>

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

***Archaeological collection:*** Florida’s Unmarked Burial Law  
[dos.myflorida.com/.../public-lands/research-permits](http://dos.myflorida.com/.../public-lands/research-permits)

***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 “Invasive plant permit”.)

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

***Educator Aquatic Specimen Collecting permit:*** <http://fmsea.org/events/ascw>

### **SSEF of Florida Scientific Review Committee**

*Any SRC Team member below will be glad to assist you with questions*

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