

# 56<sup>th</sup> Florida Regional Junior Science, Engineering, and Humanities Symposium

January 27-29, 2019 at the University of Florida

## *STEM Research Speaker Competition Rules*

### General Information

1. **Purpose:** The National Junior Science and Humanities Symposium was established to encourage STEM research at the high school level, to recognize high achieving students, and to provide opportunities for students to present their independent research in a professional setting, similar to professional science or engineering meetings.
2. **Number of Students Competing and Presentation Rooms:** Up to 24 students will be invited to compete at the 2019 Florida Regional JSEHS. Speakers will be equally divided into four presentation rooms based upon research subject area. JSEHS organizers will group students based upon the subject area of the submitted paper taking into consideration the student's selected research category.
3. **Competition Date:** Students selected to compete at the 2019 Florida Regional JSEHS are required to attend the entire conference from Sunday, January 27 – Tuesday, January 29, 2019. The STEM Research Speaker Competition will take place on the morning of Tuesday, January 29, 2019.

### Required Paperwork- Must be received by the CPET office no later than January 7, 2019 by 5:00 pm

1. **200-word Abstract:** All competitors must email a copy in a Word or Word compatible file to [jsehs@cpet.ufl.edu](mailto:jsehs@cpet.ufl.edu).
2. **Research Paper:** Students are allowed to submit an edited and updated copy of their research paper. Students are encouraged to work with his or her teacher sponsor to incorporate feedback from the Selection Committee. Student may also include additions to the research project if the project is on-going. The student's name must be included on the research paper.
3. **Competitor Information Sheet:** Emailed to all Competitors with their Invitation.

### Presentation Requirements

1. **Presentation Schedule:** Each speaker will be assigned a time slot during which he or she will present. Speakers arrive before the start of the first presentation and must stay in the room he or she is presenting for the duration of the competition. Please afford your fellow students the courtesy of your attention.
2. **Coaching/Speaker Sequestering:** Speakers are not permitted to receiving coaching from teachers, research advisors, or parents once the competition begins. At the conclusion of the competition, speakers will remain together in one presentation room until the judges have completed the selection process.
4. **Presentation Timing:**
  - a. **Speaker Preparation.** Each speaker will have **two (2) minutes** to set up their presentation. If the student does not complete the set up with in the two (2) minutes, the 12-minute presentation time will start. Therefore, if the student does not present during their allotted time then they will not present at all.
  - b. **Speaker Presentations.** Each speaker is allocated a maximum of **12 minutes** for the presentation. Eleven minutes after the presentation has begun, the timekeeper will raise his or her hand long enough to catch the attention of the speaker. The timekeeper will stand at 12 minutes. The speaker may finish his or her sentence at which time the timekeeper will verbally indicate time is completed. The speaker must stop the presentation at that time.

- c. **Judges' Questions.** Next, the Session Moderator, not the student speaker, will ask for questions from the judges. The judges are the only people allowed to ask questions. **Six minutes** is allowed for questions, so long as the exchange is of general interest to the group and not to a specific person only. **Speakers should repeat questions before answering to ensure that the audience hears the question, and understands the subsequent dialogue.**
5. **Judges:** Student presentations will be evaluated by University and College research and teaching faculty, medical practitioners, and industry experts. All judges hold advance degrees. There will be at least three judges in each presentation room.

The judges' role is to evaluate the quality of the student's work and how well the student presented the research. Judges will use the submitted abstract, research paper, and oral presentation to make this evaluation. Judges will ask questions to the student following the presentation (see **Judges Questions** above).

At the conclusion of all the student presentations, judges from all four rooms will come together to convene and select the top four winners. During this time, JSEHS speakers will be sequestered. Judges may request student(s) to give an up-to 2 minutes summary presentation to all the JSEHS judges (see **Summary Presentations** below).

**Judges' decisions are final.**

6. **The Presentation:** Presentations should be concise, well prepared oral reports describing original work recently performed by the speaker.
  - a. **Visual Aids.** Each room will have an LCD Projector and PC-based laptop computer. Students may also bring their own computer (see **Computer Requirements** and **Back-up Suggestions** below). Students may also use the provided white board. *Please bring your own dry erase markers.* In some rooms, the LCD projector shines onto the provided white board.
  - b. **PowerPoint** or similar presentation is allowed. Students will have an opportunity to run their presentation on the provided lab-top or the student's own computer and practice with the LCD Projector on Monday (see **Practice Time** below). The student must be prepared to do the presentation without PowerPoint in the event there is a problem with the PowerPoint.
  - c. **Equipment.** Oral presentations must be complete and stand alone. Handouts, placards, hand-held or stationary objects, models, etc., are not permitted.
7. **Computer Requirements and Back-up Suggestions:** *JSEHS will provide a PC-based laptop computer and LCD projector with standard VGA connection cable.* You are welcome to use your own laptop, but please note competitors are responsible for ensuring it can be hooked up to a VGA port. Students bringing a PC-based laptop with standard a VGA output port should be able to connect their laptop to the LCD projector. However, as newer laptops become sleeker, output cable ports are not always standard. **REMINDER! It is the speaker's responsibility to ensure his or her lab top will be compatible with the provided equipment.**

*Students bringing any tablet or any Apple-product must provide their own VGA cables. JSEHS will not provide any cords compatible with tablets and Apple-products.*

8. **Internet Access & Copies of your Presentations:** We encourage students to bring multiple electronic copies of their presentation downloaded onto a USB flashdrive or other portable storage device. **DO NOT** rely on one copy of your presentation to work. **Internet access is not provided in the room.** Therefore, the presentation should not be saved online as a backup, as you will not have access to your email or online cloud storage.
9. **Summary Presentation:** At the conclusion of the speaker competition, judges from all four presentation rooms will convene. At this time the judges may request student(s) present an up to 2-minute summary presentation. **Visuals are not permitted during the summary presentation.** Students are encouraged to prepare for this aspect of the competition too. Judges may ask questions during this time too.

10. **Practice Time:** Students will have an opportunity to sign-up for one 20 to 30 minute practice session. Sign-up will occur Sunday night at the hotel. This practice session allows students to become comfortable with the speaker presentation room and is not intended to be a student's only practice time. Students should arrive at JSEHS already well-practiced and prepared.

**Judging Criteria Handout** is available from the JSEHS website: <https://www.cpet.ufl.edu/students/school-year-programs/jsehs/speaker-competition/>

### **Presentation Suggestions**

Judges were asked to make constructive suggestions to help students in future speeches and research. The following suggestions have been offered in past student speaking competitions.

1. **Present information in “layman’s terms” so that it is understood by all;** however, if a question arises that is phrased using scientific terminology or language, an answer on that level should be given.
2. Use a minimum number of slides and other visuals; flashing too many visuals before the audience is ineffective.
3. Talk unhurriedly about each slide or other visual, or graph or table. If you go too fast, the audience does not have sufficient time to understand what they are seeing and hearing.
4. When a graph is shown, always name the quantities plotted along both axes, even though they may be labeled. Also, state the significance of the position and shape of the graph. If listed numbers are shown, then comment on the values.
5. Considering the limitation on time, the presentation may have to be a broad description of the overall work rather than an intricate explanation of the details. The presenter's research and conclusions should be adequately explained. The research actually is the most important component.
6. PRACTICE, PRACTICE, PRACTICE ... Several practice sessions are recommended, preferably with audiences unfamiliar with the research, such as clubs or classes. These trials help reveal communication weaknesses and aid in timing adjustments.
7. Be prepared to answer judges' questions, especially with reference to your own research. Remember, however, that you may also be asked background questions which refer to your knowledge of the field as a whole (*i.e.*, if you quote statistical data, then you may be asked how you performed the statistical analysis).